Effective Date of Rule: Thirty-one days after filing.
Purpose: WAC 246-808-590 Professional boundaries and sexual misconduct, rules for individuals under the authority of the chiropractic quality assurance commission (commission). The purpose of the adopted rule is to: (1) Remove any ambiguities and create clear definitions; (2) ensure that the rules clearly outline professional boundaries and sexual misconduct; and (3) ensure the commission's definition of sexual misconduct is consistent with other professions' rules defining sexual misconduct. These requirements already exist but are being outlined in more detail to provide clarity and to align with the department of health's sexual misconduct rules in chapter 246-16 WAC.

Citation of Rules Affected by this Order: Amending WAC 246-808-590.

Statutory Authority for Adoption: RCW 18.25.0171, 18.130.050, and 18.13.062.

Adopted under notice filed as WSR 22-08-113 on April 6, 2022.
Changes Other than Editing from Proposed to Adopted Version: The rule was amended in subsection (3) (b) as follows: "Uses or exploits privileged information or access to privileged information to meet the health care provider's personal or sexual objectives."

The chiropractic quality assurance commission changed the language from "needs" to "objectives" to more closely align with other terminology used in the rule.

A final cost-benefit analysis is available by contacting Betty Moe, Chiropractic Quality Assurance Commission, P.O. Box 47858, Olympia, WA 98504-7858, phone 360-236-2868, fax 360-236-2360, TTY 711, email Betty.Moe@doh.wa.gov, website www.doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: May 12, 2022.

AMENDATORY SECTION (Amending WSR 96-16-074, filed 8/6/96, effective 9/6/96)

WAC 246-808-590 Professional boundaries and sexual misconduct. (() (1) The chiropractor shall never engage in sexual contact or sexual activity with current clients.
(2) The chiropractor shall never engage in sexual contact or sexwal activity with former clients if such contact or activity involves the abuse of the chiropractor-client relationship. Factors which the commission may considex in evaluating if the chiropractor-client relationship has been abusive include, but are not limited to:
(a) The amount of time that has passed since therapy terminated;
(b) The nature and duration of the thexapy;
(c) The circumstances of cessation or termination;
(d) The former client's personal history;
(e) The former elient's current mental status;
(f) The likelihood of adverse impact on the former elient and
others; and
(g) Any statements or actions made by the chiropractor during the eourse of treatment suggesting or inviting the possibility of a posttermination sexual or romantic relationship with the former client.
(3) The chiropractor shall never engage in sexually harassing or demeaning behavior with current or former clients.)) (1) The following definitions apply throughout this section unless the context clearly requires otherwise.
(a) "Patient" means a person who is receiving health care or treatment, or has received health care or treatment without a termination of the health care provider-patient relationship. The determination of when a person is a patient is made on a case-by-case basis with consideration given to a number of factors, including the nature, extent, and context of the professional relationship between the health care provider and the person. The fact that a person is not actively receiving treatment or professional services is not the sole determining factor.
(b) "Health care provider" means a person licensed or registered to practice under chapter 18.25 RCW .
(c) "Key third party" means immediate family members and others who would be reasonably expected to play a significant role in the health care decisions of the patient and includes, but is not limited to, the spouse, domestic partner, sibling, parent, child, guardian, and person authorized to make health care decisions of the patient.
(2) A health care provider shall not engage in sexual misconduct with a current patient or key third party. Sexual misconduct includes, but is not limited to:
(a) Sexual intercourse or genital to genital contact;
(b) Touching or exposing breasts, genitals, anus, or any sexualized body part for any purpose other than appropriate examination and treatment;
(c) Rubbing against a patient or key third party for sexual gratification;
(d) Kissing;
(e) Examination of or touching genitals, anus, or rectum without using gloves;
(f) Not allowing a patient the privacy to dress or undress;
(g) Dressing or undressing in the presence of the patient or key third party;
(h) Removing patient clothing or gown or draping without consent;
(i) Encouraging the patient to masturbate in the presence of the health care provider or masturbation by the health care provider while the patient is present;
(j) Suggesting or discussing the possibility of a dating, sexual or romantic relationship after the professional relationship ends;
(k) Terminating a professional relationship for the purpose of dating or pursuing a romantic or sexual relationship;
(l) Soliciting a date with a patient or key third party;
(m) Communicating the sexual history, preferences, opinions, or fantasies of the health care provider, patient or key third party;
(n) Making statements regarding the patient or key third party's body, appearance, sexual history, or sexual orientation other than for legitimate health care purposes;
(o) Sexually demeaning behavior including any verbal or physical contact which may reasonably be interpreted as demeaning, humiliating, embarrassing, threatening, or harming a patient or key third party;
(p) Photographing or filming the body or any body part or pose of a patient or key party, other than for legitimate health care purposes;
(q) Showing a patient or key third party sexually explicit photographs, other than for legitimate health care purposes.
(r) Offering to provide goods or services in exchange for sexual favors;
(s) Oral to genital contact; and
(t) Genital to anal contact or oral to anal contact.
(3) A health care provider shall not engage in any of the conduct described in subsection (2) of this section with a former patient or key third party if the health care provider:
(a) Uses or exploits the trust, knowledge, influence, or emotions derived from the professional relationship; or
(b) Uses or exploits privileged information or access to privileged information to meet the health care provider's personal or sexual objectives.
(4) Sexual misconduct also includes sexual contact with any person involving force, intimidation, or lack of consent, sexually harassing or demeaning behavior with current or former patients or key third parties, or a conviction of a sex offense as defined in RCW 9.94A.030.
(5) To determine whether a patient is a current patient or a former patient, the commission will analyze each case individually, and will consider a number of factors including, but not limited to, the following:
(a) Documentation of formal termination of professional relationship;
(b) Transfer of the patient's care to another health care provider;
(c) The length of time that has passed since the last health care services were provided to the patient;
(d) The length of the professional relationship;
(e) The extent to which the patient has confided personal or private information to the health care provider;
(f) The nature of the patient's health problem; and
(g) The degree of emotional dependence and vulnerability of the patient.
(6) These rules do not prohibit:

Washington State Register, Issue 22-14
(a) Providing health care services in case of emergency where the services cannot or will not be provided by another health care provider;
(b) Contact that is necessary for a legitimate health care purpose and that meets the standard of care appropriate to the chiropractic profession; or
(c) Providing health care services for a legitimate health care purpose to a person who is in a preexisting, established personal relationship with the health care provider where there is no evidence of, or potential for, exploiting the patient.
(7) It is not a defense that the patient, former patient, or key third party initiated or consented to the conduct, or that the conduct occurred outside the professional setting.
(8) A violation of any provision of this rule shall constitute grounds for disciplinary action.
[Statutory Authority: Chapter 18.25 RCW. WSR 96-16-074, § 246-808-590, filed 8/6/96, effective 9/6/96.]

# WSR 22-14-004 <br> PERMANENT RULES <br> DEPARTMENT OF COMMERCE 

[Filed June 22, 2022, 2:28 p.m., effective July 23, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: This rule change adjusts the date when an exempt facility applicant can be awarded more than 30 percent of the initial setaside for exempt facility projects from July 1 to May 1. This will allow exempt facility applicants to receive allocations exceeding the current 30 percent limitation earlier and would facilitate exempt facility projects' ability to fully access exempt facility initial setaside cap. This will assist with maximizing the ability of exempt facility projects to fully utilize the exempt facility initial allocation and could allow for larger exempt facility projects to advance.

The change to WAC 365-135-070 (1) (a) amends the date (from July 1 to May 1) when an exempt facility applicant may be awarded more than 30 percent of the initial set-aside for exempt facility projects.

The change to WAC 365-135-070(6) amends language referring to percentages from written form to numbers. Citations for "one hundred," "ninety," "eighty," and "seventy" percent are respectively changed to "100," "90," "80," and "70" percent.

Citation of Rules Affected by this Order: Amending 2.
Statutory Authority for Adoption: RCW 34.05.353 (1) (c) and (e).
Adopted under notice filed as WSR 22-09-057 on April 18, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 2, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 2, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 2, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 21, 2022.
David Pringle
Rules Coordinator

OTS-3731. 1

AMENDATORY SECTION (Amending WSR 21-15-104, filed 7/20/21, effective 8/20/21)

WAC 365-135-070 Criteria for exempt facility bonds. (1) In addition to the state statute, the following guidelines will be used as criteria for evaluating exempt facility requests:
(a) Until ((July)) May lst of each year, any one exempt facility project may not receive more than ((thirty)) 30 percent of the initial allocation amount available in the exempt facility category.
(b) The level of unemployment in a particular community within a county, to the extent that figures are available from the Washington state employment security department.
(c) The number of direct jobs and secondary or spin-off jobs expected to be generated by the project.
(d) The degree to which the project proposes to provide jobs for lower-income persons from the community.
(e) The number of jobs created in proportion to the amount of the bond cap allocation.
(f) The proportionate number of persons in relationship to the size of the community who will benefit from the project.
(g) The degree to which the project provides an economic boost to an economically distressed community (based on the three-year unemployment figures from employment security).
(h) The degree to which the project retains or expands the local tax base.
(i) The degree to which the project reduces environmental pollution.
(j) The degree to which the project diverts solid waste from disposal and manufactures it into value-added products.
(k) The degree to which the project produces energy at a lower cost than alternative or existing energy sources.
(l) The environmental benefit of the project to the particular community, the county or the state.
(m) The availability of bond cap from the exempt facility category.
(n) Recognize and accommodate the unique timing, and issuance needs of large scale projects that may require allocations in more than one year.
(o) Projects that result in publicly owned facilities over privately owned facilities.
(2) Exempt facility applications will not be considered for allocation until:
(a) The department receives:
(i) A list of all permits required to complete the project and the date each permit application was submitted to and/or granted by the appropriate authority;
(ii) A copy of any environmental impact statements; and
(b) Significant progress is demonstrated in securing project financing.
(3) The criteria in this section and other applicable criteria otherwise established in rule and statute shall not be considered as ranked in any particular order but shall be weighed and balanced for each application and among applications in making allocation decisions.
(4) After July 1st of each year, the department may approve an allocation amount prior to the issuer completing all of the criteria listed above.
(5) Exempt facility projects may receive an allocation in order to convert taxable financing to tax-exempt financing, but only in January or July of any year. The request for conversion will be compared against other requests for conversion and current exempt facility applications. Projects that use the Washington economic development finance authority to complete their financing will have priority over projects in obtaining future allocations to convert to tax-exempt financing. Conversion is only allowed within the federal guidelines of one year after the project comes online or two calendar years after
the Washington economic development finance authority financing is approved, whichever comes first.
(6) Exempt facility projects up to $\$ 50,000,000$ may receive an allocation for up to ( (ene hundred)) 100 percent of the total project cost. Projects from $\$ 50,000,001$ to $\$ 75,000,000$ may receive an allocation for up to ((ninety)) 90 percent of the total project cost. Projects from $\$ 75,000,001$ to $\$ 100,000,000$ may receive an allocation for up to ((eighty)) 80 percent of the total project cost. Projects over $\$ 100,000,000$ may receive an allocation for up to ((seventy)) 70 percent of the total project cost. A project may obtain additional allocation above these percentages after July 1st of the last year of eligibility only if the total demand for cap is lower than the amount available.
[Statutory Authority: RCW 34.05.353 (1) (b) and (d). WSR 21-15-104, § 365-135-070, filed 7/20/21, effective 8/20/21. Statutory Authority: Chapter 39.86 RCW and RCW 43.330.040 (2)(g). WSR 97-02-093, § 365-135-070, filed 1/2/97, effective 2/2/97. Statutory Authority: Chapter 39.86 RCW. WSR 93-13-012 (Order 93-05), § 365-135-070, filed 6/7/93, effective 1/1/94.]

# WSR 22-14-011 <br> PERMANENT RULES <br> BOARD OF <br> PILOTAGE COMMISSIONERS <br> [Filed June 23, 2022, 8:56 a.m., effective July 24, 2022] 

Effective Date of Rule: Thirty-one days after filing.
Purpose: This rule making amends the types of pilotage assignments subject to the requirement for 10 hours rest with the opportunity for eight hours of sleep after completion of an assignment. Puget Sound Pilots (PSP) recently approved several measures to increase dispatching efficiency and pilot availability while observing state mandated rest rules. One of those measures is to allow a pilot to be dispatched to multiple assignments, as long as the combined duration of the assignments does not exceed 13 hours. The board adopted these changes via emergency rule at the March 17, 2022, regular monthly meeting. This rule-making initiative is to consider and codify that change.

Citation of Rules Affected by this Order: Amending WAC 363-116-081.

Statutory Authority for Adoption: Chapter 88.16 RCW, Pilotage Act.

Adopted under notice filed as WSR 22-09-077 on April 20, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: June 21, 2022.
Jaimie C. Bever
Executive Director

OTS-3692. 1

AMENDATORY SECTION (Amending WSR 21-07-088, filed 3/19/21, effective 4/19/21)

WAC 363-116-081 Rest period. (1) Pilots shall observe rest period requirements as set out in RCW 88.16 .103 as now or hereafter amended. Pilots shall have a mandatory rest period of at least ((ten)) 10 hours with an opportunity for eight hours of uninterrupted sleep after completion of an assignment((; excluding)) or multiple assignments ((within a harbor area, provided the combined total duration of assignment time does not exceed thirteen hours)).
(2) An assignment is a billable pilotage service, including cancellations and ship movements, regardless of duration.
(3) An assignment begins at call time and ends at check-in time and includes preparation time and travel time to and from the ship in addition to bridge time. Call time allows one to two hours of preparation before the start of travel time to the ship. Check-in time occurs when travel time from the ship is completed. In the Puget Sound Pilotage district travel times are documented in the Puget Sound pilots operating rules and may be reviewed by the board from time to time.
(4) When there are multiple assignments ((within a harbor area (multiple harbor shifts), call time is before the first harbor shift and check-in time occurs when the travel time has been completed aftex the final harbor shift. Harbor area geographic definitions outlined by the utilities and transportation commission are used to distinguish harbor shifts from other ship moves.
(5) Pilots shall not complete more than three consecutive night assignments, a night assignment being one in which)), the combined total duration of the assignments shall not exceed 13 hours. The total duration of multiple assignments shall be measured from the call time before the first assignment to check-in time after the final assignment.
(5) An assignment is a night assignment if any part occurs between 0100 and 0459 hours. After three consecutive nights with night assignments, pilots shall have a mandatory rest period of at least ((もwelve)) 12 hours, including at least one period between 2000 and 0800 hours.
[Statutory Authority: Chapter 88.16 RCW. WSR 21-07-088, § 363-116-081, filed 3/19/21, effective 4/19/21. WSR 97-08-042, recodified as § 363-116-081, filed 3/28/97, effective 3/28/97. Statutory Authority: RCW 88.16.035. WSR 79-05-023 (Order 79-2, Resolution No. 79-2), § 296-116-081, filed 4/17/79; Order 73-6, § 296-116-081, filed 5/11/73.]

WSR 22-14-013<br>PERMANENT RULES<br>DEPARTMENT OF REVENUE<br>[Filed June 23, 2022, 2:21 p.m., effective July 24, 2022]

Effective Date of Rule: Thirty-one days after filing.
Purpose: The department is amending WAC 458-61A-211 Mere change in identity or form-Family corporations and partnerships, to incorporate 2021 legislation, SSB 5034. The purpose of this legislation is to modernize the Washington Nonprofit Corporation Act by creating a new chapter under Title 24 RCW.

Citation of Rules Affected by this Order: Amending WAC 458-61A-211 Mere change in identity or form-Family corporations and partnerships.

Statutory Authority for Adoption: RCW 82.32.300, 82.01.060, 82.45.150.

Adopted under notice filed as WSR 22-09-030 on April 12, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 23, 2022.
Atif Aziz
Rules Coordinator

OTS-3697.1

AMENDATORY SECTION (Amending WSR 10-07-133, filed 3/23/10, effective 4/23/10)

[^0](a) The transfer by an individual or tenants in common of an interest in real property to a corporation, partnership, or other entity if the entity receiving the ownership interest receives it in the same pro rata shares as the individual or tenants in common held prior to the transfer. ((t)) See also WAC 458-61A-212, Transfers where gain is not recognized under the Internal Revenue Code. ( $(t)$ )
(b) The transfer by a corporation, partnership, or other entity of its interest in real property to its shareholders or partners, who will hold the real property either as individuals or as tenants in common in the same pro rata share as they owned the corporation, partnership, or other entity. To the extent that a distribution of real property is disproportionate to the interest the grantee partner has in the partnership, it will be subject to real estate excise tax.
(c) The transfer by an entity of its interest in real property to its wholly owned subsidiary, the transfer of real property from a wholly owned subsidiary to its parent, or the transfer of real property from one wholly owned subsidiary to another.
(d) The transfer by a corporation, partnership or other entity of its interest in real property to another corporation, partnership, or other entity if the grantee owner(s) receives it in the same pro rata shares as the grantor owner(s) held prior to the transfer.
(e) Corporate mergers and consolidations that are accomplished by transfers of stock or membership, and mergers between corporations and limited partnerships as provided in chapters 25.10 and 24.03 A RCW.
(f) A transfer of real property to a newly formed, beneficiary corporation from an incorporator to the newly formed corporation, provided:
(i) The proper real estate excise tax was paid on the original transfer to the incorporator; and
(ii) It was documented on or before the original transfer that the incorporator received title to the property on behalf of that corporation during its formation process.

This tax exemption does not apply to a transaction in which a property owner acquires title in his or her own name and later transfers title to the corporation upon its formation.
(g) A transfer into any revocable trust.
(h) A conveyance from a trustee of a revocable trust to the original grantor or to a beneficiary if no valuable consideration passes, or if the transaction is otherwise exempt under this chapter (for example, a gift or inheritance). A sale of real property by the trustee to a third party, or to a beneficiary for valuable consideration, is subject to the real estate excise tax.
(3) Examples. The following examples, while not exhaustive, illustrate some of the circumstances in which a grant of an interest in real property may or may not qualify for this exemption. These examples should be used only as a general guide. The taxability of each transaction must be determined after a review of all the facts and circumstances.
(a) Andy owns a 100\% interest in real property. He transfers his property to his solely owned corporation. The transfer is exempt from real estate excise tax because there has been no change in the beneficial ownership interest in the property.
(b) Elizabeth owns a 100\% interest in real property, and is the sole owner of Zippy Corporation. She transfers her property to Zippy. The corporation pays $\$ 5,000$ to Elizabeth and agrees to make payments on the underlying debt on the property. Despite the fact that there
was consideration involved in the transfer, it is still exempt from tax because there was no change in beneficial ownership.
(c) Jim, Kathie, and Tim own real property as joint tenants. They transfer their property to their LLC in the same pro rata ownership. The transfer is exempt from real estate excise tax because there has been no change in beneficial ownership.
(d) Pat, Liz, and Erin own Stage Corporation. They also own Song \& Dance Partnership, in the same pro rata ownership percentages as their interests in the corporation. Stage Corporation transfers real property to Song \& Dance Partnership. The transfer is exempt from real estate excise tax, because there has been no change in beneficial interest.
(e) Morgan owns real property. Brea owns Sparkle Corporation. Morgan transfers real property to Sparkle in exchange for an interest in the corporation. The transfer is subject to real estate excise tax because there has been a change in the beneficial interest in the real property. The tax applies to the extent that the transfer of real property results in the grantor having a different proportional interest in the property after it is transferred. (((Note,)) However, ((that)) Morgan and Brea may be able to structure their transaction in a manner that would qualify for exemption under WAC 458-61A-212. ( ( + ) )
(f) Dan owns property as sole owner. Jill owns property as sole owner. Dan and Jill each transfer their property to Rhyming LLC, which they form together. The transfers are taxable because there has been a change in the beneficial ownership interest in the real property. To the extent that the transfer of real property results in the grantor having a different proportional interest in the property after the transfer, it is taxable. (((Note,)) However, ((that)) Dan and Jill may qualify for an exemption under WAC 458-61A-212. ( ( + ) )
(g) Fred and Steve are equal partners in Jazzy Partnership. They decide to transfer real property from the partnership to themselves as individuals. Based on its true and fair value, the partnership transfers $60 \%$ of the real property to Fred and $40 \%$ to Steve. This distribution is not in proportion to their ownership interest in Jazzy Partnership, and the transfer is not exempt because there has been a change in the beneficial ownership interest. To the extent that the transfer of property results in the grantor having a different proportional interest in the property after the transfer, it is taxable. (((Note,)) However, ((that)) Fred and Steve may qualify for an exemption under WAC 458-61A-212.( ( + ) )
(4) Disparate treatment of ownership interests.
(a) Where the ownership of real property is different for financial accounting purposes than for federal tax purposes, the beneficial ownership interest in the real property is deemed the entity which is the owner for financial accounting purposes. Any transfer from the entity that is the owner for federal tax purposes to the owner for financial accounting purposes, or vice versa, is subject to the real estate excise tax.
(b) For example, Giant Company wants to expand its business. It identifies some real property, but is unable to finance the purchase through a normal loan. It contracts with Mega Loans Inc. to enter into a "synthetic lease" for the purchase of the real property. Under the terms of the synthetic lease, Mega Loans will take title to the real property, and Giant Company will lease it from Mega Loans. Real estate excise tax is paid on the purchase of the real property by Mega Loans. The terms of the lease also provide that Giant Company will be the owner for federal tax purposes and Mega Loans will be the owner for
financial accounting purposes. Per the lease agreement, after a specified time Mega Loans will transfer title to the real property to Giant Company. The transfer of title from Mega Loans to Giant Company is subject to real estate excise tax.
(5) Family corporations, partnerships, or other entities. This exemption applies to transfers to an entity that is wholly owned by the transferor and/or the transferor's spouse, state registered domestic partner, children, or state registered domestic partner's children regardless of whether the transfer results in a change in the beneficial ownership interest. However, real estate excise taxes will become due and payable on the original transfer as otherwise provided by law if:
(a) The partnership or corporation thereafter voluntarily trans-
fers the property; or
(b) The transferor, spouse, state registered domestic partner, children, or state registered domestic partner's children voluntarily transfer stock in the corporation, or interest in the partnership capital to other than:
(i) The transferor and/or the transferor's spouse, state registered domestic partner, children, or state registered domestic partner's children;
(ii) A trust having the transferor and/or the transferor's spouse, state registered domestic partner, children, or state registered domestic partner's children as the only beneficiaries at the time of transfer to the trust; or
(iii) A corporation or partnership wholly owned by the original transferor and/or the transferor's spouse, state registered domestic partner, children, or state registered domestic partner's children within three years of the original transfer to which this exemption applies, and the tax on the subsequent transfer is not paid within ((sixty)) 60 days of becoming due.

For example, parents own real property as individuals. They create an LLC that is owned by themselves and their three children. The parents transfer the real property to the LLC. Despite the fact that there was a change in beneficial ownership interest, it is still exempt from tax, because the LLC is owned by the grantor and/or the grantor's spouse, state registered domestic partner, children, or state registered domestic partner's children.
(6) Transfers when there is not a change in identity or form of ownership of an entity. This exemption applies to transfers of real property when the grantor and grantee are the same.

For example, John and Megan own real property as tenants in common. They decide that they prefer to hold the property as joint tenants with rights of survivorship. John and Megan, as tenants in common, convey the property to John and Megan as joint tenants with rights of survivorship. The transfer is exempt from real estate excise tax.
[Statutory Authority: 2009 c 521. WSR 10-07-133, § 458-61A-211, filed 3/23/10, effective 4/23/10. Statutory Authority: RCW 82.32.300, 82.04.150, and 82.01.060(2). WSR 06-20-036, s 458-61A-211, filed 9/25/06, effective 10/26/06. Statutory Authority: RCW 82.32.300, 82.01.060(2), and 82.45.150. WSR 05-23-093, § 458-61A-211, filed 11/16/05, effective 12/17/05.]

# WSR 22-14-014 <br> PERMANENT RULES <br> DEPARTMENT OF REVENUE 

[Filed June 23, 2022, 2:24 p.m., effective July 24, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: The department is amending WAC 458-20-119, 458-20-124, 458-20-168, 458-20-169, 458-20-244, and 458-20-249 to account for general updates, including readability, and to incorporate the following legislation: SSB 5034 (2021); HB 1296 (2021); HB 2390 (2020); and SHB 2246 (2020).

Citation of Rules Affected by this Order: Amending WAC 458-20-119, 458-20-124, 458-20-168, 458-20-169, 458-20-244, and 458-20-249.

Statutory Authority for Adoption: RCW 82.32.300 and 82.01.060.
Adopted under notice filed as WSR 22-09-029 on April 12, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 6, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 23, 2022.

Atif Aziz<br>Rules Coordinator

## OTS-3696. 2

AMENDATORY SECTION (Amending WSR 12-07-060, filed 3/19/12, effective 4/19/12)

WAC 458-20-119 Sales by caterers and food service contractors. (1) Introduction. This ((stion)) rule explains Washington's business and occupation ( $B \& O$ ) tax and retail sales tax applications for sales by caterers and food service contractors.
(a) Examples. This ((secton)) rule contains examples that identify a number of facts and then state a conclusion. These examples should be used only as a general guide. The tax results of other situations must be determined after a review of all facts and circumstances.
(b) ( What other sections might apply?)) Other rules that may apply. The following ((sectons)) rules may contain additional relevant information:
((-)) (i) WAC 458-20-107 Requirement to separately state sales tax-Advertised prices including sales tax.
((-)) (ii) WAC 458-20-124 Restaurants, cocktail bars, taverns and similar businesses.
((*)) (iii) WAC 458-20-166 Hotels, motels, boarding houses, rooming houses, resorts, ((summer camps)) hostels, trailer camps, ((ete)) short-term rentals and similar lodging businesses.
((•)) (iv) WAC 458-20-167 Educational institutions, school districts, student organizations, and private schools.
((*)) (v) WAC 458-20-168 Hospitals, nursing homes, ((boarding homes) ) assisted living facilities, adult family homes and similar health care facilities.
((\&)) (vi) WAC 458-20-175 Persons engaged in the business of operating as a private or common carrier by air, rail or water in interstate or foreign commerce.
((e)) (vii) WAC 458-20-189 Sales to and by the state of Washington $((\boldsymbol{\tau}))$ and municipal corporations, including counties, cities, towns, school districts, and fire districts.
((*)) (viii) WAC 458-20-190 Sales to and by the United States and certain entities created by the United States-Doing business on federal reservations-Sales to foreign governments.
((e)) (ix) WAC 458-20-244 Food and food ingredients.
(2) Sales by caterers. Sales of meals and prepared food by caterers are subject to the retailing $B \& O$ and retail sales taxes when sold to consumers. "Caterer" means a person who provides, prepares, and serves meals for immediate consumption at a location selected by the customer. The tax liability is the same whether the meals are prepared at the customer's site or the caterer's site. The retailing B\&O and retail sales taxes also apply when caterers prepare and serve meals using ingredients provided by the customer.
(3) Food service contractors. The term "food service contractor" means a person who operates a food service at a kitchen, cafeteria, dining room, or similar facility owned by an institution or business. Food service contractors may manage the food service operation on behalf of the institution or business, or may actually make sales of meals or prepared foods.
(a) Sales of meals. Food service contractors who sell meals or prepared foods to consumers are subject to the retailing $B \& O$ and retail sales taxes on their gross proceeds of sales. For example, the operation of a cafeteria which provides meals to employees of a manufacturing or financial business is generally a retail activity. The food service contractor is considered to be making retail sales of meals, whether payment for the meal is made by the employees or the business, unless the business itself is reselling the meals to the employees.

In all cases where the meals are prepared at off-site facilities not owned by the institution or business, the food service contractor is considered to be making sales of meals and the retailing $B \& O$ and retail sales taxes apply to the gross proceeds of sale, or gross income for sales to consumers.
(b) Food service management. The gross proceeds derived from the management of a food service operation are subject to the service and other business activities B\&O tax. These tax reporting provisions apply whether the staff actually preparing the meals or prepared foods is employed by the institution or business hiring the food service contractor, or by the food service contractor itself. If the food service contractor merely manages the food service operation on behalf of an institution or business, that institution or business is consid-
ered to be selling meals or providing the meals as a part of the services the institution or business renders to its customers. These institutions and businesses should refer to subsections (4) and (5) in this ((section)) rule to determine their B\&O tax and retail sales tax liabilities.

Food service management includes, but is not limited to, the following activities:
(i) Food service contractors operating a cafeteria or similar facility which provides meals and prepared food for employees ((and/or)) or guests of a business, but only where the business owning the facility is the one actually selling the meals to its employees.
(ii) Food service contractors managing ((and/ox)) or operating a cafeteria, lunch room, or similar facility for the exclusive use of students or faculty at an educational institution or private school. The educational institution or private school provides these meals to the students and faculty as a part of its educational services. The food service contractor is managing a food service operation on behalf of the institution, and is not making retail sales of meals to the students, faculty, or institution. Sales of meals or prepared foods to guests in such areas are, however, subject to the retailing $B \& O$ and retail sales taxes.
(iii) Food service contractors managing ((and/ox)) or operating the dietary facilities of a hospital, nursing home, or similar institution, for the purpose of providing meals or prepared foods to its patients or residents ((thereof)). These meals are provided to the patients or residents by the hospital, nursing home, or similar institution as a part of the services rendered by the institution. The food service contractor is managing a food service operation on behalf of the institution, and is not considered to be making retail sales of meals to the patients, residents, or institution. Sales of meals to doctors, nurses, visitors, and other employees through a cafeteria or similar facility are, however, subject to the retailing $B \& O$ and retail sales taxes.
(c) Examples.
(i) Example 1. GC Inc. is a food service contractor managing and operating an on-site cafeteria for B College. This cafeteria is operated for the exclusive use of students and faculty. Guests of students or faculty members, however, are allowed to use the facilities. All moneys collected in the cafeteria are retained by B College. B College pays GC's direct costs for managing and operating the cafeteria, including the costs of the unprepared food products, employee salaries, and overhead expenses. GC also receives a management fee.

GC Inc. is managing a food service operation. The measure of tax is the gross proceeds received from B College. GC Inc. may not claim a deduction on account of cost of materials, salaries, or any other expense. GC Inc.'s proceeds are subject to the service and other activities B\&O tax classification. B College is considered to be making retail sales of meals to the guests and must collect and remit retail sales tax on the gross proceeds of these sales. B College should refer to WAC 458-20-167 to determine whether the retailing B\&O tax applies.
(ii) Example 2. DF Food Service contracts with Hospital A to manage and operate Hospital A's dietary and cafeteria facilities. DF is to receive a per meal fee for meals provided to Hospital A's patients. DF Food Service retains all proceeds for sales of meals to physicians, nurses, and visitors in the cafeteria.

The gross proceeds received from Hospital A ((in regards to)) regarding the meals provided to the patients are derived from the man-
agement of a food service operation. These proceeds are subject to the service and other activities B\&O tax classification. DF, however, is making retail sales of meals to physicians, nurses, and visitors in the cafeteria. DF Food Service must pay retailing B\&O tax, and collect and remit retail sales tax, on the gross proceeds derived from the cafeteria sales.
(4) Retailing $\mathbf{B \& O}$ and retail sales taxes. The sales of meals to consumers are subject to the retailing $B \& O$ tax and generally subject to retail sales tax. However, a retail sales tax exemption is available for the following sales of meals:
(a) Prepared meals sold under a state-administered nutrition program for the aged as provided for in the Older Americans Act (Public Law 95-478 Title III) and RCW 74.38.040(6) ( $(-)$ ) $\dot{1}$
(b) Prepared meals sold to or for senior citizens, disabled persons, or low-income persons by a ((not-for-profit)) nonprofit organization organized under chapter 24.03 A or 24.12 RCW. However, this exemption does not apply to purchases of prepared meals by ((not-forprofit)) nonprofit organizations, such as hospitals, which provide the meals to patients as a part of the services they render ( ( - ) ) ; and
(c) Prepared meals sold to the federal government. (((See)) WAC 458-20-190. ((t)) However, meals sold to federal employees are taxable, even if the federal employee will be reimbursed for the cost of the meals by the federal government.
(5) Wholesale sales of prepared meals. Persons making sales of prepared meals to persons who will be reselling the meals are subject to the wholesaling $B \& O$ tax classification. Sellers must obtain ((xesale certificates for sales made before January 1, 2010, or) ) a reseller permit((s)) for sales ((made on or after January 1, 2010,)) from their customers to document the wholesale nature of any sale as provided in ((MAC 458-20-102A (Resale certificates) and)) WAC 458-20-102 ( ( $t$ ) ) Reseller permits ( ( ) . Even though resale certificates are no longer used after December 31, 2009, they must be kept on file by the seller for five years from the date of last use or December 31, 2014)).
(6) ((When is)) Deferred sales or use tax ((due?)). If the seller fails to collect the appropriate retail sales tax, the purchaser is required to pay the deferred sales or use tax directly to the department ( (-)) for many catering and food service items, as follows:
(a) Purchases of dishes, kitchen utensils, linens, and items which do not become an ingredient of the meal, are subject to retail sales tax.
(b) Retail sales tax or use tax applies to purchases of equipment, repairs, appliances, and construction.
(c) ((The)) Retail sales tax or use tax does not apply to purchases of food or beverage products ((which)) that are ingredients of meals being sold at retail or wholesale.
(d) Purchases of food products and prepared meals by persons who are not in the business of selling meals at retail or wholesale are subject to the retail sales tax. However, certain food products are ((statutorily)) exempt ((өf)) from retail sales or use tax. ((t)) See WAC 458-20-244.( ( + ) )
[Statutory Authority: RCW 82.32.300, 82.01.060(2), and 2011 c 55. WSR 12-07-060, § 458-20-119, filed 3/19/12, effective 4/19/12. Statutory Authority: RCW 82.32.300, 82.01.060(2), chapters 82.04, 82.08, 82.12 and 82.32 RCW. WSR 10-06-069, § 458-20-119, filed 2/25/10, effective 3/28/10. Statutory Authority: RCW 82.32.300. WSR 99-11-107, §

458-20-119, filed 5/19/99, effective 6/19/99; WSR 93-23-019, § 458-20-119, filed 11/8/93, effective 12/9/93; WSR 86-03-016 (Order ET 86-1), § 458-20-119, filed 1/7/86; WSR 82-16-061 (Order ET 82-7), § 458-20-119, filed 7/30/82. Statutory Authority: RCW 82.01.060(2) and 82.32.300. WSR 78-07-045 (Order ET 78-4), § 458-20-119, filed 6/27/78; Order ET 74-1, § 458-20-119, filed 5/7/74; Order ET 70-3, § 458-20-119 (Rule 119), filed 5/29/70, effective 7/1/70.]

AMENDATORY SECTION (Amending WSR 15-21-092, filed 10/21/15, effective 11/21/15)

WAC 458-20-124 Restaurants, cocktail bars, taverns and similar businesses. (1) Introduction. This rule explains how Washington's business and occupation ( $\mathrm{B} \&(\mathrm{O}$ ) tax and retail sales tax apply to sales by restaurants, cocktail bars, taverns, and similar businesses. It discusses sales of meals, beverages, and foods at prices ((inclusive ef the) that include retail sales tax. This rule also explains how discounted and promotional meals are taxed. Caterers and persons who merely manage the operations of a restaurant or similar business should refer to WAC 458-20-119 Sales by caterers and food service contractors, to determine their tax liability.
(a) Definition. Restaurants, cocktail bars, and taverns. The term "restaurants, cocktail bars, taverns, and similar businesses" means every place where prepared foods and beverages are sold and served to individuals, generally for consumption on the premises where sold.
(b) Examples. This rule contains examples that identify a number of facts and then state a conclusion. These examples should be used only as a general guide. The tax results of other situations must be determined after a review of all facts and circumstances.
(c) ( What other rules might apply? In addition to information available on the department's website pertaining to prepared food and beverage sales,) ) Other rules that may apply. The following rules may contain other relevant information:
((*)) (i) WAC 458-20-107 Requirement to separately state sales tax-Advertised prices including sales tax.
((*)) (ii) WAC 458-20-119 Sales by caterers and food service contractors.
((*)) (iii) WAC 458-20-131 Gambling activities.
((*)) (iv) WAC 458-20-183 ((Amusement, recreation, and physical fitness sexvices)) Recreational services and activities.
( (-)) (v) WAC 458-20-187 Tax responsibility of ( (persons owning and/or operating vending machines, amusement devices, and service maehincs)) vending machine owners and operators.
((*)) (vi) WAC 458-20-189 Sales to and by the state of Washington and municipal corporations, including counties, cities, towns, school districts, and fire districts.
((*)) (vii) WAC 458-20-190 Sales to and by the United States and certain entities created by the United States-Doing business on federal reservations-Sales to foreign governments.
((*)) (viii) WAC 458-20-243 Litter tax.
((*)) (ix) WAC 458-20-244 Food and food ingredients.
(2) Retailing $\mathbf{B \& O}$ and retail sales taxes. Sales of meals and prepared foods to consumers by restaurants, cocktail bars, taverns, and similar businesses are subject to ((the)) retailing B\&O tax ((elassi-
fication) ) and generally subject to retail sales tax. Retail sales tax exemptions are available for the following sales of meals:
(a) Prepared meals sold under a state-administered nutrition program for the aged as provided for in the Older Americans Act (Public Law 95-478 Title III) and RCW 74.38.040(6);
(b) Prepared meals sold to or for senior citizens, disabled persons, or low-income persons by a ((not-for-profit)) nonprofit organization organized under chapter 24.03 A or 24.12 RCW;
(c) Prepared meals sold to the federal government. (((See)) WAC 458-20-190. ( ( + ) ) However, meals sold to federal employees are taxable, even if the federal employee will be reimbursed for the cost of the meals by the federal government; and
(d) ( (Effective July 1, 2011, RCW 82.08 .9995 provides a retail sales tax exemption fox)) Meals provided without specific charge by a restaurant to its employees. ((Such)) RCW 82.08.9995. These meals are also exempt from B\&O tax and use tax. ((t))RCW 82.04.750 and 82.12.9995. ( ( $\boldsymbol{t})$ ) However, if any charge is made for meals to employees, retailing B\&O tax and retail sales tax apply.

For ((the)) purposes of (d) of this subsection, the following definitions apply:
(i) "Meal" means one or more items of prepared food or beverages other than alcoholic beverages. For the purposes of (d) of this subsection, "alcoholic beverage" and "prepared food" have the same meanings as provided in RCW 82.08.0293.
(ii) "Restaurant" means any establishment having special space and accommodation where food and beverages are regularly sold to the public for immediate, but not necessarily on-site, consumption, but excluding grocery stores, mini-markets, and convenience stores. Restaurant includes, but is not limited to, lunch counters, diners, coffee shops, espresso shops or bars, concession stands or counters, delicatessens, and cafeterias. It also includes space and accommodations where food and beverages are sold to the public for immediate consumption ((that)), if a separate charge is made for such food and beverages, and are located within:

- Hotels, motels, lodges, boarding houses, bed and breakfast facilities;
- Hospitals, office buildings, movie theaters; and
- Schools, colleges, or universities ( (, if a scparate charge is made for such food or beverages)).

Restaurants also include:

- Mobile sales units that sell food or beverages for immediate consumption within a place, the entrance to which is subject to an admission charge; and
- Public and private carriers, such as trains and vessels, that sell food or beverages for immediate consumption if a separate charge is made for such food or beverages.

A restaurant is open to the public for purposes of this subsection (2)(d) if members of the public can be served as guests. "Restaurant" does not include businesses making sales through vending machines or through mobile sales units such as catering trucks or sidewalk vendors of food or beverage items.
(3) Wholesaling B\&O tax. Persons making sales of prepared meals to persons who will be reselling the meals are subject to the wholesaling $B \& O$ tax classification. Sellers must obtain a copy of the purchaser's reseller permit to document the wholesale nature of any sale as provided in WAC 458-20-102 Reseller permits.
(4) Service and other business activities B\&O tax. Compensation received from owners of vending machines for allowing the placement of those machines at the restaurant, cocktail bar, tavern, or similar business is subject to the service and other business activities tax. WAC 458-20-187. Persons operating ((games)) contests of chance should refer to WAC 458-20-131.
(5) ((Exemptions. Effective Octobex 1, 2013, RCW 82.08.210 provides retail sales tax and use tax exemptions for sales to restaurants of products that impart flavor to food during the cooking process; and

- Are completely or substantially consumed by combustion during the cooking process; or
- That support the food during the cooking process and are comprised entirely of wood.

The exemption includes products such as wood chips, charcoal, eharcoal briquettes, grapevines, and cedar grilling planks. The exemp= tions do not apply to any type of gas fuel. For the purpose of these exemptions, "restaurant" has the same meaning as found in RCW 82.08.9995. These exemptions are scheduled to expire July 1, 2017.
(6))) Deferred sales or use tax. If the seller fails to collect the appropriate retail sales tax, the purchaser is required to pay the deferred sales or use tax directly to the department.
(a) Retail sales tax or use tax applies to purchases of dishes, kitchen utensils, linens, and items that do not become an ingredient of the meal.
(b) Retail sales tax or use tax applies to purchases of equipment, repairs, appliances, and construction.
(c) Retail sales tax or use tax does not apply to purchases of food or beverage products that are ingredients of the meals being sold.
(d) Retail sales tax or use tax does not apply to purchases of paper plates, paper cups, paper napkins, toothpicks, or any other articles that are furnished to customers, the first actual use of which renders such articles unfit for further use, when purchased by restaurants and similar businesses making actual sales of meals.
(( $(7)$ ) ) (6) Combination business. Persons operating a combination of two kinds of food sales, of which one is the sale of prepared food (i.e., an establishment, such as a deli, selling food products ready for consumption and in bulk quantities), should refer to WAC 458-20-244 for taxability information.
(( (8))) (7) Discounted meals, promotional meals, and meals given away. Persons who sell meals on a "two for one" or similar basis are not giving away a free meal, but rather are selling two meals at a discounted price. Both the retailing $B \& O$ and retail sales taxes are calculated on the reduced price actually received by the seller.

Persons who provide meals free of charge to persons other than their employees are consumers of those meals. Persons operating restaurants or similar businesses are not required to report use tax on food and food ingredients given away, even if the food or food ingredients are part of prepared meals. For example, a restaurant providing meals to the homeless or hot dogs free of charge to a little league team will not incur a retail sales or use tax liability with respect to these items given away. A sale has not occurred, and the food and food ingredients exemption applies. Should the restaurant provide the little league team with soft drinks free of charge, the restaurant will incur a deferred retail sales or use tax liability with respect to those soft drinks. Soft drinks are excluded from the exemption for food and food ingredients. ((tsee)) WAC 458-20-244.((t))
(( (9)) ) (8) Sales of meals, beverages and food at prices that include retail sales tax. Persons may advertise and/or sell meals, beverages, or any kind of food product at prices including retail sales tax. Any person electing to advertise and/or make sales in this manner must clearly indicate this pricing method on the menus and other price information. WAC 458-20-107.
( ((10))) (9) Spirits, beer, and wine restaurant licensees. Restaurants operating under the authority of a license from the liquor ((control)) and cannabis board to sell spirits, beer, and wine by the glass for on-premises consumption generally have both dining and cocktail lounge areas. Customers purchasing beverages or food in lounge areas may not be given sales invoices, sales slips, or dinner checks, nor are they generally provided with menus.
(a) Many spirits, beer, and wine restaurant licensees elect to sell beverages or food at prices inclusive of the retail sales tax in the cocktail lounge area. If this pricing method is used, notification that retail sales tax is included in the price of the beverages or foods must be posted in the lounge area in a manner and location so that customers can see the notice without entering employee work areas. The department presumes that no retail sales tax has been collected or is included in the gross receipts when a notice is not posted and the customer does not receive a sales slip or sales invoice separately stating the retail sales tax.
(b) The election to include retail sales tax in the selling price in one area of a location does not preclude the restaurant operator from selling beverages or food at a price exclusive of retail sales tax in another. For example, a spirits, beer, and wine restaurant licensee may elect to include the retail sales tax in the price charged for beverages in the lounge area, while the price charged in the dining area is exclusive of the retail sales tax.
(c) Spirits, beer, and wine restaurant licensees are not required to post actual drink prices in the cocktail lounge areas. However, if actual prices are posted, the advertising requirements expressed in WAC 458-20-107 must be met.
( ((11) Gratuities. Tips or gratuities representing donations or gifts by customers under circumstances which are clearly voluntary are not part of the selling price and not subject to tax. However, mandatory additions to the price by the sellex, whether labeled service charges, tips, gratuities or otherwise are part of the selling price and are subject to both the retailing B\&O and retail sales taxes. (12)) (d) Examples.
(((a))) (i) Example 1. XYZ Restaurant operates both a cocktail bar and a dining area. XYZ has elected to sell drinks and appetizers in the bar at prices including the retail sales tax while selling drinks and meals served in the dining area at prices exclusive of the retail sales tax. There is a sign posted in the bar area advising customers that all prices include retail sales tax. Customers in the dining area are given sales invoices that separately state the retail sales tax. As an example, a typical well drink purchased in the bar for ( (\$2.50)) \$7.00 inclusive of the retail sales tax, is sold for ( $(\$ 2.50)$ ) $\$ 7.00$ plus retail sales tax in the dining area. The pricing requirements have been satisfied and the drink and food totals are correctly reflected on the customers' dinner checks. XYZ may factor the retail sales tax out of the cocktail bar gross receipts when determining its retailing $B \& O$ and retail sales tax liability.
(( $(\mathrm{b})$ ) ) (ii) Example 2. RBS Restaurant operates both a cocktail bar and a dining area. RBS has elected to sell drinks at prices inclu-
sive of retail sales tax for all areas where drinks are served. It has a sign posted to inform customers in the bar area of this fact and a statement is also on the dinner menu indicating that any charges for drinks includes retail sales tax. Dinner checks are given to customers served in the dining area that state the price of the meal exclusive of retail sales tax, the retail sales tax on the meal, and the drink price including retail sales tax. Because the business has met the sign posting requirement in the bar area and has indicated on the menu that retail sales tax is included in the price of the drinks, RBS may factor the retail sales tax out of the gross receipts received from its drink sales when determining its taxable retail sales.
((c))) (iii) Example 3. Z Tavern sells all foods and drinks at a price ((inclusive of)) that includes the retail sales tax. However, there is no mention of this pricing structure on its menus or reader boards. The gross receipts from Z Tavern's food and drink sales are subject to the retailing $B \& O$ and retail sales taxes. Z Tavern has failed to meet the conditions for selling foods and drinks at prices including retail sales tax. Z Tavern may not assume ((that)) the gross receipts include any retail sales tax and may not factor the retail sales tax out of the gross receipts.
(10) Gratuities. Tips or gratuities representing donations or gifts by customers under circumstances which are clearly voluntary are not part of the selling price and not subject to tax. However, mandatory additions to the price by the seller, whether labeled service charges, tips, gratuities or otherwise are part of the selling price and are subject to both the retailing $B \& O$ and retail sales taxes.
[Statutory Authority: RCW 82.32.300, 82.01.060(2), and 2015 c 86. WSR 15-21-092, § 458-20-124, filed 10/21/15, effective 11/21/15. Statutory Authority: RCW 82.32.300, 82.01.060(2), 82.08.050, and 2013 2nd sp.s. c 13. WSR 14-01-050, § 458-20-124, filed 12/12/13, effective 1/12/14. Statutory Authority: RCW 82.32.300, 82.01.060(2), and 2011 c 55. WSR 12-07-060, § 458-20-124, filed 3/19/12, effective 4/19/12. Statutory Authority: RCW 82.32.300, 82.01.060(2), chapters 82.04, 82.08, 82.12 and 82.32 RCW. WSR 10-06-069, § 458-20-124, filed 2/25/10, effective 3/28/10. Statutory Authority: RCW 82.32.300. WSR 93-23-018, § 458-20-124, filed 11/8/93, effective 12/9/93; WSR 83-07-034 (Order ET 83-17), § 458-20-124, filed 3/15/83; Order ET 70-3, § 458-20-124 (Rule 124), filed 5/29/70, effective 7/1/70.]

AMENDATORY SECTION (Amending WSR 21-01-062, filed 12/9/20, effective 1/9/21)

WAC 458-20-168 Hospitals, nursing homes, assisted living facilities, adult family homes and similar health care facilities. (1) Introduction. This rule explains the application of business and occupation ( $B \& O$ ), retail sales, and use taxes to persons operating:

- Hospitals as defined in RCW 70.41.020;
- Nursing homes as defined in RCW 18.51.010;
- Assisted living facilities as defined in RCW 18.20.020;
- Adult family homes as defined in RCW 70.128.010; and
- Similar health care facilities.
(a) Examples. This rule contains examples that identify a number of facts and then state a conclusion. The examples should be used only
as a general guide. The tax results of other situations must be determined after a review of all of the facts and circumstances.
(b) ( What other rules might apply? The department of revenue (department) has adopted other rules that may apply to the provision өf health care.) ) Other rules that may apply. Readers may want to refer to the rules in the following list for additional information:
(i) WAC 458-20-102 Reseller permits.
(ii) WAC 458-20-111 Advances and reimbursements.
(iii) WAC 458-20-150 Optometrists, ophthalmologists, and opticians.
(iv) WAC 458-20-151 Dentists, audiologists, and other health care providers $(\boldsymbol{(})$ ) ——Dental laboratories $(\boldsymbol{( \boldsymbol { \sigma } )}$ ) and dental technicians.
(v) WAC 458-20-169 Nonprofit organizations.
(vi) WAC 458-20-178 Use tax and the use of tangible personal property.
(vii) WAC 458-20-18801 Medical substances, devices, and supplies for humans-Drugs prescribed for human use—Medically prescribed oxygen -Prosthetic devices-Mobility enhancing equipment-Durable medical equipment.
(viii) WAC 458-20-233 Tax liability of medical and hospital service bureaus and associations and similar health care organizations.
(2) Personal and professional services of hospitals. For ( (the)) purposes of this ((subscction)) rule, the following definitions apply:
- "Hospital" - The term hospital is as defined in RCW 70.41.020. It includes hospitals that come within the scope of chapter 71.12 RCW, but only if they are also licensed under chapter 70.41 RCW.
- "Public hospital" or "nonprofit hospital" - Public or nonprofit hospitals are hospitals operated by the state or any of its political subdivisions or operated as nonprofit corporations.
(a) Hospital services to patients. Gross income earned by hospitals for providing personal or professional services to patients is subject to B\&O tax as shown ( (өf)) in the table below. RCW 82.04.260.

| ((Report Ineome From Providing Personal or Professional Services | Time Frame <br> Prior to May 1, 2010 | Time Frame <br> May 1, 2010 and After |
| :---: | :---: | :---: |
| For profit hespitals | Service and other B\&O tax elassification | For prefit hospitals B\&O tax elassification |
| Public and nomprofit hospitals | Public or nomprofit hospitals $B \& \theta$ tax classifieation | Public or nemprofit hospitals $B \& \theta$ tax classifieation)) |


| Report Income From <br> Providing Personal or <br> Professional Services | Reporting Classification |
| :--- | :--- |
| For profit hospitals | For profit hospitals B\&O <br> tax classification |
| Public and nonprofit | Public or nonprofit <br> hospitals <br> hospitals B\&O tax <br> classification |

Gross income earned for providing nonmedical services, interest received on patient accounts receivable, and amounts earned for providing transcribing services to physicians are subject to service and other activities B\&O tax.
(b) Clinics and departments operated by hospitals. Gross income earned by medical clinics and departments providing services to patients and operated by a hospital is subject to B\&O tax as shown in ((もhe table in)) subsection (2) (a) of this rule, where the operation of a medical clinic or department is covered by the hospital's li-
cense. If the clinic or department is not covered by the hospital's license, the gross income earned by a medical clinic or department providing services to patients is subject to $B \& O$ tax under the service and other activities B\&O tax classification.
(i) Example 1. Acme Hospital is a nonprofit hospital that has a medical clinic that is physically located within the hospital. The clinic is open only during ((fegular business)) the hours of ( ( $t$ ) ) 8:00 a.m. to 5:00 p.m. ((+)) \& and provides no domiciliary care or overnight facilities to its patients. The medical clinic is covered under Acme Hospital's hospital license. Gross income earned by the medical clinic for providing patient care is subject to the Public and Nonprofit Hospital $\mathrm{B} \&$ Tax Classification because the clinic is covered under the hospital license.
(ii) Example 2. Mountain Hospital is a for profit hospital with a cancer treatment facility that is located one mile from the hospital campus. The cancer treatment facility provides the type of services normally provided by hospitals to cancer patients but only during regular business hours. The cancer treatment facility is covered under the hospital's license. Gross income earned by the cancer treatment facility is subject to the For Profit Hospitals B\&O tax ((zs shown in the table in subsection (2) (a) of this rule)) classification because the facility is covered under the hospital's license.
(c) Educational programs and services. Amounts earned by public or nonprofit hospitals for providing educational programs and services to the general public are subject to $B \& O$ tax under the public or nonprofit hospitals classification if the educational programs and services are an integral, interrelated, and essential part of the hospital. Otherwise, such amounts are subject to $B \& O$ tax under the service and other activities ((もaz)) classification. Educational services are considered an integral, interrelated, and essential part of the hospital only if they are unique and incidental to the provision of hospitalization services. Only those educational programs and services offered by a hospital that would be very difficult or impossible to duplicate by a person other than a hospital because of the specialized body of knowledge, facilities, and equipment required are unique and incidental to the provision of hospitalization services. Amounts received from educational programs and services are subject to the service and other activities $B \& O$ tax when the educational programs or services could be provided by any physician, clinic, or trained lay person.
(3) Personal and professional services from other medical clinics, nursing homes, and similar health care facilities. Gross income earned by medical clinics, nursing homes, and similar health care facilities for providing personal and professional services is subject to service and other activities $B \& O$ tax. Physicians performing these services are also subject to service and other activities B\&O tax on gross income earned. Services provided are ones not integral, interrelated, and an essential part of a hospital operation.
(4) Assisted living facilities and domiciliary care. For the purpose of this rule, "assisted living facilities" and "domiciliary care" have the same meaning as found in RCW 18.20.020. A preferential B\&O tax rate is provided by RCW 82.04.2908 to persons operating assisted living facilities licensed under chapter 18.20 RCW. Persons operating licensed assisted living facilities should report their gross income derived from providing room and domiciliary care to residents under the licensed assisted living facilities B\&O tax classification. Refer
to subsection (9) (h) of this rule for $B \& O$ tax deductions and exemptions available to persons operating assisted living facilities.
(5) Hospitals or other health care facilities operated by the state of Washington. Gross income earned by the state of Washington for operating a hospital or other health care facilities, whether or not owned by the state, is not subject to $B \& O$ tax.
(6) Nonprofit corporations and associations performing research and development. A separate B\&O tax rate applies to nonprofit corporations and nonprofit associations for gross income earned in performing research and development within this state, including medical research. See RCW 82.04.260.
(7) Sales of tangible personal property. Retailing B\&O tax applies to sales of tangible personal property sold and billed separately from the performance of personal or professional services by hospitals, nursing homes, assisted living facilities, adult family homes, and similar health care facilities. This includes charges for making copies of medical records. The seller must collect retail sales tax from the buyer and remit the tax to the department unless the sale is specifically exempt by law.
(a) Tangible personal property used in providing medical services to patients. Retailing B\&O and retail sales taxes do not apply to charges to a patient for tangible personal property used in providing medical services to the patient, even if separately billed. Tangible personal property used in providing medical services is not considered to have been sold separately from the medical services simply because those items are separately invoiced. These charges, even if separately itemized, are for providing medical services.

For example, when a hospital charges a patient for drugs physically administered by the hospital staff, the charges to the patient are subject to $B \& O$ tax under the appropriate tax classification as shown in ((the table in)) subsection (2)(a) of this rule based on the hospital making the charge. ((On the other hand)) However, charges for drugs sold to persons or their caregivers, either for self-administration or administration by a caregiver other than the seller, are subject to retailing $B \& O$ tax and retail sales tax unless specifically exempt by law. Readers should refer to WAC 458-20-18801 for detailed information regarding retail sales tax exemptions that apply to sales of prescription drugs and other medical items.
(b) Sales of meals. Although the sale of meals is generally considered to be a retail sale, hospitals, nursing homes, assisted living facilities, and similar health care facilities that furnish meals to patients or residents as a part of the services provided to those patients or residents are not considered to be making retail sales of meals. Thus amounts earned by hospitals, nursing homes, assisted living facilities, and similar health care facilities for furnishing meals to patients or residents are subject to $B \& O$ tax as part of the services provided to those patients or residents. Such amounts are not subject to retail sales tax.

RCW 82.08 .0293 and 82.12 .0293 provide, respectively, retail sales tax and use tax exemptions for prepared meals sold to senior citizens, disabled persons, or low-income persons by a ((not-for-profit)) nonprofit organization organized under chapter 24.03 A or 24.12 RCW. The exemptions apply to sales of prepared meals to ((not-for-profit)) nonprofit organizations organized under chapter 24.03 A or 24.12 RCW , that provide the meals to senior citizens, disabled persons, or low-income persons as a part of the patient services they render.

Hospitals, nursing homes, assisted living facilities, and similar health care facilities may have restaurants, cafeterias, or other dining facilities where meals are sold to doctors, employees, and visitors. These sales of meals are subject to retailing $B \& O$ and retail sales taxes. For additional information regarding the sale of meals, including meals furnished to employees, refer to WAC 458-20-124.
(8) Industry reporting. This subsection discusses common reporting issues affecting persons operating medical or other health care facilities.
(a) Adjustments to revenues. Many hospitals provide medical care without charge or where some portion of the charge will be canceled. In other cases, medical care is billed to patients at "standard" rates but is later adjusted to reduce the charges to the rates established by contract with medicare, medicaid, or private insurers. In these situations, the hospital must initially include the total charges as billed to the patient as gross income unless the hospital's records clearly indicate the amount of income to which it will be entitled under its contracts with insurance carriers. Where tax returns are initially filed based on gross charges, an adjustment may be taken on future tax returns after the hospital has adjusted its records to reflect the actual amounts collected. In no event may the hospital reduce the amount of its current gross income by amounts that were not previously reported on its excise tax return. If the tax rate changes from the time the $B \& O$ tax was first paid on the gross charges and the time of the adjustment, the hospital must file amended tax returns to report the $B \& O$ tax on the transaction as finally completed at the rate in effect when the service was performed.
(b) ( What are the)) Tax consequences ((when)) if a hospital contracts with an independent contractor to provide medical services at the hospital((?)) - When a hospital contracts with an independent contractor (service provider) to provide medical services, such as managing and staffing the hospital's emergency department, the hospital may not deduct the amount paid to the service provider from its gross income. If, however, the patients are alone liable for paying the service provider, and the hospital has no personal liability, either primarily or secondarily, for paying the service provider, other than as agent for the patients, then the hospital may deduct from its gross income the amount it receives and pays to the service provider.

In addition, the service provider is subject to service and other activities B\&O tax on the amount earned from the hospital for providing these services for the hospital. If the service provider subcontracts with a third party, such as a physician or nurse, to help provide medical services as an independent contractor, the service provider may not deduct from its gross income amounts paid to the subcontractor where the service provider is personally liable, either primarily or secondarily, for paying the subcontractor. If, however, the hospital is alone liable for paying the subcontractor, and the service provider has no personal liability, either primarily or secondarily, other than as agent for the hospital, then the service provider may deduct from its gross income the amount it receives from the hospital and pays to the subcontractor. For additional information regarding deductible advances and reimbursements, refer to WAC 458-20-111.
(c) ((May)) Nursing homes and assisted living facilities may not claim a B\&O tax exemption for the rental of real estate. ( (? No.) ) The purpose of nursing homes is to provide medical care to their residents. The purpose of assisted living facilities is to assume general responsibility for the safety and well-being of their residents and to
provide other services to residents such as housekeeping, meals, laundry, and activities. Assisted living facilities may also provide residents with assistance with activities of daily living, health support services, and intermittent nursing services. Because the purpose of nursing homes and assisted living facilities is to provide services and not to lease or rent real property, no part of the gross income of nursing homes or assisted living facilities is exempted from B\&O tax as the rental of real estate.
(9) B\&O tax deductions, credits, and exemptions. This subsection provides information about $B \& O$ tax deductions, credits, and exemptions available to persons operating medical or other health care facilities.

Deductible amounts should be included in the gross income reported on the combined excise tax return and then identified on the appropriate deduction detail line of the ((excise tax)) return to determine the amount of taxable income.
(a) Organ procurement organizations. RCW 82.04 .326 provides a B\&O tax exemption for amounts earned by a qualified organ procurement organization under 42 U.S.C. Sec. 273 (b) in effect as of January 1, 2001, to the extent that the amounts are exempt from federal income tax.
(b) Contributions, donations, and endowment funds. RCW 82.04.4282 provides a B\&O tax deduction for amounts received as contributions, donations, and endowment funds, including grants, which are not in exchange for goods, services, or business benefits. For example, a B\&O tax deduction is allowed for donations received by a public hospital, as long as the donors do not receive any goods, services, or any business benefits in return. On the other hand, a public hospital may not take a B\&O tax deduction on amounts earned from a state university for work-study programs or training seminars, because the university receives business benefits in return, as students receive education and training while enrolled in the university's degree programs.
(c) Adult family homes. RCW 82.04 .327 provides a B\&O tax exemption for gross income derived from personal and professional services of adult family homes licensed by the department of social and health services (DSHS), or which are specifically exempt from licensing under the rules of DSHS. This exemption does not apply to persons who provide home care services to clients in the clients' own residences.

For the purpose of this rule, "adult family home" has the same meaning as in RCW 70.128.010.
(d) Nonprofit kidney dialysis facilities, hospice agencies, and nonprofit nursing homes and homes for unwed mothers. RCW 82.04.4289 provides a B\&O tax exemption for amounts earned as compensation for services rendered to patients or from sales of drugs for human use pursuant to a prescription furnished as an integral part of services rendered to patients by kidney dialysis facilities operated as a nonprofit corporation, nonprofit hospice agencies licensed under chapter 70.127 RCW, nonprofit nursing homes and homes for unwed mothers operated as religious or charitable organizations. This exemption applies only if no part of the net earnings earned by such an institution inures, directly or indirectly, to any person other than the institution entitled to this exemption. This exemption is available to nonprofit hospitals for income from the operation of kidney dialysis facilities if the hospital accurately identifies and accounts for the income from this activity.

Examples of nonprofit nursing homes include nursing homes operated by church organizations or by nonprofit corporations designed to
assist alcoholics in recovery and rehabilitation. Nursing homes and homes for unwed mothers operated by governmental entities, including public hospital districts, do not qualify for the $B \& O$ tax exemption provided in RCW 82.04.4289.
(e) Government payments made to health or social welfare organizations. RCW 82.04.4297 provides a B\&O tax deduction to health or social welfare organizations, as defined in RCW 82.04.431, for amounts earned directly from the United States, any instrumentality of the United States, the state of Washington, or any municipal corporation or political subdivision of the state of Washington as compensation for health or social welfare services.
( (Effective August 1, 2011,)) RCW 82.04.4275 provides a B\&O tax deduction for amounts health or social welfare organizations receive as compensation for providing child welfare services under a govern-ment-funded program.

A deduction is not allowed, however, for amounts that are received under an employee benefit plan. For purposes of the deduction provided by RCW 82.04.4297, "employee benefit plan" includes any plan, trust, commingled employee benefit trust, or custodial arrangement that is subject to the Employee Retirement Income Security Act of 1974, as amended, 29 U.S.C. Sec. 1001 et seq., or that is described in sections 125, 401, 403, 408, 457, and 501 (c) (9) and (17) through (23) of the Internal Revenue Code of 1986, as amended, or a similar plan maintained by a state or local government, or a plan, trust, or custodial arrangement established to self-insure benefits required by federal, state, or local law.
(f) Amounts earned under a health service program subsidized by federal or state government. RCW 82.04 .4311 provides a B\&O tax deduction to:

- A public hospital that is owned by a municipal corporation or political subdivision; or
- A nonprofit hospital; or
- A nonprofit community health center; or
- A network of nonprofit community health centers, that qualifies as a health and social welfare organization as defined in RCW 82.04.431, for amounts earned as compensation for health care services covered under the federal medicare program authorized under Title XVIII of the federal Social Security Act; medical assistance, children's health, or other program under chapter 74.09 RCW; or for the state of Washington basic health plan under chapter 70.47 RCW. This deduction applies to amounts received directly or through a third party from the qualified programs or plans. However, it does not apply to amounts received from patient copayments or patient deductibles. For purposes of the deduction provided by RCW 82.04.4311, "community health center" means a federally qualified health center as defined in 42 U.S.C. Sec. 1396d as existed on August 1, 2005.

Example 3. Acme Hospital is a nonprofit hospital that qualifies as a health and social welfare organization as defined in RCW 82.04.431. Acme receives $\$ 1,000$ for providing health care services to Jane, who qualifies for the federal medicare program authorized under Title XVIII of the federal Social Security Act. Jane is covered in a health care plan that is a combination of medicare, which is B\&O tax deductible by Acme, and a medicare plus plan, which is paid for by Jane and is not $B \& O$ tax deductible by Acme. Jane pays $\$ 20$ to Acme as patient copayments. Medicare pays $\$ 600$ to Acme for the health care services, and the medicare plus plan pays $\$ 380$. Acme may deduct only the $\$ 600$ received from medicare.
(g) Blood and tissue banks. Except as otherwise provided, RCW 82.04.324 provides a B\&O tax exemption for amounts earned by a qualifying blood bank, a qualifying tissue bank, or a qualifying blood and tissue bank to the extent such amounts are exempt from federal income tax.
((Effective October 1, 2013, RCW 82.04 .324 provides that persons elaiming this exemption must report amounts exempt under this subsection to the department on their excise tax returns. Except for persons whose primary business purpose is the collection, preparation, and processing of blood, the exemption per person is limited to one humdred fifty thousand dollars in tax per calendar year. RCW 82.04 .324 (3) is scheduled to expire June 30, 2016.))

For the purposes of this exemption, the following definitions apply:
(i) Qualifying blood bank. "Qualifying blood bank" means a blood bank that qualifies as an exempt organization under 26 U.S.C. $501(c)(3)$ as existing on June 10, 2004, that is registered under 21 C.F.R., Part 607 as existing on June 10, 2004 , and whose primary business purpose is the collection, preparation, and processing of blood.
( (Effective October 1, 2013, the definition of "qualifying blood bank" includes an exempt organization, as described above, that tests or processes blood, on behalf of itself or other qualifying blood bank or qualifying blood and tissue bank. This definition is scheduled to expire Junc 30, 2016.)) "Qualifying blood bank" does not include a comprehensive cancer center that is recognized as such by the National Cancer Institute.
(ii) Qualifying tissue bank. "Qualifying tissue bank" means a tissue bank that qualifies as an exempt organization under 26 U.S.C. $501(\mathrm{c})(3)$ as existing on June 10, 2004, is registered under 21 C.F.R., Part 1271 as existing on June 10, 2004, and whose primary business purpose is the recovery, processing, storage, labeling, packaging, or distribution of human bone tissue, ligament tissue and similar musculoskeletal tissues, skin tissue, heart valve tissue, or human eye tissue. "Qualifying tissue bank" does not include a comprehensive cancer center that is recognized as such by the National Cancer Institute.
(iii) Qualifying blood and tissue bank. "Qualifying blood and tissue bank" means a bank that qualifies as an exempt organization under 26 U.S.C. $501(\mathrm{c})(3)$ as existing on June 10, 2004 , is registered under 21 C.F.R., Parts 607 and 1271 as existing on June 10, 2004, and whose primary business purpose is the collection, preparation, and processing of blood, and the recovery, processing, storage, labeling, packaging, or distribution of human bone tissue, ligament tissue and similar musculoskeletal tissues, skin tissue, and heart valve tissue.
( (Effective October 1, 2013, the definition of "qualifying blood and tissue bank" includes an exempt organization, as described in (g) (iii) of this subsection, that tests or processes blood, on behalf of itsclf or other qualifying blood bank or qualifying blood and tissue bank.)) "Qualifying blood and tissue bank" does not include a comprehensive cancer center that is recognized as such by the National Cancer Institute. ( (This definition is scheduled to expire June 30, 2016.) )
(h) Assisted living facilities. RCW 82.04 .4337 provides a B\&O tax deduction to licensed assisted living facility operators for amounts earned as compensation for providing adult residential care, enhanced adult residential care, or assisted living services under contract with the department of social and health services authorized by chapter 74.39A RCW to residents who are medicaid recipients. For the pur-
pose of this rule, "adult residential care," "enhanced adult residential care," and "assisted living services" have the same meaning as in RCW 74.39A.009.

In addition, RCW 82.04.4264 provides a B\&O tax exemption for amounts earned by a nonprofit assisted living facility licensed under chapter 18.20 RCW for providing room and domiciliary care to residents of the assisted living facility. For purposes of this rule, "nonprofit assisted living facility" means an assisted living facility that is operated as a religious or charitable organization, is exempt from federal income tax under 26 U.S.C. Sec. 501(c)(3), is incorporated under chapter 24.03 A RCW, is operated as part of a nonprofit hospital, or is operated as part of a public hospital district.
(i) Comprehensive cancer centers. RCW 82.04 .4265 provides a B\&O tax exemption for amounts earned by a comprehensive cancer center to the extent such amounts are exempt from federal income tax. For purposes of this rule, "comprehensive cancer center" means a cancer center that has written confirmation that it is recognized by the National Cancer Institute as a comprehensive cancer center and that qualifies as an exempt organization under 26 U.S.C. Sec. 501(c)(3) as existing on July 1, 2006.
(j) Prescription drugs administered by the medical service provider. RCW 82.04.620 allows a deduction from the measure of tax for reporting under the service and other activities classification of the B\&O tax (RCW 82.04.290) for amounts earned by physicians or clinics for drugs for infusion or injection by licensed physicians or their agents for human use pursuant to a prescription. This deduction only applies to amounts that:
(i) Are separately stated on invoices or other billing statements;
(ii) Do not exceed the then current federal rate; and
(iii) Are covered or required under a health care service program subsidized by the federal or state government.

For the purpose of this deduction only, amounts that "are covered or required under a health care service program subsidized by the federal or state government" include any required drug copayments made directly from the patient to the physician or clinic.
(A) "Federal rate" means the rate at or below which the federal government or its agents reimburse providers for prescription drugs administered to patients as provided for in the medicare, Part B, drugs average sales price information resource as published by the United States Department of Health and Human Services, or any index that succeeds it.
(B) The deduction is available on an "all or nothing" basis against the total amount earned for a specific drug charge. If the total amount earned by the physician or clinic for a specific drug exceeds the federal reimbursement rate, none of the total amount earned qualifies for the deduction (including any required copayment received directly from the patient). In other words, a physician or clinic may not simply take an "automatic" deduction equal to the federal reimbursement rate for each drug.
(C) For physicians or clinics reporting taxes on the accrual basis, the total amount charged for a drug must be included in the gross income at the time of billing if it is in excess of the federal rate. However, in some cases the gross income from charges may be adjusted, as indicated in subsection (8)(a) of this rule. If such an adjustment to gross income is appropriate, the exemption discussed in this subsection may also be taken at the time of billing if the adjustment
leaves the physician or clinic contractually liable to receive a total
 that does not exceed the federal rate.
(10) Sales, use, and other specified taxes deductions and exemptions. Unless otherwise exempt by law, hospitals, nursing homes, adult family homes, assisted living facilities, and similar health care providers are required to pay retail sales tax on purchases of equipment and supplies. The deductions and exemptions listed in this subsection are available to qualified persons.
(a) For the purpose of this subsection, the following definitions apply:
(i) "Chemical" means any catalyst, solvent, water, acid, oil, or other additive that physically or chemically interacts with blood, bone, or tissue.
(ii) "Materials" for the purposes of RCW 82.08 .02807 means any item of tangible personal property including, but not limited to, bags, packs, collecting sets, filtering materials, testing reagents, antisera, and refrigerants, used or consumed in performing research on, procuring, testing, processing, storing, packaging, distributing, or using blood, bone, or tissue.
(iii) "Medical supplies" means any item of tangible personal property, including any repair and replacement parts for such tangible personal property, used by a comprehensive cancer center for the purpose of performing research on, procuring, testing, processing, storing, packaging, distributing, or using blood, bone, or tissue. The term includes tangible personal property used to:
(A) Provide preparatory treatment of blood, bone, or tissue;
(B) Control, guide, measure, tune, verify, align, regulate, test, or physically support blood, bone, or tissue; and
(C) Protect the health and safety of employees or others present during research on, procuring, testing, processing, storing, packaging, distributing, or using blood, bone, or tissue.
(iv) "Research" means basic and applied research that has as its objective the design, development, refinement, testing, marketing, or commercialization of a product, service, or process.
(b) Temporary medical housing provided by a health or social welfare organization. RCW 82.08.997 provides an exemption from state and local retail sales taxes and lodging taxes for temporary medical housing provided by a health or social welfare organization. The term "health or social welfare organization" is defined in RCW 82.04.431. "Temporary medical housing" means transient lodging and related services provided to a patient or the patient's immediate family, legal guardian, or other persons necessary to the patient's mental or physical well-being.
(i) The exemption applies to the following taxes:
(A) Retail sales tax levied under RCW 82.08.020;
(B) Lodging taxes levied under chapter 67.28 RCW;
(C) Convention and trade center tax levied under chapter 36.100 RCW;
(D) Public facilities tax levied under RCW 36.100.040; and
(E) Tourism promotion areas tax levied under RCW 35.101.050.
(ii) The exemptions in this subsection apply to charges made for "temporary medical housing" only:
(A) While the patient is receiving medical treatment at a hospital required to be licensed under RCW 70.41 .090 or at an outpatient clinic associated with such hospital, including any period of recuperation or observation immediately following such medical treatment; and
(B) By a person that does not furnish lodging or related services to the general public.
(c) Purchases for resale. Purchases of tangible personal property for resale without intervening use are not subject to retail sales tax. Persons purchasing tangible personal property for resale must furnish a copy of their reseller permit to the seller to document the wholesale nature of the sale. ( (Reseller permits replaced resale cextificates effective January 1, 2010.) )
(d) Sales of medical supplies, chemicals, or materials to a comprehensive cancer center. RCW 82.08 .808 and 82.12 .808 provide, respectively, retail sales tax and use tax exemptions for sales of medical supplies, chemicals, or materials to a comprehensive cancer center. These exemptions do not apply to sales of construction materials, office equipment, building equipment, administrative supplies, or vehicles.
(e) Sales of medical supplies, chemicals, or materials to organ procurement organizations. RCW 82.08 .02807 and 82.12 .02749 provide((s)), respectively, retail sales tax and use tax exemptions for sales of medical supplies, chemicals, or materials to organ procurement organizations exempt under RCW 82.04.326. These exemptions do not apply to the sale of construction materials, office equipment, building equipment, administrative supplies, or vehicles.
(11) Buyer's responsibility to remit deferred sales or use tax. If the seller does not collect retail sales tax on a retail sale, the buyer must remit the retail sales tax $\boldsymbol{L}^{( }\left(\mathrm{t}^{\prime}\right)$ ) commonly referred to as "deferred sales tax" ( $(+)$ ) $\perp$ or use tax directly to the department unless the purchases are specifically exempt by law. For detailed information regarding the use tax, refer to WAC 458-20-178.
(a) ( (How do I report)) Reporting deferred sales or use tax. Persons registered with the department and required to file tax returns should report deferred sales or use tax on their combined excise tax return. As the combined excise tax return does not have a separate line for reporting deferred sales tax, the buyer should report the tax liability on the use tax line. If a deferred sales tax or use tax liability is incurred by a person who is not required to be registered with the department, the person must report the tax on a "Consumer Use Tax Return" and remit the appropriate tax to the department.
(b) ((Where can I obtain a)) Consumer Use Tax Return ((?)). The Consumer Use Tax Return may be obtained from the department's website at dor.wa.gov, or by calling the department's telephone information center at ((1-800-647-7706)) 1-360-705-6705.
[Statutory Authority: RCW 82.24.550, 82.01.060, 82.08.808, 82.12.808, 82.08.02807 and 82.12.02749. WSR 21-01-062, § 458-20-168, filed 12/9/20, effective 1/9/21. Statutory Authority: RCW 82.32.300, 82.01.060(2), and 2015 c 86. WSR 15-21-092, § 458-20-168, filed 10/21/15, effective 11/21/15. Statutory Authority: RCW 82.32.300 and 82.01.060(2). WSR 14-18-019, § 458-20-168, filed 8/25/14, effective 9/25/14. Statutory Authority: RCW 82.32.300, 82.01.060(2), chapters 82.04, 82.08, 82.12 and 82.32 RCW. WSR 10-06-069, § 458-20-168, filed 2/25/10, effective 3/28/10. Statutory Authority: RCW 82.32.300 and 82.01.060(2). WSR 08-16-057, § 458-20-168, filed 7/30/08, effective 8/30/08; WSR 05-14-090, § 458-20-168, filed 6/30/05, effective 7/31/05. Statutory Authority: RCW 82.32.300 and 82.04.260(15). WSR 94-11-097, § 458-20-168, filed 5/17/94, effective 6/17/94. Statutory Authority: RCW 82.32.300. WSR 88-01-050 (Order 87-9), § 458-20-168, filed 12/15/87; WSR 87-05-042 (Order 87-1), § 458-20-168, filed

2/18/87; WSR 83-07-033 (Order ET 83-16), § 458-20-168, filed 3/15/83. Statutory Authority: RCW 82.01.060(2) and 82.32.300. WSR 78-07-045 (Order ET 78-4), § 458-20-168, filed 6/27/78; Order ET 74-2, § 458-20-168, filed 6/24/74; Order ET 70-3, § 458-20-168 (Rule 168), filed 5/29/70, effective 7/1/70.]

AMENDATORY SECTION (Amending WSR 20-21-104, filed 10/21/20, effective 11/21/20)

WAC 458-20-169 Nonprofit organizations. (1) Introduction. Unlike the tax systems of most states and the federal government, Washington's tax system, including its primary business tax, applies to the activities of nonprofit organizations. Washington's business and occupation ( $\mathrm{B} \& \mathrm{O}$ ) tax is imposed on all entities that generate gross receipts or proceeds, unless there is a specific statutory exemption or deduction. This rule explains how the B\&O, retail sales, and use taxes apply to activities often performed by nonprofit organizations. Although some nonprofit organizations may be subject to other taxes (((e.g., )) such as the public utility tax or insurance premium taxes on income from utility or insurance activities( $(+)$ ), these taxes are not discussed in this rule. The rule describes the most common $B \& O$, retail sales, and use tax exemptions and deductions that are specifically provided to nonprofit organizations by state law. Other exemptions or deductions not specific to nonprofit organizations may also apply.
(a) Examples. This rule contains examples that identify a number of facts and then state a conclusion. These examples should be used only as a general guide. The tax results of other situations must be determined after a review of all facts and circumstances.
(b) Other rules that may ((be relevant)) apply. Rules in the following list may contain additional ((felevant)) information for nonprofit organizations:
(i) WAC 458-20-101 Tax registration and tax reporting.
(ii) WAC 458-20-167 Educational institutions, school districts, student organizations, and private schools((;
(ii)) ).
(iii) WAC 458-20-168 Hospitals, nursing homes, assisted living facilities, adult family homes and similar health care facilities( ( $\quad$ (iii))) .
(iv) WĀ 4 48-20-183 ((Amusement, recreation, and physical fitness
services;
(iv)) ) Recreational services and activities.
(v) WAC 458-20-249 Artistic or cultural organizations( (; and
(v) ) .
(vi) WAC 458-20-256 Trade shows, conventions and seminars.
(2) Registration and reporting requirements. Nonprofit organizations ( (with \$12,000 or more per year in gross receipts from sales, and/or gross income from services subject to the B\&O tax, or that)) are subject to the registration and reporting requirements as described in WAC 458-20-101. Whether registering and reporting are required depends upon the level and type of taxes the nonprofit organization is required to collect or pay to the department of revenue (department) ( (xetail sales tax or any other tax or fee which the department administers (regardless of the level of annual gross receipts) must register with the department. Nonprofit organizations with less than twelve
thousand dollars per year in gross receipts and that are not required to collect retail sales tax or any other tax or fec administered by the department are not required to register with the department. For more information on whether registration with the department is required see WAC 458-20-101)).
(3) Filing combined excise tax returns. Nonprofit organizations making retail sales that require the collection of retail sales tax must file an excise tax return, regardless of the annual level of gross receipts or gross income and whether or not any B\&O tax is due. For information on when a taxpayer may qualify for a small business B\&O tax credit, see WAC 458-20-104 Small business tax relief based on income of business. The excise tax return with payment is generally filed on a monthly basis. Under certain conditions the department may authorize taxpayers to file and remit payment on either a quarterly or an annual basis or be placed on an "active nonreporting" status by the department. For information on how reporting frequencies are assigned to taxpayers, see WAC 458-20-22801 Tax reporting frequency, and WAC 458-20-101.
( (Nonprofit organizations that do not have retail sales tax to remit, but are required to register, do not have to file an excise tax return if they mect certain statutory requirements (o.g., annual gross income of less than $\$ 28,000$ ) and are placed on an "active nonreporting" status by the department. For additional information on whethex an organization qualifics for the "active nonreporting" status see WAC 458-20-101.) )
(4) General tax reporting responsibilities. While Washington state law provides some tax exemptions and deductions specifically for nonprofit organizations, these organizations otherwise have the same tax-reporting responsibilities as for-profit organizations.
(a) Business and occupation tax. Chapter 82.04 RCW imposes a B\&O tax on every person with substantial nexus in Washington ( (fee RCW 82.04.067)) $)$ engaged in business activities within this state, unless the income is specifically exempt or deductible under state law. RCW 82.04.067. The B\&O tax applies to the value of products, gross proceeds of sales, or gross income of the business, as the case may be. RCW 82.04.220.
(i) Common B\&O tax classifications. Chapter 82.04 RCW provides a number of classifications that apply to specific activities. The most common B\&O tax classifications applying to income received by nonprofit organizations are the retailing, wholesaling, and service and other activities classifications. RCW 82.04.250, 82.04.270, and 82.04.290. If an organization engages in more than one kind of business activity, it must report the gross income from each activity under the appropriate tax classification. RCW 82.04.440(1).
(ii) Measure of tax. The most common measures of the B\&O tax are "gross proceeds of sales" and "gross income of the business." RCW 82.04 .070 and 82.04 .080 , respectively. These measures include the value proceeding or accruing from the sale of tangible personal property or services rendered without any deduction for the cost of property sold, cost of materials used, labor costs, discounts paid, delivery costs, taxes, losses, or any other expenses.
(b) Retail sales tax. A nonprofit organization must collect and remit retail sales tax on all retail sales, unless the sale is specifically exempt by statute. Examples of retail sales tax exemptions that may apply to nonprofit organizations are those for:
(i) Sales of certain food products, (() (see)) $\bar{W} A C$ 458-20-244 ( (т) ) Food and food ingredients ( $(\boldsymbol{\prime}$,$) ) i$
(ii) Construction materials purchased by a health or social welfare organization for new construction of alternative housing to be licensed as a family foster home for youth in crisis. ((fse)) RCW 82.08.02915 ( $(\boldsymbol{+}$, ) ) . New construction includes renovating an existing structure to provide new housing for youth in crisis; and (iii) Fund-raising activities (((see)) in subsection (5) (g) of this rule( (). New construction includes renovating an existing structure to provide now housing for youth in crisis)).

A nonprofit organization must pay retail sales tax when it purchases goods or retail services for its own use as a consumer, unless the purchase is specifically exempt by statute. Items purchased for resale without intervening use are purchases at wholesale and are not subject to the retail sales tax if the seller takes from the buyer a copy of the buyer's reseller permit. The reseller permit documents the wholesale nature of any sale. ( (Reseller permits replaced resale cextificates effective January 1, 2010.)) For additional information on reseller permits see WAC 458-20-102 Reseller permits.
(c) Use tax. The use tax is imposed on every person, including nonprofit organizations, using tangible personal property within this state as a consumer, unless such use is specifically exempt by statute. The use tax applies only if retail sales tax has not previously been paid on the item. The rate of tax is the same as the retail sales tax rate that applies at the location where the property is first used.

A common application of the use tax occurs when items are purchased from an out-of-state seller who has no presence in Washington. When the out-of-state seller does not collect Washington's retail sales or use tax, the buyer is statutorily required to remit use tax directly to the department. For more information on use tax and the use of tangible personal propertyı see WAC 458-20-178 Use tax and the use of tangible personal property.

Except for fund-raising, use tax exemptions generally correspond to retail sales tax exemptions. For example, the use tax exemption for construction materials acquired by a health or social welfare organization for new construction of alternative housing for youth in crisis, to be licensed as a family foster home ( (t)) in RCW 82.12.02915((t)) \& corresponds with the retail sales tax exemption described in subsection (4)(b) of this rule for purchasing these construction materials.
(i) Use tax exemption for donated items. RCW 82.12 .02595 provides a use tax exemption for personal property donated to a nonprofit charitable organization. This exemption:
(A) Is available for the nonprofit charitable organization and the donor, if the donor did not previously use the personal property as a consumer((. It also)) i or
(B) Applies to the use of property by a donor who is incorporating the property into a nonprofit organization's real or personal property for no charge((-

The exemption also)); or
(C) Applies to another person using property originally donated to a charitable nonprofit organization that is subsequently donated or bailed to that person by the charitable nonprofit organization, provided that person uses the property in furtherance of the charitable purpose for which the property was originally donated to the charitable nonprofit organization. ((for example,))
(I) Example 1. A hardware store donates an industrial pressure washer to a nonprofit community center for neighborhood cleanup, the
community center bails this washer to people enrolled in its neighborhood improvement group for neighborhood clean-up projects. No use tax is due from any of the participants in these transactions. ((An example of a gift that would not qualify is when))
(II) Example 2. A car is donated to a church for its staff and the church gives that car to its pastor. The pastor must pay use tax on the car because it serves multiple purposes. It serves the church's charitable purpose, but it also acts as compensation to the pastor and is available for the pastor's personal use, so the gift of the car would not qualify for the exemption as a gift of donated items. The subsequent donation of property from the charity to another person must be solely for a charitable purpose. If the property is donated or bailed to the third party for a charitable purpose in line with the nonprofit organization's charitable activities, generally( $(\boldsymbol{\tau})$ ) no additional proof is required that this was the charitable purpose for which the property was originally donated.
(ii) Use tax implications with respect to fund-raising activities. Subsection (5) (g) of this rule explains that a retail sales tax exemption is available for certain fund-raising sales. However, there is usually no comparable use tax exemption provided to the ( (buyex) uscr) ) buyer or user of property purchased at these fund-raising sales. While the nonprofit organization is not obligated to collect use tax from the buyer, the organization is encouraged to inform the buyer of the buyer's possible use tax obligation.
(iii) Contests of chance. RCW 82.12 .225 provides a use tax exemption for the use of any article of personal property, purchased or received as a prize in a contest of chance, as defined in RCW 82.04.285, from a nonprofit organization or a library, if the value is less than the current value limit. This exemption only applies if the gross income from the sale by the nonprofit organization or library is exempt under RCW 82.04.3651.
(A) The current value limit is ((twelve thousand dollars))
\$12,000. Beginning in 2020, the value limit must be adjusted annually each December for inflation. The department will calculate an adjusted value limit for use in the next calendar year, using the consumer price index for the Seattle area. Adjusted value limits may not decrease from one year to the next. If an adjusted value limit calculation based on the consumer price index results in less than the current year's value limit, the current year's value limit will apply in the following calendar year. Adjusted value limits are published on the department's website and take effect January lst for the following year.
(B) The following definitions apply to (c) (iii) of this subsection unless the context clearly requires otherwise:
(I) "Consumer price index" means the consumer price index for all urban consumers, all items, (CPI-U) as calculated by the United States Bureau of Labor Statistics or successor agency.
(II) "Seattle area" means the geographic area sample that includes Seattle and surrounding areas.
(5) Exemptions. The following sources of income are specifically exempt from tax. As such, they should not be included or reported as gross income if the organization is required to file an excise tax return.
(a) Adult family homes. RCW 82.04 .327 exempts from $B \& O$ tax amounts received by licensed adult family homes or adult family homes that are exempt from licensing under rules of the department of social and health services.

Washington State Register, Issue 22-14
(b) Nonprofit assisted living facilities. RCW 82.04 .4264 exempts
from $B \& O$ tax amounts received by a nonprofit assisted living facility licensed under chapter 18.20 RCW for providing room and domiciliary care to residents of the assisted living facility. ((Nonprofit assis ted living facilitics were formerly known as "nonprofit boarding homes" in the statute.)) For the purposes of this exemption, the terms:
(i) "Domiciliary care" has the meaning provided in RCW 18.20.020; and
(ii) "Nonprofit assisted living facility" means an assisted living facility that is operated as a religious or charitable organization, is exempt from federal income tax under 26 U.S.C. Sec. 501 (c) (3), is incorporated under chapter 24.03A RCW, is operated as part of a nonprofit hospital, or is operated as part of a public hospital district.
(c) Camp or conference centers. RCW 82.04.363 and 82.08.830」 respectively $\not{ }_{\perp}$ exempt from $B \& O$ tax and retail sales tax amounts received by a nonprofit organization from the sale or furnishing of certain items or services at a camp or conference center conducted on property exempt from the property tax under RCW 84.36 .030 (1), (2), or (3). For information about property tax exemptions that may apply see: WAC 458-16-210 ((t)) Nonprofit organizations or associations organized and conducted for nonsectarian purposes((t)); WAC 458-16-220 ((t))Church camps((t)); and WAC 458-16-230 ((t))Character building organizations( (t)).

Amounts received from the sale of the following items and services are exempt:
(i) Lodging, conference and meeting rooms, camping facilities, parking, and similar licenses to use real property;
(ii) Food and meals;
(iii) Books, tapes, and other products, including electronically transferred items, available exclusively to the participants at the camp, conference, or meeting and not available to the public at large.
(d) Child care resource and referral services. RCW 82.04 .3395 exempts from B\&O tax amounts received by nonprofit organizations for providing child care resource and referral services. Child care resource and referral services do not include child care services provided directly to children.
(e) Credit and debt services. RCW 82.04 .368 exempts from B\&O tax amounts received by nonprofit organizations for providing specialized credit and debt services. These services include:
(i) Presenting individual and community credit education programs including credit and debt counseling;
(ii) Obtaining creditor cooperation allowing a debtor to repay debt in an orderly manner;
(iii) Establishing and administering negotiated repayment programs for debtors; and
(iv) Providing advice or assistance to a debtor with regard to (i), (ii), or (iii) of this subsection.
(f) Day care provided by churches. RCW 82.04 .339 exempts from B\&O tax amounts received by a church for the care of children of any age for periods of less than ((もwnty-four)) 24 hours, provided the church is exempt from property tax under RCW 84.36.020.
(g) Fund-raising. RCW 82.04 .3651 and 82.08 .02573 , respectively, exempt from $B \& O$ tax and retail sales tax amounts received from certain fund-raising activities.

These exemptions apply only to the fund-raising income received by the nonprofit organization. For example, commission income received by a nonprofit organization selling books owned by a for-profit entity on a consignment basis is exempt from tax only if the statutory requirements are satisfied. The nonprofit organization is generally responsible for collecting and remitting retail sales tax on the gross proceeds of sales when selling items for another person. For additional information on the taxability of sales by agents, auctioneers and other similar types of sellers see WAC 458-20-159.
(i) ((What)) Qualifying nonprofit organizations ((qualify?)). Nonprofit organizations that qualify for this exemption are those that are:
(A) A tax-exempt nonprofit organization described by section $501(c)(3)$ (educational and charitable), 501 (c) (4) (social welfare), or 501(c)(10) (fraternal societies operating as lodges) of the Internal Revenue Code; or
(B) A nonprofit organization that would qualify for tax exemption under section $501(\mathrm{c})(3),(4)$, or (10) except that it is not organized as a nonprofit corporation; or
(C) A nonprofit organization that does not pay its members, stockholders, officers, directors, or trustees any amounts from its gross income, except as payment for services rendered, does not pay more than reasonable compensation to any person for services rendered, and does not engage in a substantial amount of political activity. Political activity includes, but is not limited to, influencing legislation and participating in any campaign on behalf of any candidate for political office.
(ii) Qualifying fund-raising activities. For the purpose of this exemption, "fund-raising activity" means soliciting or accepting contributions of money or other property, or activities involving the anticipated exchange of goods or services for money between the soliciting organization and the organization or person solicited, for furthering the goals of the nonprofit organization. The following are examples of qualifying fund-raising activities:
(A) Example 3. Money raised by a nonprofit charitable group from its annual telephone fund drive to fund its homeless shelters where nothing is promised in return for a donor's pledge is exempt as fundraising contributions of money to further the goals of the nonprofit organization.
(B) Example 4. A nonprofit group organized as a community playhouse has an annual telephone fund drive. The group gives the caller a mug, jacket, dinner, or vacation trip depending on the amount of pledge made over the phone. The community playhouse does not sell or exchange the mugs, jackets, dinners, or trips for cash or property, except during this pledge drive. The money is used to produce the next season's plays. The money earned from the pledges is exempt from both B\&O tax and retail sales tax to the extent these amounts represent an exchange of goods and services for money to further the goals of the nonprofit group. The money earned from the pledges above the value of the goods and services exchanged is exempt as a fund-raising contribution of money to further the goals of the nonprofit organization.
(C) Example 5. A nonprofit group sells ice cream bars at booths leased during the two-week runs of three county fairs, for a total of six weeks during the year, to fund youth camps maintained by the nonprofit group. The money earned from the booths is exempt from both $B \& O$ tax and retail sales tax as a fund-raising exchange of goods for money to further the goals of the nonprofit group.
(iii) Contributions of money or other property. The term contributions includes grants, donations, endowments, scholarships, gifts, awards, and any other transfer of money or other property by a donor, provided the donor receives no significant goods, services, or benefits in return for making the gift. For example, an amount received by a nonprofit educational broadcaster from a group that conditions receipt on the nonprofit broadcaster airing its seminars is not a contribution regardless of how the amount paid is titled by the two organizations.

It is not unusual for the person making a gift to require some accountability for how the gift is used as a condition for receiving the gift or future gifts. Such gifts remain exempt, provided the "accountability" required does not result in a direct benefit to the donor. ( ( + ) Examples of direct benefits to a donor ( (are:)) may include money given for a report on the soil contamination levels of land owned by the donor, medical services provided to the donor or the donor's family, or market research benefiting the donor directly ( $(t)$ ). This "accountability" can take the form of conditions or restrictions on the use of the gift for specific charitable purposes or can take the form of written reports accounting for the use of the gift. Public acknowledgment of a donor for the gift is not a significant service or benefit.
(iv) Nonqualifying fund-raising activities. Fund-raising activity does not include the operation of a regular place of business in which services are provided or sales are made during regular hours such as a bookstore, thrift shop, restaurant, legal or health clinic, or similar business. It also does not include the operation of a regular place of business from which services are provided or performed during regular hours such as the provision of retail, personal, or professional services. A regular place of business and the regular hours of that business depend on the type of business being conducted. The following are examples of nonqualifying fund-raising activities:
(A) Example 6. In the example in (g) (iii) of this subsection demonstrating that an amount received by a nonprofit broadcaster was not a contribution because services were given in return for the funds, this activity must also be examined to see whether the exchange was for services as part of a fund-raising activity. The broadcaster is in the business of broadcasting programs. It has a regular site for broadcasting programs and broadcasts ((twenty-four)) 24 hours every day. Broadcasting is a part of its business activity performed from a regular place of business during regular hours. The money received from the group with the requirement that its seminars be broadcast would not qualify as money received from a fund-raising activity even though the parties viewed the money as a "donation."
(B) Example 7. A nonprofit organization that makes catalog sales throughout the year with a ((twenty-four)) 24 hour telephone line for taking orders has a regular place of business at the location where the sales orders are processed and regular hours of ((もwnty-four)) 24 hours a day. Catalog sales are not exempt as fund-raising amounts even though the funds are raised for a nonprofit purpose.
(C) Example 8. A nonprofit group organized as a community playhouse ((has)) performs three plays during the year at a leased ((theaもre) ) theater. The plays run for a total of six weeks and the group provides concessions at each of the performances. The playhouse has a regular place of business with regular hours for that type of business. The concessions ((are done)) operate at that regular place of business during regular hours. The concessions are not exempt as fund-
raising activities even though amounts raised from the concessions may be used to further the nonprofit purpose of that group.
(D) Example 9. A nonprofit student group ( $(\boldsymbol{\sigma})$ ) that raises money for scholarships and other educational needs $((\boldsymbol{T}))$ sets up an espresso stand that is open for two hours every morning during the school year. The espresso stand is a regular place of business with regular hours for that type of business. The money earned from the espresso stand is not exempt, even though the amounts are raised to further the student group's nonprofit purpose.
(v) Fund-raising sales by libraries. RCW 82.04 .3651 provides that ((the sale of)) selling used books, used videos, used sound recordings, or similar used information products in a library is not ( (the operation of)) operating a regular place of business, if the proceeds are used solely to support the library. The library must be a free public library supported in whole or in part with money derived from taxes. RCW 27.12.010. In addition to the B\&O tax exemption under RCW 82.04.3651, RCW 82.08.02573 provides a comparable retail sales tax exemption for the same sales made by a library.
(h) Group training homes. RCW 82.04.385 exempts from B\&O tax amounts received from the department of social and health services for operating a nonprofit group training home. The amounts excluded from gross income must be used for the cost of care, maintenance, support, and training of developmentally disabled individuals. As defined in RCW 71A.22.020, a nonprofit group training home is an approved facility equipped, supervised, managed, and operated on a full-time nonprofit basis for the full-time care, treatment, training, and maintenance of individuals with developmental disabilities.
(i) Sheltered workshops. RCW 82.04 .385 also exempts from B\&O tax amounts received by a nonprofit organization for operating a sheltered workshop.
(i) ((What is)) Definition of a sheltered workshop((?)). A sheltered workshop is that part of the nonprofit organization engaged in business activities that are performed primarily to provide evaluation and work ((adjusted)) adjustment services for ((a handicapped)) persons with disabilities or to provide gainful employment or rehabilitation services to (( handicapped)) persons with disabilities. The sheltered workshop ( (ean)) may be maintained on or off the premises of the nonprofit organization.
(ii) ( What is meant by ")) Gainful employment or rehabilitation services to ((a handicapped person"?)) persons with disabilities. Gainful employment or rehabilitation services must be an interim step in the rehabilitation process that is provided because the person cannot be readily absorbed into the competitive labor market or because employment opportunities for the person do not exist during that time in the competitive labor market.
(("Handicapped,")) "Persons with disabilities," for the purposes of this exemption, means persons with a physical or mental disability that restricts normal achievement, including medically recognized addictions and learning disabilities. However, this term does not include social or economic disadvantages that restrict normal achievement (((e.g.)), such as having a prior criminal history or low-income status ( $(+)$ ).
(j) Student loan services. RCW 82.04 .367 exempts from B\&O tax amounts received by nonprofit organizations that are exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code that:
(i) Are guarantee agencies under the federal guaranteed student loan program or that issue debt to provide or acquire student loans; or
(ii) Provide guarantees for student loans made through programs other than the federal guaranteed student loan program.
(k) Grants received to fund education programs pertaining to litter control, waste reduction, recycling, and composting. ((ffective July 24, 2015,) ) RCW 82.04.755 provides a B\&O tax exemption for grants received by a nonprofit organization from the matching fund competitive grant program established in RCW ( 70.93 .180 (1) (b) (ii)) ) 70A. 200.140 (1)(b) (ii). This program provides funding for local or statewide education programs designed to help the public with litter control, waste reduction, recycling, and composting of primarily products upon which litter tax is imposed. For information on the state litter tax program, see chapter 82.19 RCW . The requirements for the grants are listed in RCW ( 70.93 .180 (1) (b) (ii). Chapter 15, Laws of Z2015 (ESHB 1060)) ) 70A. 200.140 (1) (b) (ii).
(6) B\&O tax deduction of payments made to health or social welfare organizations.
(a) Compensation from public entities. RCW 82.04 .4297 provides a B\&O tax deduction to health or social welfare organizations for amounts received from the United States, any instrumentality of the United States, the state of Washington, or any municipal corporation or political subdivision of the state of Washington as compensation for or to support health or social welfare services, rendered by a health or social welfare organization, as defined in RCW 82.04.431, or by a municipal corporation or political subdivision. These deductible amounts should be included in the gross income reported on the excise tax return, entered on the deduction page, and then deducted on the return when determining the amount of the organization's taxable income. A deduction is not allowed, however, for amounts that are received under an employee benefit plan.
(b) Mental health services or ((ehemical dependency)) substance use disorder treatment services under a government-funded program. ((RCW 82.04.4277)) Effective April 26, 2021, RCW 82.04.4290 provides a B\&O tax deduction for health or social welfare organizations for amounts received as compensation for providing mental health services or ((ehemical dependency)) substance use disorder treatment services under a government-funded program. During the period August 24, 2011, to December 31, 2019, RCW 82.04.4277 provided a similar B\&O tax deduction for mental health services and chemical dependency services under a government-funded program. This rule explains the $B \& O$ tax deduction in RCW 82.04.4290.

A behavioral health administrative services organization may deduct from the measure of tax amounts received from the state of Washington for distribution to a health or social welfare organization that is eligible to deduct the distribution for providing mental health services of substance use disorder treatment services under a government-funded program.
(i) The following definitions apply to (b) of this subsection unless the context clearly requires otherwise:
(A) ( "Chemical dependency" has the same meaning as provided in RCW 70.96A.020;) ) "Behavioral health administrative services organization" has the same meaning as provided in RCW 71.24.025;
(B) "Health and social welfare organization" has the meaning provided in RCW 82.04.431; ((and))
(C) "Mental health services" ( (and "behavioral health oxganization" have the meanings) ) has the same meaning provided in ((RCW 71.24 .025 .
(ii) The deduction for amounts received as compensation for providing chemical dependency services under a government-funded program is effective April 1, 2016. Regional support networks, which are renamed behavioral health organizations effective April 1, 2016, may also deduct from the measure of tax amounts received from the state of Washington for distribution to health or social welfare organizations eligible to deduct the distribution under RCW 82.04.4277.
(iii))) chapter 71.24 RCW ; and
(D) "Substance use disorder treatment services" means substance use disorder treatment services as described in chapter 71.24 RCW.
(ii) Persons claiming a deduction((s)) under RCW ((82.04.4277)) 82.04.4290 must file an annual tax performance report with the department. Refer to RCW 82.32.534 and WAC 458-20-267 Annual tax performance reports for certain tax preferences, for information regarding filing an annual tax performance report.
((iv) These deductions are)) (iii) This deduction is scheduled to expire January 1, ((z020)) 2032.
(c) Child welfare services. RCW 82.04 .4275 provides a B\&O tax deduction for health or social welfare organizations for amounts received as compensation for providing child welfare services under a government-funded program. Persons may also deduct from the measure of tax amounts received from the state of Washington for distribution to health or social welfare organizations eligible to deduct the distribution under RCW 82.04.4275(1).
(d) ((What is a)) Definition of health or social welfare organization((?)). A health or social welfare organization is an organization, including any community action council, providing health or social welfare services as defined in ((subsection (6))) (e) of this ((xule)) subsection. To be exempt under RCW 82.04.4297, a corporation must satisfy all of the following conditions:
(i) Be a corporation sole under chapter 24.12 RCW or a domestic or foreign ((not-for-profit)) nonprofit corporation under chapter 24.03A RCW. A corporation providing professional services as authorized under chapter 18.100 RCW does not qualify as a health or social welfare organization;
(ii) Be governed by a board of not less than eight individuals who are not paid corporate employees when the organization is a (not-for-profit)) nonprofit corporation;
(iii) Not pay any part of its corporate income directly or indirectly to its members, stockholders, officers, directors, or trustees except as executive or officer compensation or as services rendered by the corporation in accordance with its purposes and bylaws to a member, stockholder, officer, or director or as an individual;
(iv) Only pay compensation to corporate officers and executives for actual services rendered. This compensation must be at a level comparable to like public service positions within Washington;
(v) Have irrevocably dedicated its corporate assets to health or social welfare activities. Upon corporate liquidation, dissolution, or abandonment, any distribution or transfer of corporate assets may not inure directly or indirectly to the benefit of any member or individual, except for another health or social welfare organization;
(vi) Be duly licensed or certified as required by law or regulation;
(vii) Use government payments to provide health or social welfare services;
(viii) Make its services available regardless of race, color, national origin, or ancestry; and
(ix) Provide access to the corporation's books and records to the department's authorized agents upon request.
(e) Qualifying health or welfare services. The term "health or social welfare services" includes, and is limited to:
(i) Mental health, drug, or alcoholism counseling or treatment;
(ii) Family counseling;
(iii) Health care services;
(iv) Therapeutic, diagnostic, rehabilitative, or restorative services for the care of the sick, aged, physically disabled, developmentally disabled, or emotionally disabled individuals;
(v) Activities, including recreational activities, intended to prevent or ameliorate juvenile delinquency or child abuse;
(vi) Care of orphans or foster children;
(vii) Day care of children;
(viii) Employment development, training, and placement;
(ix) Legal services to the indigent;
(x) Weatherization assistance or minor home repairs for low-income homeowners or renters;
(xi) Assistance to low-income homeowners and renters to offset the cost of home heating energy, through direct benefits to eligible households or to fuel vendors on behalf of eligible households; ( (and) )
(xii) Community services to low-income individuals, families and groups that are designed to have a measurable and potentially major impact on causes of poverty in communities of the state of Washington; and
(xiii) Temporary medical housing, as defined in RCW 82.08.997, if the housing is provided only:
(A) While the patient is receiving medical treatment at a hospital required to be licensed under RCW 70.41 .090 or at an outpatient clinic associated with such hospital, including any period of recuperation or observation immediately following such medical treatment; and
(B) By a person that does not furnish lodging or related services to the general public.
[Statutory Authority: RCW 82.32.300 and 82.01.060. WSR 20-21-104, § 458-20-169, filed 10/21/20, effective 11/21/20. Statutory Authority: RCW 82.32.300, 82.01.060(2), 82.32.534, 82.32.585, 82.32.590, 82.32.600, 82.32.605, 82.32.607, 82.32.710, 82.32.790, 82.32.808, 82.04.240, 82.04.2404, 82.04.260, 82.04.2909, 82.04.426, 82.04.4277, 82.04.4461, 82.04.4463, 82.04.448, 82.04.4481, 82.04.4483, 82.04.449, 82.08.805, 82.08.965, 82.08.9651, 82.08.970, 82.08.980, 82.08.986, 82.12.022, 82.12.025651, 82.12.805, 82.12.965, 82.12.9651, 82.12.970, 82.12.980, 82.16.0421, 82.29A.137, 82.60.070, 82.63.020, 82.63.045, $82.74 .040,82.74 .050,82.75 .040,82.75 .070,82.82 .020,82.82 .040$, 84.36.645, and 84.36.655. WSR 18-13-094, § 458-20-169, filed 6/19/18, effective 7/20/18. Statutory Authority: RCW 82.32.300, 82.01.060(2), and 82.04[.] 4277. WSR 16-20-011, § 458-20-169, filed 9/23/16, effective 10/24/16. Statutory Authority: RCW 82.32.300 and 82.01.060(2). WSR 16-07-047, § 458-20-169, filed 3/14/16, effective 4/14/16; WSR 14-13-105, § 458-20-169, filed 6/17/14, effective 7/18/14. Statutory Authority: RCW 82.32.300, 82.01.060(2), chapters 82.04, 82.08, 82.12 and 82.32 RCW. WSR 10-06-070, § 458-20-169, filed 2/25/10, effective

3/28/10. Statutory Authority: RCW 82.32.300. WSR 01-09-066, § 458-20-169, filed 4/16/01, effective 5/17/01; WSR 91-21-001, § 458-20-169, filed 10/3/91, effective 11/3/91; WSR 88-21-014 (Order 88-7), § 458-20-169, filed 10/7/88; WSR 86-02-039 (Order ET 85-8), § 458-20-169, filed 12/31/85; WSR 83-07-033 (Order ET 83-16), § 458-20-169, filed 3/15/83. Statutory Authority: RCW 82.01.060(2) and 82.32.300. WSR 78-07-045 (Order ET 78-4), § 458-20-169, filed 6/27/78; Order ET 70-3, § 458-20-169 (Rule 169), filed 5/29/70, effective 7/1/70.]

AMENDATORY SECTION (Amending WSR 19-20-061, filed 9/26/19, effective 10/27/19)

## WAC 458-20-244 Food and food ingredients. (1) Introduction.

 This rule provides guidelines for determining if food or food ingredients qualify for the retail sales tax and use tax exemptions under RCW 82.08.0293 and 82.12 .0293 (collectively referred to in this rule as the "exemptions").There is no corresponding business and occupation (B\&O) tax exemption. Even if a sale of food or food ingredients is exempt from retail sales tax or use tax under the exemptions, gross proceeds from sales of food or food ingredients remain subject to the retailing B\&O tax.
(2) Other rules that may apply. Rules in the following list may contain additional relevant information:
(a) WAC 458-20-119 Sales by caterers and food service contractors;
(b) WAC 458-20-124 Restaurants, cocktail bars, taverns and similar businesses;
(c) ( (MAC 458-20-12401 Special stadium sales and use tax;
(d)) ) WAC 458-20-166 Hotels, motels, boarding houses, rooming houses, resorts, hostels, trailer camps, short-term rentals and similar lodging businesses;
(((c))) (d) WAC 458-20-167 Educational institutions, school districts, student organizations, and private schools;
((f))) (e) WAC 458-20-168 Hospitals, nursing homes, assisted living facilities, adult family homes and similar health care facilities;
((f))) (f) WAC 458-20-169 Nonprofit organizations;
(((h))) (g) WAC 458-20-229 Refunds; and
(((i))) (h) WAC 458-20-243 Litter tax.
(3) Items qualifying for the exemptions.
(a) In general. The exemptions apply to food and food ingredients. "Food and food ingredients" means substances, whether in liquid, concentrated, solid, frozen, dried, or dehydrated form, that are sold for ingestion or chewing by humans and are consumed for their taste or nutritional value.
(b) Items not used solely for ingestion or chewing. Items that are commonly ingested or chewed by humans for their taste or nutritional value but which may also be used for other purposes are generally treated as food or food ingredients. For example, pumpkins are presumed to be a food or food ingredient unless the pumpkin is sold painted or is otherwise clearly for decorative purposes rather than consumption. This is true even though the purchaser may use an undecorated pumpkin for carving and display rather than for eating.
(4) Items not qualifying for the exemptions. The exemptions do not apply to the following items, which are not considered "food or food ingredients" or which are otherwise specifically excluded from the exemptions:
(a) Items sold for medical or hygiene purposes. Items commonly used for medical or hygiene purposes, such as cough drops, breath sprays, toothpaste, etc., are not ingested for taste or nutrition and are not considered a food or food ingredient. In contrast, breath mints are commonly ingested for taste and are considered a food or food ingredient.
(b) Bulk sales of ice. Ice sold in bags, containers, or units of greater than ((ten)) 10 pounds and blocks of ice of any weight are not considered a food or food ingredient. Ice sold in cubed, shaved, or crushed form in packages or quantities of ((もen)) 10 pounds or less is considered a food or food ingredient. Refer to WAC 458-20-120, Sales of ice, for additional guidance on the sale of ice.
(c) Alcoholic beverages. Alcoholic beverages are excluded from the definition of food and food ingredients. "Alcoholic beverages" means beverages that are suitable for human consumption and contain one-half of one percent or more of alcohol by volume.
(d) Tobacco. Tobacco is excluded from the definition of food and food ingredients. "Tobacco" includes cigarettes, cigars, chewing or pipe tobacco, or any other item((s)) that contains tobacco.
(e) Marijuana. Marijuana, useable marijuana, marijuana concentrates, or marijuana-infused products, as defined in RCW 69.50.101, are excluded from the definition of food and food ingredients. "Marijuana" means all parts of the plant Cannabis, whether growing or not, with a THC concentration greater than 0.3 percent on a dry weight basis.
(f) Bottled water. Bottled water is excluded from the exemptions for food and food ingredients. "Bottled water" means water that is placed in a safety sealed container or package for human consumption.
(i) Bottled water is calorie free and does not contain sweeteners or other additives except that it may contain:
(A) Antimicrobial agents;
(B) Fluoride;
(C) Carbonation;
(D) Vitamins, minerals, and electrolytes;
(E) Oxygen;
(F) Preservatives; and
(G) Only those flavors, extracts, or essences derived from a spice or fruit.
(ii) Exemptions for tax on bottled water. There are limited retail sales tax exemptions on bottled water. Sellers must collect the retail sales tax on all sales of bottled water, unless the bottled water is delivered to the buyer as described in (f) (ii) (C) of this subsection. Any buyer that has paid at least ((twenty-five dollars)) $\$ 25.00$ in state and local taxes on purchases of bottled water subject to the exemptions described in (f) (ii)(A) and (B) of this subsection may apply for a refund of the taxes directly from the department.
(A) Prescription issued bottled water. Bottled water prescribed to patients for use in the cure, mitigation, treatment, or prevention of disease or other medical condition is exempt. RCW 82.08.9994. The bottled water must be prescribed, through an order, formula, or recipe issued in any form of oral, written, electronic, or other means of transmission, by a licensed practitioner authorized by Washington law to prescribe.
(B) ((Potable water not readily available.)) Primary water source unsafe. Bottled water for human use by persons whose primary source of drinking water is unsafe is exempt. RCW 82.08.99941. A person's primary source of drinking water is unsafe if:
(I) The public water system providing the drinking water has issued a public notification that the drinking water may pose a health risk, and the notification is still in effect on the date that the bottled water was purchased;
(II) Test results on the person's drinking water, which are no more than ((もwelve)) 12 months old, from a laboratory certified to perform drinking water testing show that the person's drinking water does not meet safe drinking water standards applicable to public water systems; or
(III) The person otherwise establishes, to the department's satisfaction, that the person's drinking water does not meet safe drinking water standards applicable to public water systems.
(C) Bottled water delivered to the buyer in a reusable container not sold with the water. Buyers claiming an exemption listed in (f) (ii) (A) or (B) of this subsection that have the qualifying water delivered in a reusable container that is not sold with the water must complete a retail sales exemption certificate and provide it to the seller. The seller must retain a copy of the certificate.
(iii) For information regarding exemption certificates and refund requests, visit dor.wa.gov.
(g) Soft drinks. Soft drinks are excluded from the exemptions for food and food ingredients. "Soft drinks" means any nonalcoholic beverage that contains natural or artificial sweeteners, except beverages that contain:
(i) Milk or milk products;
(ii) Soy, rice, or similar milk substitutes; or
(iii) More than ((fifty)) 50 percent by volume of vegetable or fruit juice.

For example, sweetened sports beverages are considered "soft drinks," but a sweetened soy beverage is a food or food ingredient.

Beverage mixes that are not sold in liquid form are not soft drinks even though they are intended to be made into a beverage by the customer. Examples include powdered fruit drinks, powdered tea or coffee drinks, and frozen concentrates. These items are food or food ingredients and are not subject to retail sales tax.
(h) Dietary supplements. Dietary supplements are excluded from the exemptions for food and food ingredients. "Dietary supplement" means any product intended to supplement the diet, other than tobacco, which meets all of the following requirements:
(i) Contains a vitamin; mineral; herb or other botanical; an amino acid; a substance for use by humans to increase total dietary intake; or a concentrate, metabolite, constituent, extract; or a combination of any of ((them)) these ingredients;
(ii) Is intended for ingestion in tablet, capsule, powder, soft gel, gelcap, or liquid form, or if not intended for ingestion in such a form, is not represented as conventional food and is not represented for use as a sole item of a meal or of the diet; and
(iii) Is required to be labeled with a Food and Drug Administration "supplement facts" box. If a product is otherwise considered a food or food ingredient and labeled with both a "supplement facts" box and "nutrition facts" box, the product is treated as a food or food ingredient.

Nutrition products formulated to provide balanced nutrition as a sole source of a meal or of the diet are considered a food or food ingredient and not a dietary supplement. Refer to RCW 82.08.925 for information on the retail sales tax exemption applicable to dietary supplements dispensed under a prescription.
(i) Prepared food. Prepared food is excluded from the exemptions for food and food ingredients. Prepared food generally means heated foods, combined foods, or foods sold with utensils provided by the seller, as described in more detail in subsection (5) of this rule.
(5) Items designated as prepared foods. Food or food ingredients are "prepared foods" if any one of the following is true:
(a) Heated foods. Food or food ingredients are "prepared foods" if sold in a heated state or are heated by the seller, except bakery items. "Bakery items" include bread, rolls, buns, biscuits, bagels, croissants, pastries, donuts, Danish, cakes, tortes, pies, tarts, muffins, bars, cookies, and tortillas. Food is sold in a heated state or is heated by the seller when the seller provides the food to the customer at a temperature that is higher than the air temperature of the seller's establishment. Food is not sold in a heated state or heated by the seller if the customer, rather than the seller, heats the food in a microwave provided by the seller.
(b) Combined foods. Food or food ingredients are "prepared foods" if the item sold consists of two or more foods or food ingredients mixed or combined by the seller for sale as a single item, unless the food or food ingredients are any of the following:
(i) Bakery items (defined in (a) of this subsection);
(ii) Items that the seller only cuts, repackages, or pasteurizes;
(iii) Items that contain eggs, fish, meat, or poultry, in a raw or undercooked state requiring cooking as recommended by the federal Food and Drug Administration in chapter 3, part 401.11 of The Food Code, published by the Food and Drug Administration, as amended or renumbered as of January 1, 2003, so as to prevent foodborne illness; or
(iv) Items sold in an unheated state as a single item at a price that varies based on weight or volume.
(c) Food sold with utensils provided by the seller. Food or food ingredients are "prepared foods" if sold with utensils provided by the seller. Utensils include plates, knives, forks, spoons, glasses, cups, napkins, and straws. A plate does not include a container or packaging used to transport the food.
(i) Utensils are customarily provided by the seller. A food or food ingredient is "sold with utensils provided by the seller" if the seller's customary practice for that item is to physically deliver or hand a utensil to the customer with the food or food ingredient as part of the sales transaction. If the food or food ingredient is prepackaged with a utensil, the seller is considered to have physically delivered a utensil to the customer unless the food and utensil are prepackaged together by a food manufacturer classified under sector 311 of the NAICS. Examples of utensils provided by such manufacturers include juice boxes that are packaged with drinking straws, and yogurt or ice cream cups that are packaged with wooden or plastic spoons.
(ii) Utensils are necessary to receive the food. Individual food or food ingredient items are "sold with utensils provided by the seller" if a plate, glass, cup, or bowl is necessary to receive the food or food ingredient and the seller makes those utensils available to its customers. For example, items obtained from a self-serve salad bar are sold with utensils provided by the seller, because the customer
must use a bowl or plate provided by the seller in order to receive the items.
(iii) More than ((seventy-five)) 75 percent prepared food sales with utensils available. All food and food ingredients sold at an establishment, including foods prepackaged with a utensil by a manufacturer classified under sector 311 of the NAICS, are "sold with utensils provided by the seller" if the seller makes utensils available to its customers and the seller's gross retail sales of prepared food under (a), (b), and (c) (ii) of this subsection equal more than ((seven= もy-five) ) 75 percent of the seller's gross retail sales of all food and food ingredients, including prepared food, soft drinks, bottled water, and dietary supplements.
(A) Exception for four or more servings. Even if a seller has more than ((seventy-five)) 75 percent prepared food sales, four servings or more of food or food ingredients packaged for sale as a single item and sold for a single price are not "sold with utensils provided by the seller" unless the seller's customary practice for the package is to physically hand or otherwise deliver a utensil to the customer as part of the sales transaction. Whenever available, the number of servings included in a package of food or food ingredients is to be determined based on the manufacturer's product label. If no label is available, the seller must reasonably determine the number of servings.
(B) Determining total sales of prepared foods. The seller must determine a single prepared food sales percentage annually for all the seller's establishments in the state based on the prior year of sales. The seller may elect to determine its prepared food sales percentage based either on the prior calendar year or on the prior fiscal year. A seller may not change its elected method for determining its prepared food percentage without the written consent of the department of revenue. The seller must determine its annual prepared food sales percentage as soon as possible after accounting records are available, but in no event later than ((nincty)) 90 days after the beginning of the seller's calendar or fiscal year. A seller may make a good faith estimate of its first annual prepared food sales percentage if the seller's records for the prior year are not sufficient to allow the seller to calculate the prepared food sales percentage. The seller must adjust its good faith estimate prospectively if its relative sales of prepared foods in the first ((ninety)) $\underline{90}$ days of operation materially depart from the seller's estimate.
(d) Examples. The following examples identify a number of facts and then state a conclusion. These examples should be used only as a general guide. The tax results of other situations must be determined after a review of all of the facts and circumstances.
(i) Example 1. Fast Cafe sells hot and cold coffee and mixed coffee and mixed milk beverages, cold soft drinks, milk and juice in sin-gle-serving containers, sandwiches, whole fruits, cold pasta salad, cookies and other pastries. Fast Cafe prepares the pasta salad onsite. It orders the pastries from a local bakery, including specialty cakes which it sells both as whole cakes and by the slice. It purchases its sandwiches from a local caterer. The sandwiches are delivered by the caterer prewrapped in plastic with condiments and a plastic knife. Fast Cafe makes straws, napkins and cup lids available for all customers by placing them on a self-service stand. In its first full year of operation, Fast Cafe's annual gross retail sales of all food and food ingredients, including prepared food, soft drinks, bottled water, and dietary supplements is $\$ 100,000$. Of this gross retail sales
total, $\$ 80,000$ is from the sale of hot coffee and hot and cold mixed coffee and milk beverages, all sold in disposable paper or plastic cups with the Fast Cafe logo.

Because more than ((seventy-five)) 75 percent of Fast Cafe's total retail sales of food and food ingredients, including prepared food, soft drinks, bottled water, and dietary supplements are sales of food or food ingredients that are heated or combined by the seller or sold with a utensil (cups) necessary to receive the food, Fast Cafe has more than ((scventy-five)) 75 percent prepared food sales. Because Fast Cafe makes utensils available for its customers, all food and food ingredients sold by Fast Cafe are considered "prepared food," including the cold milk beverages, cookies and pastries, pasta salad, sandwiches and whole fruits. The only exception is the sale of whole specialty cakes. Because a whole cake contains four or more servings, it is not subject to retail sales tax unless Fast Cafe customarily hands a utensil to the customer as part of the sale transaction.
(ii) Example 2. Assume the same facts as in Example 1, but that only $\$ 60,000$ of Fast Cafe's Year 1 gross retail sales were sales of hot coffee and hot and cold mixed coffee and milk beverages. The remainder of its retail sales were sales of sandwiches, whole fruits, cookies and other pastries. Under these facts, Fast Cafe does not have more than ((seventy-five)) 75 percent prepared food sales. Thus, the items sold by Fast Cafe are taxed as follows:
(A) Hot coffee and milk beverages are heated by the seller and are also sold by Fast Cafe with a utensil (a paper cup) necessary to receive the food. The hot coffee and milk beverages are "prepared food" for either reason and are subject to retail sales tax.
(B) Cold mixed milk beverages are a combination of two or more foods or food ingredients and are also sold by Fast Cafe with a utensil (a paper or plastic cup) necessary to receive the food. The cold milk beverages are "prepared food" for either reason and are subject to retail sales tax.
(C) Cold soft drinks are not exempt and are subject to retail sales tax.
(D) Sandwiches prepared by the caterer are subject to retail sales tax. Even though the caterer, rather than the seller, combines the ingredients and includes a utensil, Fast Cafe is considered to have provided the utensil because the caterer is not a food manufacturer classified under sector 311 of the NAICS.
(E) Pasta salad is combined by the seller and is subject to retail sales tax. Note that if the pasta salad was sold by the pound, rather than by servings, it would not be subject to retail sales tax.
(F) Milk and juice in single serving containers, whole fruit, cookies, pastries, slices of cake, and whole cakes are not subject to retail sales tax unless the seller's customary practice is to hand a utensil to the customer as part of the sales transaction. None of these items are heated by the seller, combined by the seller, or require a plate, glass, cup, or bowl in order to receive the item. Even if Fast Cafe heats the pastries for its customers, the pastries are not subject to retail sales tax.
(iii) Example 3. A pizza restaurant sells whole hot pizzas, hot pizza by the slice, and unheated ready-to-bake pizzas. The whole hot pizzas and hot pizza sold by the slice, including delivered pizzas, are "prepared food" because these items are sold in a heated state. If the unheated ready-to-bake pizzas are prepared by the seller, they are "prepared food" because the seller has mixed or combined two or more food ingredients. This is true even though some ingredients in the un-
heated pizzas are raw or uncooked，because those ingredients do not require cooking to prevent foodborne illness．If the unheated ready－ to－bake pizzas are prepared by a manufacturer other than the seller， they will be taxable as＂prepared food＂only if sold with utensils provided by the seller．
（6）Combined sales of taxable and exempt items．Where two or more distinct and identifiable items of tangible personal property，at least one of which is a food or food ingredient，are sold for one nonitemized price that does not vary based on the selection by the purchaser of items included in the transaction：
（a）The entire transaction is taxable if the seller＇s purchase price or sales price of the taxable items is greater than（（fifty））$\underline{50}$ percent of the combined purchase price or sales price；and
（b）The entire transaction is exempt from retail sales tax if the seller＇s purchase price or sales price of the taxable items is（（fif もy））$\frac{50}{}$ percent or less of the combined purchase price or sales price．

The seller may make the determination based on either purchase price or sales price，but may not use a combination of the purchase price and sales price．

Example．A combination wine and cheese picnic basket contains four items packaged together：A bottle of wine，a wine opener，single－ serving cheeses，and the picnic basket holding these items．The sell－ er＇s purchase price for the wine，wine－opener，and picnic basket to－ tals（（もen dollars））\＄10．00．The seller＇s purchase price for the cheeses is two dollars．The seller must collect retail sales taxes on the entire package，because the seller＇s purchase price for the taxa－ ble items（（（ten dollars））$\$ 10.00$ ）is greater than（（fifty）） 50 per－ cent of the combined purchase price（（（もwlve dollars））$\$ 12.00$ ）．
（c）Incidental packaging．＂Distinct and identifiable items＂does not include packaging which is immaterial or incidental to the sale of another item or items．For example，a decorative bag sold filled with candy is not the sale of＂distinct and identifiable＂items where the bag is merely ornamental packaging immaterial in the sale of the can－ dy．
（d）Free items．＂Distinct and identifiable items＂does not in－ clude items provided free of charge．An item is only provided free of charge if the seller＇s sales price does not vary depending on whether the item is included in the sale．
（7）Seller＇s accounting requirements．All sales of food and food ingredients at an establishment will be treated as taxable unless the seller separately accounts for sales of exempt and nonexempt food and food ingredients．It is sufficient separation for accounting purposes if cash registers or the like are programmed to identify items that are not tax exempt and to calculate and assess the proper sales tax accordingly．
（8）Other retail sales tax exemptions that may apply．
（a）Meals served to certain persons．The exemptions apply to food and food ingredients furnished，prepared，or served as meals：
（i）Under a state－administered nutrition program for the aged as provided for in the Older Americans Act（Public Law 95－478 Title III） and RCW 74．38．040（6）；
（ii）Provided to senior citizens，individuals with disabilities， or low－income persons by a（（not－for－profit））nonprofit organization organized under chapter 24.03 A or 24.12 RCW ；or
（iii）Provided to residents，（（sixty－two））$\frac{62}{f}$ years of age or older，of a qualified low－income senior housing facility by the lessor or operator of the facility．The sale of a meal that is billed to both
spouses of a marital community or both domestic partners of a domestic partnership meets the age requirement in this subsection (a) (iii) if at least one of the spouses or domestic partners is at least ( (sixty-(w-)) 62 years of age. For purposes of this subsection, "qualified low-income senior housing facility" means a facility:
(A) That meets the definition of a qualified low-income housing project under Title 26 U.S.C. Sec. 42 of the federal Internal Revenue Code, as existing on August 1, 2009;
(B) That has been partially funded under Title 42 U.S.C. Sec. 1485 of the federal Internal Revenue Code; and
(C) For which the lessor or operator has at any time been entitled to claim a federal income tax credit under Title 26 U.S.C. Sec. 42 of the federal Internal Revenue Code.
(b) Foods exempt under the Supplemental Nutrition Assistance Program (SNAP). Under RCW 82.08.0297, eligible foods purchased with food benefits under the SNAP or a successor program are exempt from the retail sales tax. This is a separate and broader exemption than the retail sales tax exemption for food and food ingredients under RCW 82.08.0293. For example, bottled water, soft drinks, garden seeds, and plants which produce food for the household to eat are "eligible foods" but are not "food or food ingredients." If such items are purchased with food benefits under SNAP or a successor program, they are exempt from the retail sales tax under RCW 82.08.0297, even though the items do not qualify for the exemption under RCW 82.08.0293.
(i) Use of food benefits combined with other means of payment. When both food benefits and other means of payment are used in the same sales transaction, for purposes of collecting retail sales taxes, the other means of payment ((shall)) must be applied first to items which are food and food ingredients exempt under RCW 82.08.0293. The intent is to apply the benefits and other means of payment in such a way as to provide the greatest possible exemption from retail sales tax.
(ii) Example. A customer purchases the following at a grocery store: Meat for three dollars, cereal for three dollars, canned soft drinks for five dollars, and soap for two dollars for a total of ((thirteen dollars)) \$13.00. The customer pays with seven dollars in benefits and six dollars in cash. The cash is applied first to the soap because the soap is neither exempt under RCW 82.08.0293 nor an eligible food under SNAP. The remaining cash (four dollars) is applied first to the meat and the cereal. The food benefits are applied to the balance of the meat and cereal (two dollars) and to the soft drinks (five dollars). Retail sales tax is due only on the soap.
(9) Vending machine sales. The exemptions do not apply to sales of food and food ingredients dispensed from vending machines. There are special requirements for reporting retail sales tax collected on vending machine sales, discussed in (a) of this subsection. "Honor box" sales (sales of snacks or other items from open display trays) are not considered vending machine sales.
(a) Calculating and reporting retail sales tax collected on vending machine sales. Vending machine owners do not need to state the retail sales tax amount separately from the selling price. See RCW 82.08.050 and 82.08.0293. Instead, vending machine owners must determine the amount of retail sales tax collected on the sale of food or food ingredients by using one of the following methods:
(i) Food or food ingredients dispensed in a heated state, soft drinks, and bottled water. For food or food ingredients dispensed from vending machines in a heated state (e.g., hot coffee, soups, tea, and
hot chocolate) and vending machine sales of soft drinks and bottled water, a vending machine owner must calculate the amount of retail sales tax that has been collected ("tax in gross") based on the gross vending machine proceeds. The "tax in gross" is a deduction against the gross amount of both retailing $B \& O$ and retail sales. The formula is:
gross machine proceeds $-[($ gross machine proceeds $) /(1+$ sales tax rate $)]=$ tax in gross
(ii) All other food or food ingredients. For all other food and food ingredients dispensed from vending machines, a vending machine owner must calculate the amount of retail sales tax that has been collected ("tax in gross") based on ((fifty-seven)) 57 percent of the gross vending machine proceeds. The "tax in gross" is a deduction against the gross amount of both retailing $B \& O$ and retail sales. The formula is:
(gross machine proceeds $\times$.57) x sales tax rate $=$ tax in gross
The remaining $43\left(\left(\frac{\%}{\sigma}\right)\right)$ percent of the gross vending machine proceeds, less the "tax in gross" amount, is reported as an exempt food sales deduction against retail sales proceeds only calculated as follows:
(gross machine proceeds x .43 ) - tax in gross $=$ exempt food deduction
(b) Example. Jane owns a vending machine business with machines in Spokane and Seattle. In each location, she has a vending machine selling candy and a second vending machine selling hot cocoa and coffee drinks. Her annual sales for the vending machines and the combined retail sales tax rates for Seattle and Spokane are as follows:

|  | Coffee Machine <br> (cocoa \& coffee) | Candy Machine | Combined Retail <br> Sales Tax Rate |
| :--- | :---: | :---: | :---: |
| Seattle | $\$ 2,500$ | $\$ 10,000$ | .101 |
| Spokane | $\$ 3,000$ | $\$ 6,000$ | .089 |

To determine the amount of retail sales tax she collected on the sale of cocoa and coffee (food dispensed in a heated state, subject to retail sales tax), Jane calculates the "tax in gross" deduction amount as follows:
gross machine proceeds $-[($ gross machine proceeds $) /(1+$ sales tax rate $)]=$ tax in gross

$$
\begin{array}{ll}
\$ 2,500-(\$ 2,500 / 1.101) & =\$ 229.34 \\
\$ 3,000-(\$ 3,000 / 1.089) & =\frac{\$ 245.18}{\$ 474.52}
\end{array} \quad \begin{aligned}
& \text { (Seattle coffee machine) } \\
& \text { (Spokane coffee machine) }
\end{aligned}
$$

Thus, for both retailing $B \& O$ and retail sales, Jane must report her total gross coffee machine proceeds of $\$ 5,500$ with a "tax in gross" deduction of \$474.52.

To determine the amount of retail sales tax she collected on the sale of candy, Jane calculates the "tax in gross" deduction amount as follows:
(gross machine proceeds x .57) x sales tax rate $=$ tax in gross

$$
\begin{aligned}
\$ 10,000 \times .57 \times .101 & =\$ 575.70 \\
\$ 6,000 \times .57 \times .089 & =\frac{\$ 304.38}{\$ 880.08}
\end{aligned} \quad \begin{aligned}
& \text { (Seattle candy machine) } \\
& \text { (Spokane candy machine) }
\end{aligned}
$$

Thus, for both retailing $B \& O$ and retail sales, Jane must report her total gross candy machine proceeds of $\$ 16,000$ with a "tax in gross" deduction of $\$ 880.08$.

Jane must also report an exempt food sales deduction representing the remaining $43\left(\left(\frac{\%}{\%}\right)\right)$ percent of the gross candy machine proceeds.
( $43 \% \mathrm{x}$ gross machine proceeds) - tax in gross $=$ exempt food deduction
$(.43 \times \$ 16,000)-\$ 880.08=\$ 5999.92$
Jane reports the exempt food sales deduction only against the gross amount of her retail sales. The deduction does not apply to retailing $B \& O$.
[Statutory Authority: RCW 82.32.300, 82.01.060(2), 82.08.0293, 82.12.0293, 82.08.9994, 82.08.99941, 82.12.9994, and 82.12.99941. WSR 19-20-061, § 458-20-244, filed 9/26/19, effective 10/27/19. Statutory Authority: RCW 82.32.300 and 82.01.060(2). WSR 15-01-006, § 458-20-244, filed 12/4/14, effective 1/4/15. Statutory Authority: RCW 82.32.300, 82.01.060(2), 82.08.0293 and 82.12.0293. WSR 12-01-027, § 458-20-244, filed 12/12/11, effective 1/12/12; WSR 10-21-010, § 458-20-244, filed 10/7/10, effective 11/7/10. Statutory Authority: RCW 82.32.300 and 82.01.060(2). WSR 07-24-038, § 458-20-244, filed 11/30/07, effective 12/31/07; WSR 07-11-066, § 458-20-244, filed 5/14/07, effective 6/14/07; WSR 03-24-031, § 458-20-244, filed 11/25/03, effective 1/1/04. Statutory Authority: RCW 82.32.300. WSR 88-15-066 (Order 88-4), § 458-20-244, filed 7/19/88; WSR 87-19-139 (Order 87-6), § 458-20-244, filed 9/22/87; WSR 86-21-085 (Order ET 86-18), § 458-20-244, filed 10/17/86; WSR 86-02-039 (Order ET 85-8), § 458-20-244, filed 12/31/85; WSR 83-17-099 (Order ET 83-6), § 458-20-244, filed 8/23/83; WSR 82-16-061 (Order ET 82-7), § 458-20-244, filed 7/30/82. Statutory Authority: RCW 82.01.060(2) and 82.32.300. WSR 78-05-041 (Order ET 78-1), § 458-20-244 (Rule 244), filed 4/21/78, effective 7/1/78.]

AMENDATORY SECTION (Amending WSR 21-01-064, filed 12/9/20, effective 1/9/21)

WAC 458-20-249 Artistic or cultural organizations. (1) Introduction. This rule explains deductions and exemptions from Washington business and occupation tax, retail sales tax and use tax as applied to artistic and cultural organizations. Readers may refer to the following for additional information.
(a) Statutes that may apply:
(i) RCW 82.04.4327 Deductions—Artistic and cultural organiza-tions((-Income from business activities)).
(ii) RCW 82.04.4328 "Artistic or cultural organization" defined. (iii) RCW 82.08.031 Exemptions-Sales to artistic or cultural organizations of certain objects acquired for exhibition or presentation.
(iv) RCW 82.12.031 Exemptions-Use by artistic or cultural organizations of certain objects.
(b) Other rules that may apply:
(i) WAC 458-20-169 Nonprofit organizations.
(ii) WAC 458-20-178 Use tax and the use of tangible personal property.
(2) Definitions.
(a) "Artistic or cultural organization" means an organization that is organized and operated exclusively for the purpose of providing artistic or cultural exhibitions, presentations, or performances or cultural or art education programs for viewing or attendance by the general public and meets all of the following requirements:
(i) The organization is a ((not-for-profit)) nonprofit corporation under chapter 24.03 A RCW;
(ii) The organization is managed by a governing board of not less than eight individuals none of whom is a paid employee of the organization;
(iii) No part of the organization's income may be paid directly or indirectly to its members, stockholders, officers, directors, or trustees except in the form of services rendered by the corporation in accordance with its purposes and bylaws;
(iv) Salary or compensation paid to the organization's officers and executives must be only for actual services rendered, and at levels comparable to the salary or compensation of like positions within the state;
(v) Assets of the corporation must be irrevocably dedicated to the activities for which the exemption is granted;
(vi) On the liquidation, dissolution, or abandonment by the corporation, assets of the corporation may not inure directly or indirectly to the benefit of any member or individual except a nonprofit organization, association, or corporation ((which)) that also would be entitled to the exemption;
(vii) The corporation must be duly licensed or certified when licensing or certification is required by law or regulation;
(viii) The amounts received that qualify for exemption must be used for the activities for which the exemption is granted;
(ix) Services must be available regardless of race, color, national origin, or ancestry; and
(x) The director of revenue must have access to its books in order to determine whether the corporation is exempt from taxes.
(b) The term "artistic or cultural exhibitions, presentations, or performances or cultural or art education programs" includes and is limited to:
(i) An exhibition or presentation of works of art or objects of cultural or historical significance, such as those commonly displayed in art or history museums;
(ii) A musical or dramatic performance or series of performances; or
(iii) An educational seminar or program, or series of such programs, offered by the organization to the general public on an artistic, cultural, or historical subject.
(3) Business and occupation tax deduction. In computing tax under RCW 82.04.4327, an artistic or cultural organization may deduct the following from the measure of tax:
(a) All amounts received by the artistic or cultural organization; and
(b) The value of articles manufactured by the artistic or cultural organization solely for use by the organization in displaying art objects or presenting artistic or cultural exhibitions, performances, or programs for attendance or viewing by the general public.
(4) Retail sales tax.
(a) Artistic or cultural organizations that charge for goods or services included in the definition of "retail sale" under RCW 82.04.050( ( $\boldsymbol{(})$ ) must collect and report the retail sales tax. No retail sales tax exemption is available for sales by such organizations.
(b) Such organizations are exempt from paying retail sales tax on their purchases of certain "objects" for the purpose of exhibition or presentation to the general public if the objects are:
(i) Objects of art;
(ii) Objects of cultural value;
(iii) Objects to be used in the creation of a work of art, other than tools; or
(iv) Objects to be used in displaying art objects or presenting artistic or cultural exhibitions or performances. (RCW 82.08.031)
(c) The term "objects" means items of tangible personal property. It does not include professional or commercial services rendered by third parties. Where certain services ((are)) performed ((which)) are merely incidental to sales of tangible personal property, e.g., designing playbills or altering stage curtains ((which)) that are then sold to qualifying organizations, the total charge will be exempt.
(d) Charges for materials, equipment, and services related to repair, maintenance, or replacement of buildings or structures are not exempt. Thus, e.g., theater seats, aisle carpeting, air conditioning systems, painting of interior or exterior of buildings, and the like are not tax exempt "objects."
(e) Exempt sales include rentals of exempt objects. Examples of objects that qualifying artistic or cultural organizations may purchase without payment of retail sales tax are:
(i) Tickets, programs, signs, posters, fliers, and playbills printed for particular displays or performances; scenery, costumes, stage props, scrims, and materials for their construction;
(ii) Stage lights, filters, control panels, color medium, stage drapes, sets, set paint, gallery exhibition materials, risers, display platforms, and materials for their construction;
(iii) Sheet music, recordings, musical instruments and musical supplies for the staging of displays and performances;
(iv) Movie projectors, films, sound systems, video and sound equipment and supplies, computer hardware and standard, prewritten software directly used exclusively in the staging of performances or actual display of art objects.
(f) Examples of objects that qualifying artistic or cultural organizations may purchase, on which the retail sales tax must be paid are:
(i) Supplies and equipment for clerical support, including bulk tickets for general use, stationery, ((typewiters)) computers, copy machines, and general office supplies;
(ii) Theater seats, lobby furniture, carpeting, vending machines, and general supplies for audience or ((patrons')) patron convenience and use;
(iii) Shipping and packing materials, crates, boxes, dunnage, labels, tags, and container-related items for transfer or storage of exempt objects;
(iv) Sewing machines and other durable equipment used to prepare, repair, and maintain exempt objects (such items are deemed to be "tools," rather than exempt objects);
(v) Theater or building lighting and utility fixtures and systems, and computer hardware and software not directly and exclusively used in staging performances or actually displaying art objects.
(g) Qualified artistic and cultural organizations may obtain the tax exemptions by providing their suppliers with a written statement in essentially the following form:

I, (buyer's name), hereby confirm that the items purchased on (date of purchase), without payment of retail sales tax, from (seller's name) are all objects of art or cultural value or to be used in the creation of such objects or in displaying art objects or presenting artistic or cultural exhibitions or performances.
(signature of authorized purchaser)
for: (name of organization)
(registration no. of organization)
(h) Vendors who accept such certifications in good faith are not required to collect and remit retail sales tax on such sales.
(6) Use tax. Under RCW 82.12.031, the use tax does not apply to the use of any objects that would be exempt from retail sales tax had the objects been purchased in this state. The use tax applies to all other items of tangible personal property that artistic or cultural organizations use upon which retail sales tax has not been paid.
[Statutory Authority: RCW 82.01.060 and 82.32.300. WSR 21-01-064, § 458-20-249, filed 12/9/20, effective 1/9/21. Statutory Authority: RCW 82.32.300. WSR 86-07-006 (Order ET 86-4), § 458-20-249, filed 3/6/86.]

# WSR 22-14-019 <br> PERMANENT RULES <br> HEALTH CARE AUTHORITY 

[Filed June 24, 2022, 9:23 a.m., effective August 1, 2022]
Effective Date of Rule: August 1, 2022.
Purpose: The agency is amending WAC 182-537-0600 to remove subsection (6), which requires participating school districts to provide local funding. The legislature changed the funding formula for schoolbased health services by removing the financial contribution requirement for school districts.

Citation of Rules Affected by this Order: Amending WAC 182-537-0600.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.
Adopted under notice filed as WSR 22-11-005 on May 5, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: June 24, 2022.
Wendy Barcus
Rules Coordinator

OTS-3691. 1

AMENDATORY SECTION (Amending WSR 20-14-062, filed 6/26/20, effective 7/27/20)

WAC 182-537-0600 School district requirements for billing and payment. To receive payment from the medicaid agency for providing school-based health care services (SBHS) to eligible children, a school district must:
(1) Enroll as a billing provider in ProviderOne and have a current, signed core provider agreement (CPA) with the agency.
(2) Have a current, signed, and executed SBHS contract with the agency.
(3) Meet the applicable requirements in chapter 182-502 WAC.
(4) Comply with the applicable requirements in the agency's current, published ProviderOne billing and resource guide.
(5) Bill according to the agency's current SBHS billing guide and the SBHS fee schedule.
(6) ( (comply with the intergovernmental transfer (IGT) process. The school district must provide its local mateh to the agency within one hundred twenty days of the invoice date.
(a) If local match is not received within one hundred twenty days of the invoice date, the agency will deny claims.
(b) School districts may resubmit denied claims within twenty= four months from the date of service under WAC 182-502-0150.
(7)) ) Provide only early intervention or health care-related services identified through a current individualized education program (IEP) or individualized family service plan (IFSP).
((4)) (7) Use only licensed health care providers or nonlicensed people practicing under the supervision of a licensed provider under WAC 182-537-0350.
(( $(9)$ ) (8) Enroll licensed health care providers as servicing providers under the school district's ProviderOne account, and ensure providers have their own national provider identifier (NPI) number. ((110))) (9) Meet documentation requirements described in WAC 182-537-0700.
[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 20-14-062, § 182-537-0600, filed 6/26/20, effective 7/27/20; WSR 19-04-095, § 182-537-0600, filed 2/5/19, effective 3/8/19; WSR 16-07-141, § 182-537-0600, filed 3/23/16, effective 4/23/16. Statutory Authority: RCW 41.05.021, 34 C.F.R. $300.154(\mathrm{~d})$, and chapter 182-502 WAC. WSR 13-21-079, § 182-537-0600, filed 10/17/13, effective 11/17/13. Statutory Authority: RCW 41.05.021. WSR 13-05-017, s 182-537-0600, filed 2/7/13, effective 3/10/13. WSR 11-14-075, recodified as 182-537-0600, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090, 74.09.500, and 42 C.F.R. 440.110. WSR 09-07-004, § 388-537-0600, filed 3/4/09, effective 4/4/09.]

# WSR 22-14-021 <br> PERMANENT RULES <br> STATE BOARD OF HEALTH 

[Filed June 24, 2022, 9:56 a.m., effective August 1, 2023]
Effective Date of Rule: August 1, 2023.
Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: Restrictions imposed by the 2009 legislature on the implementation of new or amended school facility rules are retained in the 2021-2023 supplemental state operating budget, prohibiting implementation of the rules through June 2023.

Purpose: This filing delays the effective date of new sections of chapter 246-366 WAC, Primary and secondary schools, and new chapter 246-366A WAC, Environmental health and safety standards for primary and secondary schools, one year due to legislative direction in the supplemental state operating budget (ESSB 5693) prohibiting implementation until the legislature acts to formally fund implementation. The rules provide minimum environmental health and safety standards for schools.

New sections of chapter 246-366 WAC, Primary and secondary schools, and new chapter 246-366A WAC, Environmental health and safety standards for primary and secondary schools, were adopted by the state board of health (board) on August 12, 2009, filed as WSR 09-14-136. The board filed a rule-making order (CR-103), WSR 10-01-174, on December 22, 2009, setting the effective date of the rules as July 1, 2010. However, in advance of the board's actions, the 2009 legislature adopted a proviso in the state operating budget (ESHB 1244) suspending implementation of the rules until the legislature acts to formally fund implementation. The proviso has been included in all subsequent state operating budgets, including the 2021-2023 supplemental state operating budget (ESSB 5693). In response, the board has taken the following series of actions to delay implementation of the rules:

Voted on March 10, 2010, to file an amended rule-making order, filed as WSR 10-12-018 on May 21, 2010, to delay the effective date to July 1, 2011;

Voted on April 13, 2011, to file an amended rule-making order, filed as WSR 11-10-080 on May 3, 2011, to delay the effective date to July 1, 2013;

Voted on March 13, 2013, to file an amended rule-making order, filed as WSR 13-09-040 on April 11, 2013, to delay the effective date to July 1, 2015;

Voted on March 11, 2015, to file an amended rule-making order, filed as WSR 15-09-070 on April 15, 2015, to delay the effective date to July 1, 2017;

Voted on June 14, 2017, to file an amended rule-making order, filed as WSR 17-14-055 on June 28, 2017, to delay the effective date to August 1, 2019;

Voted on June 12, 2019, to file an amended rule-making order, filed as WSR 19-14-107 on July 2, 2019, to delay the effective date to August 1, 2021; and

Voted on June 9, 2021, to file an amended rule-making order, filed as WSR 21-14-056 on July 1, 2021, to delay the effective date to August 1, 2022.

Action by the board in June 2022 extends the effective date of the new rules to August 1, 2023. The board will continue to monitor the state budget and budget proviso suspending implementation of the
new rules in the coming legislative sessions for possible implementation in 2023.

Statutory Authority for Adoption: RCW 43.20.050.
Adopted under notice filed as WSR 09-14-136 on July 1, 2009.
Changes Other than Editing from Proposed to Adopted Version: See WSR 10-01-174.

A final cost-benefit analysis is available by contacting Kaitlyn Donahoe, P.O. Box 47990, Olympia, WA 98504-7990, phone 360-584-6737, TTY 711, email kaitlyn. donahoe@sboh.wa.gov, website www.sboh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0 .

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0 .

Date Adopted: June 8, 2022.

Michelle A. Davis Executive Director

WSR 22-14-024<br>PERMANENT RULES<br>BOARD OF INDUSTRIAL INSURANCE APPEALS<br>[Filed June 24, 2022, 11:59 a.m., effective July 25, 2022]

Effective Date of Rule: Thirty-one days after filing.
Purpose: Rules are being modified to clarify that, except by agreement of the parties or as otherwise required by law, mediation and claim resolution settlement conference communications are confidential and are not to be admitted as evidence. Clarifies that participants, representatives, and the judge are not required to disclose such communications. The revision clarifies that the board doesn't need an objection from a party to determine such communications inadmissible. Any waiver of the confidentiality must be affirmatively expressed. Amendments also clarify that mediation and claim resolution settlement conference judges may not be called to testify to, and shall not disclose, their or any participant's mediation or claims resolution settlement communications in any kind of proceeding, whether the proceeding takes the form of a discovery or perpetuation deposition, a hearing, or some other form.

Also, amended to update WAC 263-12-115(10) and 263-12-117, the telephone hearing/depositions rules, to include videoconferencing.

Housekeeping update to various rules to remove "structured" from the phrase "claim resolution structured settlement agreements."

Citation of Rules Affected by this Order: Amending 7.
Statutory Authority for Adoption: RCW 51.52.020.
Adopted under notice filed as WSR 22-11-076 on May 17, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 7, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 7, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 24, 2022.
Brian O. Watkins
[Chief Legal Officer]

OTS-3778. 1

AMENDATORY SECTION (Amending WSR 21-15-042, filed 7/14/21, effective 8/14/21)

WAC 263-12-01501 Communications and filing with the board. Where to file communications with the board. Except as provided elsewhere in this section all written communications shall be filed with
the board at its headquarters in Olympia, Washington. With written permission of the industrial appeals judge assigned to an appeal, depositions, witness confirmations, motions (other than motions for stay filed pursuant to RCW 51.52.050), briefs, stipulations, agreements, and general correspondence may be filed in the appropriate regional board facilities located in Tacoma, Spokane, or Seattle.
(2) Methods of filing. Unless otherwise provided by statute or these rules any written communication may be filed with the board by using one of four methods: Personally, by mail, by telephone facsimile, or by electronic filing. Failure of a party to comply with the filing methods selected by the party for use under this section, or as otherwise set forth in these rules or statute for filing written communications may prevent consideration of a document.
(a) Filing personally. The filing of a written communication with the board personally is accomplished by delivering the written communication to an employee of the board at the board's headquarters in Olympia during customary office hours.
(b) Filing by mail. The filing of a written communication with the board is accomplished by mail when the written communication is deposited in the United States mail, properly addressed to the board's headquarters in Olympia and with postage prepaid. Where a statute or rule imposes a time limitation for filing the written communication, the party filing the same should include a certification demonstrating the date filing was perfected as provided under this subsection. Unless evidence is presented to the contrary, the date of the United States postal service postmark shall be presumed to be the date the written communication was mailed to the board.
(c) Filing by telephone facsimile.
(i) The filing of a written communication with the board by telephone facsimile is accomplished when a legible copy of the written communication is reproduced on the board's telephone facsimile equipment during the board's customary office hours. All facsimile communications must be filed with the board via fax numbers listed on the board's website.
(ii) The hours of staffing of the board's telephone facsimile equipment are the board's customary office hours. Documents sent by facsimile communication comments outside of the board's customary office hours will be deemed filed on the board's next business day.
(iii) Any written communication filed with the board by telephone facsimile should be preceded by a cover page identifying the party making the transmission, listing the address, telephone and telephone facsimile number of such party, referencing the appeal to which the written communication relates, and indicating the date of, and the total number of pages included in, such transmission. A separate transmission must be used for each appeal. Transmissions containing more than one docket number will be rejected and filing will not be accomplished, unless the multiple docket numbers have been previously consolidated by the board.
(iv) The party attempting to file a written communication by telephone facsimile bears the risk that the written communication will not be received or legibly printed on the board's telephone facsimile equipment due to error in the operation or failure of the equipment being utilized by either the party or the board.
(v) The board may require a party to file an original of any document previously filed by telephone facsimile.
(d) Electronic filing. Electronic filing is accomplished by using the electronic filing link on the board's website. Communication sent
by email will not constitute or accomplish filing. Communication filed using the board's website outside of the board's customary office hours will be deemed filed on the board's next business day. A separate transmission must be used for each appeal. Transmissions containing more than one docket number will be rejected and filing will not be accomplished, unless the multiple docket numbers have been previously consolidated by the board.
(3) Electronic filing of a notice of appeal. A notice of appeal may be filed electronically when using the appropriate form for electronic filing of appeals as provided on the board's website. An electronic notice of appeal is filed when it is received by the board's designated computer during the board's customary office hours pursuant to WAC 263-12-015. Appeals received via the board's website outside of the board's customary office hours will be deemed filed on the board's next business day. The board will issue confirmation to the filing party that an electronic notice of appeal has been received. The board may reject a notice of appeal that fails to comply with the board's filing requirements. The board will notify the filing party of the rejection.
(4) Electronic filing of application for approval of claim resolution ((structured)) settlement agreement. An application for approval of claim resolution ((structured)) settlement agreement must be filed electronically using the form for electronic filing of applications for approval of claim resolution ((structured)) settlement agreement as provided on the board's website. An electronic application for approval of claim resolution ( (structured)) settlement agreement is filed when received by the board's designated computer during the board's customary office hours pursuant to WAC 263-12-015. Applications received by the board via the board's website outside of the board's customary office hours will be deemed filed on the board's next business day. The board will issue confirmation to the filing party that an electronic application for approval of claim resolution ((structured)) settlement agreement has been received. An electronic copy of the signed agreement for claim resolution ((structured)) settlement agreement must be submitted as an attachment to the application for approval. The board will reject an application for approval of claim resolution ((structured)) settlement agreement that fails to comply with the board's filing requirements. The board will notify the filing party of the rejection.
(5) Sending written communication. All correspondence or written communication filed with the board pertaining to a particular case, before the entry of a proposed decision and order, should be sent to the attention of the industrial appeals judge assigned to the case. Interlocutory appeals should be sent to the attention of the chief industrial appeals judge. In all other instances, written communications shall be directed to the chief legal officer of the board.
(6) Form requirements. Any written communications with the board concerning an appeal should reference the docket number assigned by the board to the appeal, if known. Copies of any written communications filed with the board shall be served on all other parties or their representatives of record, and the original shall demonstrate compliance with the requirement to serve all parties. All written communications with the board shall be on paper $81 / 2^{\prime \prime} \mathrm{x} 11$ " in size.
[Statutory Authority: RCW 51.52.020. WSR 21-15-042, § 263-12-01501, filed 7/14/21, effective 8/14/21; WSR 18-24-123, § 263-12-01501, filed 12/5/18, effective 1/5/19; WSR 17-24-121, § 263-12-01501, filed

12/6/17, effective 1/6/18; WSR 16-24-054, § 263-12-01501, filed 12/2/16, effective 1/2/17; WSR 14-24-105, § 263-12-01501, filed 12/2/14, effective 1/2/15; WSR 11-23-154, § 263-12-01501, filed 11/22/11, effective 12/23/11; WSR 10-14-061, § 263-12-01501, filed 6/30/10, effective 7/31/10; WSR 06-12-003, § 263-12-01501, filed 5/25/06, effective 6/25/06; WSR 04-22-047, § 263-12-01501, filed 10/28/04, effective 11/28/04; WSR 04-16-097, § 263-12-01501, filed 8/3/04, effective 9/3/04; WSR 98-20-109, § 263-12-01501, filed 10/7/98, effective 11/7/98; WSR 91-13-038, § 263-12-01501, filed 6/14/91, effective 7/15/91.]

AMENDATORY SECTION (Amending WSR 21-15-042, filed 7/14/21, effective 8/14/21)

WAC 263-12-020 Appearances of parties before the board. (1) Who may appear? Any party to any appeal may appear before the board at any conference or hearing held in such appeal, either on the party's own behalf or by a representative as described in subsections (3) and (4) of this section.
(2) Who must obtain approval prior to representing a party? A person who is disbarred, resigns in lieu of discipline, or is presently suspended from the practice of law in any jurisdiction, or has previously been denied admission to the bar in any jurisdiction for reasons other than failure to pass a bar examination, shall not represent a party without the prior approval of the board. A written petition for approval shall be filed ((sixty)) 60 calendar days prior to any event for which the person seeks to appear as a representative. The board may deny any petition that fails to demonstrate competence, moral character, or fitness.
(3) Who may represent a party?
(a) A worker or beneficiary may be represented by:
(i) An attorney at law with membership in good standing in the Washington state bar association or a paralegal supervised by an attorney at law with membership in good standing in the Washington state bar association.
(ii) An attorney at law with membership in good standing in the highest court of any other state or the District of Columbia.
(iii) A lay representative so long as the person does not charge a fee, is not otherwise compensated for the representation except as provided in (a) (iv) of this subsection, and files a declaration or affidavit with the board certifying compliance with this rule. The industrial appeals judge may alternatively permit this certification to be made under oath and reflected in a transcript or report of proceeding.
(iv) A lay representative employed by the worker's labor union whose duties include handling industrial insurance matters for the union, provided the person files a declaration or affidavit with the board certifying this status. The industrial appeals judge may alternatively permit this certification to be made under oath and reflected in a transcript or report of proceeding.
(v) Any lay representative seeking to represent a worker or beneficiary who has not provided the certification required under (a) (iii) and (iv) of this subsection will be excluded from serving as a worker's or beneficiary's representative.
(b) An employer or retrospective rating group may be represented by:
(i) An attorney at law with membership in good standing in the Washington state bar association or a paralegal supervised by an attorney at law with membership in good standing in the Washington state bar association.
(ii) An attorney at law with membership in good standing in the highest court of any other state or the District of Columbia.
(iii) A lay representative who is a corporate officer or an employee of the employer or retrospective rating group.
(iv) A firm that contracts with the employer or retrospective rating group to handle matters pertaining to industrial insurance.
(c) The department of labor and industries may be represented by:
(i) An attorney employed as assistant attorney general or appointed as a special assistant attorney general.
(ii) A paralegal supervised by an assistant attorney general or special assistant attorney general.
(iii) An employee of the department of labor and industries designated by the director, or his or her designee, in a claim resolution ((structured)) settlement agreement under RCW 51.04.063.
(d) A licensed legal intern may represent any party consistent with Washington state admission to practice rule $9(e)$.
(4) Appeals under the Washington Industrial Safety and Health

## Act.

(a) In an appeal by an employee or employee representative under the Washington Industrial Safety and Health Act, the cited employer may enter an appearance as prescribed in subsection (7) of this section and will be deemed a party to the appeal.
(b) In an appeal by an employer, under the Washington Industrial Safety and Health Act, an employee or employee representative may enter an appearance as prescribed in subsection (7) of this section and will be deemed a party to the appeal.
(c) A lay representative appearing on behalf of an employee or an employee representative in an appeal under the Washington Industrial Safety and Health Act is not subject to the compensation restrictions of subsection (3) of this section.
(5) May a self-represented party be accompanied by another person? Where the party appears representing himself or herself, he or she may be accompanied, both at conference and at hearing, by a lay person of his or her choosing who shall be permitted to accompany the party into the conference or hearing room and with whom he or she can confer during such procedures. If the lay person is also a witness to the proceeding, the industrial appeals judge may exclude the lay person from the proceeding as provided by Evidence Rule 615.
(6) Assistance by the industrial appeals judge. Although the industrial appeals judge may not advocate for either party, all parties who appear either at conferences or hearings are entitled to the assistance of the industrial appeals judge presiding over the proceeding. Such assistance shall be given in a fair and impartial manner consistent with the industrial appeals judge's responsibilities to the end that all parties are informed of the procedure to be followed and the issues involved in the proceedings. Any party who appears representing himself or herself shall be advised by the industrial appeals judge of the burden of proof required to establish a right to the relief being sought.
(7) How to make an appearance.
(a) Appearance by employer representative. Within ((fourteen)) 14 days of receipt of an order granting appeal, any representative of an employer or retrospective rating group must file a written notice of appearance that includes the name, address, and telephone number of the individual who will appear.
(b) Appearances by a worker or beneficiary representative shall be made either by:
(i) Filing a written notice of appearance with the board containing the name of the party to be represented, and the name and address of the representative; or by
(ii) Appearing at the time and place of a conference or hearing on the appeal, and notifying the industrial appeals judge of the party to be represented, and the name and address of the representative.
(8) Notice to other parties.
(a) The appearing party shall furnish copies of every written notice of appearance to all other parties or their representatives of record at the time the original notice is filed with the board.
(b) The board will serve all of its notices and orders on each representative and each party represented. Service upon the representative shall constitute service upon the party. Where more than one individual associated with a firm, or organization, including the office of the attorney general, has made an appearance, service under this subsection shall be satisfied by serving the individual who filed the notice of appeal, or who last filed a written notice of appearance or, if no notice of appeal or written notice of appearance has been filed on behalf of the party, the individual who last appeared at any proceeding concerning the appeal.
(9) Withdrawal or substitution of representatives. An attorney or other representative withdrawing from a case shall immediately notify the board and all parties of record in writing. The notice of withdrawal shall comply with the rules applicable to notices of withdrawal filed with the superior court in civil cases. Withdrawal is subject to approval by the industrial appeals judge or the chief legal officer. Any substitution of an attorney or representative shall be accomplished by written notification to the board and to all parties of record together with the written consent of the prior attorney or representative. If such consent cannot be obtained, a written statement of the reason therefor shall be supplied.
(10) Conduct. All persons appearing as counsel or representatives in proceedings before the board or before its industrial appeals judges shall conform to the standards of ethical conduct required of attorneys before the courts of the state of Washington.
(a) Industrial appeals judge. If any such person does not conform to such standard, the industrial appeals judge presiding over the appeal, at his or her discretion and depending on all the circumstances, may take any of the following actions:
(i) Admonish or reprimand such person.
(ii) Exclude such person from further participation or adjourn the proceeding.
(iii) Certify the facts to the appropriate superior court for contempt proceedings as provided in RCW 51.52.100.
(iv) Report the matter to the board.
(b) The board. In its discretion, either upon referral by an industrial appeals judge as stated above or on its own motion, after information comes to light that establishes to the board a question regarding a person's ethical conduct and fitness to practice before the
board, and after notice and hearing, the board may take appropriate disciplinary action including, but not limited to:
(i) A letter of reprimand.
(ii) Refusal to permit such person to appear in a representative capacity in any proceeding before the board or its industrial appeals judges.
(iii) Certification of the record to the superior court for contempt proceedings as provided in RCW 51.52.100. If the circumstances require, the board may take action as described above prior to notice and hearing if the conduct or fitness of the person appearing before the board requires immediate action in order to preserve the orderly disposition of the appeal(s).
(c) Proceedings. If any person in proceedings before the board disobeys or resists any lawful order or process, or misbehaves during a hearing or so near the place thereof as to obstruct the same, or neglects to produce, after having been ordered so to do, any pertinent book, paper or document, or refuses to appear after having been subpoenaed, or upon appearing refuses to take oath as a witness, or after having the oath refuses to be examined according to law, the industrial appeals judge may, at his or her discretion and depending on all the circumstances:
(i) Admonish or reprimand such person.
(ii) Exclude such person from further participation or adjourn the proceeding.
(iii) Certify the facts to the appropriate superior court for contempt proceedings as provided in RCW 51.52.100.
(iv) Report the matter to the board for action consistent with (b) of this subsection.
[Statutory Authority: RCW 51.52.020. WSR 21-15-042, § 263-12-020, filed 7/14/21, effective 8/14/21; WSR 16-24-054, § 263-12-020, filed 12/2/16, effective 1/2/17; WSR 14-24-105, § 263-12-020, filed 12/2/14, effective 1/2/15; WSR 10-14-061, § 263-12-020, filed 6/30/10, effective 7/31/10; WSR 04-16-009, § 263-12-020, filed 7/22/04, effective 8/22/04; WSR 00-23-021, § 263-12-020, filed 11/7/00, effective 12/8/00; WSR 98-20-109, § 263-12-020, filed 10/7/98, effective 11/7/98; WSR 91-13-038, § 263-12-020, filed 6/14/91, effective 7/15/91. Statutory Authority: RCW 51.41.060(4) and 51.52.020. WSR 83-01-001 (Order 12), § 263-12-020, filed 12/2/82. Statutory Authority: RCW 51.52.020. WSR 82-03-031 (Order 11), § 263-12-020, filed 1/18/82; Order 7, § 263-12-020, filed 4/4/75; Order 6, § 263-12-020, filed 9/29/72; Order 4, § 263-12-020, filed 6/9/72; General Order 2, § 3.1, filed 6/12/63; General Order 1, filed 3/23/60; General Order 3, § 3.1(b), Subsection (2), filed 10/29/65.]

AMENDATORY SECTION (Amending WSR 11-23-154, filed 11/22/11, effective 12/23/11)

WAC 263-12-054 Petition to enforce terms of claim resolution ((structured)) settlement agreement. A petition to enforce the terms of a claim resolution ((structured)) settlement agreement must include:
(1) A copy of the agreement;
(2) A copy of the board order approving the agreement;
(3) A statement setting forth the basis for the parties' failure to comply with the agreement; and
(4) The current mailing address of each party to the agreement.
[Statutory Authority: RCW 51.52.020. WSR 11-23-154, § 263-12-054, filed 11/22/11, effective 12/23/11.]

AMENDATORY SECTION (Amending WSR 14-24-105, filed 12/2/14, effective 1/2/15)

WAC 263-12-092 Mediation and claim resolution ((structured)) settlement agreement conferences. ((1) A statement made by any par- ty, representative or other participant in the course of mediation eonducted pursuant to RCW 51.52 .095 or a claim resolution structured settlement agreement conference conducted pursuant to RCW 51.04.063, whether verbal or written, is privileged as provided in subsection (2) of this section and is not subject to discovery or admissible in evidence in a procecding unless waived or reduced to writing and made part of a settlement agreement.

(2) In a proceeding, the following privileges apply:
(a) A party may refuse to disclose and may prevent any other per= son from disclosing a statement;
(b) A mediator or structured settlement conference judge may refuse to disclose and may prevent any other person from disclosing a statement from the mediator or judge; and
(c) A nomparty participant may refuse to disclose and may prevent any other person from disclosing a statement of the nomparty participant.)) (1) Except as otherwise required by law, subsection (3) of this section, or by expressed agreement of the parties, all mediation and claim resolution settlement agreement conferences conducted pursuant to RCW 51.52 .095 or 51.04 .063 , including communications, statements, and disclosures made by any participant shall be confidential. Such communications, statements, and disclosures shall not be reported, placed in evidence, or disclosed to anyone not a party to the appeal. Such communications, statements, and disclosures shall not be construed as an admission or declaration against interest. No party shall be bound by anything done or said during such events unless a settlement or other agreement is reached in writing or reduced to writing by the mediator or judge.
(2) Despite any agreement of the parties to the contrary, a mediation or claim resolution settlement agreement conference judge is prohibited from disclosing any communications, statements, disclosures, or representations identified in subsection (1) of this section, and shall not be called as a witness or deponent in any later proceeding for the purpose of making such disclosures.
(3) Evidence or information that is otherwise admissible or subject to discovery does not become inadmissible or protected from discovery solely by reason of its disclosure or use in a mediation ((unless otherwise privileged by subsection (2) of this section)).
(4) Mediation and claim resolution ((structured)) settlement agreement conferences are confidential and nonparties may be excluded from the ((proceedings)) events.
(5) Mediation and claim resolution ((structured)) settlement agreement conferences may not be recorded by any type of recording device.
[Statutory Authority: RCW 51.52.020. WSR 14-24-105, § 263-12-092, filed 12/2/14, effective 1/2/15; WSR 08-01-081, § 263-12-092, filed 12/17/07, effective 1/17/08.]

AMENDATORY SECTION (Amending WSR 17-24-121, filed 12/6/17, effective 1/6/18)

## WAC 263-12-115 Procedures at hearings. (1) Industrial appeals

judge. All hearings shall be conducted by an industrial appeals judge who shall conduct the hearing in an orderly manner and rule on all procedural matters, objections and motions.
(2) Order of presentation of evidence.
(a) In any appeal under either the Industrial Insurance Act, the Worker and Community Right to Know Act, or the Crime Victims Compensation Act, the appealing party shall initially introduce all evidence in his or her case-in-chief except that in an appeal from an order of the department that alleges fraud or willful misrepresentation the department or self-insured employer shall initially introduce all evidence in its case-in-chief.
(b) In all appeals subject to the provisions of the Washington Industrial Safety and Health Act, the department shall initially introduce all evidence in its case-in-chief.
(c) After the party with the initial burden has presented his or her case-in-chief, the other parties may then introduce the evidence necessary to their cases-in-chief. In the event there is more than one other party, they may either present their cases-in-chief successively or may join in their presentation. Rebuttal evidence shall be received in the same order. Witnesses may be called out of turn in contravention of this rule only by agreement of all parties.
(3) Objections and motions to strike. Objections to the admission or exclusion of evidence shall be in short form, stating the legal grounds of objection relied upon. Extended argument or debate shall not be permitted.
(4) Rulings. The industrial appeals judge on objection or on his or her own motion shall exclude all irrelevant or unduly repetitious evidence and statements that are inadmissible pursuant to WAC 263-12-095(5). All rulings upon objections to the admissibility of evidence shall be made in accordance with rules of evidence applicable in the superior courts of this state.
(5) Interlocutory appeals to the board - Confidentiality of trade secrets. A direct appeal to the board shall be allowed as a matter of right from any ruling of an industrial appeals judge adverse to the employer concerning the confidentiality of trade secrets in appeals under the Washington Industrial Safety and Health Act.
(6) Interlocutory review by a chief industrial appeals judge.
(a) Except as provided in subsection (5) of this section interlocutory rulings of the industrial appeals judge are not subject to direct review by the board. A party to an appeal or a witness who has made a motion to quash a subpoena to appear at board related proceedings, may within five working days of receiving an adverse ruling from an industrial appeals judge request a review by a chief industrial appeals judge or his or her designee. Such request for review shall be in writing and shall be accompanied by an affidavit in support of the request and setting forth the grounds for the request, including the
reasons for the necessity of an immediate review during the course of conference or hearing proceedings. Within ((もen)) 10 working days of receipt of the written request, the chief industrial appeals judge, or designee, may decline to review the ruling based upon the written request and supporting affidavit; or, after such review as he or she deems appropriate, may either affirm or reverse the ruling, or refer the matter to the industrial appeals judge for further consideration.
(b) Failure to request review of an interlocutory ruling shall not constitute a waiver of the party's objection, nor shall an unfavorable response to the request preclude a party from subsequently renewing the objection whenever appropriate.
(c) No conference or hearing shall be interrupted for the purpose of filing a request for review of the industrial appeals judge's rulings; nor shall any scheduled proceedings be canceled pending a response to the request.
(7) Recessed hearings. Where, for good cause, all parties to an appeal are unable to present all their evidence at the time and place originally set for hearing, the industrial appeals judge may recess the hearing to the same or a different location so as to insure that all parties have reasonable opportunity to present their respective cases. No written "notice of hearing" shall be required as to any recessed hearing.
(8) Failure to present evidence when due.
(a) If any party is due to present certain evidence at a hearing or recessed hearing and, for any reason on its part, fails to appear and present such evidence, the industrial appeals judge may conclude the hearing and issue a proposed decision and order on the record, or recess or set over the proceedings for further hearing for the receipt of such evidence.
(b) In cases concerning Washington Industrial Safety and Health Act citations, a failure to appear by the person and/or party who filed the appeal is deemed to be an admission of the validity of any citation, abatement period, or penalty issued or proposed, and constitutes a waiver of all rights except the right to receive a copy of the decision.
(c) In cases concerning willful misrepresentation, the industrial appeals judge may proceed with the hearing, receive evidence, and issue a proposed decision and order without requirement of further notice to the appealing party who fails to appear.
(9) Offers of proof in colloquy. When an objection to a question is sustained an offer of proof in question and answer form shall be permitted unless the question is clearly objectionable on any theory of the case.
(10) Telephone and video testimony. At hearings, the parties may present the testimony of witnesses by telephone or video if agreed to by all parties and approved by the industrial appeals judge. For good cause the industrial appeals judge may authorize telephone or video testimony over the objection of a party after weighing the following nonexclusive factors:

- The need to weigh a witness's demeanor or credibility.
- Difficulty in handling documents and exhibits.
- The number of parties participating in the hearing.
- Whether any of the testimony will need to be translated.
- Ability of the witness to travel.
- Feasibility of taking a perpetuation deposition.
- Availability of quality telecommunications equipment and service.

When telephone or video testimony is permitted, the industrial appeals judge presiding at the hearing will swear in the witness testifying by ((phone)) telephone or video as if the witness appeared live at the hearing. For rules relating to telephone or video deposition testimony, see WAC 263-12-117.
[Statutory Authority: RCW 51.52.020. WSR 17-24-121, § 263-12-115, filed 12/6/17, effective 1/6/18; WSR 14-24-105, § 263-12-115, filed 12/2/14, effective 1/2/15; WSR 08-01-081, § 263-12-115, filed 12/17/07, effective 1/17/08; WSR 03-02-038, § 263-12-115, filed 12/24/02, effective 1/24/03; WSR 00-23-021, § 263-12-115, filed 11/7/00, effective 12/8/00; WSR 91-13-038, § 263-12-115, filed 6/14/91, effective 7/15/91; WSR 84-08-036 (Order 17), § 263-12-115, filed 3/30/84. Statutory Authority: RCW 51.41.060(4) and 51.52.020. WSR 83-01-001 (Order 12), § 263-12-115, filed 12/2/82. Statutory Authority: RCW 51.52.020. WSR 82-03-031 (Order 11), § 263-12-115, filed 1/18/82; Order 9, § 263-12-115, filed 8/8/75; Order 7, § 263-12-115, filed 4/4/75; Order 4, § 263-12-115, filed 6/9/72; General Order 3, Rule 7.5, filed 10/29/65; General Order 2, Rule 7.4, filed 6/12/63; General Order 1, Rule 5.10, filed 3/23/60. Formerly WAC 296-12-115.]

AMENDATORY SECTION (Amending WSR 21-15-042, filed 7/14/21, effective 8/14/21)

WAC 263-12-117 Perpetuation depositions. (1) Evidence by deposition. The industrial appeals judge may permit or require the perpetuation of testimony by deposition, subject to the applicable provisions of WAC 263-12-115. Such ruling may only be given after the industrial appeals judge gives due consideration to:
(a) The complexity of the issues raised by the appeal;
(b) The desirability of having the witness's testimony presented at a hearing;
(c) The costs incurred by the parties in complying with the ruling; and
(d) The fairness to the parties in complying with the ruling.
(2) Telephone and video depositions: When testimony is taken by perpetuation deposition, it may be taken by telephone or video if all parties agree. For good cause the industrial appeals judge may permit the parties to take the testimony of a witness by telephone or video deposition over the objection of a party after weighing the following nonexclusive factors:

- The need of a party to observe a witness's demeanor.
- Difficulty in handling documents and exhibits.
- The number of parties participating in the deposition.
- Whether any of the testimony will need to be translated.
- Ability of the witness to travel.
- Availability of quality telecommunications equipment and service.

If a perpetuation deposition is taken by telephone or video, the court reporter transcribing the deposition is authorized to swear in the deponent, regardless of the deponent's location within or outside the state of Washington.
(3) The industrial appeals judge may require that depositions be taken and published within prescribed time limits. The time limits may be extended by the industrial appeals judge for good cause. Each party
shall bear its own costs except when the industrial appeals judge allocates costs to parties or their representatives. If a party takes a deposition under this section, but elects not to file the deposition as evidence in the appeal, the party shall provide written notice to the assigned industrial appeals judge and all other parties prior to the deposition filing deadline.
(4) The party filing a deposition must submit the stenographically reported and transcribed deposition, certification, and exhibits in an electronic format in accordance with procedures established by the board. The following requirements apply to the submission of depositions:
(a) Video depositions will not be considered as part of the record on appeal;
(b) The electronic deposition must be submitted in searchable pdf format;
(c) Exhibits to the deposition must be filed electronically as a single attachment separate from the deposition transcript and certification;
(d) Any media exhibit (audio or video) must meet the requirements set forth in WAC 263-12-116; and
(e) If the deposition is not transcribed in a reproducible format or properly submitted it may be excluded from the record.
(5) Procedure at deposition. Unless the parties stipulate or the industrial appeals judge determines otherwise all depositions permitted to be taken for the perpetuation of testimony shall be taken subject to the following conditions:
(a) That all motions and objections, whether to form or otherwise, shall be raised at the time of the deposition and if not raised at such time shall be deemed waived.
(b) That all exhibits shall be marked and identified at the time of the deposition and, if offered into evidence, appended to the deposition.
(c) That the deposition be published without necessity of further conference or hearing at the time it is received by the industrial appeals judge.
(d) That all motions, including offers to admit exhibits and objections raised at the time of the deposition, shall be ruled upon by the industrial appeals judge in the proposed decision and order.
(e) That the deposition may be appended to the record as part of the transcript, and not as an exhibit, without the necessity of being retyped into the record.
[Statutory Authority: RCW 51.52.020. WSR 21-15-042, § 263-12-117, filed 7/14/21, effective 8/14/21; WSR 17-24-121, § 263-12-117, filed 12/6/17, effective 1/6/18; WSR 16-24-054, § 263-12-117, filed 12/2/16, effective 1/2/17; WSR 14-24-105, § 263-12-117, filed 12/2/14, effective 1/2/15; WSR 10-14-061, § 263-12-117, filed 6/30/10, effective 7/31/10; WSR 04-16-009, § 263-12-117, filed 7/22/04, effective 8/22/04; WSR 03-02-038, § 263-12-117, filed 12/24/02, effective 1/24/03.]

AMENDATORY SECTION (Amending WSR 18-24-123, filed 12/5/18, effective 1/5/19)

## WAC 263-12-165 Attorney's fees. (1) Applications for attorney's

 fees.(a) For the fixing of attorney fees as provided by RCW 51.52.120, the board shall fix a reasonable attorney fee to be paid by the worker, crime victim or beneficiary for services rendered before the board, or before the department in a claim resolution ((structured)) settlement agreement, if written application therefor is made by the attorney, worker, crime victim or beneficiary, within one year after the board's final decision and order, or approval of the claim resolution ((structured)) settlement agreement, is communicated to the party making the application. If such application for fixing of a fee is made by the attorney, it shall set forth therein the monetary amount which the attorney considers reasonable for all services rendered before the board in an appeal, or before the department in a claim resolution ((structured)) settlement agreement, and the justification supporting the requested fee. The board shall afford to all parties affected a minimum of ((ten)) 10 days in which to submit comments and material information which may be helpful to the board in setting a fair and reasonable fee.
(b) For the ordered payment of attorney fees as provided by RCW 51.32.185 and 51.32.187, the board shall set the attorney fee in a manner consistent with applicable provisions of subsections (2) and (3) ((below)) of this section.
(2) Fee fixing criteria. All attorney fees fixed by the board, where application therefor has been made, shall be established in accordance with Rule 1.5 of the Rules of Professional Conduct and the following general principles:
(a) Only one fee shall be fixed for legal services in any one appeal or claim resolution ((structured)) settlement agreement regardless of the number of attorneys representing the worker, crime victim or beneficiary, except that in cases of multiple beneficiaries represented by one or multiple attorneys the board has the discretion to set more than one attorney fee if so requested.
(b) The board shall defer fixing a fee until such time as information, which it deems sufficient upon which to base a fee, is available.
(c) A fee shall be fixed only in those cases where the attorney's services are instrumental in securing additional benefits to the worker, crime victim or beneficiary, sustaining the worker's or beneficiary's right to benefits upon an appeal by another party, or in securing a claim resolution ((structured)) settlement agreement.
(d) Where increased compensation is obtained, the fee may be fixed without regard to any medical benefits secured.
(e) In setting all fees, the following factors shall be carefully considered and weighed:
(i) Nature of the appeal or the claim resolution ((structured)) settlement agreement.
(ii) Novelty and complexity of the issues presented or other unusual circumstances.
(iii) Time and labor expended.
(iv) Skill and diligence in conducting the case or in securing the claim resolution ((structured)) settlement agreement.
(v) Extent and nature of the relief. In computing the extent of additional benefits, or the retention of benefits awarded by the de-
partment, the cost to the worker, crime victim or beneficiary of the litigation, i.e., medical examination and witness fees, shall be first deducted and the net benefits considered.
(vi) The amount of accrued time-loss payments as a result of proceedings before the board.
(vii) The prevalent practice of charging contingency fees in cases before the board.
(viii) The worker's or crime victim's circumstances and the remedial social purposes of the Industrial Insurance Act and of the Crime Victims Compensation Act, which are intended to provide sure and adequate relief to injured workers and crime victims and their families.
(f) In those cases where the payment of accumulated benefits is insufficient to allow payment of the fee set and allow the worker, crime victim or beneficiary to retain a reasonable monetary amount, the board may also set the schedule and manner in which such fee shall be payable.
(3) Amount of fees.
(a) Where additional compensation for permanent partial disability, loss of earning power, or total temporary disability is obtained as a result of settlement of the appeal on agreement of the parties prior to presentation of testimony, a fee of from 10 to 25 percent of the increased compensation due the worker, crime victim or beneficiary on the date of the board's order on agreement of the parties and by reason thereof shall be fixed after considering all factors.
(b) Where additional compensation for permanent partial disability, loss of earning power or total temporary disability is obtained after the presentation of testimony, a fee of from 10 to 30 percent of the increased compensation shall be fixed after considering all factors. This provision shall also apply to retroactive permanent total disability (pension) benefits.
(c) Where no additional compensation is obtained, but the worker or crime victim is relieved of the payment for medical benefits, a fee of from 10 to 25 percent of the amount the worker or crime victim is so relieved of paying shall be fixed after considering all factors.
(d) Where permanent total disability (pension) benefits are obtained for the worker or crime victim, or death benefits are obtained for survivors of a deceased worker or crime victim, 10 percent of the first $\$ 40,000.00$ of the pension reserve as calculated by the department of labor and industries, and 15 percent of the pension reserve in excess of $\$ 40,000.00$ shall constitute the usual fee, which may be decreased or increased after weighing all factors.
(e) Where indeterminate additional compensation is obtained because the claimant is successful in establishing a proper claim for benefits which was previously rejected or for which responsibility was denied, a fee in accordance with the preceding principles and factors shall be fixed.
(f) Where, upon an appeal by a party other than the worker or his or her beneficiary, the right to receive the benefits awarded by the department is affirmed, a fee in accordance with the preceding principles and factors shall be fixed.
(g) Where a claim resolution ((structured)) settlement agreement is approved by the board, fees for attorney's services are limited to ((fiften)) 15 percent of the total amount to be paid to the worker after the agreement becomes final.
(h) When a firefighter, law enforcement officer, or Hanford site worker has prevailed and the final decision is to allow the claim, making the opposing party responsible for the payment of reasonable
costs, including attorney fees, the fees may be established based on an hourly rate.
(i) The number of hours expended must be supported by documentation. The board will disregard inflated hours or hours reflecting reimbursement for clerical functions.
(ii) All requests for costs must be accompanied by invoices and documentation including hourly breakdowns where applicable.
(4) Excess fee unlawful. Where the board, pursuant to written application by an attorney, worker, crime victim or beneficiary, fixes a reasonable fee for the services of the attorney in proceedings before this board, or before the department in securing a claim resolution ((structured)) settlement agreement, it is unlawful for the attorney to charge or receive any fee for such services in excess of that fee so fixed, per RCW 51.52.132.
[Statutory Authority: RCW 51.52.020. WSR 18-24-123, § 263-12-165, filed 12/5/18, effective 1/5/19; WSR 11-23-154, § 263-12-165, filed 11/22/11, effective 12/23/11; WSR 08-01-081, § 263-12-165, filed 12/17/07, effective 1/17/08; WSR 95-12-062, § 263-12-165, filed 6/5/95, effective 7/6/95; WSR 91-13-038, § 263-12-165, filed 6/14/91, effective 7/15/91; WSR 82-03-031 (Order 11), § 263-12-165, filed 1/18/82; Order 7, § 263-12-165, filed 4/4/75; Order 4, § 263-12-165, filed 6/9/72; Subsection 1 from General Order 3, Rule 9.1, filed 10/29/65; General Order 2, Rule 9.2, filed 6/12/63; General Order 1, Rule 6.4, filed 3/23/60; Subsection (2), General Order 3, Rule 9.2, filed 10/29/65; General Order 9.1, filed 6/12/63; General Order 1, Rule 6.4, filed 3/23/60. Formerly WAC 296-12-165.]

WSR 22-14-026<br>PERMANENT RULES<br>DEPARTMENT OF REVENUE<br>[Filed June 24, 2022, 2:17 p.m., effective July 25, 2022]

Effective Date of Rule: Thirty-one days after filing.
Purpose: The department is updating this rule to provide guidance on reporting requirements, ensure consistency with statutory language, improve readability, and format to current standards.

Citation of Rules Affected by this Order: Amending WAC 458-20-17001.

Statutory Authority for Adoption: RCW 82.32.300, 82.01.060.
Adopted under notice filed as WSR 22-03-092 on January 18, 2022.
Changes Other than Editing from Proposed to Adopted Version: Removed some proposed changes in subsection (2) (b) thereby retaining some existing language in that subsection.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 24, 2022.
Atif Aziz
Rules Coordinator

OTS-3384. 4

AMENDATORY SECTION (Amending WSR 86-10-016, filed 5/1/86)
WAC 458-20-17001 Government contracting-Construction, installations, or improvements to government real property. (1) ((Special business and occupation tax applications and special sales/use tax applications pertain for prime and subcontractors who perform cextain eonstruction, installation, and improvements to real property of or for the United States, its instrumentalities, or a county or city housing authority created pursuant to chapter 35.82 RCW. These specific construction activities are excluded from the definition of "sale at retail" under RCW 82.04 .050 . All other sales to the United States, its agencies or instrumentalities are taxable as retail sales or wholesale sales, as appropriate. See WAC 458-20-190.
(2) The definitions of terms and general provisions contained in WAC 458-20-170 apply equally for this rule, as appropriate. In addition, the terms, "clearing land" and "moving earth" include well drilling, core drilling, and hole digging, whether or not casing mate-
rials are installed and any grading or clearing of land, including the razing of buildings or other structures.

## Business and Oceupation Tax

(3) Amounts derived from)) Introduction. This rule explains the taxation of businesses engaged in "government contracting"; i.e., constructing, repairing, decorating, or improving new or existing buildings or other structures under, upon, or above real property of or for the United States, its instrumentalities, or a county or city housing authority created pursuant to chapter 35.82 RCW . It also explains the reporting requirements for persons engaged in these activities.
(a) Examples. Examples included in this rule identify a number of facts and then state a general conclusion; they should be used only as a general guide. The tax consequences of all situations must be determined after a review of all the facts and circumstances.
(b) Other rules that may apply. The following rules may contain additional relevant information for persons engaged in government contracting or persons working with or for government contractors:
(i) WAC 458-20-134 Commercial or industrial use;
(ii) WAC 458-20-170 Constructing and repairing of new or existing buildings or other structures upon real property;
(iii) WAC 458-20-171 Building, repairing or improving streets, roads, etc., which are owned by a municipal corporation or political subdivision of the state or by the United States and which are used primarily for foot or vehicular traffic;
(iv) WAC 458-20-178 Use tax and the use of tangible personal property;
(v) WAC 458-20-190 Sales to and by the United States and certain entities created by the United States-Doing business on federal res-ervations-Sales to foreign governments;
(vi) WAC 458-20-211 Leases or rentals of tangible personal property, bailments.
(c) Definitions. The definitions in WAC 458-20-170 apply equally for this rule, as appropriate. In addition, the terms "clearing land" and "moving earth" include any grading or clearing of land, including razing buildings or other structures, as well as well drilling, core drilling, and digging holes, regardless of whether or not casing materials are installed.

## (2) Business and occupation tax.

(a) Manufacturing. Government contractors that manufacture or produce any tangible personal property for their own commercial or industrial use in performing government contracting activities must report the value of the property manufactured under the manufacturing B\&O tax classification. See RCW 82.04.240. In these circumstances, the government contractor is considered the consumer of the manufactured product and should not report the value of the manufactured product on either the retailing or wholesaling B\&O tax classifications. The multiple activities tax credit is not allowed on this transaction.
(b) Government contracting. Persons, including subcontractors, engaged in constructing, repairing, decorating, or improving new or existing buildings or other structures under, upon, or above real property, including installing or attaching tangible personal property therein or thereto, and clearing land or moving earth, of or for the United States, its instrumentalities, or county or city housing authorities of chapter 35.82 RCW are taxable under the government contracting B\&O tax classification ((of busincss and occupation tax)), on
the gross income from those activities. See RCW 82.04.280 (1)(g). The measure of the tax is the gross contract price.
( ( (4) Government contractors who manufacture or produce any tangible personal property for their own commercial or industrial use as eonsumers in performing government contracting activitics are subject to the manufacturing classification of busincss and occupation tax measured by the value of the property manufactured or produced. See also, WAC 458-20-134. The manufacturing tax applies oven though the property manufactured or produced for commercial use may be subsequently incorporated into buildings or other structures under the government contract and may thereby enhance the gross contract price.

## Retail Sales Tax

(5))) (3) Retail sales tax.
(a) Government contracting activities excluded. The retail sales tax does not apply to ( (the gross contract price, or any part thexe$\mathrm{ff}^{\prime}$ ) ) any portion of the contract price for any business activities taxable under the government contracting B\&O tax classification described in subsection (2) (b) of this section.
(b) Materials. Prime and subcontractors ( (who perform such activities)) engaged in government contracting are ( (themselves included within the statutory definition of)) "consumers" under RCW 82.04.190 and ((are required to)) must pay retail sales tax ((upon)) or use tax on all purchases of materials((, including)). Examples of common materials on which sales or use tax would apply include prefabricated and precast items, equipment, and other tangible personal property ( (which is)) installed, applied, attached, or otherwise incorporated in their government contracting work. ((This)) Sales tax applies ((for all such)) to the contractor's purchases ((of tangible personal property for installation, etc., even though)) notwithstanding that the full purchase price of ((such)) the property will be reimbursed by the government or housing authority in the gross contract price((. It alse applies)), and notwithstanding that the contract ((may contain an immediate title vesting clause which) ) provides that the title to the property vests in the government or housing authority immediately upon its acquisition by the contractor.
(( (6) Also, the retail sales tax must be paid by government contractors upon theix)) (c) Tools and consumables. Government contractors must pay retail sales tax on purchases and leases or rentals of tools, consumables, and other tangible personal property (used by them)) they use as consumers in performing government contracting as described in subsection (2) (b) of this section.

## ( Use Tax

(7) The)) (4) Use tax.
(a) Use tax applies ((upon)) to the value of all materials, equipment, and other tangible personal property ((purchased)) a government contractor purchases at retail, ((acquired)) acquires as a bailee or donee, or ((manufactured)) manufactures or ((produced by the eontractor) ) produces for commercial use or industrial use ((in performing government contracting)) and upon which ((no retail sales tax has been paid by)) the contractor, its bailor $\boldsymbol{L}^{\text {b }}$ or its donor paid no retail sales tax.
(( ( 8) Thus the use tax applies to all propexty provided by the federal government to the contractor for installation or inclusion in the contract work as well as to all government provided tooling.
(9) The use tax is to be reported and paid by the government contractor who actually installs or applics the property to the contract. Where the actual installing contractor pays the tax, no further use tax is due upon such property by any other contractor.
(10) Note to contractors: The United States Supreme Court has sustained the government contracting tax applications for this state, even though the ultimate cconomic burden of the tax is borne by the United States Government (Washington V. US, 75 L . Fd 2d 264, 1983).
(11)) (b) Government contractors are required to remit use tax on the value of government-provided tooling as well as property provided by the federal government to the contractor for installation or inclusion in the contract work.
(c) Either the prime contractor or a subcontractor may be held responsible for payment of the applicable use tax unless there is proof that one of these persons has paid the tax to the department because both persons are "consumers" of the tooling/property under RCW 82.04.190(6).

Example 1. Prime Contracting LLC contracts directly with the United States government to construct a new mess hall on a military base. As part of the project, Prime Contracting LLC manufactures custom wall cabinet storage units at their workshop, then delivers and installs the units in the newly constructed kitchen. Prime Contracting LLC must report the value of the manufactured cabinets under the manufacturing B\&O tax classification. Prime Contracting LLC is also subject to use tax on the value of the cabinets. The gross income from the government contract must be reported under the government contracting B\&O tax classification.

Example 2. Assume the same facts as Example 1, except Prime Contracting LLC, after manufacturing the cabinets, hires a subcontractor, Classy Cabinets Ltd., to install them. If Prime Contracting LLC does not report and remit use tax on the value of the cabinets, Classy Cabinets would be responsible for paying the use tax. Both Prime Contracting LLC and Classy Cabinets Ltd. will report their income from the project under the government contracting B\&O tax classification.

Example 3. Assume the same facts as Example 1, except Prime Contracting LLC hires subcontractor, Classy Cabinets Ltd., to build and install the custom cabinets. In this scenario, Classy cabinets Ltd. is the manufacturer of the cabinet units and must report the value of the manufactured cabinets under the manufacturing B\&O tax classification. Both Prime Contracting LLC and Classy Cabinets Ltd. will report their income from the project under the government contracting B\&O tax classification. Classy Cabinets Ltd. is also subject to use tax on the value of the cabinets. If Classy Cabinets Ltd. does not report and remit use tax on the value of the manufactured cabinets, Prime Contracting LLC would be responsible for paying the use tax.

Example 4. Assume the same facts as Example 3, except the United States government provides Classy Cabinets Ltd. with a tool necessary to install the manufactured cabinets. Classy Cabinets Ltd. is subject to use tax on the value of the tool used. See RCW 82.12.010(7) and WAC 458-20-178 (4) (f) for information on the use tax value of articles used in bailment situations. If Classy Cabinets Ltd. does not report and remit use tax on the value of the tool used, Prime Contracting LLC would be responsible for paying the use tax.
(5) This rule does not apply to public road construction. See WAC 458-20-171.
[Statutory Authority: RCW 82.32.300. WSR 86-10-016 (Order ET 86-9), $S$ 458-20-17001, filed 5/1/86.]

## WSR 22-14-029 <br> PERMANENT RULES <br> DEPARTMENT OF REVENUE

[Filed June 24, 2022, 2:35 p.m., effective July 1, 2022]
Effective Date of Rule: July 1, 2022.
Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: The stumpage values rule is required by statute (RCW 84.33.091) to be effective on July 1, 2022.

Purpose: WAC 458-40-660 contains the stumpage values used by harvesters of timber to calculate the timber excise tax. This rule is being revised to provide the stumpage values to be used during the second half of 2022 .

Citation of Rules Affected by this Order: Amending WAC 458-40-660 Timber excise tax-Stumpage value tables-Stumpage value adjustments.

Statutory Authority for Adoption: RCW 82.01.060(2) and 84.33.096.
Adopted under notice filed as WSR 22-10-042 on April 27, 2022.
A final cost-benefit analysis is available by contacting Brenton
Madison, P.O. Box 47453, Olympia, WA 98504-7453, phone 360-534-1583, fax 360-534-1606, TTY 1-800-451-7985, email BrentonM@dor.wa.gov, website dor.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0. Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0. Date Adopted: June 24, 2022.

Atif Aziz
Rules Coordinator

OTS-3757. 1

AMENDATORY SECTION (Amending WSR 22-01-185, filed 12/20/21, effective 1/1/22)

WAC 458-40-660 Timber excise tax-Stumpage value tables-Stumpage value adjustments. (1) Introduction. This rule provides stumpage value tables and stumpage value adjustments used to calculate the amount of a harvester's timber excise tax.
(2) Stumpage value tables. The following stumpage value tables are used to calculate the taxable value of stumpage harvested from ((January)) July 1 through ((Junc 30)) December 31, 2022:

Washington State Department of Revenue
WESTERN WASHINGTON STUMPAGE VALUE TABLE
((January)) July 1 through ((June 30)) December 31, 2022
Stumpage Values per Thousand Board Feet Net Scribner Log Scale ${ }^{(1)}$
Starting January 1, 2019, there are no Haul Zone ad-
justments.

|  | Species |  |  |
| :--- | :---: | :---: | :---: |
| Species Name | SVA <br> Code <br> Stumpage | Stumpage Area) <br> Values |  |
| Douglas-fir $^{(2)}$ | DF | 1 | $((\$ 455))$ |
|  |  |  | $\underline{\$ 509}$ |


| 2 | $((556))$ |
| :--- | ---: |
| $\underline{611}$ |  |
| $((584))$ |  |
| $\underline{658}$ |  |
|  | 4 |


|  |  | 4 | $640$ |
| :---: | :---: | :---: | :---: |
|  |  | 5 | ((554)) |
|  |  |  | 559 |
|  |  | 9 | ((444)) |
|  |  |  | $\underline{495}$ |
| Western | WH | 1 | ((314)) |
| Hemlock and |  |  | ( 342 |
| Other |  | 2 | ((386)) |
| Conifer ${ }^{(3)}$ |  |  | ( $\underline{448}$ |
|  |  | 3 | ((367)) |
|  |  |  | $\underline{404}$ |
|  |  | 4 | ((404)) |
|  |  |  | $\underline{418}$ |
|  |  | 5 | ((373)) |
|  |  |  | $\underline{399}$ |
|  |  | 9 | ((300)) |
|  |  |  | 328 |
| Western | RC | 1-5 | ((1515)) |
| Redcedar ${ }^{(4)}$ |  |  | $\underline{1472}$ |
|  |  | 9 | ((1501)) |
|  |  |  | $\underline{1458}$ |
| Ponderosa | PP | 1-5 | ((174)) |
| Pine ${ }^{(5)}$ |  |  | $\underline{185}$ |
|  |  | 9 | ((157)) |
|  |  |  | 171 |
| Red Alder | RA | 1-5 | ((464)) |
|  |  |  | 521 |
|  |  | 9 | ((450)) |
|  |  |  | 507 |
| Black <br> Cottonwood | BC | 1-5 | 39 |
|  |  | 9 | 25 |
| Other <br> Hardwood | OH | 1-5 | ((198)) |
|  |  |  | $\underline{251}$ |
|  |  | 9 | ((184)) |
|  |  |  | $\underline{237}$ |
| Douglas-fir <br> Poles \& Piles | DFL | 1-5 | ((844)) |
|  |  |  | $\underline{975}$ |
|  |  | 9 | ((827)) |
|  |  |  | 961 |


| Species Name | Species Code | SVA (Stumpage Value Area) | Stumpage Values |
| :---: | :---: | :---: | :---: |
| Western | RCL | 1-5 | ((1838)) |
| Redcedar |  |  | $\underline{1763}$ |
| Poles |  | 9 | ((1824)) |
|  |  |  | $\underline{1749}$ |
| Chipwood ${ }^{(6)}$ | CHW | 1-5 | 1 |
|  |  | 9 | 1 |
| RC Shake \& | RCS | 1-9 | 322 |
| Shingle <br> Blocks ${ }^{(7)}$ |  |  |  |
| Posts ${ }^{(8)}$ | LPP | 1-9 | 0.35 |
| DF Christmas Trees ${ }^{(9)}$ | DFX | 1-9 | 0.25 |
| Other | TFX | 1-9 | 0.50 |
| Christmas |  |  |  |
| Trees ${ }^{(9)}$ |  |  |  |

(1) Log scale conversions Western and Eastern Washington. See conversion methods WAC 458-40-680.
(2) Includes Western Larch.
(3) Includes all Hemlock, Spruce and true Fir species, or any other conifer not listed on this page.
(4) Includes Alaska-Cedar
(5) Includes all Pines in SVA 1-5 \& 9
(6) Stumpage value per ton.
(7) Stumpage value per cord.
(8) Includes Lodgepole posts and other posts, Stumpage value per 8 lineal feet or portion thereof.
(9) Stumpage value per lineal foot.

Washington State Department of Revenue EASTERN WASHINGTON STUMPAGE VALUE TABLE
((January)) July 1 through ((June 30)) December 31, 2022
Stumpage Values per Thousand Board Feet Net Scribner Log Scale ${ }^{(1)}$
Starting January 1, 2019, there are no Haul Zone ad-
justments.

| Species Name | Species Code | SVA (Stumpage Value Area) | Stumpage Values |
| :---: | :---: | :---: | :---: |
| Douglas-fir ${ }^{(2)}$ | DF | 6 | ((\$379)) |
|  |  |  | \$410 |
|  |  | 7 | ((393)) |
|  |  |  | $\underline{424}$ |
| Western | WH | 6 | ((266)) |
| Hemlock and |  |  | 304 |
| Other |  | 7 | ((280)) |
| Conifer ${ }^{(3)}$ |  |  | ( $\underline{318}$ |
| Western | RC | 6 | ((1338)) |
| Redcedar ${ }^{(4)}$ |  |  | $\underline{1689}$ |
|  |  | 7 | ((1352)) |
|  |  |  | (1703 |
| Ponderosa | PP | 6 | ((157)) |
| Pine ${ }^{(5)}$ |  |  | 171 |
|  |  | 7 | ((174)) |
|  |  |  | $\underline{185}$ |
| Other <br> Hardwood | OH | 6 | 1 |
|  |  | 7 | 9 |


| Species Name | Species Code | SVA (Stumpage Value Area) | Stumpage Values |
| :---: | :---: | :---: | :---: |
| Western | RCL | 6 | ((1764)) |
| Redcedar |  |  | 1891 |
| Poles |  | 7 | ((1778)) |
|  |  |  | $\underline{1905}$ |
| Chipwood ${ }^{(6)}$ | CHW | 6 | 1 |
|  |  | 7 | 1 |
| Small Logs ${ }^{(6)}$ | SML | 6 | 23 |
|  |  | 7 | 25 |
| RC Shake \& | RCS | 6-7 | 322 |
| Shingle <br> Blocks ${ }^{(7)}$ |  |  |  |
| Posts ${ }^{(8)}$ | LPP | 6-7 | 0.35 |
| DF Christmas Trees ${ }^{(9)}$ | DFX | 6-7 | 0.25 |
| Other | TFX | 6-7 | 0.50 |
| Christmas <br> Trees ${ }^{(9)}$ |  |  |  |

(1) Log scale conversions Western and Eastern Washington. See conversion methods WAC 458-40-680.
(2) Includes Western Larch.
(3) Includes all Hemlock, Spruce and true Fir species, and Lodgepole Pine in SVA 6-7, or any other conifer not listed on this table.
(4) Includes Alaska-Cedar.
(5) Includes Western White Pine in SVA 6-7.
(6) Stumpage value per ton.
(7) Stumpage value per cord.
(8) Includes Lodgepole posts and other posts, Stumpage value per 8 lineal feet or portion thereof.
(9) Stumpage value per lineal foot.
(3) Harvest value adjustments. The stumpage values in subsection (2) of this rule for the designated stumpage value areas are adjusted for various logging and harvest conditions, subject to the following:
(a) No harvest adjustment is allowed for special forest products, chipwood, or small logs.
(b) Conifer and hardwood stumpage value rates cannot be adjusted below one dollar per MBF.
(c) Except for the timber yarded by helicopter, a single logging condition adjustment applies to the entire harvest unit. The taxpayer must use the logging condition adjustment class that applies to a majority (more than $50 \%$ ) of the acreage in that harvest unit. If the harvest unit is reported over more than one quarter, all quarterly returns for that harvest unit must report the same logging condition adjustment. The helicopter adjustment applies only to the timber volume from the harvest unit that is yarded from stump to landing by helicopter.
(d) The volume per acre adjustment is a single adjustment class for all quarterly returns reporting a harvest unit. A harvest unit is established by the harvester prior to harvesting. The volume per acre is determined by taking the volume logged from the unit excluding the volume reported as chipwood or small logs and dividing by the total acres logged. Total acres logged does not include leave tree areas (RMZ, UMZ, forested wetlands, etc., over two acres in size.
(e) A domestic market adjustment applies to timber which meet the following criteria:
(i) Public timber - Harvest of timber not sold by a competitive bidding process that is prohibited under the authority of state or federal law from foreign export may be eligible for the domestic market adjustment. The adjustment may be applied only to those species of timber that must be processed domestically. According to type of sale, the adjustment may be applied to the following species:

Federal Timber Sales: All species except Alaska-cedar. (Stat. Ref. - 36 C.F.R. 223.10)

State, and Other Nonfederal, Public Timber Sales: Western Redcedar only. (Stat. Ref. - 50 U.S.C. appendix 2406.1 )
(ii) Private timber - Harvest of private timber that is legally restricted from foreign export, under the authority of The Forest Resources Conservation and Shortage Relief Act (Public Law 101-382), (16 U.S.C. Sec. 620 et seq.); the Export Administration Act of 1979 (50 U.S.C. App. 2406(i)); a Cooperative Sustained Yield Unit Agreement made pursuant to the act of March 29, 1944 (16 U.S.C. Sec. 583-583i); or Washington Administrative Code (WAC 240-15-015(2)) is also eligible for the Domestic Market Adjustment.

The following harvest adjustment tables apply from January 1 through June 30, 2022:


TABLE 10—Harvest Adjustment Table
Stumpage Value Areas 6 and 7
((January)) July 1 through ((June 30)) December 31, 2022

(4) Damaged timber. Timber harvesters planning to remove timber from areas having damaged timber may apply to the department of revenue for an adjustment in stumpage values. The application must contain a map with the legal descriptions of the area, an accurate estimate of the volume of damaged timber to be removed, a description of the damage sustained by the timber with an evaluation of the extent to which the stumpage values have been materially reduced from the values shown in the applicable tables, and a list of estimated additional costs to be incurred resulting from the removal of the damaged timber. The application must be received and approved by the department of revenue before the harvest commences. Upon receipt of an application, the department of revenue will determine the amount of adjustment to be applied against the stumpage values. Timber that has been damaged due to sudden and unforeseen causes may qualify.
(a) Sudden and unforeseen causes of damage that qualify for consideration of an adjustment include:
(i) Causes listed in RCW 84.33.091; fire, blow down, ice storm, flood.
(ii) Others not listed; volcanic activity, earthquake.
(b) Causes that do not qualify for adjustment include:
(i) Animal damage, root rot, mistletoe, prior logging, insect damage, normal decay from fungi, and pathogen caused diseases; and
(ii) Any damage that can be accounted for in the accepted normal scaling rules through volume or grade reductions.
(c) The department of revenue will not grant adjustments for applications involving timber that has already been harvested but will
consider any remaining undisturbed damaged timber scheduled for removal if it is properly identified.
(d) The department of revenue will notify the harvester in writing of approval or denial. Instructions will be included for taking any adjustment amounts approved.
(5) Forest-derived biomass, has a $\$ 0 /$ ton stumpage value.
[Statutory Authority: RCW 82.01.060(2), 84.33.096, 84.33.091, and 84.33.140. WSR 22-01-185, § 458-40-660, filed 12/20/21, effective 1/1/22. Statutory Authority: RCW 82.01.060(2) and 84.33.096. WSR 21-13-100, § 458-40-660, filed 6/18/21, effective 7/1/21. Statutory Authority: RCW 82.01.060(2), 84.33.096, 84.33.091, and 84.33.140. WSR 21-02-020, § 458-40-660, filed 12/28/20, effective 1/1/21. Statutory Authority: RCW 82.01.060(2) and 84.33.096. WSR 20-14-067, § 458-40-660, filed 6/26/20, effective 7/1/20; WSR 20-02-053, § 458-40-660, filed 12/23/19, effective 1/1/20; WSR 19-14-013, § 458-40-660, filed 6/21/19, effective 7/1/19; WSR 19-02-069, § 458-40-660, filed 12/28/18, effective 1/1/19. Statutory Authority: RCW 82.01.060(2), 82.32.300, and 84.33.096. WSR 18-14-023, § 458-40-660, filed 6/26/18, effective 7/1/18; WSR 18-02-058, § 458-40-660, filed 12/29/17, effective 1/1/18; WSR 17-14-020, § 458-40-660, filed 6/23/17, effective 7/1/17; WSR 17-02-003, § 458-40-660, filed 12/22/16, effective 1/1/17. Statutory Authority: RCW 82.01.060(2), 82.32.300, 84.33.096, 84.33.091, and 84.33.140. WSR 16-14-035, § 458-40-660, filed 6/28/16, effective 7/1/16. Statutory Authority: RCW 82.01.060(2), 82.32.300, and 84.33.096. WSR 16-01-069, § 458-40-660, filed 12/14/15, effective 1/1/16. Statutory Authority: RCW 82.01.060(2), 82.32.300, 84.33.096, 84.33.091, and 84.33.140. WSR 15-14-019, § 458-40-660, filed 6/22/15, effective 7/1/15; WSR 15-01-095, § 458-40-660, filed 12/17/14, effective 1/1/15. Statutory Authority: RCW 82.01.060(2), 82.32.300, 84.33.096 and 84.33.091. WSR 14-14-079, § 458-40-660, filed 6/27/14, effective 7/1/14; WSR 14-01-097, § 458-40-660, filed 12/17/13, effective 1/1/14; WSR 13-14-056, § 458-40-660, filed 6/28/13, effective 7/1/13; WSR 13-02-034, § 458-40-660, filed 12/21/12, effective 1/1/13; WSR 12-14-065, § 458-40-660, filed 6/29/12, effective 7/1/12. Statutory Authority: RCW 82.01.060(2), 82.32.300, 84.33.096, 84.33.091 and 84.33.140. WSR 12-02-040, § 458-40-660, filed 12/29/11, effective 1/1/12. Statutory Authority: RCW 82.01.060(2), 82.32.300, 84.33.096 and 84.33.091. WSR 11-14-051, § 458-40-660, filed 6/29/11, effective 7/1/11; WSR 11-02-014, § 458-40-660, filed 12/29/10, effective 1/1/11; WSR 10-14-095, § 458-40-660, filed 7/6/10, effective 7/6/10; WSR 10-02-032, § 458-40-660, filed 12/29/09, effective 1/1/10; WSR 09-14-109, § 458-40-660, filed 6/30/09, effective 7/1/09; WSR 09-02-043, § 458-40-660, filed 12/31/08, effective 1/1/09; WSR 08-14-085, § 458-40-660, filed 6/27/08, effective 7/1/08; WSR 08-02-064, § 458-40-660, filed 12/28/07, effective 1/1/08; WSR 07-14-095, § 458-40-660, filed 6/29/07, effective 7/1/07; WSR 07-02-039, 06-14-064, 06-02-005, 05-14-087, 05-02-040, 04-14-033, 04-01-125, 03-14-072, Authority: RCW 82.01.060(2), 82.32.300, 84.33.096, 84.33.091, and
84.33.140. WSR 03-02-004, § 458-40-660, filed 12/19/02, effective 1/1/03. Statutory Authority: RCW 82.32.300, 84.33.096, and 84.33.091. WSR 02-14-019, § 458-40-660, filed 6/21/02, effective 7/1/02. Statutory Authority: RCW 82.32.300, 84.33.096, 84.33.091 and 84.33.120. WSR 02-02-033, $\$ 458-40-660$, filed 12/24/01, effective 1/1/02. Statutory Authority: RCW 82.32.300, 84.33.096, and 84.33.091. WSR 01-13-105, § 458-40-660, filed 6/20/01, effective 7/1/01; WSR 01-02-020, § 458-40-660, filed 12/21/00, effective 1/1/01. Statutory Authority: RCW 82.32.300, 84.33.096, 84.33.091, 82.32.060, and 84.33.077. WSR 00-19-067, § 458-40-660, filed 9/19/00, effective 1/1/01. Statutory Authority: RCW 82.32.300, 84.33.096 and 84.33.091. WSR 00-14-011, § 458-40-660, filed 6/27/00, effective 7/1/00; WSR 00-02-019, § 458-40-660, filed 12/27/99, effective 1/1/00; WSR 99-14-055, § 458-40-660, filed 6/30/99, effective 7/1/99; WSR 99-02-032, § 458-40-660, filed 12/30/98, effective 1/1/99; WSR 98-14-083, § 458-40-660, filed 6/30/98, effective 7/1/98; WSR 98-02-015, § 458-40-660, filed 12/30/97, effective 1/1/98; WSR 97-14-068, § 458-40-660, filed 6/30/97, effective 7/1/97. Statutory Authority: RCW 82.32.330, 84.33.096 and 84.33.091. WSR 97-02-069, § 458-40-660, filed 12/31/96, effective 1/1/97; WSR 96-14-063, § 458-40-660, filed 6/28/96, effective 7/1/96; WSR 96-02-057, § 458-40-660, filed 12/29/95, effective 1/1/96. Statutory Authority: RCW 82.32.330, 84.33.096 and 84.33.200. WSR 95-18-027, § 458-40-660, filed 8/25/95, effective 9/25/95. Statutory Authority: RCW 82.32.300 and 84.33.096. WSR 95-02-038, § 458-40-660, filed 12/30/94, effective 1/1/95. Statutory Authority: RCW 84.33.091, 84.32.300 [82.32.300] and 84.33.096. WSR 94-14-048, § 458-40-660, filed 6/30/94, effective 7/1/94; WSR 94-02-047, § 458-40-660, filed 12/30/93, effective 1/1/94; WSR 93-14-051, § 458-40-660, filed 6/30/93, effective 7/1/93; WSR 93-02-025, § 458-40-660, filed 12/31/92, effective 1/1/93; WSR 92-14-083, § 458-40-660, filed 6/29/92, effective 7/1/92; WSR 92-02-067, § 458-40-660, filed 12/31/91, effective 1/1/92. Statutory Authority: RCW 84.33.096 and 82.32.300. WSR 91-14-077, § 458-40-660, filed 6/28/91, effective 7/1/91; WSR 91-09-030, § 458-40-660, filed 4/12/91, effective 5/13/91; WSR 91-02-088, § 458-40-660, filed 12/31/90, effective 1/31/91; WSR 90-14-033, § 458-40-660, filed 6/29/90, effective 7/30/90; WSR 90-02-049, § 458-40-660, filed 12/29/89, effective 1/29/90. Statutory Authority: Chapter 84.33 RCW and RCW 84.33.091. WSR 89-14-051 (Order FT-89-2), § 458-40-660, filed 6/30/89; WSR 89-02-027 (Order FT-88-5), § 458-40-660, filed 12/30/88; WSR 88-14-032 (Order FT-88-2), § 458-40-660, filed 6/30/88; WSR 88-02-026 (Order FT-87-5), § 458-40-660, filed 12/31/87. Statutory Authority: Chapter 84.33 RCW. WSR 87-14-042 (Order 87-2), § 458-40-660, filed 6/30/87; WSR 87-02-023 (Order 86-4), § 458-40-660, filed 12/31/86.]

# Washington State Register, Issue 22-14 

WSR 22-14-030
WSR 22-14-030
PERMANENT RULES
PUBLIC DISCLOSURE COMMISSION
[Filed June 24, 2022, 2:40 p.m., effective June 30, 2022]
Effective Date of Rule: June 30, 2022.
Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: RCW 42.17A.110(1) requires public disclosure commission rules to take effect by June 30 to be effective for the election cycle in the same year. The shortened effective date is necessary to meet that statutory deadline in order for the rule to take effect for the 2022 primary and general election cycle.

Purpose: The amendment will adjust the threshold for reporting "last minute" contributions. The adjustment will raise the threshold for which contributions must be reported within the special reporting period under RCW 42.17A. 265 (six days before the primary and 21 days before the general election).

Citation of Rules Affected by this Order: Amending WAC 390-05-400.

Statutory Authority for Adoption: RCW 42.17A.125.
Adopted under notice filed as WSR 22-08-047 on March 31, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0 .

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 23, 2022.
Sean Flynn
General Counsel

OTS-3703.1

AMENDATORY SECTION (Amending WSR 20-02-062, filed 12/24/19, effective 1/24/20)

WAC 390-05-400 Changes in dollar amounts. Pursuant to the authority in RCW $42.17 A .125$ that the commission may revise the monetary contribution limits and reporting thresholds and code values of the act to reflect changes in economic conditions, the previous and current amounts are:

| Code Section | Subject Matter | Previous | Current |
| :--- | :--- | :---: | :---: |
| .005 | Reporting threshold for <br> for political advertising | $\$ 950$ | $\$ 1,000$ |


[Statutory Authority: RCW 42.17A.110(1), 2019 c 428, and 2019 c 261. WSR 20-02-062, § 390-05-400, filed 12/24/19, effective 1/24/20. Statutory Authority: RCW 42.17A.110(1) and 2018 c 304. WSR 18-24-074, § 390-05-400, filed 11/30/18, effective 12/31/18. Statutory Authority: RCW 42.17A.110, 42.17A.125(1), and 42.17A.250 [(1)](g). WSR 16-04-080,
§ 390-05-400, filed 1/29/16, effective 2/29/16; WSR 14-01-010, § 390-05-400, filed 12/5/13, effective 1/5/14. Statutory Authority: RCW 42.17A.110 and 42.17A.125. WSR 13-05-012, § 390-05-400, filed 2/7/13, effective 3/10/13. Statutory Authority: RCW 42.17.110 and 42.17.125. WSR 12-10-041, § 390-05-400, filed 4/27/12, effective 5/28/12. Statutory Authority: RCW 42.17.370(1) and 42.17.690. WSR 12-01-032, 390-05-400, filed 12/13/11, effective 1/13/12. Statutory Authority: RCW 42.17.370(1), 42.17.690, and 42.17.645. WSR 08-04-022, § 390-05-400, filed 1/28/08, effective 2/28/08. Statutory Authority: RCW 42.17.370. WSR 07-07-005, S 390-05-400, filed 3/8/07, effective 4/8/07. Statutory Authority: RCW 42.17.370 and 42.17.690. WSR 06-07-001, § 390-05-400, filed 3/1/06, effective 4/1/06. Statutory Authority: RCW 42.17.690. WSR 03-22-064, § 390-05-400, filed 11/4/03, effective 1/1/04. Statutory Authority: RCW 42.17.370 and 42.17.690. WSR 01-22-050, § 390-05-400, filed 10/31/01, effective 1/1/02. Statutory Authority: RCW 42.17.370(1). WSR 00-04-058, § 390-05-400, filed 1/28/00, effective 3/1/00. Statutory Authority: RCW 42.17.690. WSR 98-08-069, § 390-05-400, filed 3/30/98, effective 5/1/98; WSR 96-04-021, § 390-05-400, filed 1/30/96, effective 3/1/96.]

WSR 22-14-036<br>PERMANENT RULES<br>SUPERINTENDENT OF<br>PUBLIC INSTRUCTION<br>[Filed June 27, 2022, 11:03 a.m., effective July 28, 2022]

Effective Date of Rule: Thirty-one days after filing.
Purpose: The office of superintendent of public instruction
(OSPI) revised chapter 392-162 WAC concerning the learning assistance program (LAP) to (1) align the rules with the amended requirements under chapter 28A. 165 RCW through the passage of $H B 1208 ;(2)$ clarify requirements in $H B 1208$, including specific guidance on the timeline and use of the Washington integrated student supports protocol for determining LAP services; and (3) provide regulatory guidelines to districts who choose to use learning assistance program funds to implement the $K-2$ literacy screening and intervention requirements under RCW 28A.320.260.

Citation of Rules Affected by this Order: New WAC 392-162-016 and 392-162-120; repealing WAC 392-162-020, 392-162-023, 392-162-025, 392-162-032, 392-162-033, 392-162-036, 392-162-041 and 392-162-080; and amending WAC 392-162-005, 392-162-010, 392-162-015, 392-162-054, 392-162-110, and 392-162-112.

Statutory Authority for Adoption: RCW 28A.165.075.
Adopted under notice filed as WSR 22-09-081 on April 20, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 2, Amended 6, Repealed 8.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 27, 2022.
Chris P. S. Reykdal
State Superintendent
of Public Instruction

OTS-3068.2

AMENDATORY SECTION (Amending WSR 18-02-082, filed 1/2/18, effective 2/2/18)

WAC 392-162-005 Authority. The authority for this chapter is RCW 28A.165.075, which authorizes the superintendent of public instruction to adopt rules ((and regulations)) for the administration of the learning assistance program.
[Statutory Authority: RCW 28A.165.075 and 28A.150.290. WSR 18-02-082, § 392-162-005, filed 1/2/18, effective 2/2/18; WSR 16-16-078, § 392-162-005, filed 7/29/16, effective 9/1/16. Statutory Authority: RCW 28A.165.075. WSR 14-08-067, § 392-162-005, filed 3/31/14, effective 5/1/14; WSR 08-21-053, § 392-162-005, filed 10/9/08, effective 11/9/08. Statutory Authority: RCW 28A.300.070. WSR 07-02-015, § 392-162-005, filed 12/21/06, effective 1/21/07. Statutory Authority: 1987 c 478. WSR 87-22-001 (Order 87-14), § 392-162-005, filed 10/22/87. Statutory Authority: RCW 28A.41.408. WSR 84-14-038 (Order 84-21), § 392-162-005, filed 6/28/84.]

AMENDATORY SECTION (Amending WSR 18-02-082, filed $1 / 2 / 18$, effective 2/2/18)

WAC 392-162-010 Purpose. The learning assistance program requirements in this chapter are designed to:
(1) ( (Guide school districts in addressing the needs of students in grades kindergarten through four who are deficient in reading or reading readiness skills to improve reading literacy;
(2))) Promote the use of data when developing programs to assist students who are not meeting academic standards ((and reduce disrup= tive behaviors in the classroom)); and
(((3))) (2) Guide school districts in providing the most effective and efficient practices when implementing supplemental instruction and services to assist students who are not meeting academic standards ((and reduce disxuptive behaviors in the classroom; and
(4) Guide school districts in providing extended learning opportunities to assist $K-12$ students who are not meeting academic standards in English language arts or mathematics, students identified in eighth grade in need of high school transition services which could eontinue up through the end of ninth grade, and students in grades eleven and twelve who are at risk of not meeting state and local graduation requirements)).
[Statutory Authority: RCW 28A. 165.075 and 28A.150.290. WSR 18-02-082, § 392-162-010, filed 1/2/18, effective 2/2/18; WSR 16-16-078, § 392-162-010, filed 7/29/16, effective 9/1/16. Statutory Authority: RCW 28A.165.075. WSR 14-08-067, § 392-162-010, filed 3/31/14, effective 5/1/14; WSR 09-24-075, § 392-162-010, filed 11/30/09, effective 12/31/09; WSR 08-21-053, § 392-162-010, filed 10/9/08, effective 11/9/08. Statutory Authority: RCW 28A.300.070. WSR 07-02-015, § 392-162-010, filed 12/21/06, effective 1/21/07. Statutory Authority: 1987 c 478. WSR 87-22-001 (Order 87-14), § 392-162-010, filed 10/22/87. Statutory Authority: RCW 28A.41.408. WSR 84-14-038 (Order 84-21), § 392-162-010, filed 6/28/84.]

AMENDATORY SECTION (Amending WSR 16-16-078, filed 7/29/16, effective 9/1/16)

WAC 392-162-015 Definitions((-Basic skills)). As used in this chapter, the ((term "basic skills" means English language arts or
mathematics, as well as readiness associated with these skills.)) terms:
(1) "District" means a school district, public charter school, or school authorized to operate as a state-tribal education compact school in accordance with chapter 28A. 715 RCW.
(2) "Literacy screening tool" means one of the literacy screening tools identified and approved by the dyslexia advisory council and the office of the superintendent of public instruction in accordance with RCW 28A. 300.700.
[Statutory Authority: RCW 28A.165.075 and 28A.150.290. WSR 16-16-078, § 392-162-015, filed 7/29/16, effective 9/1/16. Statutory Authority: RCW 28A. 300.070. WSR 07-02-015, § 392-162-015, filed 12/21/06, effective 1/21/07. Statutory Authority: 1987 c 478. WSR 87-22-001 (Order 87-14), § 392-162-015, filed 10/22/87. Statutory Authority: RCW 28A.41.408. WSR 84-14-038 (Order 84-21), § 392-162-015, filed 6/28/84.]

## NEW SECTION

WAC 392-162-016 Application. As described in RCW 28A.165.057, two application periods exist:
(1) The first timeline applies immediately and continues through the later of:
(a) The expiration or termination of Proclamation 20-05, and any subsequent orders extending or amending the proclamation, declaring a state of emergency on February 29, 2020, for all counties in Washington due to COVID-19; or September 1, 2025, whichever is later.
(b) During the first timeline described in subsection (1) (a) of this section, school districts must budget and expend the appropriations for the learning assistance program, under RCW 28A.165.005 through 28A. 165.065 , to identify students who are not meeting academic standards and address their academic and nonacademic needs resulting from and exacerbated by the COVID-19 pandemic.
(c) During the first timeline described in subsection (1) (a) of this section, school districts are encouraged to budget and expend the appropriations for the learning assistance program, under RCW 28A.165.005 through 28A. 165.065, using the framework of the Washington integrated student supports protocol, established under RCW 28A. 300.139 .
(2) The second timeline applies after the first timeline expires as described in subsection (1) (a) of this section. During the second timeline, school districts must budget and expend the appropriations for the learning assistance program, under RCW 28A.165.005 through 28A.165.065, using the framework of the Washington integrated student supports protocol, established under RCW 28A.300.139.
[]

AMENDATORY SECTION (Amending WSR 18-02-082, filed 1/2/18, effective 2/2/18)

WAC 392-162-054 Allocation, supplement not supplant, and use of funds. (1) The funds for the learning assistance program shall be allocated according to WAC 392-122-605 for the learning assistance program base allocation and the learning assistance program high povertybased school allocation.
(2) The learning assistance high poverty-based school allocation must be ((distributed to)) expended by the district for the schools ((building)) that generated the funding and may not supplant the learning assistance program base allocation expenditures for those schools.
(3) All learning assistance program funds must be expended for the purposes of RCW 28A.165.005 through 28A.165.065.
[Statutory Authority: RCW 28A. 165.075 and 28A.150.290. WSR 18-02-082, § 392-162-054, filed 1/2/18, effective 2/2/18; WSR 16-16-078, § 392-162-054, filed 7/29/16, effective 9/1/16. Statutory Authority: RCW 28A.165.075. WSR 14-08-067, § 392-162-054, filed 3/31/14, effective 5/1/14; WSR 09-24-075, § 392-162-054, filed 11/30/09, effective 12/31/09; WSR 08-21-053, § 392-162-054, filed 10/9/08, effective 11/9/08. Statutory Authority: RCW 28A.300.070. WSR 07-02-015, § 392-162-054, filed 12/21/06, effective 1/21/07.]

AMENDATORY SECTION (Amending WSR 16-16-078, filed 7/29/16, effective 9/1/16)

WAC 392-162-110 Program requirements-((District)) Reporting. ((1) Individual student records shall be recorded, beginning with the 2014-15 school year, in the statewide individual student data system annual entrance and exit performance data for each student participating in the learning assistance program according to specifications established by the office of the superintendent of public instruction's EEDARS manual.
(2) Districts shall submit to the superintendent of public in $=$ struction by the established due date an annual report in the clectronic format provided by the superintendent of public instruction. The report must include the following:
(a) The amount of academic growth gained by students participating in the learning assistance program;
(b) The number of students who gain at least one year of academic growth;
(c) The specific practices, activities, and programs used by each school building that received learning assistance program funds; and
(d) The number of students served by the learning assistance program during the school year who were able to exit the program because student academic growth resulted in mecting the academic standard for grade level.
(3)) ) The superintendent of public instruction ((will)) may withhold the monthly learning assistance program apportionment payment to a school district, public charter school, or state-tribal education compact school ( (eperated pursuant to a state-tribe education compact)) if the school district, charter school, or state-tribal educa-
tion compact school fails to submit its annual report for the prior school year to the superintendent of public instruction by the established due date. The first learning assistance program apportionment payment of the school year and subsequent allocations may be withheld until the annual reports are completed in approvable form.
[Statutory Authority: RCW 28A.165.075 and 28A.150.290. WSR 16-16-078, § 392-162-110, filed 7/29/16, effective 9/1/16. Statutory Authority: RCW 28A.165.075. WSR 14-08-067, § 392-162-110, filed 3/31/14, effective 5/1/14. Statutory Authority: RCW 28A.300.070. WSR 07-02-015, § 392-162-110, filed 12/21/06, effective 1/21/07. Statutory Authority: 1987 c 478. WSR 95-19-031 (Order 95-08), § 392-162-110, filed 9/12/95, effective 10/13/95; WSR 87-22-001 (Order 87-14), § 392-162-110, filed 10/22/87. Statutory Authority: RCW 28A.41.408. WSR 84-14-038 (Order 84-21), § 392-162-110, filed 6/28/84.]

AMENDATORY SECTION (Amending WSR 18-02-082, filed 1/2/18, effective 2/2/18)

WAC 392-162-112 Carry over of funds. (1) Districts may carry over from one year to the next up to ten percent of the learning assistance program base allocation provided ((allocated)) under WAC 392-122-605((; however, )). Carry-over funds ((shall)) must be expended solely for the ((learning assistance program)) purposes of RCW 28A. 165.005 through 28A. 165.065 .
(2) Districts may carry over from one year to the next up to ten percent of the learning assistance program high poverty-based school allocation provided under WAC 392-122-605. Carry-over funds must be expended solely for the ((Iearning assistance program)) purposes of RCW 28A. 165.005 through 28A. 165.065 and for the specific schools ((generating)) that generated the ((allocation)) funding.
[Statutory Authority: RCW 28A.165.075 and 28A.150.290. WSR 18-02-082, § 392-162-112, filed 1/2/18, effective 2/2/18. Statutory Authority: RCW 28A.300.070. WSR 07-02-015, § 392-162-112, filed 12/21/06, effective 1/21/07.]

## NEW SECTION

WAC 392-162-120 Implementation of K -2 literacy screening re-quirements-Use of funds. (1) A school district that chooses to expend learning assistance program funds to implement the screening and intervention requirements under RCW 28A. 320.260 may use the district's learning assistance program base allocation under WAC 392-122-605 to fund the purchase of a literacy screening tool as defined under this chapter.
(2) A school district that chooses to expend learning assistance program funds as permitted under this section must submit data according to specifications established by the office of the superintendent of public instruction in accordance with RCW 28A. 165.100 and 28A. 320.270 .
[]

## REPEALER

The following sections of the Washington Administrative Code are repealed:

| WAC | 392-162-020 | Definition-Learning assistance program (LAP). |
| :---: | :---: | :---: |
| WAC | 392-162-023 | Definition—District. |
| WAC | 392-162-025 | Definition-Statewide student assessments. |
| WAC | 392-162-032 | Definition-Participating student. |
| WAC | 392-162-033 | Definition-Students who are not meeting academic standards. |
| WAC | 392-162-036 | Definition-Extended learning opportunities. |
| WAC | 392-162-041 | Best practices. |
| WAC | 392-162-080 | Program requirement-Selection of students. |

WSR 22-14-040
PERMANENT RULES
HEALTH CARE AUTHORITY
[Filed June 27, 2022, 1:39 p.m., effective July 28, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: The agency is correcting subsection (3)(c) of this rule to align with the medicaid state plan.

Citation of Rules Affected by this Order: Amending WAC 182-550-6000.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.
Adopted under notice filed as WSR 22-11-057 on May 16, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: June 27, 2022.
Wendy Barcus
Rules Coordinator

## OTS-3758. 1

AMENDATORY SECTION (Amending WSR 22-04-051, filed 1/27/22, effective 2/27/22)

WAC 182-550-6000 Outpatient hospital services-Conditions of payment and payment methods. (1) The medicaid agency pays hospitals for covered outpatient hospital services provided to eligible clients when the services meet the provisions in WAC 182-550-1700. All professional medical services must be billed according to chapter 182-531 WAC.
(2) To be paid for covered outpatient hospital services, a hospital provider must:
(a) Have a current core provider agreement with the agency;
(b) Bill the agency according to the conditions of payment under WAC 182-502-0100;
(c) Bill the agency according to the time limits under WAC 182-502-0150; and
(d) Meet program requirements in other applicable WAC and the agency's published issuances.
(3) The agency does not pay separately for any services:
(a) Included in a hospital's room charges;
(b) Included as covered under the agency's definition of room and board (e.g., nursing services). See WAC 182-550-1050; or
(c) Related to an inpatient hospital admission and provided within one calendar day of a client's inpatient admission ( (or dis eharge)).
(4) The agency does not pay:
(a) A hospital for outpatient hospital services when a managed care plan is contracted with the agency to cover these services;
(b) More than the "acquisition cost" ("A.C.") for HCPCS (health care common procedure coding system) codes noted in the outpatient fee schedule; or
(c) For cast room, emergency room, labor room, observation room, treatment room, and other room charges in combination when billing periods for these charges overlap.
(5) The agency uses the outpatient weighted costs-to-charges (OWCC) rate to pay for covered outpatient services provided in a critical access hospital (CAH). See WAC 182-550-2598.
(6) Hospitals must provide documentation as required or requested by the agency.
(7) All hospital providers must present final charges to the agency within 365 days of the "statement covers period from date" shown on the claim. The state of Washington is not liable for payment based on billed charges received beyond 365 days from the "statement covers period from date" shown on the claim.
[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 22-04-051, § 182-550-6000, filed 1/27/22, effective 2/27/22; WSR 15-18-065, § 182-550-6000, filed 8/27/15, effective 9/27/15. WSR 11-14-075, recodified as § 182-550-6000, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090, 74.09.500. WSR 07-13-100, § 388-550-6000, filed 6/20/07, effective 8/1/07; WSR 04-20-060, § 388-550-6000, filed 10/1/04, effective 11/1/04. Statutory Authority: RCW 74.04.050, 74.04.057, 74.08.090, and Public Law 104-191. WSR 03-19-044, § 388-550-6000, filed 9/10/03, effective 10/11/03. Statutory Authority: RCW 74.08.090, 74.09.500, 74.09.035(1), and 43.88.290. WSR 02-21-019, § 388-550-6000, filed 10/8/02, effective 11/8/02. Statutory Authority: RCW 74.09.090, 42 U.S.C. 1395x(v), 42 C.F.R. 447.271 and 42 C.F.R. 11303. WSR 99-14-028, § 388-550-6000, filed 6/28/99, effective 7/1/99. Statutory Authority: RCW 74.08.090, 42 U.S.C. $1395 \mathrm{x}(\mathrm{v}), 42$ C.F.R. 447.271, 447.11303, and 447.2652. WSR 99-06-046, § 388-550-6000, filed 2/26/99, effective 3/29/99. Statutory Authority: RCW 74.08.090, 74.09.730, 74.04.050, 70.01.010, 74.09.200, [74.09.]500, [74.09.]530 and 43.20B.020. WSR 98-01-124, § 388-550-6000, filed 12/18/97, effective 1/18/98.]

## WSR 22-14-052 <br> PERMANENT RULES <br> DEPARTMENT OF <br> FISH AND WILDLIFE

[Order 22-115—Filed June 29, 2022, 8:03 a.m., effective July 30, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: The purpose of this rule making is to regulate the commercial salmon fisheries in Puget Sound. These rules are part of a comprehensive suite of rule-making packages to implement the new 2022-2023 salmon seasons for Washington state developed through the broader North of Falcon process pursuant to the fish and wildife commission's North of Falcon Policy C-3608 for 2019-2023.

The North of Falcon process typically begins in January and consists of government-to-government meetings involving the National Marine Fisheries Service (NMFS), treaty tribes, and the Washington department of fish and wildlife (WDFW) representatives. Separate meetings are held with stakeholders, both at a statewide and regional level, to review preseason run size forecasts, NMFS guidance relative to allowable impacts for species listed under the Endangered Species Act, which includes salmon, but [and] other protected species as well, such as southern resident killer whales.

Stakeholder meetings specific to the Puget Sound fisheries were held in February and March, and the public hearing on the proposed rules was held on June 22, 2022. The comprehensive North of Falcon meeting schedule and the meeting agendas, handouts, and audio recordings of the public meetings are available on WDFW's website at https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings.

While these rules regulate only commercial fisheries, the seasons specified in these rules are structured in a coordinated manner intended to provide commercial and recreational fishing opportunities in Puget Sound while ensuring conservation requirements and management objectives in federal and state laws and regulations, state/tribal harvest management agreements, and fish and wildlife commission policies are met.

Even though drafted as amendments to preceding rules, these new amendments function as a coordinated and unitary fishery rule-making package for the 2022-2023 fishery season, and thus substantively replace prior years' fisheries in Puget Sound. Specifically, these rules replace and supersede the language in these WAC in their entirety: WAC 220-354-080 Puget Sound salmon-Closed areas, 220-354-120 Puget Sound salmon-Purse seine-Open periods, 220-354-160 Puget Sound salmon-Gillnet-Open periods, 220-354-180 Puget Sound salmon-Reef net-Open periods, and 220-354-210 Puget Sound salmon-Beach seine-Open periods.

Included in the fish and wildlife commission's North of Falcon Policy C-3608 for 2019-2023 is a delegation of authority to the director of the WDFW to adopt the implementing regulations, including this rule making, resulting from the North of Falcon process.

Citation of Rules Affected by this Order: Amending WAC 220-354-080 Puget Sound salmon-Closed areas, 220-354-120 Puget Sound salmon-Purse seine-Open periods, 220-354-160 Puget Sound salmon-Gillnet-Open periods, 220-354-180 Puget Sound salmon-Reef net-Open periods, and 220-354-210 Puget Sound salmon-Beach seine-Open periods.

Statutory Authority for Adoption: RCW 77.04.012, 77.04.020, 77.04.045, and 77.12.047.

Adopted under notice filed as WSR 22-11-086 on May 17, 2022.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 5, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 27, 2022.
Kelly Susewind
Director

OTS-3783.1

AMENDATORY SECTION (Amending WSR 21-14-068, filed 7/2/21, effective 8/2/21)

WAC 220-354-080 Puget Sound salmon-Closed areas. It is unlawful at any time, unless otherwise provided, to take, fish for, or possess salmon taken for commercial purposes with any type of gear from the following portions of Puget Sound Salmon Management and Catch Reporting Areas, except that closures listed in this section do not apply to reef net fishing areas listed in RCW 77.50.050:

Areas 4B, 5, 6, 6B, and 6C - The Strait of Juan de Fuca Preserve as defined in WAC 220-354-330.

Area 6D - Waters within $1 / 4$ nautical mile of the Dungeness River mouth (48 ${ }^{\circ}{ }^{\prime} 16^{\prime \prime N} \mathrm{~N}, 123^{\circ} 7{ }^{\prime} 48^{\prime \prime} \mathrm{W}$, east to waters within 500 feet of Meadowbrook Creek mouth (489'7"N, $123^{\circ} 7^{\prime} 19^{\prime \prime} W$ ).

## Area 7 -

(1) The San Juan Island Preserve as defined in WAC 220-354-320.
(2) Those waters within 1,500 feet of shore on Orcas Island from Deer Point ( $48^{\circ} 36^{\prime} 5.1^{\prime \prime N}$ N, $122^{\circ} 47$ '59.7"W) northeasterly to Lawrence
 a line projected from the northernmost point of Jones Island

(3) Those waters within 1,500 feet of the shore of Cypress Island from Cypress Head ( $48^{\circ} 34^{\prime} 3.1^{\prime \prime N}$ N, $122^{\circ} 40^{\prime} 5.5^{\prime \prime} W$ ) to the northernmost

(4) Those waters easterly of a line projected from Iceberg Point (48으'20.2"N, $122^{\circ} 53^{\prime \prime} 41.1^{\prime \prime W}$ ) to Iceberg Island (48 ${ }^{\circ} 25^{\prime 2} 20.2^{\prime \prime N}$, $\left.122^{\circ} 53^{\prime \prime} 41.1^{\prime W} W\right)$, to the easternmost point of Charles Island
 point of Charles Island ( $48^{\circ} 26^{\prime} 41.1^{\prime \prime N}, 122^{\circ} 54$ '34.3"W) to the shore of Lopez Island (48 ${ }^{\circ} 26^{\prime \prime} 47.1$ "N, $122^{\circ} 54^{\prime \prime} 34.2$ "W).
(5) Those waters northerly of a line projected from the southernmost point of land at Aleck Bay ( $48^{\circ} 25^{\prime 2} 25.6^{\prime \prime N}$ N, $122^{\circ} 51^{\prime \prime} 8.2^{\prime \prime} \mathrm{W}$ ) to the westernmost point of Colville Island (48 $\left.{ }^{\circ} 24^{\prime \prime} 56^{\prime N} \mathrm{~N}, 122^{\circ} 49^{\prime \prime} 31.9^{\prime W} \mathrm{~W}\right)$,
thence from the easternmost point of Colville Island (48 $24.53 .5^{\prime \prime} \mathrm{N}$,

(6) Those waters easterly of a line projected from Biz Point on Fidalgo Island ( $\left.48^{\circ} 26^{\prime} 33.1^{\prime \prime N} \mathrm{~N}, 122^{\circ} 40^{\prime} 42.3^{\prime \prime} \mathrm{W}\right)$ to the Williamson Rocks Lighted Buoy 4 (Light List No. 19335 FlR4s4M"4"RED, $48^{\circ} 26^{\prime \prime} 51$ "N,
 19345 Red Nun, $\left.48^{\circ} 27^{\prime 2} 27^{\prime \prime} \mathrm{W}, 122^{\circ} 42^{\prime} 57^{\prime \prime} \mathrm{N}\right)$, thence to Burrows Island Light (Light List No. 19350 FlW6s57ft7MHorn(Bl(2)30s, $48^{\circ} 27$ '27.6"N, $122^{\circ} 42^{\prime} 59.3^{\prime W} W$ ) on the westernmost point of Burrows Island, thence to the southwestern-most point of Fidalgo Head (48*29'31.2"N, $122^{\circ} 42^{\prime} 10.6^{\prime W} \mathrm{~W}$ ), and including those waters within 1,500 feet of the western shore of Allan Island, those waters within 1,500 feet of the western shore of Burrows Island, and those waters within 1,500 feet of the shore of Fidalgo Island from the southwestern-most point of Fidalgo Head (48²9'31.2"N, $122^{\circ} 42^{\prime} 10.6^{\prime \prime} W$ ) northerly to Shannon Point

(7) Additional Fraser sockeye and pink seasonal closure:

Those waters within 1,500 feet of the shore of Fidalgo Island from the Initiative 77 marker ( $48^{\circ} 25^{\prime \prime} 14.2$ "N, $122^{\circ} 40^{\prime} 04.5^{\prime W} W$ ) northerly to Biz Point (48*26'33.1"N, $122^{\circ} 40^{\prime \prime} 42.3^{\prime \prime} W$ ).
(8) Those waters within 1,500 feet of the eastern shore of Lopez Island from Point Colville (48 ${ }^{\circ} 25^{\prime \prime} 17.1^{\prime \prime N}$, $122^{\circ} 48^{\prime} 50.7$ W) northerly to
 1,500 feet of the eastern shore of Decatur Island from the southernmost point of land ( $48^{\circ} 28^{\prime} 52$ "N, $122^{\circ} 49^{\prime} 5$ "W) northerly to Fauntleroy Point (48 $31^{\prime} 28.4^{\prime \prime N}, 122^{\circ} 47^{\prime} 18.8^{\prime \prime W}$ ), and including those waters within 1,500 feet of the shore of James Island.

Area 7A - The Drayton Harbor Preserve as defined in WAC 220-354-310.

Area 7B -
(1) That portion south and east of a line from William Point on Samish Island (48․34'55.2"N, $122^{\circ} 33^{\prime \prime} 38.2$ "W) to Saddlebag Island (48³2'7.2"W, $122^{\circ} 33^{\prime} 32.6^{\prime \prime} \mathrm{N}$ ) to Casperson Point on Guemes Island to landfall on March Point (48²9'58.4"N, $122^{\circ} 33^{\prime} 55.9^{\prime \prime} \mathrm{W}$ ), and that portion northerly of the railroad trestle in Chuckanut Bay.
(2) That portion of Bellingham Bay and Portage Bay adjacent to Lummi Indian Reservation is closed north and west of a line from the intersection of Marine Drive and Hoff Road (4846'59"N, 122³4'25"W) projected 180 degrees true for 1.80 nautical miles (nm) to a point at $48^{\circ} 45^{\prime} 11^{\prime \prime N}, 122^{\circ} 34^{\prime} 25^{\prime \prime} \mathrm{W}$, then 250 degrees true for 0.92 nm to a point at $48^{\circ} 44^{\prime} 50^{\prime \prime} \mathrm{N}, 122^{\circ} 35^{\prime} 42^{\prime \prime} \mathrm{W}$, then 270 degrees true for 0.95 nm to $48^{\circ} 44^{\prime} 50^{\prime \prime N}$, $122^{\circ} 37.08^{\prime \prime} \mathrm{W}$, then 228 degrees true for 0.65 nm to $48^{\circ} 44^{\prime} 24^{\prime \prime} \mathrm{N}, 122^{\circ} 37^{\prime} 52^{\prime \prime} \mathrm{W}$, then 200 degrees true for 0.69 nm to $48^{\circ} 43^{\prime} 45^{\prime \prime N}, 122^{\circ} 38^{\prime} 12 \mathrm{~W} \mathrm{~W}$, then 90 degrees true for 0.64 nm to a point just northeast of Portage Island ( $48^{\circ} 43^{\prime} 45^{\prime \prime} N, 122^{\circ} 377^{\prime \prime} 14$ W), then 155 degrees true for 0.97 nm to a point just east of Portage Island ( $48^{\circ} 42^{\prime} 52^{\prime \prime} N, 122^{\circ} 36^{\prime} 37{ }^{\prime \prime W}$ ), then 247 degrees true for 80 yards to landfall on Portage Island ( $48^{\circ} 42^{\prime \prime} 51.1^{\prime \prime N}$ N, $122^{\circ} 36^{\prime \prime} 40.3^{\prime W}$ ).
(3) *Section reserved* Additional coho seasonal closure: Hale Pass - Not in place for 2021.
(4) Additional chum seasonal closure: That portion of Bellingham Bay referred to as the Whatcom Creek Zone is closed east of a line projected 186 degrees true from the Bellingham Breakwater north entrance light 4 (Light List No. 19280 Fl(1)R6s17m5M, 4845'26.3"N, $122^{\circ} 30^{\prime} 41.5^{\prime \prime} W$ ) at the west entrance to Squalicum Harbor, to landfall ((zも)) east of Post Point (( (48․ $\left.\left.42^{\prime} 47.4^{\prime \prime N}, 122^{\circ} 31^{\prime} 0.5^{\prime \prime W} \mathrm{~m}\right)\right)$ ( $48^{\circ} 43^{\prime} 18^{\prime \prime} \mathrm{N}, 122^{\circ} 30^{\prime} 42^{\prime \prime} \mathrm{W}$ ).

Area 7C - That portion southeasterly of a line projected from the mouth of Oyster Creek ( $48^{\circ} 36^{\prime} 51.6^{\prime \prime} \mathrm{N}$, $122^{\circ} 26^{\prime} 27.8^{\prime \prime}$ W) 237 degrees true to the fishing boundary marker on Samish Island (48³4'33.1"N, 122³1'49.3"W).

Area 8 -
(1) That portion of Skagit Bay easterly of a line projected from Brown Point on Camano Island (48* $16^{\prime} 12.6^{\prime \prime} N$, $122^{\circ} 27$ '52.8"W) to a white monument on the easterly point of Ika Island (48 $21^{\prime \prime} 40.1^{\prime N} \mathrm{~N}$, $122^{\circ}$ 29'52.8"W), thence across the Skagit River to the terminus of the jetty with McGlinn Island (48 $22^{\prime \prime} 18.3^{\prime \prime N}, 122^{\circ} 30^{\prime} 18.3^{\prime W}$ W).
(2) Those waters within 1,500 feet of the western shore of Camano Island south of a line projected true west from Rocky Point


## Area 8A -

(1) Those waters easterly of a line projected from Mission Beach
 18480 FlG25s15ft4M"1," $48^{\circ} 0^{\prime} 15.5^{\prime N} N, 122^{\circ} 17^{\prime} 49.7$ W) , excluding the waters of Area 8D, thence through the Snohomish River Light 5 (Light List No. 18535 FlG4s16ft5M, $47^{\circ} 59^{\prime \prime} 16.3^{\prime N} N, 122^{\circ} 13^{\prime \prime} 47.4^{\prime W}$ W) and across the mouth of the Snohomish River to landfall on the eastern shore (4759'13.3"N, $\left.122^{\circ} 13^{\prime} 35^{\prime \prime} \mathrm{W}\right)$, and those waters northerly of a line from Camano Head ( $48^{\circ} 3^{\prime} 23.2$ "N, $122^{\circ} 21^{\prime \prime} 24.6^{\prime \prime} \mathrm{W}$ ) to the northern boundary of Area 8D, except when open for pink fisheries.
(2) Additional coho seasonal closure prior to October 3: Those waters southerly of a line projected from the Washington state ferry Clinton terminal ( $\left.47^{\circ} 58^{\prime} 28.8^{\prime \prime N}, 122^{\circ} 21^{\prime} 5.2^{\prime \prime} \mathrm{W}\right)$ to landfall on the eastern shore ( $47^{\circ} 56^{\prime} 57 \mathrm{~N}$, $122^{\circ} 18^{\prime} 15.7$ "W).

Area 8D - Those waters easterly of a line projected from the northerly most point of Mission Beach (48* $3^{\prime} 19.3^{\prime \prime N}$, $122^{\circ} 17$ '23.1"W) to Hermosa Point (48ㅇ'42.7"N, $122^{\circ} 17{ }^{\prime} 36.4$ "W).

Area 9 - Those waters lying inside and westerly of a line projected from the Point No Point Light (Light List No. 16550 Fl(3)W10s27ft14M, $\left.47^{\circ} 54^{\prime} 43.9^{\prime \prime} N, 122^{\circ} 31^{\prime} 36.3^{\prime W} W\right)$ to the traffic separation lane Lighted Buoy SE (Light List No. 16540 FlY2.5s5MY"SE," (4755'26.8"N, $\left.122^{\circ} 29^{\prime} 30.7^{\prime \prime} \mathrm{W}\right)$, thence to landfall at (4755'4.2"N,


## Area 9A -

(1) Those waters north of a line projected from the southern edge of the old mill site ( $\left.47^{\circ} 51^{\prime} 05.5^{\prime \prime N}, 122^{\circ} 34^{\prime} 59^{\prime \prime} \mathrm{W}\right)$ to the fallen tree on the opposite shore ( $47^{\circ} 51^{\prime} 6.6^{\prime \prime N}$, $122^{\circ} 34^{\prime} 15.9^{\prime \prime} W$ ).
(2) Those waters within 1000 feet of Port Gamble Creek and Martha John Creek.

Area 10 -
(1) Those waters easterly of a line projected from Meadow Point (4704'35.9"N, $122^{\circ} 24^{\prime} 21.6^{\prime \prime} W$ ) to West Point (47³9'43.6"N, 122응․8.5"W).
(2) Those waters of Port Madison westerly of a line projected from Point Jefferson ( $47^{\circ} 44^{\prime} 51.7$ "N, $122^{\circ} 28^{\prime} 25.6^{\prime \prime} W$ ) to the northernmost portion of Point Monroe ( $47^{\circ} 42^{\prime} 32^{\prime \prime} \mathrm{N}, 122^{\circ} 30^{\prime} 43.5^{\prime \prime} \mathrm{W}$ ).
(3) Additional pink seasonal closure: The area east inside of the line projected from West Point (47 $39^{\prime} 43.6^{\prime \prime N}$ N, $122^{\circ} 26^{\prime} 8.5^{\prime \prime} \mathrm{W}$ ) and extending west to the traffic separation lane Lighted Buoy SG (Light List No. 16815 FlY2.5s5MY"SG," $47^{\circ} 39^{\prime \prime} 41.6^{\prime N}$ N, $122^{\circ} 27^{\prime \prime} 52.6^{\prime W}$ ), thence 20 degrees true until reaching latitude $47^{\circ} 44^{\prime} 30.0^{\prime \prime} N$, thence extending directly east to the shoreline (4744'30"N, $\left.122^{\circ} 22^{\prime} 40.5^{\prime \prime} \mathrm{W}\right)$.
(4) Additional purse seine pink seasonal closure: The area within 500 feet of the eastern shore in Area 10 is closed to purse seines north of latitude $47^{\circ} 44$ '30.0"N.
(5) Additional chum seasonal closure: Those waters of Elliott Bay east of a line from Alki Point (Light List No. 16915 Fl5s39ft16m, 47³4'34.5"N, $122^{\circ} 25^{\prime} 14^{\prime \prime} \mathrm{W}$ ) to the Fourmile Rock Light 1 (Light List No. 16810 FlG6s15ft6M"1," $\left.47^{\circ} 38^{\prime 2} 20.4 " N, 122^{\circ} 24^{\prime \prime} 48.7 " W\right)$, and those waters northerly of a line projected from Point Wells to traffic separation lane Lighted Buoy SF (Light List No. 16745 FlY2.5s5MY"SF," 47${ }^{\circ} 45^{\prime \prime} 53^{\prime \prime} N$, $122^{\circ} 26^{\prime \prime} 15.7$ "W), then west to President's Point (47045'57.2"N, $122^{\circ} 28^{\prime} 20.1$ "W).
(6) Those waters of Rich Passage, easterly of a line projected from Orchard Point ( $47^{\circ} 33^{\prime} 55^{\prime \prime N}$, $\left.122^{\circ} 31^{\prime} 56^{\prime \prime} \mathrm{W}\right)$ to Beans Point ( $47^{\circ} 34^{\prime} 29^{\prime \prime} \mathrm{N}, 122^{\circ} 31^{\prime} 20^{\prime \prime} \mathrm{W}$ ) on Bainbridge Island, and westerly of a line projected from Restoration Point ( $47^{\circ} 3^{\prime \prime} 1^{\prime \prime N}$, $122^{\circ} 28^{\prime} 46^{\prime W}$ ) to landfall at Colchester ( $47^{\circ} 32^{\prime} 41^{\prime \prime N}, 122^{\circ} 322^{\prime} 22.6^{\prime \prime}$ W) true west from the northwest point of Blake Island.

Area 10E - Those waters of Liberty Bay north of a line projected true east from $47^{\circ} 41^{\prime \prime} 56.4 " N, 122^{\circ} 36^{\prime} 53.5^{\prime W} \mathrm{~W}$ to $47^{\circ} 41^{\prime} 56.4^{\prime N} \mathrm{~N}$,
 and those waters of Sinclair Inlet southwest of a line projected true east from the Washington state ferry Bremerton terminal (47³3'43.9"N, $122^{\circ} 37^{\prime \prime} 31.1^{\prime \prime} W$ ) to landfall at Port Orchard (47³3'43.9"N, $\left.122^{\circ} 35^{\prime} 31.1^{\prime \prime} \mathrm{W}\right)$.

## Area 11 -

(1) The waters of Gig Harbor, northerly of a line projected true west from the Gig Harbor Light (Light List No. 17221 FlR4s13ft3MPriv., 47º 19'35.7"N, $122^{\circ} 34^{\prime 29.2 " W) . ~ T h e ~ w a t e r s ~ o f ~ C o m m e n c e m e n t ~ B a y, ~ s o u t h ~ o f ~}$ a line from Browns Point ( $47^{\circ} 18^{\prime 20.3 " N, ~} 122^{\circ} 26^{\prime \prime} 39.4$ "W) to the northernmost point of land on Point Defiance ( $47^{\circ} 19^{\prime \prime} 7.7^{\prime \prime N}$ N, $122^{\circ} 32^{\prime 2} 23.9^{\prime W}$ ).
(2) Additional chum seasonal closure: Those waters south of a line projected from the Gig Harbor Light (Light List No. 17221 FlR4s13ft3MPriv., $\left.47^{\circ} 19^{\prime} 35.7^{\prime \prime} \mathrm{N}, 122^{\circ} 34^{\prime 2} 29.2^{\prime \prime} \mathrm{W}\right)$ to the Washington state ferry Tahlequah terminal ( $47^{\circ} 19$ '58.3"N, $122^{\circ} 30$ '25.5"W), south of a line projected from Neill Point (47¹9'53"N, $122^{\circ} 29^{\prime} 33^{\prime \prime}$ W) to Piner Point ( $\left.47^{\circ} 20^{\prime} 37{ }^{\prime \prime} \mathrm{N}, 122^{\circ} 27^{\prime} 17{ }^{\prime \prime} \mathrm{W}\right)$, west of a line projected from Piner
 $\left.122^{\circ} 25^{\prime} 47^{\prime \prime} \mathrm{W}\right)$, and north of Area 11/11A line.

Areas 12, 12B, and 12C - Those waters within 1,000 feet of the eastern shore.

Area 12 - Those waters inside and easterly of a line projected from Lone Rock ( $47^{\circ} 39^{\prime} 46^{\prime \prime} \mathrm{N}, 122^{\circ} 46^{\prime} 11^{\prime \prime} W$ ) to Hood Canal Light 13 (Light List No. 17855 FlG2.5s20ft4M"13," $47^{\circ} 39^{\prime} 45.5^{\prime \prime N}, 122^{\circ} 47$ '14.4"W) off Big Beef Creek, thence southerly to the outermost northern headland of Little Beef Creek (47³9'24.4"N, $\left.122^{\circ} 47{ }^{\prime} 23.4 " W\right)$.

Area 12 - Additional chum seasonal closures: Those waters of Area 12 south and west of a line projected 94 degrees true from south Hazel Point ( $\left.47^{\circ} 41^{\prime} 29.1^{\prime \prime} N, 122^{\circ} 46^{\prime} 22.6^{\prime \prime} \mathrm{W}\right)$ to the Hood Canal Light 11 on the opposite shore (Light List No. 17845 FLG4s15ft5M"11," $47^{\circ} 41{ }^{\prime 24.6 " N,}$ $122^{\circ} 4^{\prime} 50.4$ "W), bounded on the west by the Area $12 / 12 \mathrm{~B}$ boundary line are closed to purse seine weeks 43, 44, and 45. Open to gillnets weeks 43 and 44.

## Area 12A -

(1) Those waters north of a line projected due east from Broad Spit ( $47^{\circ} 48^{\prime} 37.8^{\prime N} \mathrm{~N}, 122^{\circ} 48^{\prime} 59.3^{\prime \prime W}$ ) to landfall on the Toandos Peninsula (47048'37.8"N, $122^{\circ} 47^{\prime} 42.5^{\prime \prime} W$ ).
(2) Those waters within 1,000 feet of the mouth of the Quilcene River.

## Area 12B -

(1) Those waters within 1/4-mile of the mouths of the Dosewallips, Duckabush, and Hamma Hamma rivers and Anderson Creek.
(2) Additional Chinook seasonal closure: Those waters north and east of a line projected from Tekiu Point (47³5'6.6"N, 12257'52.8"W) to Triton Head (47³6'10.9"N, $122^{\circ} 59^{\prime} 0.5^{\prime \prime} W$ ).

## Area 12C -

(1) Those waters within 2,000 feet of the western shore between
 Port of Hoodsport marina dock (47²4'12.6"N, 1230'29.5"W). This area is also referred to as the Hoodsport Hatchery Zone.
(2) Those waters south of a line projected 107 degrees true from the Cushman Powerhouse ( $47^{\circ} 22^{\prime \prime} 11.2^{\prime \prime} \mathrm{N}, 123^{\circ} 09^{\prime} 35.9{ }^{\prime \prime} \mathrm{W}$ ) to the Union boat launch (47 $21^{\circ} 27.5^{\prime \prime N}, 123^{\circ} 6^{\prime} 1.9^{\prime W}$ ) .
(3) Those waters within 1/4-mile of the mouth of the Dewatto River.

Area 13A - Those waters of Burley Lagoon north of State Route 302; those waters within 1,000 feet of the outer oyster stakes off Minter Creek Bay from $47^{\circ} 21^{\prime \prime} 47.5^{\prime N} \mathrm{~N}, 122^{\circ} 41^{\prime \prime} 10.1^{\prime \prime} W$ to $47^{\circ} 21^{\prime 9} 9.8^{\prime N} \mathrm{~N}$, $122^{\circ} 41^{\prime} 57.7$ W, including all waters of Minter Creek Bay; those waters westerly of a line drawn due north from Thompson Spit (47¹9'58.6"N, $122^{\circ} 43^{\prime} 42.7$ "W) at the mouth of Glen Cove; and those waters within 1/4mile of Green Point.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.045 [77.04.055], and 77.12.047. WSR 21-14-068 (Order 21-94), § 220-354-080, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-050 (Order 20-98), § 220-354-080, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 19-15-051 (Order 19-140), § 220-354-080, filed 7/12/19, effective 8/12/19. Statutory Authority: RCW 77.04.090, 77.04.130, 77.15.568, 77.08 .010 , 77.65.510, 77.65.515, and 77.65.520. WSR 18-18-078 (Order 18-221), § 220-354-080, filed 9/4/18, effective 10/5/18. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 17-17-100 (Order 17-205), amended and recodified as § 220-354-080, filed 8/18/17, effective 9/18/17; WSR 16-18-067, § 220-47-307, filed 9/2/16, effective 10/3/16; WSR 15-17-034 (Order 15-254), § 220-47-307, filed 8/11/15, effective 9/11/15; WSR 14-14-011 (Order 14-144), § 220-47-307, filed 6/19/14, effective 7/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 13-15-148 (Order 13-144), § 220-47-307, filed 7/23/13, effective 8/23/13; WSR 12-15-034 (Order 12-131), § 220-47-307, filed 7/12/12, effective 8/12/12; WSR 11-16-016 (Order 11-165), § 220-47-307, filed 7/22/11, effective 8/22/11; WSR 10-14-129 (Order 10-137), § 220-47-307, filed 7/7/10, effective 8/7/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-054 (Order 09-108), § 220-47-307, filed 7/9/09, effective 8/9/09; WSR 08-15-031 (Order 08-167), § 220-47-307, filed 7/8/08, effective 8/8/08. Statutory Authority: RCW 77.12.047. WSR 04-16-125 (Order 04-202), § 220-47-307, filed 8/4/04, effective 9/4/04; WSR 03-18-005 (Order 03-210), § 220-47-307, filed 8/20/03, effective 9/20/03. Statutory Authority: RCW 75.08.080. WSR 99-24-011 (Order 99-202), § 220-47-307, filed 11/19/99, effective 12/20/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-47-307, filed 7/15/98, effective 8/15/98. Statutory Au-
thority: RCW 75.08.080. WSR 97-16-030 (Order 97-124), § 220-47-307, filed 7/29/97, effective 8/29/97; WSR 96-15-101 (Order 96-81), § 220-47-307, filed 7/22/96, effective 8/22/96; WSR 95-13-056 (Order 95-75), § 220-47-307, filed 6/16/95, effective 7/17/95; WSR 94-15-001 (Order 94-62), § 220-47-307, filed 7/6/94, effective 8/6/94; WSR 92-15-105 (Order 92-47), § 220-47-307, filed 7/20/92, effective 8/20/92; WSR 91-18-024 (Order 91-72), § 220-47-307, filed 8/27/91, effective 9/27/91; WSR 90-13-025 (Order 90-49), § 220-47-307, filed 6/11/90, effective 7/12/90; WSR 88-14-133 (Order 88-48), § 220-47-307, filed 7/6/88; WSR 85-13-032 (Order 85-60), § 220-47-307, filed 6/12/85; WSR 84-13-078 (Order 84-53), s 220-47-307, filed 6/21/84; WSR 83-14-020 (Order 83-57), § 220-47-307, filed 6/28/83; WSR 82-15-040 (Order 82-83), § 220-47-307, filed 7/15/82; WSR 81-18-017 (Order 81-101), § 220-47-307, filed 8/25/81; WSR 80-10-058 (Order 80-83), § 220-47-307, filed 8/6/80.]

AMENDATORY SECTION (Amending WSR 21-14-068, filed 7/2/21, effective 8/2/21)

WAC 220-354-120 Puget Sound salmon-Purse seine-Open periods. (1) It is unlawful to take, fish for, or possess salmon taken with purse seine gear for commercial purposes from Puget Sound, except in the following designated Puget Sound Salmon Management and Catch Reporting Areas and during the periods provided for in each respective Management and Catch Reporting Area:

| AREA | TIME |  | DATE |
| :---: | :---: | :---: | :---: |
| 7, 7A: | 7AM - 6PM | - | $\begin{aligned} & ((10 / 10,)) 10 / 11,10 / 12, \\ & 10 / 14,10 / 15,10 / 18, \\ & 10 / 19,10 / 20,10 / 21, \\ & 10 / 22,10 / 23,10 / 24, \\ & 10 / 25,10 / 26,10 / 27, \\ & 10 / 28,10 / 29,10 / 30, \\ & 10 / 31,11 / 1,11 / 2,11 / 3, \\ & 11 / 4,11 / 5((, 11 / 6)) \end{aligned}$ |
| Note: In Areas 7 and 7A, it is unlawful to fail to brail when fishing with purse seine gear. Any time brailing is required, purse seine fishers must also use a recovery box in compliance with WAC 220-354-100 (7)(a) through (f). |  |  |  |
| $7 \mathrm{~B}((, 7 \mathrm{C}))$ : | 6AM - 8PM | - | $\begin{aligned} & ((8 / 18,8 / 25,8 / 26,9 / 1) \\ & 8 / 10,8 / 17,8 / 24,8 / 25) \\ & \underline{8 / 31} \end{aligned}$ |
|  | 7AM - 7PM | - | $\begin{aligned} & ((9 / 6,9 / 8,9 / 1 \theta)) \underline{9 / 5,5} \\ & \underline{9 / 7,9 / 9} \end{aligned}$ |
| 7B: | 7AM - 7PM | - | $\begin{aligned} & ((9 / 13,9 / 15,9 / 17)) \\ & \underline{9 / 12,9 / 14,9 / 16} \end{aligned}$ |
|  | $\begin{aligned} & \text { 7AM } \\ & ((9 / 19)) \\ & \underline{9 / 18} \end{aligned}$ | - | 6PM ((10/23)) 10/22 |
|  | 7AM - 6PM | - | $((10 / 27)) \underline{10 / 24-10 / 28}$ |
|  | 7AM - 6PM | - | $((11 / 3)) \underline{10 / 31-11 / 4}$ |
|  | 7AM - 5PM | - | $((11 / 10)) \underline{11 / 7-11 / 11}$ |
|  | 7AM - 5PM | - | $((4 / 17)) \underline{11 / 14-11 / 18}$ |
|  | 7AM - 5PM | - | ((11/24)) $\underline{11 / 21-11 / 25}$ |
|  | 7AM - 5PM | = | 11/28-12/2 |
| 7C: | 6AM - 8PM | = | $\frac{8 / 10,8 / 17,8 / 24,8 / 25}{8 / 31}$ |
|  | 7AM - 7PM | $=$ | 9/5, 9/7, 9/9 |


(2) It is unlawful to retain the following salmon species taken with purse seine gear within the following areas during the following periods:
(a) Chinook salmon - At all times in Areas 7, 7A, 8, 8A, 8D, 10, 11, 12, 12B, and 12C, and after October 20 in Area 7B.
(b) Coho salmon - At all times in Areas 7, 7A, 10, 11, 12, 12B, and 12C, and prior to September 1 in Area 7B.
(c) Chum salmon - Prior to October 1 in Areas 7 and 7A, and at all times in 8A.
(d) All other saltwater and freshwater areas - Closed.
(3) Fishers must take department observers, if requested by department staff, when participating in these openings.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.045 [77.04.055], and 77.12.047. WSR 21-14-068 (Order 21-94), § 220-354-120, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-050 (Order 20-98), § 220-354-120, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 19-15-051 (Order 19-140), § 220-354-120, filed 7/12/19, effective 8/12/19; WSR 18-14-013 (Order 18-131), § 220-354-120, filed 6/22/18, effective 7/23/18; WSR 17-17-100 (Order 17-205), amended and recodified as § 220-354-120, filed 8/18/17, effective 9/18/17; WSR 16-18-067, § 220-47-311, filed 9/2/16, effective 10/3/16; WSR 15-17-034 (Order 15-254), § 220-47-311, filed 8/11/15, effective 9/11/15; WSR 14-14-011 (Order 14-144), § 220-47-311, filed 6/19/14, effective 7/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 13-15-148 (Order 13-144), § 220-47-311, filed 7/23/13, effective 8/23/13; WSR 12-15-034 (Order 12-131), § 220-47-311, filed 7/12/12, effective 8/12/12; WSR 11-16-016 (Order 11-165), §

220-47-311, filed 7/22/11, effective 8/22/11; WSR 10-14-129 (Order 10-137), § 220-47-311, filed 7/7/10, effective 8/7/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-054 (Order 09-108), § 220-47-311, filed 7/9/09, effective 8/9/09; WSR 08-15-031 (Order 08-167), § 220-47-311, filed 7/8/08, effective 8/8/08; WSR 07-20-006, § 220-47-311, filed 9/20/07, effective 10/21/07. Statutory Authority: RCW 77.12.047. WSR 06-16-045 (Order 06-173), § 220-47-311, filed 7/26/06, effective 8/26/06; WSR 05-17-002 (Order 05-166), § 220-47-311, filed 8/3/05, effective 9/3/05; WSR 04-16-125 (Order 04-202), § 220-47-311, filed 8/4/04, effective 9/4/04; WSR 03-18-005 (Order 03-210), § 220-47-311, filed 8/20/03, effective 9/20/03; WSR 02-16-004 (Order 02-167), § 220-47-311, filed 7/25/02, effective 8/25/02; WSR 01-13-056 (Order 01-106), § 220-47-311, filed 6/15/01, effective 7/16/01; WSR 00-18-023 (Order 00-172), § 220-47-311, filed 8/28/00, effective 9/28/00. Statutory Authority: RCW 75.08.080. WSR 99-24-011 (Order 99-202), § 220-47-311, filed 11/19/99, effective 12/20/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-47-311, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-16-030 (Order 97-124), § 220-47-311, filed 7/29/97, effective 8/29/97; WSR 96-15-101 (Order 96-81), § 220-47-311, filed 7/22/96, effective 8/22/96; WSR 95-13-056 (Order 95-75), § 220-47-311, filed 6/16/95, effective 7/17/95; WSR 94-15-001 (Order 94-62), § 220-47-311, filed 7/6/94, effective 8/6/94; WSR 93-14-041 (Order 93-55), § 220-47-311, filed 6/29/93, effective 7/30/93; WSR 92-15-105 (Order 92-47), § 220-47-311, filed 7/20/92, effective 8/20/92; WSR 91-18-024 (Order 91-72), § 220-47-311, filed 8/27/91, effective 9/27/91; WSR 90-13-025 (Order 90-49), § 220-47-311, filed 6/11/90, effective 7/12/90; WSR 89-13-004 (Order 89-44), § 220-47-311, filed 6/8/89; WSR 88-14-133 (Order 88-48), § 220-47-311, filed 7/6/88; WSR 87-15-059 (Order 87-72), § 220-47-311, filed 7/14/87; WSR 86-13-038 (Order 86-46), § 220-47-311, filed 6/12/86; WSR 85-13-032 (Order 85-60), § 220-47-311, filed 6/12/85; WSR 84-13-078 (Order 84-53), § 220-47-311, filed 6/21/84; WSR 83-14-020 (Order 83-57), § 220-47-311, filed 6/28/83; WSR 82-15-040 (Order 82-83), § 220-47-311, filed 7/15/82; WSR 81-18-017 (Order 81-101), § 220-47-311, filed 8/25/81; WSR 80-10-058 (Order 80-83), § 220-47-311, filed 8/6/80; WSR 78-05-018 (Order 78-16), § 220-47-311, filed 4/13/78; Order 77-66, § 220-47-311, filed 8/5/77; Order 77-14, § 220-47-311, filed 4/15/77; Order 76-41, § 220-47-311, filed 6/4/76; Order 1251, § 220-47-311, filed 8/18/75; Order 1210, § 220-47-311, filed 5/26/75; Order 1143, § 220-47-311, filed 8/8/74; Order 1125, § 220-47-311, filed 6/6/74; Order 1066, § 220-47-311, filed 7/19/73; Order 1057, § 220-47-311, filed 5/22/73; Order 988, § 220-47-311, filed 4/28/72.]

AMENDATORY SECTION (Amending WSR 21-14-068, filed 7/2/21, effective 8/2/21)

## WAC 220-354-160 Puget Sound salmon-Gillnet-Open periods. (1)

It is unlawful to take, fish for, or possess salmon taken with gillnet gear for commercial purposes from Puget Sound, except in the following designated Puget Sound Salmon Management and Catch Reporting Areas during the periods provided for in each respective fishing area:

AREA
6D: Skiff gillnet only, definition WAC 220-350-170 and lawful gear description WAC 220-354-140.

TIME
7AM - 7PM

DATE(S)
9/21, 9/22, 9/23, ((9/24)) 9/26, 9/27
9/28, 9/29, 9/30, ((10/4)) 10/3, 10/4,
$10 / 5,10 / 6,10 / 7,((10 / 8)) 10 / 10$,
10/11, 10/12, 10/13, 10/14, ((10/15))
10/17, 10/18, 10/19, 10/20, 10/21,
$((10 / 22,10 / 25,10 / 26,10 / 27,10 / 28$,
$10 / 29)$ ) $10 / 24,10 / 25,10 / 26,10 / 27$,
10/28, 10/31, 11/1, 11/2, 11/3, 11/4

MINIMUM MESH
5"
illnet fishery. It is unlawful to retain Chinook taken in Area 6D any time, or any chum salmon taken in Area 6D prior to October ((12)) 15 per Table 3.34 of the SCSCI Base Conservation Regime. In Area 6D, any Chinook or chum salmon required to be released must be removed from the net by cutting the meshes ensnaring the fish.

| 7, 7A: | 7AM | - | Midnight | $\begin{aligned} & ((10 / 10,)) 10 / 11,10 / 12,10 / 14,10 / 15, \\ & 10 / 18,10 / 19,10 / 20,10 / 21,10 / 22 \\ & 10 / 23,10 / 24,10 / 25,10 / 26,10 / 27 \\ & 10 / 28,10 / 29,10 / 30,10 / 31,11 / 1 \\ & 11 / 2,11 / 3,11 / 4,11 / 5((, 11 / 6)) \end{aligned}$ | $61 / 4 "$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Note: In Areas 7 and 7A after October 9 and prior to October 18, coho and Chinook salmon must be released, and it is unlawful to use a net soak time more than 45 minutes. Net soak time is defined as the time elapsed from when the first of the gillnet web enters the water, until the gillnet is fully retr from the water. Fishers must also use a recovery box in compliance with WAC 220-354-140 (5)(a) through (f) when coho and Chinook release is requ |  |  |  |  |  |
| $7 \mathrm{~B}((, 7 \mathrm{C})$ ): | 7 PM | - | 8AM | ((NHGHTLY 8/15, 8/16, 8/17)) <br> NIGHTLY $8 / 7,8 / 8,8 / 9,8 / 14,8 / 15$, <br> 8/16, 8/17, 8/21, 8/22, 8/23, 8/24 | $7{ }^{\prime \prime}$ |
|  | ( $(7$ PM | - | 8AM | NHGHTLY 8/22, 8/23, $8 / 24$ | 5")) |
|  | $\begin{array}{r} 7 \mathrm{AM}((8 / 29)) \\ \underline{8 / 28} \\ \hline \end{array}$ | - | 7AM ((9/3)) 9 9/2 |  | $5{ }^{\prime \prime}$ |
|  | $\begin{array}{r} 7 \mathrm{AM}((9 / 5)) \\ 9 / 4 \end{array}$ | - | $7 \mathrm{AM}((9 / 10)) \underline{\underline{9 / 9}}$ |  | 5" |
| ((7B:) ) | $\begin{array}{r} 7 \mathrm{AM}((9 / 12)) \\ \underline{9 / 11} \end{array}$ | - | $\begin{aligned} & \text { 7AM }((9 / 17)) \\ & \underline{9 / 16} \end{aligned}$ |  | 5" |
|  | $\begin{array}{r} 7 \mathrm{AM}((9 / 19)) \\ \underline{9 / 18} \end{array}$ | - | Midnight $((10 / 23)) \underline{10 / 22}$ |  | 5" |
|  | ( 7 AM | - | 7 PM | $\begin{aligned} & \text { DAILY } 10 / 26,10 / 27,11 / 2,11 / 3 \text {, } \\ & 11 / 9,11 / 10,11 / 16,11 / 17,11 / 23, \\ & 11 / 24,11 / 30,12 / 4 \end{aligned}$ | 61/4")) |
|  | 7AM 10/24 | - | 4PM 10/28 | $\begin{aligned} & ((\text { (ВA } \\ & 11 / 18,11 / 25)) \end{aligned}$ | $61 / 4 "$ |
|  | 7AM 10/31 | $=$ | 4PM 11/4 |  |  |
|  | 7AM 11/7 | = | 4PM 11/11 |  |  |
|  | 7AM 11/14 | - | 4PM 11/18 |  |  |
|  | 7AM 11/21 | $=$ | 4PM 11/25 |  |  |
|  | 7AM 11/28 | - | 4PM 12/2 |  |  |
| 7C: | 7PM | - | 8AM | NIGHTLY $8 / 7,8 / 8,8 / 9,8 / 14,8 / 15$, 8/16, 8/17, 8/21, 8/22, 8/23, 8/24 | 7" |
|  | 7AM 8/28 | $=$ | 7AM 9/2 |  | 7" |
|  | 7AM 9/4 | - | 7AM 9/9 |  | 7" |

Note: In Area 7C the minimum mesh size is 7 " through $((9 / 11)) \underline{9 / 9}$.
Note: The Whatcom Creek Zone: That portion of Area 7B east of a ((line fromPost Point te)) North - South line from the flashing red light at the west entrance to Squalicum Harbor ((is CLOSED)) to land fall east of Post Point may close per in-season management needs.
8: 5AM - 11PM Closed 5"

Note: In Area 8 it is unlawful to take or fish for pink salmon with drift gillnets greater than 60-mesh maximum depth. Fishers must also use minimum $5^{\prime \prime}$ and maximum $51 / 2^{\prime \prime}$ mesh during pink salmon management periods.

| 8A: | 6PM | - | 8AM | Closed | 5" |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6PM | - | 8AM | Closed | 5" |
| Note: In Area 8A fishers must use minimum $5^{\prime \prime}$ and maximum $51 / 2^{\prime \prime}$ mesh during pink salmon management periods. |  |  |  |  |  |
| 8D: | 6PM | - | 8AM | Closed | 5" |
|  | 6PM | - | 8AM | Closed | $5{ }^{\prime \prime}$ |
|  | 6PM | - | 8AM | Closed | $5{ }^{\prime \prime}$ |
|  | 6PM | - | 8AM | Closed | 5" |
|  | 5PM | - | 9AM | Closed | 5" |
|  | 5PM | - | 9AM | Closed | 5" |
|  | 5PM | - | 9AM | Closed | 5" |
|  | 5PM | - | 9AM | Closed | 5" |
|  | 4PM | - | 8AM | Closed | 5" |
|  | 4PM | - | 8AM | Closed | 5" |
|  | 6AM | - | 6PM | Closed | $61 / 4 "$ |

AREA

| TIME |  |  |
| ---: | :--- | :--- |
| 7 AM | - | 6 PM |
| $7 \mathrm{AM}((8 / 15))$ | - | $7 \mathrm{PM}((10 / 30))$ |
| $\underline{8 / 7}$ | $\underline{10 / 29}$ |  |

9A: Skiff gillnet only, definition WAC 220-350-170 and lawful gear description WAC 220-354-140.

DATE(S)
Closed

6 1/4"
5"

Note: It is unlawful to retain chum salmon taken in Area 9A prior to October 1, and it is unlawful to retain Chinook salmon at any time. Any salmon required to be released must be removed from the net by cutting the meshes ensnaring the fish.

| 10, 11: | ( 7 A M | - | 7PM | 8/16,8/18, 8/23, 8/25,8/30,9/1 | $5{ }^{\prime \prime}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5PM | - | 7АМ | Closed | $\left.61 / 4{ }^{\prime \prime}\right)$ ) |
|  | 5PM | - | 9AM | Additional October dates (determined per agreement with tribal comanagers in-season if harvestable surplus of salmon increase). | $61 / 4 "$ |

Note: Areas 10 pink directed purse seine and gillnet fisheries, adjusted hours 7AM-7PM, limited participation to 5 purse seine and 5 gillnet, observers required, use of recovery box required in compliance with WAC 220-354-140 (5)(a) through (f). Purse seines must brail. For gillnets it is unlawful to use a net soak time of more than 90 minutes. Net soak time is defined as the time elapsed from when the first of the gillnet web enters the water, until the gillnet is fully retrieved from the water. Retention of Chinook, coho, and chum is prohibited for all gears.


Note: In Area 12A, it is unlawful to use other than 5-inch minimum mesh in the skiff gillnet fishery. It is unlawful to retain Chinook or chum salmon taken in Area 12A at any time, and any salmon required to be released must be removed from the net by cutting the meshes ensnaring the fish.

| 12, 12B: | 7AM | - | 8PM | $\begin{aligned} & ((10 / 18,10 / 21,10 / 26,10 / 28)) 10 / 13, \\ & 10 / 17,10 / 19,10 / 24,10 / 27,10 / 31, \\ & \underline{11 / 2} \end{aligned}$ | $61 / 4 "$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7AM | - | 7PM | $((11 / 1,11 / 4)) \underline{11 / 7,11 / 9}$ | $61 / 4 "$ |
|  | 6AM | - | 6PM | Additional November dates (determined per agreement with tribal co-managers in-season if harvestable surplus of salmon increase). | $61 / 4 "$ |
| 12C: | 6AM | - | 6PM | 10/31, 11/2, 11/4, 11/7 | $61 / 4 "$ |

All other saltwater and freshwater areas - Closed.
Nightly openings refer to the start date.
Within an area or areas, a mesh size restriction remains in effect from the first date indicated until a mesh size change is shown, and the new mesh size restriction remains in effect until changed.
(2) Fishers must take department observers, if requested by department staff, when participating in these openings.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.045 [77.04.055], and 77.12.047. WSR 21-14-068 (Order 21-94), § 220-354-160, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-050 (Order 20-98), § 220-354-160, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 19-15-051 (Order 19-140), § 220-354-160, filed 7/12/19, effective 8/12/19; WSR 18-14-013 (Order 18-131), § 220-354-160, filed 6/22/18, effective 7/23/18; WSR 17-17-100 (Order 17-205), amended and recodified as § 220-354-160, filed 8/18/17, effective 9/18/17; WSR 16-18-067, § 220-47-411, filed 9/2/16, effective 10/3/16; WSR 15-17-034 (Order 15-254), § 220-47-411, filed 8/11/15, effective 9/11/15; WSR 14-14-011 (Order 14-144), § 220-47-411, filed 6/19/14, effective 7/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 13-15-148 (Order 13-144), § 220-47-411, filed 7/23/13, effective 8/23/13; WSR 12-15-034 (Order 12-131), § 220-47-411, filed 7/12/12, effective 8/12/12; WSR 11-16-016 (Order 11-165), § 220-47-411, filed 7/22/11, effective 8/22/11; WSR 10-14-129 (Order 10-137), § 220-47-411, filed 7/7/10, effective 8/7/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-054 (Order 09-108), § 220-47-411, filed 7/9/09, effective 8/9/09; WSR 08-15-031 (Order 08-167), §220-47-411, filed 7/8/08, effective 8/8/08; WSR 07-20-006, § 220-47-411, filed 9/20/07, effective 10/21/07. Statutory Authority:

RCW 77.12.047. WSR 06-16-045 (Order 06-173), § 220-47-411, filed 7/26/06, effective 8/26/06; WSR 05-17-002 (Order 05-166), § 220-47-411, filed 8/3/05, effective 9/3/05; WSR 04-16-125 (Order 04-202), § 220-47-411, filed 8/4/04, effective 9/4/04; WSR 03-16-101 (Order 03-179), § 220-47-411, filed 8/6/03, effective 9/6/03; WSR 02-16-004 (Order 02-167), § 220-47-411, filed 7/25/02, effective 8/25/02; WSR 01-13-056 (Order 01-106), § 220-47-411, filed 6/15/01, effective 7/16/01; WSR 00-18-023 (Order 00-172), § 220-47-411, filed 8/28/00, effective 9/28/00. Statutory Authority: RCW 75.08.080. WSR 99-24-011 (Order 99-202), § 220-47-411, filed 11/19/99, effective 12/20/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-47-411, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-16-030 (Order 97-124), § 220-47-411, filed 7/29/97, effective 8/29/97; WSR 96-15-101 (Order 96-81), § 220-47-411, filed 7/22/96, effective 8/22/96; WSR 95-13-056 (Order 95-75), § 220-47-411, filed 6/16/95, effective 7/17/95; WSR 94-15-001 (Order 94-62), § 220-47-411, filed 7/6/94, effective 8/6/94; WSR 93-14-041 (Order 93-55), § 220-47-411, filed 6/29/93, effective 7/30/93; WSR 92-15-105 (Order 92-47), § 220-47-411, filed 7/20/92, effective 8/20/92; WSR 91-18-024 (Order 91-72), § 220-47-411, filed 8/27/91, effective 9/27/91; WSR 90-13-025 (Order 90-49), § 220-47-411, filed 6/11/90, effective 7/12/90; WSR 89-13-004 (Order 89-44), § 220-47-411, filed 6/8/89; WSR 88-14-133 (Order 88-48), § 220-47-411, filed 7/6/88; WSR 87-15-059 (Order 87-72), § 220-47-411, filed 7/14/87; WSR 86-13-038 (Order 86-46), § 220-47-411, filed 6/12/86; WSR 85-13-032 (Order 85-60), § 220-47-411, filed 6/12/85; WSR 84-13-078 (Order 84-53), § 220-47-411, filed 6/21/84; WSR 83-14-020 (Order 83-57), § 220-47-411, filed 6/28/83; WSR 82-15-040 (Order 82-83), § 220-47-411, filed 7/15/82; WSR 81-18-017 (Order 81-101), § 220-47-411, filed 8/25/81; WSR 80-10-058 (Order 80-83), § 220-47-411, filed 8/6/80; WSR 78-05-018 (Order 78-16), § 220-47-411, filed 4/13/78; Order 77-66, § 220-47-411, filed 8/5/77; Order 77-14, § 220-47-411, filed 4/15/77; Order 76-41, § 220-47-411, filed 6/4/76; Order 1251, § 220-47-411, filed 8/18/75; Order 1210, § 220-47-411, filed 5/26/75; Order 1143, § 220-47-411, filed 8/8/74; Order 1125, § 220-47-411, filed 6/6/74; Order 1066, § 220-47-411, filed 7/19/73; Order 1057, § 220-47-411, filed 5/22/73; Order 988, § 220-47-411, filed 4/28/72.]

AMENDATORY SECTION (Amending WSR 21-14-068, filed 7/2/21, effective 8/2/21)

## WAC 220-354-180 Puget Sound salmon-Reef net open periods. (1)

It is unlawful to take, fish for, or possess salmon taken with reef net gear for commercial purposes in Puget Sound, except in the following designated Puget Sound Salmon Management and Catch Reporting Areas, during the periods provided for in each respective area:

| AREA | TIME | DATE(S) |
| :---: | :---: | :---: |
| 7 | $5 A M-9 P M$ | Daily |

(2) It is unlawful at all times to retain unmarked Chinook salmon taken with reef net gear, and it is unlawful to retain chum salmon taken with reef net gear prior to October 1.
(3) It is unlawful to retain marked Chinook after September 30.
(a) It is unlawful to retain marked Chinook with reef net gear if the fisher does not have in his or her immediate possession a depart-ment-issued Puget Sound Reef Net Logbook with all retained Chinook accounted for in the logbook. Marked Chinook are those with a clipped adipose fin and a healed scar at the site of the clipped fin.
(b) Completed logs must be submitted and received within six working days to: Puget Sound Commercial Salmon Manager, Department of Fish \& Wildlife, 600 Capitol Way $N, ~ O l y m p i a, ~ W A ~ 98501-1091 . ~$
(4) All other saltwater and freshwater areas - Closed.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.045 [77.04.055], and 77.12.047. WSR 21-14-068 (Order 21-94), § 220-354-180, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-050 (Order 20-98), $\$$ 220-354-180, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 19-15-051 (Order 19-140), § 220-354-180, filed 7/12/19, effective 8/12/19; WSR 18-14-013 (Order 18-131), § 220-354-180, filed 6/22/18, effective 7/23/18; WSR 17-17-100 (Order 17-205), amended and recodified as § 220-354-180, filed 8/18/17, effective 9/18/17; WSR 16-18-067, § 220-47-401, filed 9/2/16, effective 10/3/16; WSR 15-17-034 (Order 15-254), § 220-47-401, filed 8/11/15, effective 9/11/15; WSR 14-14-011 (Order 14-144), § 220-47-401, filed 6/19/14, effective 7/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 12-15-034 (Order 12-131), § 220-47-401, filed 7/12/12, effective 8/12/12; WSR 11-16-016 (Order 11-165), § 220-47-401, filed 7/22/11, effective 8/22/11; WSR 10-14-129 (Order 10-137), § 220-47-401, filed 7/7/10, effective 8/7/10. Statutory Authority: RCW 77.12 .047 and 77.04.020. WSR 09-15-054 (Order 09-108), § 220-47-401, filed 7/9/09, effective 8/9/09; WSR 08-15-031 (Order 08-167), § 220-47-401, filed 7/8/08, effective 8/8/08; WSR 07-20-006, § 220-47-401, filed 9/20/07, effective 10/21/07. Statutory Authority: RCW 77.12.047. WSR 06-16-045 (Order 06-173), § 220-47-401, filed 7/26/06, effective 8/26/06; WSR 05-17-002 (Order 05-166), § 220-47-401, filed 8/3/05, effective 9/3/05; WSR 04-16-125 (Order 04-202), § 220-47-401, filed 8/4/04, effective 9/4/04; WSR 03-18-005 (Order 03-210), § 220-47-401, filed 8/20/03, effective 9/20/03; WSR 02-16-004 (Order 02-167), s 220-47-401, filed 7/25/02, effective 8/25/02; WSR 01-13-056 (Order 01-106), § 220-47-401, filed 6/15/01, effective 7/16/01; WSR 00-18-023 (Order 00-172), § 220-47-401, filed 8/28/00, effective 9/28/00. Statutory Authority: RCW 75.08.080. WSR 99-24-011 (Order 99-202), § 220-47-401, filed 11/19/99, effective 12/20/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-47-401, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-16-030 (Order 97-124), § 220-47-401, filed 7/29/97, effective 8/29/97; WSR 96-15-101 (Order 96-81), § 220-47-401, filed 7/22/96, effective 8/22/96; WSR 95-13-056 (Order 95-75), § 220-47-401, filed 6/16/95, effective 7/17/95; WSR 94-15-001 (Order 94-62), S 220-47-401, filed 7/6/94, effective 8/6/94; WSR 93-14-041 (Order 93-55), § 220-47-401, filed 6/29/93, effective 7/30/93; WSR 92-15-105 (Order 92-47), § 220-47-401, filed 7/20/92, effective 8/20/92; WSR 91-18-024 (Order 91-72), § 220-47-401, filed 8/27/91, effective 9/27/91; WSR 90-13-025 (Order 90-49), § 220-47-401, filed 6/11/90, effective 7/12/90; WSR 89-13-004 (Order 89-44), § 220-47-401, filed 6/8/89; WSR 88-14-133 (Order 88-48), § 220-47-401, filed 7/6/88; WSR 87-15-059 (Order 87-72), § 220-47-401, filed 7/14/87; WSR 86-13-038 (Order 86-46), § 220-47-401,
filed 6/12/86; WSR 81-18-017 (Order 81-101), § 220-47-401, filed 8/25/81; WSR 80-10-058 (Order 80-83), § 220-47-401, filed 8/6/80; WSR 78-05-018 (Order 78-16), § 220-47-401, filed 4/13/78; Order 77-66, § 220-47-401, filed 8/5/77; Order 77-14, § 220-47-401, filed 4/15/77; Order 76-41, § 220-47-401, filed 6/4/76; Order 1210, § 220-47-401, filed 5/26/75; Order 1143, § 220-47-401, filed 8/8/74; Order 1125, § 220-47-401, filed 6/6/74; Order 1066, § 220-47-401, filed 7/19/73; Order 1057, § 220-47-401, filed 5/22/73; Order 988, § 220-47-401, filed 4/28/72.]

AMENDATORY SECTION (Amending WSR 21-14-068, filed 7/2/21, effective 8/2/21)

WAC 220-354-210 Puget Sound salmon-Beach seine-Open periods. (1) It is unlawful to take, fish for, or possess salmon taken with beach seine gear for commercial purposes from Puget Sound except in the following designated Puget Sound Salmon Management and Catch Reporting Areas during the periods provided hereinafter in each respective Management and Catch Reporting Area:

All areas:

(2) It is unlawful to retain the following salmon species taken with beach seine gear within the following areas during the following periods:
(a) Chinook salmon - At all times in Area 12A.
(b) Chum salmon - In all areas prior to October 10.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.045 [77.04.055], and 77.12.047. WSR 21-14-068 (Order 21-94), § 220-354-210, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-050 (Order 20-98), § 220-354-210, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.130, 77.12.045, and 77.12.047. WSR 19-15-051 (Order 19-140), § 220-354-210, filed 7/12/19, effective 8/12/19; WSR 18-14-013 (Order 18-131), § 220-354-210, filed 6/22/18, effective 7/23/18; WSR 17-17-100 (Order 17-205), amended and recodified as § 220-354-210, filed 8/18/17, effective 9/18/17; WSR 16-18-067, § 220-47-428, filed 9/2/16, effective 10/3/16; WSR 15-17-034 (Order 15-254), § 220-47-428, filed 8/11/15, effective 9/11/15; WSR 14-14-011 (Order 14-144), § 220-47-428, filed 6/19/14, effective 7/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and
77.12.047. WSR 13-15-148 (Order 13-144), § 220-47-428, filed 7/23/13, effective 8/23/13; WSR 12-15-034 (Order 12-131), § 220-47-428, filed 7/12/12, effective 8/12/12; WSR 11-16-016 (Order 11-165), § 220-47-428, filed 7/22/11, effective 8/22/11; WSR 10-14-129 (Order 10-137), § 220-47-428, filed 7/7/10, effective 8/7/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-054 (Order 09-108), $\$$ 220-47-428, filed 7/9/09, effective 8/9/09. Statutory Authority: RCW 77.12.047. WSR 05-17-002 (Order 05-166), S 220-47-428, filed 8/3/05, effective 9/3/05; WSR 04-16-125 (Order 04-202), § 220-47-428, filed 8/4/04, effective 9/4/04; WSR 03-18-005 (Order 03-210), § 220-47-428, filed 8/20/03, effective 9/20/03; WSR 02-16-004 (Order 02-167), § 220-47-428, filed 7/25/02, effective 8/25/02; WSR 01-13-056 (Order 01-106), § 220-47-428, filed 6/15/01, effective 7/16/01; WSR 00-18-023 (Order 00-172), § 220-47-428, filed 8/28/00, effective 9/28/00. Statutory Authority: RCW 75.08.080. WSR 99-24-011 (Order 99-202), § 220-47-428, filed 11/19/99, effective 12/20/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-47-428, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-16-030 (Order 97-124), § 220-47-428, filed 7/29/97, effective 8/29/97; WSR 96-15-101 (Order 96-81), § 220-47-428, filed 7/22/96, effective 8/22/96.]

> WSR 22-14-053
> PERMANENT RULES
> DEPARTMENT OF
> FISH AND WILDLIFE
[Order 22-116—Filed June 29, 2022, 8:04 a.m., effective July 30, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: The purpose of this rule making is to regulate the commercial salmon fisheries in Willapa Bay and Grays Harbor. These rules are part of a comprehensive suite of rule-making packages to implement the new 2022-2023 salmon seasons for Washington state, developed through the broader North of Falcon process pursuant to the fish and wildife commission's North of Falcon Policy C-3608 for 2019-2023.

The North of Falcon process typically begins in January and consists of government-to-government meetings involving the National Marine Fisheries Service (NMFS), treaty tribes, and Washington department of fish and wildlife (WDFW) representatives. Separate meetings are held with stakeholders, both at a statewide and regional level, to review preseason run size forecasts, NMFS guidance relative to allowable impacts for species listed under the Endangered Species Act, which includes salmon, but [and] other protected species as well, such as southern resident killer whales.

Stakeholder meetings specific to the Willapa Bay and Grays Harbor fisheries were held in February, March, and April, and the public hearing on the proposed rules was held on June 22, 2022. The comprehensive North of Falcon meeting schedule and the meeting agendas, handouts, and audio recordings of the public meetings are available on WDFW's website at https://wdfw.wa.gov/fishing/management/north-falcon/ public-meetings.

While these rules regulate only commercial fisheries, the seasons specified in these rules are an integral part of implementing commercial and recreational fisheries in a coordinated manner pursuant to the Willapa Bay Salmon Management Policy C-3622 and Grays Harbor Basin Salmon Management Policy C-3621. As such, the commercial fisheries for 2022-2023 are structured in a manner intended to consider and provide both commercial and recreational fishing opportunities in Willapa Bay and Grays Harbor, while ensuring conservation requirements and management objectives in federal and state laws and regulations, state/tribal harvest management agreements, and fish and wildlife commission policies are met.

Even though drafted as amendments to preceding rules, these new amendments function as a coordinated and unitary fishery rule-making package for the 2022-2023 fishery season, and thus substantively replace prior years' fisheries in Willapa Bay and Grays Harbor. Specifically, these rules replace and supersede the language in WAC 220-354-250 for the Willapa Bay salmon fall fishery and WAC 220-354-290 for the Grays Harbor salmon fall fishery in their entirety.

Included in the fish and wildlife commission's North of Falcon Policy C-3608 for 2019-2023 is a delegation of authority to the director of WDFW to adopt the implementing regulations, including this rule making, resulting from the North of Falcon process.

Citation of Rules Affected by this Order: Amending WAC 220-354-250 and 220-354-290.

Statutory Authority for Adoption: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047.

Adopted under notice filed as WSR 22-11-087 on May 17, 2022.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 2, Repealed 0 .

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 27, 2022.

OTS-3764.1

AMENDATORY SECTION (Amending WSR 21-14-069, filed 7/2/21, effective 8/2/21)

WAC 220-354-250 Willapa Bay salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Willapa Bay for commercial purposes or to possess salmon taken from those waters for commercial purposes, except that:

## Fishing periods:

(1) Gillnet gear may be used to fish for coho salmon, chum salmon, and Chinook salmon:

| Area | Time | Date(s) | Maximum Mesh Size |
| :---: | :---: | :---: | :---: |
| $2 \mathrm{~N}, 2 \mathrm{M}$ | 6:00 a.m. through 6:00 p.m. | ((8/20)) 8 8/26 | 4.25" |
| 2N, 2M | 6:00 a.m. through 6:00 p.m. | $((8 / 27)) \underline{9 / 2}$ | 4.25" |
| 2N, 2M | 6:00 a.m. through 6:00 p.m. | ((9/3)) 9/7 | 4.25" |
| $2 \mathrm{~N}((, 2 \mathrm{M}))$ | ((6:00 a.m. through 6:00 p.m.)) <br> 7:00 a.m. through 7:00 p.m. | $((9 / 10)) \underline{9 / 12,9 / 13, ~ 9 / 15, ~ 9 / 16, ~ 9 / 17 ~}$ | 4.25" |
| ((2N)) 2 2M | 7:00 a.m. through 7:00 p.m. | 9/12, ((9/14)) 9/13, 9/15, 9/16 | 4.25" |
| ((2M)) 2T, 2U | 7:00 a.m. through 7:00 p.m. | $((9 / 14)) \underline{9 / 16, ~ 9 / 17}$ | 4.25 " |
| ( $2 \mathrm{~N}, 2 \mathrm{M}, 2 \mathrm{~T}, 2 \mathrm{U}$ | 7:00 a.m. through 7:00 p.m. | $9 / 16$ | 4.25" |
| 2N, 2T, 2 U | 7:00 a .m. through 7:00 p.m. | 9/18 | 4.25")) |
| 2N, 2M, 2R, 2T, 2 U | 7:00 a.m. through 7:00 p.m. | $((9 / 21,9 / 24)) 9 / 19,9 / 20,9 / 21,9 / 22,9 / 23$ | 6.5 " |
| $\begin{aligned} & 2 \mathrm{~N}, 2 \mathrm{M}, 2 \mathrm{R}, 2 \mathrm{~T}, 2 \mathrm{U}((- \\ & 2 \mathrm{R})) \end{aligned}$ | 7:00 a.m. through 7:00 p.m. | ((9/22)) 9/26, 9/27, 9/29, 9/30, 10/1 | 6.5 " |
| ( $2 \mathrm{~N}, 2 \mathrm{~T}$ | 7:00 a.m. through 7:00 p.m. | $9 / 25$ | 6.5" |
| 2N, $2 \mathrm{M}, 2 \mathrm{U}$ | 7:00 a.m. through 7:00 p.m. | 9/28, 10/4 | 6.5 " |
| 2N, 2R, 2T, 2 U | 7:00 a.m. through 7:00 p.m. | 9/29 | 6.5 " |
| 27 | 7:00 a.m. through 7:00 p.m. | 104 | 6.5 " |
| 2N, 2 U | 7:00 a m. through 7:00 p.m. | 10/2 | 6.5")) |


| Area | Time | Date(s) | Maximum Mesh Size |
| :---: | :---: | :---: | :---: |
| 2N, 2M, 2R, 2T, 2 U | 7:00 a.m. through 7:00 p.m. | ((10/5)) $\underline{10 / 3,10 / 4,10 / 5,10 / 6,10 / 7}$ | 6.5 " |
| 2N, ((2M,)) 2R, 2T, 2U | 7:00 a.m. through 7:00 p.m. | $((10 / 7)) \underline{10 / 9,10 / 10,10 / 13,10 / 15}$ | 6.5 " |
| ( $2 \mathrm{~N}, 2 \mathrm{M}, 2 \mathrm{R}, 2 \mathrm{~T}, 2 \mathrm{U}$ | 7:00 a.m. through 7:00 p.m. | 10/12 | 6.5 " |
| 2N, 2T, 2U | 7:00 a m.m. through 7:00 p.m. | $10 / 14$ | 6.5 " |
| $2 \mathrm{~N}, 2 \mathrm{M}, 2 \mathrm{R}, 2 \mathrm{~T}, 2 \mathrm{U}$ | 7:00 a.m. through 7:00 p.m. | 10/19 | 6.5")) |
| $\underline{2 M}$ | 7:00 a.m. through 7:00 p.m. | 10/9, 10/10 | $6.5^{\prime \prime}$ |
| 2N, 2T, 2 U | 7:00 a.m. through 7:00 p.m. | 11/1, 11/2, 11/3, 11/4, 11/5 | 6.5 " |
| 2N, 2M, 2T, 2U | 7:00 a.m. through 7:00 p.m. | $((11 / 8)) \underline{11 / 7, ~ 11 / 11}$ | 6.5 " |
| $2 \mathrm{~N}, 2 \mathrm{M}, 2 \mathrm{~T}, 2 \mathrm{U}$ | 7:00 a.m. through 7:00 p.m. | $((11 / 15)) \underline{11 / 16}$ | 6.5 " |

Gear:
(2) Gillnet gear restrictions - All areas:
(a) Drift gillnet gear only. It is unlawful to use set net gear.
(b) It is permissible to have on-board a commercial vessel more than one net, provided the nets are of a mesh size that is legal for the fishery, and the length of any one net does not exceed one thousand five hundred feet in length.
(c) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line.
(d) It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Willapa Bay, provided the net is properly stored. A properly stored net is defined as a net on a drum that is fully covered by a tarp (canvas or plastic) and bound with a minimum of ten revolutions of rope that is $3 / 8$ (0.375) inches or greater.
(e) From 12:01 a.m. August ((z ) ) 26 through 11:59 p.m. November ( $(15,2021)$ ) 16, 2022: Mesh size must not exceed six and one-half inches stretched, except mesh size must not exceed four and one-quarter inches stretched in Area 2 N on August ( $(20,27)$ ) 26, September ( 3 , 10, 12, 14, 16, and 18) ) $2,7,12,13,15,16$, and 17, Area 2M on August ((27)) 26, September ( $(3,10,14)$ ) $2,7,12,13,15$, and 16 , and Areas 2 T and 2 U on September 16 and $((18,2021))$ 17, 2022.

## Other:

(3) Recovery boxes and soak time limits described in this section are required from 12:01 a.m. August ((z0)) 26 through 11:59 p.m. November ((15, 2021)) 16, 2022:
(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing in Willapa Bay Areas 2M, 2N, 2R, 2T, and 2 U .
(i) Each box and chamber must be operating during any time the net is being retrieved or picked. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute.
(ii) Each chamber of the recovery box must meet the following dimensions as measured from within the box:
(A) The inside length measurement must be at or within 39-1/2 inches to 48 inches;
(B) The inside width measurements must be at or within 8 to 10 inches; and
(C) The inside height measurement must be at or within 14 to 16 inches.
(iii) Each chamber of the recovery box must include a water inlet hole between $3 / 4$ inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1-3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least $1-1 / 2$ inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber.
(b) From 12:01 a.m. August ( $(2 \theta)$ ) 26 through 11:59 p.m. November ( $(15,2021)$ ) 16, 2022, all steelhead and all wild (unmarked) Chinook must be placed in an operating recovery box, which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (c) of this subsection.
(c) All fish placed in recovery boxes must remain until they are not lethargic and/or not bleeding and must be released to the river/bay prior to landing or docking.
(d) Soak time must not exceed 45 minutes. Soak time is defined as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.
(4) Quick reporting is required for wholesale dealers and fishers retailing their catch under a "limited fish seller endorsement." According to WAC 220-352-320, reports must be submitted by 10:00 a.m. on the day after the purchase date, unless otherwise specified in a voluntary electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).
(5) Retention prohibitions:
(a) All green and white sturgeon and all steelhead, except as provided in subsection (3) of this section, must be handled with care to minimize injury to the fish and must be released immediately to the river/bay.
(b) Retention of any species other than coho, Chinook, or chum salmon is prohibited.
(c) From 12:01 a.m. August ( ( $2 \theta)$ ) 26 through 11:59 p.m. November ( $(15,2021)$ ) 16, 2022, retention of any species other than coho salmon, hatchery Chinook salmon marked by a healed scar at the site of the adipose fin, or chum salmon is prohibited.
(6) Report all encounters of green sturgeon, white sturgeon, and steelhead, (your name, date of encounter, and number of species encountered) to the quick reporting office via phone at \#866-791-1280, fax at \#360-249-1229, or email at harborfishtickets@dfw.wa.gov. Fishers may have wholesale dealers use the "buyer only" portion of the fish ticket and have encounters included with each day's quick reporting.
(7) Do not remove tags from white sturgeon. Please obtain available information from tags without removing tags. Submit tag information to the Washington Department of Fish and Wildlife, 48 Devonshire Rd., Montesano, WA 98563.
(8) Those waters of Area $2 T$, north of a line from Toke Point channel marker 3 easterly through Willapa Harbor channel marker 13 (green), then northeasterly to the power transmission pole located at
$46^{\circ} 43.1907^{\prime} N, 123^{\circ} 50.83134^{\prime} \mathrm{W}$ are closed from 12:01 a.m. September 16, ((z021)) 2022, through 11:59 p.m., September 30, ((z021)) 2022.
(9) It is unlawful to fish with gillnet gear in Areas 2 M , $2 \mathrm{~N}, ~ 2 \mathrm{R}$, 2 T , and 2 U unless the vessel operator has attended a "Fish Friendly" best fishing practices workshop and has in their possession while fishing a department-issued certification card.
(10) Fishers must take department observers, if requested by department staff, when participating in these openings. Fishers also must provide notice of intent to participate by contacting quick reporting by phone, fax ${ }_{\perp}$ or email, listed in subsection (6) of this section. Notice of intent must be given prior to 5:00 p.m. on August ( $\boldsymbol{6}_{\text {, }}$ z021)) 19, 2022.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-069 (Order 21-93), § 220-354-250, filed 7/2/21, effective 8/2/21; WSR 20-14-051 (Order 20-103), § 220-354-250, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 19-15-053 (Order 19-127), § 220-354-250, filed 7/12/19, effective 8/12/19; WSR 18-15-070, § 220-354-250, filed 7/17/18, effective 8/17/18. Statutory Authority: RCW 77.04.090 and 77.04.130. WSR 18-11-052 (Order 18-92), § 220-354-250, filed 5/10/18, effective 6/10/18. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 17-17-012, § 220-354-250, filed 8/4/17, effective 9/4/17. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-05-112 (Order 17-04), amended and recodified as § 220-354-250, filed 2/15/17, effective 3/18/17. Statutory Authority: RCW 77.04.012, 77.04.020, 77.12.045, 77.12.047, and 77.04.055. WSR 16-15-029 (Order 16-176), § 220-40-027, filed 7/12/16, effective 8/12/16; WSR 15-18-029 (Order 15-281), § 220-40-027, filed 8/25/15, effective 9/8/15; WSR 14-15-052 (Order 14-173), § 220-40-027, filed 7/11/14, effective 8/11/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 13-17-001 (Order 13-184), § 220-40-027, filed 8/7/13, effective 8/12/13; WSR 12-11-093, § 220-40-027, filed 5/18/12, effective 6/18/12; WSR 11-14-003 (Order 11-91), § 220-40-027, filed 6/22/11, effective 7/23/11; WSR 10-12-061 (Order 09-108), § 220-40-027, filed 5/27/10, effective 6/27/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-16-125 (Order 09-109), § 220-40-027, filed 8/4/09, effective 9/4/09; WSR 08-15-003 (Order 08-166), § 220-40-027, filed 7/3/08, effective 8/3/08. Statutory Authority: RCW 77.04.020, 77.12.047, and 77.65.200. WSR 07-17-010, § 220-40-027, filed 8/3/07, effective 9/3/07. Statutory Authority: RCW 77.12.047. WSR 05-17-006 (Order 05-167), § 220-40-027, filed 8/3/05, effective 9/3/05; WSR 04-16-013 (Order 04-183), § 220-40-027, filed 7/22/04, effective 8/22/04; WSR 03-18-004 (Order 03-208), § 220-40-027, filed 8/20/03, effective 9/20/03; WSR 02-16-021 (Order 02-173), § 220-40-027, filed 7/26/02, effective 8/26/02; WSR 01-13-055 (Order 01-104), § 220-40-027, filed 6/15/01, effective 7/16/01; WSR 00-23-065 (Order 00-240), § 220-40-027, filed 11/15/00, effective 12/16/00. Statutory Authority: RCW 75.08.080. WSR 99-24-104 (Order 99-206), § 220-40-027, filed 11/30/99, effective 12/31/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-40-027, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-15-148 (Order 97-123), § 220-40-027, filed 7/23/97, effective 8/23/97; WSR 96-13-035 (Order 96-77), § 220-40-027, 6/11/96, effective 7/12/96; WSR 95-13-065 (Order 95-76), § 220-40-027, filed 6/19/95, effective 7/20/95; WSR 94-16-017 (Order 94-61), § 220-40-027,
filed 7/21/94, effective 8/21/94; WSR 93-14-042 (Order 93-54), § 220-40-027, filed 6/29/93, effective 7/30/93; WSR 90-18-023 (Order 90-77), § 220-40-027, filed 8/24/90, effective 9/24/90; WSR 89-16-056 (Order 89-71), § 220-40-027, filed 7/28/89, effective 8/28/89.]

OTS-3765.1

AMENDATORY SECTION (Amending WSR 21-14-069, filed 7/2/21, effective 8/2/21)

WAC 220-354-290 Grays Harbor salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Grays Harbor for commercial purposes or to possess salmon taken from those waters for commercial purposes, except that:

## Fishing periods:

(1) Gillnet gear may be used to fish for Chinook, coho, and chum salmon, and shad as provided in this section and in the ( (times and area identified in the)) chart below.

Time:
((7:00 a.m. through 7:00 p.m. October 25;
7:00 a.m. threugh 7:00 p.m.
October 26;
7:00 a.m. through 7:00 p.m.
Oetober 27;
Noon through 11:59 p.m.
November 2;
AND
7:00 a.m. threugh 7:00 p.m. November 3;
AND
Noon October 17 through noen October 20;
AND
6:00 a.m. October 24 through
6:00 a.m. October 26.))
12:01 p.m. through 7:00 p.m.
September 28;
12:01 p.m. through 7:00 p.m. October 12;
7:00 a.m. through 7:00 p.m.
October 19;
7:00 a.m. through 7:00 p.m.
October 20;
7:00 a.m. through 7:00 p.m.
October 24;
7:00 a.m. through 7:00 p.m.
October 25;
7:00 a.m. through 7:00 p.m.
October 26;

Areas:
Area 2A and Area 2D

Area 2C
辟

Time:
7:00 a.m. through 7:00 p.m. November 1;
AND
7:00 a.m. through 7:00 p.m. November 2;
AND
7:00 a.m. October 17 through Area 2C 7:00 p.m. October 18;
AND
7:00 a.m. through 7:00 p.m. October 27.

Areas:

## Gear:

(2) Gillnet gear restrictions - All areas:
(a) It is permissible to have on board a commercial vessel more than one net, provided that the length of any one net does not exceed ( (one thousand five hundred)) 1,500 feet in length. Nets not specifically authorized for use in this fishery may be aboard the vessel if properly stored. A properly stored net is defined as a net on a drum that is fully covered by a tarp (canvas or plastic) and bound with a minimum of ((もen)) 10 revolutions of rope that is 3/8 (0.375) inches in diameter or greater.
(b) Areas 2A and 2D from ((Octobcr 1)) September 28 through November 30: Gillnet gear only.
(i) Drift gillnet gear only. It is unlawful to use set net gear.
(ii) It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gillnet or its attached line or float from drifting.
(iii) Mesh size must not exceed six and one-half inch maximum, except mesh size must not exceed four and one-quarter inches stretched in Areas 2A and 2D on September 28 and October 12, 2022.
(iv) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line. It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Grays Harbor.
(c) Area 2C from October 1 through November 30: Gillnet gear only.
(i) Drift gillnet gear only. It is unlawful to use set net gear.
(ii) It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gillnet or its attached line or float from drifting.
(iii) Mesh size must not exceed nine inches.
(iv) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line. It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Grays Harbor.

## Other:

(3) Recovery boxes and soak times:
(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing Areas 2A, 2C, and 2D.
(i) Each box and chamber must be operating during any time the net is being retrieved or picked and any time a fish is being held in accordance with (b) and (c) of this subsection. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute.
(ii) Each chamber of the recovery box must meet the following dimensions as measured from within the box:
(A) The inside length measurement must be at or within 39-1/2 inches to 48 inches;
(B) The inside width measurements must be at or within 8 to 10 inches; and
(C) The inside height measurement must be at or within 14 to 16 inches.
(iii) Each chamber of the recovery box must include a water inlet hole between $3 / 4$ inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1-3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least $1-1 / 2$ inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river or fresh bay water into each chamber.
(b) When fishing in Grays Harbor Areas 2A and 2D, all steelhead and wild (unmarked) Chinook must be placed in an operating recovery box which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (d) of this subsection.
(c) When fishing in Grays Harbor Area 2C, all steelhead must be placed in an operating recovery box which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (d) of this subsection.
(d) All fish placed in recovery boxes must remain until they are not lethargic and not bleeding and must be released to the river or bay prior to landing or docking.
(e) For Areas 2A and 2D, soak time must not exceed 45 minutes. Soak time is defined as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.
(4) Retention of any species other than coho, chum, hatchery Chinook marked by a healed scar at the site of the adipose fin, or shad is prohibited in Areas 2A and 2D from ((October 1)) September 28 through November 30.
(5) Retention of any species other than Chinook, chum, coho or shad, is prohibited in Area 2C from October 1 through November 30.
(6) Quick reporting is required for original receivers. According to WAC 220-352-320, reports must be made by 10:00 a.m. the day following landing, unless otherwise specified in an electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).
(7) Report all encounters of green sturgeon to the quick reporting office via phone at 866-791-1280, fax at 360-249-1229, or email at harborfishtickets@dfw.wa.gov. Fishers may have wholesale fish buyers use the "buyer only" portion of the fish ticket and include encounters with each day's quick reporting.
(8) Do noт remove tags from white or green sturgeon. Please obtain available information from tags without removing tags. Submit tag information to:

Washington Department of Fish and Wildlife 48 Devonshire Rd.
Montesano, WA 98563.
(9) (a) Fishers must take department observers, if requested, by department staff when participating in these openings.
(b) Fishers also must provide notice of intent to participate by contacting Quick Reporting by phone, fax or email. Notice of intent must be given prior to 5:00 p.m. on ((October 11)) September 21, for openings in Areas 2A, 2C, or 2D.
(10) It is unlawful to fish for salmon with tangle net or gillnet gear in Areas 2A and 2D unless the vessel operator has attended a "Fish Friendly" best fishing practices workshop and has in his or her possession a department-issued certification card.
(11) Those waters of Area 2D commonly known as the South Channel, shoreward of a line projected from a point on the southwest side of Hwy 105 bridge (4653.925'N, $123^{\circ} 59.986^{\prime}$ W) then northwest to a point on an unnamed projection of land (46 $\left.{ }^{\circ} 54.060^{\prime} N, 124^{\circ} 0.239^{\prime} W\right)$ then northerly to Channel Marker $8\left(46^{\circ} 55.369^{\prime} \mathrm{N}, 124^{\circ} 00.576^{\prime} \mathrm{W}\right)$ and to Channel Marker $27\left(46^{\circ} 56.487^{\prime} N, 124^{\circ} 0.394^{\prime} W\right)$, then easterly to North Pipeline Beacon ( $46^{\circ} 57.329^{\prime} N$, $123^{\circ} 50.957^{\prime} \mathrm{W}$ ) and south easterly in a straight line through the South Pipeline Beacon (4657.303'N, $\left.123^{\circ} 50.9^{\prime} \mathrm{W}\right)$ to the south shore are closed from 12:01 a.m. September 28, 2022, through 11:59 p.m., October 20, 2022.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-069 (Order 21-93), § 220-354-290, filed 7/2/21, effective 8/2/21; WSR 20-14-051 (Order 20-103), § 220-354-290, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 19-15-054 (Order 19-129), § 220-354-290, filed 7/12/19, effective 8/12/19; WSR 18-17-071 (Order 18-191), § 220-354-290, filed 8/10/18, effective 9/10/18. Statutory Authority: RCW 77.04.090 and 77.04.130. WSR 18-11-052 (Order 18-92), § 220-354-290, filed 5/10/18, effective 6/10/18. Statutory Authority: RCW 77.04.090, 77.04.130, 77.15.568, $77.08 .010,77.65 .510,77.65 .515$, and 77.65.520. WSR 17-22-100, § 220-354-290, filed 10/30/17, effective 1/1/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 17-19-007 (Order 17-234), § 220-354-290, filed 9/7/17, effective 10/8/17. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-05-112 (Order 17-04), amended and recodified as § 220-354-290, filed 2/15/17, effective 3/18/17. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 16-19-010 (Order 16-239), § 220-36-023, filed 9/8/16, effective 10/9/16; WSR 15-19-086 (Order 15-343), § 220-36-023, filed 9/16/15, effective 10/11/15; WSR 14-20-023 (Order 14-268), § 220-36-023, filed 9/19/14, effective 10/20/14. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 13-19-027 (Order 13-227), § 220-36-023, filed 9/9/13, effective 10/10/13; WSR 12-11-093, § 220-36-023, filed 5/18/12, effective 6/18/12; WSR 11-14-003 (Order 11-91), § 220-36-023, filed 6/22/11, effective 7/23/11; WSR 10-12-061 (Order 09-108), § 220-36-023, filed 5/27/10, effective 6/27/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-16-125 (Order 09-109), § 220-36-023, filed 8/4/09, effective

9/4/09; WSR 08-15-003 (Order 08-166), § 220-36-023, filed 7/3/08, effective 8/3/08. Statutory Authority: RCW 77.04.020, 77.12.047, and 77.65.200. WSR 07-17-010, § 220-36-023, filed 8/3/07, effective 9/3/07. Statutory Authority: RCW 77.12.047. WSR 05-17-006 (Order 05-167), § 220-36-023, filed 8/3/05, effective 9/3/05; WSR 04-16-013 (Order 04-183), § 220-36-023, filed 7/22/04, effective 8/22/04; WSR 03-18-004 (Order 03-208), § 220-36-023, filed 8/20/03, effective 9/20/03; WSR 01-13-055 (Order 01-104), § 220-36-023, filed 6/15/01, effective 7/16/01; WSR 00-23-065 (Order 00-240), § 220-36-023, filed 11/15/00, effective 12/16/00. Statutory Authority: RCW 75.08.080. WSR 99-24-104 (Order 99-206), § 220-36-023, filed 11/30/99, effective 12/31/99. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 98-15-081 (Order 98-122), § 220-36-023, filed 7/15/98, effective 8/15/98. Statutory Authority: RCW 75.08.080. WSR 97-15-148 (Order 97-123), § 220-36-023, filed 7/23/97, effective 8/23/97; WSR 96-13-035 (Order 96-77), § 220-36-023, filed 6/11/96, effective 7/12/96; WSR 95-13-065 (Order 95-76), § 220-36-023, filed 6/19/95, effective 7/20/95; WSR 94-13-014 (Order 94-46), § 220-36-023, filed 6/3/94, effective 7/4/94; WSR 93-14-042 (Order 93-54), § 220-36-023, filed 6/29/93, effective 7/30/93; WSR 90-18-023 (Order 90-77), § 220-36-023, filed 8/24/90, effective 9/24/90; WSR 89-16-056 (Order 89-71), § 220-36-023, filed 7/28/89, effective 8/28/89.]

## WSR 22-14-054 <br> PERMANENT RULES <br> DEPARTMENT OF <br> FISH AND WILDLIFE

[Order 22-114—Filed June 29, 2022, 8:10 a.m., effective July 30, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: The purpose of this rule making is to regulate the recreational salmon fisheries statewide. These rules are part of a comprehensive suite of rule-making packages to implement the new 2022-2023 salmon seasons for Washington state developed through the broader North of Falcon process pursuant to the fish and wildife commission's North of Falcon Policy C-3608 for 2019-2023.

The North of Falcon process typically begins in January and consists of government-to-government meetings involving the National Marine Fisheries Service (NMFS), treaty tribes, and Washington department of fish and wildlife (WDFW) representatives. Separate meetings are held with stakeholders, both at a statewide and regional level, to review preseason run size forecasts, NMFS guidance relative to allowable impacts for species listed under the Endangered Species Act, which includes salmon, but [and] other protected species as well, such as southern resident killer whales.

Stakeholder meetings specific to the Puget Sound fisheries were held in February, March, and early April, and the public hearing on the proposed rules was held on June 22, 2022. The comprehensive North of Falcon meeting schedule and the meeting agendas, handouts, and audio recordings of the public meetings are available on WDFW's website at https://wdfw.wa.gov/fishing/management/north-falcon/publicmeetings.

While these rules regulate only recreational fisheries, the seasons specified in these proposed rules are structured in a coordinated manner intended to provide commercial and recreational fishing opportunities while ensuring conservation requirements and management objectives in federal and state laws and regulations, state/tribal harvest management agreements, and fish and wildlife commission policies are met.

Even though drafted as amendments to preceding rules, these new amendments function as a coordinated and unitary fishery package for the 2022-2023 fishery season, and thus substantively replace prior years' recreational salmon fisheries. Specifically, these rules replace and supersede the language in these WAC in their entirety: WAC 220-312-020 Freshwater exceptions to statewide rules-Coast, 220-312-030 Freshwater exceptions to statewide rules-Southwest, 220-312-040 Freshwater exceptions to statewide rules-Puget Sound, 220-312-060 Freshwater exceptions to statewide rules-Columbia River, 220-313-060 Puget Sound salmon-Saltwater seasons and daily limits, and 220-313-070 Coastal salmon-Saltwater seasons and daily limits.

Included in the fish and wildlife commission's North of Falcon Policy C-3608 for 2019-2023 is a delegation of authority to the director of WDFW to adopt the implementing regulations, including this rule making, resulting from the North of Falcon process.

Citation of Rules Affected by this Order: Amending WAC 220-312-020 Freshwater exceptions to statewide rules-Coast, 220-312-030 Freshwater exceptions to statewide rules-Southwest, 220-312-040 Freshwater exceptions to statewide rules-Puget Sound, 220-312-060 Freshwater exceptions to statewide rules-Columbia River,

220-313-060 Puget Sound salmon-Saltwater seasons and daily limits, and 220-313-070 Coastal salmon-Saltwater seasons and daily limits. Statutory Authority for Adoption: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047.

Adopted under notice filed as WSR 22-11-085 on May 17, 2022.
Changes Other than Editing from Proposed to Adopted Version: Fol-
lowing are the changes made to the rules between $C R-102$ and CR-103: WAC 220-313-060 (3) (b), open dates should be July 1 through August 15.

WAC 220-313-060 (3) (b) (ii), corrected daily limit to daily limit 2 salmon; up to 1 may be a Chinook. WAC 220-313-060 (3) (b) (iii), release chum, Chinook and wild coho. WAC 220-313-060 (3) (b) (iv), waters east of a true north-south line through the Number 2 Buoy immediately east of Ediz Hook: Release all Chinook.

WAC 220-313-060 (3) (c), waters of Port Angeles Harbor west of a line from the tip of Ediz Hook to the ITT Rayonier Dock: Closed July 1 through August 15.

WAC 220-313-060 (3) (d), open dates should be August 16 through September 28.

WAC 220-313-060 (3) (e), closed dates should be September 29
through last day in February.
WAC 220-313-060 (4)(b), open dates should be July 14 through July
16.

WAC 220-313-060 (4) (c), waters of Rosario Strait and Eastern
Strait of Juan de Fuca closure area described in WAC 220-313-020(7) Closed to salmon fishing July 1 through September 30 .

WAC 220-313-060 (4) (d), closed dates should be July 17 through August 15.

WAC 220-313-060 (6) (c) , clarify geographic description for fishery in southern portion of Area 8-2.

WAC 220-313-060 (7) (c), clarify that Foulweather to Olele Point closure area applies to entire duration of Chinook mark-selective fishery.

WAC 220-313-060 (8) (f) (i), daily limit of 2 salmon, up to 1 may be a Chinook.

WAC 220-313-060 (8) (i) (v) (A), daily limit of 2 salmon, up to 1
may be a Chinook.
WAC 220-313-060 (8) (j) (vii), consolidating identical rules into time period with subsection (8) (j) (vi).

WAC 220-313-060 (8) (j) (viii), daily limit of 2 salmon, up to 1 may be a Chinook. WAC 220-313-060 (8) (k) (iii) (A), daily limit of 2 salmon, up to 1 may be a Chinook. WAC 220-313-060 (8) (k) (vii) (1), correct dates for fly fishing only rule. WAC 220-313-060 (9) (b), restrict open days to Wednesdays - Saturdays for Chinook mark-selective fishery.

WAC 220-313-060 (9) (b) (ii), release chum salmon.
WAC 220-313-060 (9) (f), clarify rules for Commencement Bay por-
tion of Area 11.
WAC 220-313-060 (10) (c) (v), correct last day in November.
WAC 220-313-050 (10) (c) (vii), correct last day in November. Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0,

Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 6, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: June 27, 2022.

OTS-3771. 2

AMENDATORY SECTION (Amending WSR 22-05-066, filed 2/11/22, effective 7/1/22)

WAC 220-312-020 Freshwater exceptions to statewide rules-Coast. (1) Aberdeen Lake (Grays Harbor County): Open the fourth Saturday in April through October 31.
(2) Bear Creek (Clallam County) (Bogachiel River tributary):
(a) It is unlawful to use anything other than one single-point barbless hook.
(b) It is unlawful to use bait.
(c) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow trout.
(3) Bear Creek (Clallam County) (Sol Duc River tributary):
(a) It is unlawful to use anything other than one single-point barbless hook.
(b) It is unlawful to use bait.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(4) Bear River (Pacific County):
(a) Open the Saturday before Memorial Day through March 31.
(b) From August 16 through November 30: Night closure.
(c) From the mouth (Highway 101 Bridge) to Lime Quarry Road (approximately 2 river miles):
(i) August 16 through November 30:
(ii) Barbless hooks required.
(iii) Anti-snagging rule.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Salmon: Open September 1 through January 31:
(A) Daily limit 6 ; up to 2 may be adults; of which 1 may be a
wild coho.
(B) Release wild Chinook.
(d) From the Lime Quarry Road upstream to the Longview Fiber Bridge:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(5) Beaver Creek (Clallam County) (Sol Duc River tributary):
(a) From the mouth upstream to Beaver Falls:
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) It is unlawful to use bait.
(d) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(6) Beaver Lake (Clallam County): Selective gear rules.
(7) Big River (Clallam County), outside of Olympic National Park:
(a) Open the Saturday before Memorial Day through October 15, and January 1 through the last day of February.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(8) Big River tributaries (Clallam County), outside of Olympic National Park: Open the Saturday before Memorial Day through October 15.
(9) Black River (Grays Harbor/Thurston counties): From the mouth to the bridge on 128th Ave. S.W.:
(a) Anti-snagging rule.
(b) Night closure.
(c) Barbless hooks required.
(d) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(e) Salmon:
(i) Open October 1 through ((Decembex)) October 31(((i)) ):
(A) Daily limit 6; up to (( $\mathbf{( 1 )}$ ) $\underline{2}$ may be ((an)) adults.
((fii)) (B) Release adult Chinook ((and wild coho)).
(ii) Open November 1 through November 30:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook.
(iii) Open December 1 through December 31:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook and wild coho.
(10) Bogachiel Hatchery Pond, South (Clallam County): Closed waters.
(11) Bogachiel River (Clallam County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) From the mouth to Highway 101 Bridge:
(i) Open the Saturday before Memorial Day through April 30.
(ii) It is unlawful to use bait the Saturday before Memorial Day through August 31 and February 16 through April 30.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(C) November 1 through last day in February: Steelhead: Daily
limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open July 1 through ((July)) August 31:
(I) Daily limit 4; up to 2 ((zdults)) may be ((fetained)) adults.
(II) Release wild adult Chinook and wild adult coho.
(B) Open September ((16)) 1 through ((November 30)) September 15:
(I) Daily limit 3; up to 1 ((adult)) may be ((xctaincd)) an adult.
(II) Release wild adult coho and sockeye.
(C) Open September 16 through December 15:
(I) Daily limit 3; up to 1 may be an adult.
(II) Release sockeye.
(d) From Highway 101 Bridge to Olympic National Park boundary:
(i) Open the Saturday before Memorial Day through April 30.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(12) Calawah River (Clallam County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) From the mouth to the Highway 101 Bridge:
(i) Open the Saturday before Memorial Day through April 30.
(ii) It is unlawful to use bait the Saturday before Memorial Day through ((August 31 and February 16 through)) April 30.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(C) November 1 through the last day in February: Steelhead: Daily
limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open July 1 through ((July)) August 31:
(I) Daily limit 4; up to 2 ((zdults)) may be ((fetained)) adults.
(II) Release wild adult Chinook and wild adult coho.
(B) Open September ((16)) 1 through ((November 30)) September 15:
(I) Daily limit 3; up to 1 ((zdult)) may be ((fetained)) an adult.
(II) Release wild adult coho and sockeye.
(C) Open September 16 through December 15:
(I) Daily limit 3; up to 1 may be an adult.
(II) Release sockeye.
(d) From the Highway 101 Bridge to the forks:
(i) Open the Saturday before Memorial Day through April 30.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(13) Calawah River, North Fork (Clallam County):
(a) It is unlawful to use anything other than one single-point barbless hook.
(b) It is unlawful to use bait.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(14) Calawah River, South Fork (Clallam County):
(a) From the mouth to the Olympic National Park boundary:
(b) Open the Saturday before Memorial Day through the last day in February.
(c) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(d) It is unlawful to use anything other than one single-point barbless hook.
(e) It is unlawful to use bait.
(f) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(15) Canyon River (Grays Harbor County) : Closed waters.
(16) Cases Pond (Pacific County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(17) Cedar Creek (Jefferson County), outside Olympic National

## Park:

(a) Open the Saturday before Memorial Day through the last day in February.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(18) Chehalis River (Grays Harbor County), including all channels, sloughs, and interconnected waterways:
(a) From the mouth (Highway 101 Bridge in Aberdeen) to ((Highwy 107 bridge)) Fuller Bridge (Keys Road) including all channels, sloughs, and interconnected waterways:
(i) August 1 through November 30: Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through April 15:
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open August 1 through September ((Z3)) 15:
(I) Daily limit 6.
(II) Release adult salmon.
(B) September ((Z4)) 16 through ((September 30)) October 31: ((Closed.))
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(C) Open ((October)) November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(D) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From ((Highway 107 Bridge)) Fuller Bridge (Keys Road) to South Elma Bridge (Wakefield Road) including all channels, sloughs, and interconnected waterways:
(i) All species: Single-point barbless hooks are required August 1 through November 30.
(ii) Open the Saturday before Memorial Day through April 15.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches. (iv) Salmon:
(A) Open August 1 through September ((z3:
(I) Daily limit 6 .
(II) Release adult salmon.
(B) September 24 through September 30: Closed.
(C)) ) 15:
(I) Daily limit 6 .
(II) Release adult salmon.
(B) September 16 through September 30: Closed.
(C) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(D) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(E) Open ((October)) December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(c) From South Elma Bridge (Wakefield Road) to the confluence of

Black River:
(i) All species August 16 through November 30: Single-point barb-
less hooks are required.
(ii) Open the Saturday before Memorial Day through April 15.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open ((Octobex)) November 1 through ((December 31.)) November
$30:$
(((A))) (I) Daily limit 6; up to 1 may be an adult.
(((B))) (II) Release Chinook ((and wild coh $\theta$ )).
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(d) From the confluence of Black River to high bridge on Weyerhaeuser 1000 line (approximately 400 yards downstream from Roger Creek, south of Pe Ell):
(i) Open the Saturday before Memorial Day through April 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(iv) Salmon: ( (Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B)) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(e) From high bridge on Weyerhaeuser 1000 line (approximately 400 yards downstream from Roger Creek, south of Pe Ell) upstream including all forks:
(i) Open the Saturday before Memorial Day through April 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(19) Chehalis River, South Fork (Lewis County) : From the mouth to County Highway Bridge near Boistfort School:
(a) Open the Saturday before Memorial Day through April 15.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(20) Chimacum Creek (Jefferson County):
(a) From the mouth to Ness's Corner Road:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(b) From Ness's Corner Road upstream:
(i) Open the Saturday before Memorial Day through October 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(21) Clallam River (Clallam County):
(a) Open the Saturday before Memorial Day through October 31:
(i) Selective gear rules.
(ii) Release all fish.
(b) Open from November 1 through January 31:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Cutthroat trout and wild rainbow trout: Minimum length 14
inches.
(22) Clearwater River (Jefferson County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one barbless hook.
(c) From the mouth to Snahapish River:
(i) Open the Saturday before Memorial Day through ( (September 30 and December 1 through)) April 15.
(ii) Bait is allowed September 1 through February 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open September 1 through ((Septembex)) November 30((-)) :
(B) Daily limit 3; up to 1 may be an adult.
(((C) Release wild coho.))
(d) From the Snahapish River upstream:
(i) Open the Saturday before Memorial Day through ((September
30)) October 31.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(23) Cloquallum Creek (Grays Harbor County): From the mouth to the outlet at Stump Lake:
(a) Open the Saturday before Memorial Day through the last day in February.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(24) Copalis River (Grays Harbor County):
(a) From the mouth to Carlisle Bridge:
(i) Open the Saturday before Memorial Day through last day in February.
(ii) It is permissible to retain hatchery steelhead with a dorsal fin height of less than $21 / 8$ inches or with an adipose or ventral fin clip.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open September 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open ((Өctobex)) November 1 through December 31(((B) ) :
(I) Daily limit 6; up to 1 may be an adult.
((C))) (II) Release Chinook.
(b) From Carlisle Bridge upstream:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(25) Crim Creek (Lewis County) (Chehalis River tributary): Closed waters.
(26) Damon Lake (Grays Harbor County) : Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(27) Deep Creek (Clallam County) (tributary to the straits):
(a) Open December 1 through January 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(28) Dickey Lake (Clallam County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(29) Dickey River (Clallam County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) From Olympic National Park boundary upstream to the confluence of the East and West forks:
(i) Open the Saturday before Memorial Day through ((July 31 and september 16 through)) April 30.
(ii) It is unlawful to use bait the Saturday before Memorial Day through ((July)) August 31 and February 16 through April 30.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open July 1 through ((July)) August 31:
(I) Daily limit 4; up to 2 may be adults.
(II) Release wild adult Chinook and wild adult coho.
(B) Open September ( $(16)$ ) 1 through ( (November 30)) September 15:
(I) Daily limit 3; up to 1 may be an adult.
(II) Release wild adult coho and sockeye.
(C) Open September 16 through December 15:
(I) Daily limit 3; up to 1 may be an adult.
(II) Release sockeye.
(d) From the confluence of the East and West forks upstream (for
both forks):
(i) Open the Saturday before Memorial Day through April 30.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(30) Duck Lake (Grays Harbor County):
(a) Game fish: Statewide minimum length/daily limit, except:

Crappie: No limit and no minimum length.
(b) Grass carp: No limit for anglers and bow and arrow fishing.
(31) Dungeness River (Clallam County): From the mouth to the
forks at Dungeness Forks Campground:
(a) Open October 16 through January 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(c) Salmon:
(i) Open October 16 through November 30 .
(ii) Daily limit 4 coho only.
(iii) Release wild coho.
(32) East Twin River (Clallam County):
(a) Selective gear rules.
(b) Release all fish.
(33) Elk Creek (Lewis County) (Chehalis River tributary): Open the Saturday before Memorial Day through September 30 and January 1 through March 31.
(34) Elk Lake (Clallam County):
(a) Open the Saturday before Memorial Day through October 15.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Release kokanee.
(35) Elk River (Grays Harbor County):
(a) From the mouth (Highway 105 Bridge) to the confluence of the middle branch:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) August 16 through November 30: Single-point barbless hooks are required.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open October 1 through ((December)) October $31((-$ (A) ) :
(I) Daily limit 6; up to ((1)) $\underline{2}$ may be ((za)) adults.
(( (B)) ) (II) Release adult Chinook ( (and wild coho)).
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From confluence of the middle branch upstream:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(36) Elwha River and all tributaries (Clallam County): Closed waters.
(37) Failor Lake (Grays Harbor County): Open the fourth Saturday in April through September 15.
(38) Fork Creek (Pacific County) (Willapa River tributary):
(a) From Forks Creek Hatchery rack upstream 500 feet at fishing boundary sign:
(i) Open only for anglers with lower extremity disabilities who must permanently use a medically prescribed assistive device every time for mobility as defined in WAC 220-413-150 and possess a designated harvester companion card.
(ii) Night closure.
(iii) From October 1 through November 30:
(A) Single-point barbless hooks required.
(B) Stationary gear restriction.
(iv) Open the Saturday before Memorial Day through July 15 and October 1 through March 31.
(v) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(vi) Salmon: Open October 1 through January 31:
(A) Daily limit 6; up to 2 may be adults; of which 1 may be a wild coho.
(B) Release wild Chinook ((and wild coho)).
(b) From the fishing boundary sign 500 feet above Forks Creek Hatchery rack upstream to the source:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(39) Goodman Creek (Jefferson County), outside Olympic National Park:
(a) Open the Saturday before Memorial Day through the last day in February.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(40) Gray Wolf River (Clallam County):
(a) From the confluence with the Dungeness to the bridge at river mile 1.0: Closed waters.
(b) From the bridge at river mile 1.0 , upstream:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(41) Hoh River (Jefferson County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) From the Olympic National Park boundary upstream to the DNR Oxbow Campground Boat Launch:
(i) It is unlawful to use bait from February 16 through April 15 and June 1 through August 31.
(ii) Open June 1 through August 31 and September 16 through April 15:
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(C) November 1 through February 15: Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open September 16 through November 30: Daily limit 2; up to 1 ((adult)) may be ((fetained)) an adult. ((Release wild coho.))
(B) Open December 1 through December 15: Daily limit 1 coho only.
(d) From the DNR Oxbow Campground Boat Launch to Morgans Crossing Boat Launch:
(i) Open June 1 through August 31 and September 16 through April 15.
(ii) It is unlawful to use bait June 1 through October 15 and December 1 through April 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open October 16 through November 30: Daily limit 2; up to 1 adult may be retained. ((Release wild coho.))
(B) Open December 1 through December 15: Daily limit 1 coho only.
(e) From Morgan's Crossing Boat Launch upstream to the Olympic National Park boundary below mouth of South Fork Hoh River:
(i) Open June 1 through August 31 and September 16 through April
15.
(ii) It is unlawful to use bait.
(iii) It is unlawful to fish from a floating device.
(iv) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(42) Hoh River, South Fork (Jefferson County), outside the Olympic National Park boundary:
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) Open June 1 through August 31 and September 16 through April 15.
(c) It is unlawful to use anything other than one single-point barbless hook.
(d) It is unlawful to use bait.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(43) Hoko River (Clallam County):
(a) From the mouth to the upper Hoko Bridge:
(i) From the hatchery ladder downstream 100 feet: Closed waters.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) September 1 through October 31: Open to fly fishing only.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From the upper Hoko Bridge to Ellis Creek Bridge (river mile 18.5):
(i) Open the Saturday before Memorial Day through March 31 to fly fishing only.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(44) Hoquiam River, including West Fork (Grays Harbor County):
(a) From the mouth (Highway 101 Bridge on Simpson) to Dekay Road Bridge (West Fork):
(i) August 16 through November 30: Single-point barbless hooks required.
(ii) Open the Saturday before Memorial Day through the last day of February:
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: ( Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B))) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From Dekay Road Bridge upstream:
(i) Open the Saturday before Memorial Day through the last day of February.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(45) Hoquiam River, East Fork (Grays Harbor County):
(a) From the mouth to the confluence of Berryman Creek:
(i) August 16 through November 30: Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through the last day of February.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: ( Open October 1 through December 31.
(A) Daily limit 6 ; up to 1 may be an adult.
(B)) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From the confluence of Berryman Creek upstream:
(i) Open the Saturday before Memorial Day through the last day of February.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) Selective gear rules.
(46) Humptulips River (Grays Harbor County):
(a) From the mouth (Jessie Slough) to the Highway 101 Bridge, including all channels, sloughs, and interconnected waterways:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon:
(A) Open September 1 through September 30:
(I) Daily limit 6; up to 2 may be adults, of which 1 may be a wild Chinook.
(II) Release ((wild Chinook and)) wild coho.
(B) Open October 1 through October 31:
(I) Daily limit 6; up to ( ( $~$ ) ) $\underline{2}$ may be ((an)) adults, of which 1 may be a Chinook.
(II) Release wild Chinook and wild coho.
(C) Open November 1 through December 31:
(I) Daily limit $6 ;$ up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From the Highway 101 Bridge to the confluence of the East and West forks:
(i) From December 1 through March 31: It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(iii) March 1 through March 31: Selective gear rule.
(iv) Game fish:
(A) Open the Saturday before Memorial Day through the last day in February: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Open March 1 through March 31: Release all fish, except: Anglers may retain up to 2 hatchery steelhead.
(v) Salmon:
(A) Open September 1 through September 30:
(I) Daily limit 6; up to 2 may be adults, of which 1 may be a wild Chinook.
(II) Release ((wild Chinook and)) wild coho.
(B) Open October 1 through October 31:
(I) Daily limit 6; up to ( ( $~$ ) ) 2 may be ((an)) adults, of which 1 may be a Chinook.
(II) Release wild Chinook and wild coho.
(C) Open November 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(47) Humptulips River, East Fork (Grays Harbor County): August 16 through October 31:
(a) Anti-snagging rule.
(b) Night closure.
(48) Humptulips River, West Fork (Grays Harbor County): From the mouth to Donkey Creek:
(a) August 16 through November 30:
(i) Anti-snagging rule.
(ii) Night closure.
(b) March 1 through March 31: Selective gear rule.
(c) Game fish:
(i) Open the Saturday before Memorial Day through the last day in February: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) Open March 1 through March 31: Release all fish, except: Anglers may retain up to 2 hatchery steelhead.
(49) Joe Creek (Grays Harbor County): From the mouth to Ocean Beach Road Bridge:
(a) August 16 through November 30: Single-point barbless hooks are required.
(b) Open the Saturday before Memorial Day through December 31.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) Salmon:
(i) ( Open october 1 through December 31:
(ii) Daily limit 6 ; up to 1 may be an adult.
(iii))) Open September 1 through October 31:
(A) Daily limit 6; up to 2 may be adults.
(B) Release adult Chinook.
(ii) Open November 1 through December 31:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook.
(50) Johns River (Grays Harbor County): From the mouth (Highway 105 Bridge) to Ballon Creek:
(a) August 16 through November 30: Single-point barbless hooks are required.
(b) Open the Saturday before Memorial Day through the last day in February.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) Salmon: ( Open October 1 through December 31.
(i) Daily limit 6; up to 1 may be an adult.
(ii)))
(i) Open October 1 through October 31:
(A) Daily limit 6; up to 2 may be adults.
(B) Release adult Chinook.
(ii) Open November 1 through November 30:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook.
(iii) Open December 1 through December 31:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook and wild coho.
(51) Kalaloch Creek (Jefferson County), outside Olympic National

## Park:

(a) Open the Saturday before Memorial Day through the last day in February:
(b) Selective gear rules.
(c) Game fish: State wide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(52) Lena Lake, Lower (Jefferson County): The inlet stream from the mouth upstream to the footbridge (about 100 feet): Closed waters.
(53) Lincoln Pond (Clallam County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(54) Little Hoko River (Clallam County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(55) Loomis Lake (Pacific County): Open the fourth Saturday in April through October 31.
(56) Lyre River (Clallam County):
(a) From the mouth to falls near river mile 3:
(i) Open the Saturday before Memorial Day through January 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From the falls to the Olympic National Park boundary:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(57) Matheny Creek (Jefferson County) (Queets River tributary), outside the Olympic National Park:
(a) Open the Saturday before Memorial Day through ((September 30)) October 31.
(b) It is unlawful to use bait.
(c) It is unlawful to use anything other than one barbless hook.
(d) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(58) McDonald Creek (Clallam County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(59) Moclips River (Grays Harbor County):
(a) From the mouth to the Quinault Indian Reservation boundary.
(b) Open the Saturday before Memorial Day through the last day in February.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) It is permissible to retain steelhead with a dorsal fin height of less than $21 / 8$ inches or with an adipose or ventral fin clip.
(e) Salmon:
(i) Open ( (October 1 through December 31.
(ii) Daily limit 6 ; up to 1 may be an adult.
(iii))) September 1 through October 31:
(A) Daily limit 6; up to 2 may be adults.
(B) Release adult Chinook.
(ii) Open November 1 through December 31:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook.
(60) Morse Creek (Clallam County): From the mouth to Port Angeles Dam:
(a) Open from December 1 through January 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(61) Mosquito Creek (Jefferson County): From outside Olympic National Park upstream to the Goodman 3000 Mainline Bridge:
(a) Open the Saturday before Memorial Day through the last day in February.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(62) Naselle River (Pacific/Wahkiakum counties):
(a) From the Highway 101 Bridge to the South Fork:
(i) August 1 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(ii) Open the Saturday before Memorial Day through April 15.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches. (iv) Salmon:
(A) Open August 1 through January 31((-)):
(B) Daily limit 6; up to 2 ((zdults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild cohe)).
(b) From the confluence of the South Fork upstream to the Highway 4 Bridge:
(i) February 1 through April 15: Selective gear rules.
(ii) August 1 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(D) Stationary gear restriction.
(iii) Open the Saturday before Memorial Day through April 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Salmon:
(A) Open August 1 through January $31((-))$ :
(B) Daily limit 6; up to 2 ((zdults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coh $\theta$ )).
(c) From the Highway 4 Bridge to 300 feet below the upstream entrance of the Naselle Hatchery attraction channel:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) February 1 through April 15: Selective gear rules.
(iii) August 16 through October 15: Bait or lure must be suspended below a float.
(iv) August 16 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(D) Stationary gear restrictions.
(v) Open the Saturday before Memorial Day through July 31 and ((August)) October 16 through April 15.
(vi) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(vii) Salmon:
(A) Open October 16 through January $31((-))$ :
(B) Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coho)).
(d) From 300 feet below the upstream entrance of the Naselle Hatchery attraction channel to the upstream entrance of the Naselle Hatchery attraction channel: Closed waters.
(e) From the upstream entrance of the Naselle Hatchery attraction channel to the full spanning concrete diversion structure at the Naselle Hatchery:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) August 1 through October 15: Closed waters.
(iii) October 16 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(D) Stationary gear rules.
(iv) February 1 through April 15: Selective gear rules.
(v) Open the Saturday before Memorial Day through April 15.
(vi) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(vii) Salmon:
(A) Open October 16 through January $31((-))$ :
(B) Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coh $\theta$ )).
(f) From the full spanning concrete diversion structure at the Naselle Hatchery to 400 feet downstream of the falls in Sec. 6 T10N R8W:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) August 1 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(D) Stationary gear rules.
(iii) Open the Saturday before Memorial Day through April 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Salmon:
(A) Open October 16 through January $31((-))$ :
(B) Daily limit 6; up to 2 ((zdults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coho)).
(g) From 400 feet downstream of the falls in Sec. 6, T10N, R8W to the falls in (Wahkiakum County): Closed waters.
(h) From the falls in Sec. 6, T10N, R8W to the Crown Mainline (Salme) Bridge:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) August 1 through November 15:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(D) Stationary gear rules.
(iii) Open the Saturday before Memorial Day through April 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Salmon:
(A) Open October 16 through January $31((-))$ :
(B) Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coh $\theta$ )).
(i) From the Crown Mainline (Salme) Bridge to the mouth of the North Fork:
(i) February 1 through April 15; selective gear rules.
(ii) Open the Saturday before Memorial Day through April 15.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) August 16 through November 30:
(A) Night closure.
(B) Anti-snagging rule.
(j) Upstream from the mouth of the North Fork.
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(63) Naselle River, South (Pacific County):
(a) From the mouth to Bean Creek: Open the Saturday before Memorial Day through the last day in February.
(b) The Saturday before Memorial Day through August 15: Selective gear rules.
(c) August 16 through November 30: Anti-snagging rule and night closure.
(d) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(64) Nemah River, Middle (Pacific County):
(a) From the mouth upstream to the department of natural resources decommissioned bridge on the Middle Nemah A-Line Road:
(i) Open the Saturday before Memorial Day through March 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 1 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(iv) Salmon:
(A) Open September 1 through ((September 30-)) January 31:
(B) Daily limit 6; up to 2 ((zdults)) may be ((fetained)) adults.
(C) Release wild Chinook and wild coho.
(b) From the department of natural resources decommissioned bridge on the Middle Nemah A-Line Road upstream:
(i) Open the Saturday before Memorial Day through March 31:
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) August 16 through November 30: Night closure.
(65) Nemah River, North (Pacific County):
(a) From Highway 101 Bridge upstream to the bridge on Nemah Val-
ley Road:
(i) Open the Saturday before Memorial Day through March 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 1 through November 30:
(A) Night closure.
(B) Stationary gear restriction.
(C) Single-point barbless hooks are required.
(iv) Salmon:
(A) Open August 1 through ((September 30.)) January 31:
(B) Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(C) Release wild Chinook ((and wild coh $\theta$ )).
(b) From the bridge on Nemah Valley Road upstream to approximately 1.66 miles to the Hancock property line:
(i) Open the Saturday before Memorial Day through July 31 and November 16 through March 31.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 16 through November 30:
(A) Anti-snagging rule.
(B) Night closure.
(iv) From December 1 through March 31: Selective gear rules.
(c) From the Hancock property line upstream to the temporary weir (approximately 210 feet above the Nemah Hatchery Bridge):
(i) Open only for salmon for anglers that possess a senior's license from August 1 through September 15:
(A) Salmon: Daily limit 6; up to 2 ((adults)) may be ((fetained)) adults, of which 1 may be a wild coho.
(B) Release wild Chinook ((znd wild coho)).
(ii) Open the Saturday before Memorial Day through July 31 and November 16 through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) August 16 through November 30:
(A) Anti-snagging rule.
(B) Night closure.
(v) December 1 through March 31: Selective gear rules.
(d) From the temporary weir (approximately 210 feet above the Nemah Hatchery Bridge) upstream to the Nemah Hatchery Dam: Closed waters.
(e) From the Nemah Hatchery Dam upstream to N-700 Road $\left(46^{\circ} 28.58 N, 123^{\circ} 48.54 W\right):$
(i) Open the Saturday before Memorial Day through March 31.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 16 through November 30:
(A) Night closure.
(B) Anti-snagging rule.
(iv) December 1 through March 31: Selective gear rules.
(v) Salmon: Open October 1 through January 31:
(A) Daily limit 6; up to 2 may be adults, of which 1 may be a
wild coho.
(B) Release wild Chinook.
(f) From the $\mathrm{N}-700$ Road ( $46^{\circ} 28.58 \mathrm{~N}, 123^{\circ} 48.54 \mathrm{~W}$ ) to Cruiser Creek:
(i) Open the Saturday before Memorial Day through March 31.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 16 through November 30:
(A) Night closure.
(B) Anti-snagging rule.
(iv) December 1 through March 31: Selective gear rules.
(66) Nemah River, South (Pacific County):
(a) September 1 through November 30:
(i) Night closure.
(ii) Single-point barbless hooks are required.
(b) Open the Saturday before Memorial Day through March 31:
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) Salmon:
(i) Open September 1 through ((September 30)) January 31.
(ii) Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults.
(iii) Release wild Chinook and wild coho.
(67) Newaukum River, including South Fork (Lewis County):
(a) From the mouth to Leonard Road near Onalaska:
(i) Open the Saturday before Memorial Day through March 31:
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(iv) Salmon:
(A) Open October 16 through ((December)) October $31((-$ (A) ) ) :
(I) Daily limit 6; up to ((1)) $\underline{2}$ may be ((zn)) adults.
(( (B))) (II) Release adult Chinook ((and wild coho)).
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From Leonard Road near Onalaska to Highway 508 Bridge near Kearny Creek:
(i) Open the Saturday before Memorial Day through March 31:
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(68) Newaukum River, Middle Fork (Lewis County), from the mouth to Tauscher Road Bridge:
(a) Open the Saturday before Memorial Day through March 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(69) Newaukum River, North Fork (Lewis County), from the mouth to 400 feet below the Chehalis city water intake:
(a) Open the Saturday before Memorial Day through March 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(70) Niawiakum River (Pacific County) : From Highway 101 Bridge to the South Bend/Palix Road Bridge:
(a) August 16 through November 30:
(i) Night closure.
(ii) Single-point barbless hooks are required.
(b) Open the Saturday before Memorial Day through November 30.
(71) North River (Grays Harbor/Pacific counties):
(a) From the Highway 105 Bridge to Fall River:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Anti-snagging rule.
(ii) Open the Saturday before Memorial Day through the last day
in February.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches. (iv) Salmon: Open October 1 through January 31:
(A) Daily limit 6; up to 2 may be adults, of which 1 may be a wild coho.
(B) Release wild Chinook.
(b) From Fall River upstream to Raimie Creek:
(i) Selective gear rules.
(ii) Open the Saturday before Memorial Day through the last day in February.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(72) Ozette Lake tributaries and their tributaries except Big River (Clallam County): Outside of Olympic National Park. Open the Saturday before Memorial Day through October 15.
(73) Palix River, including all forks (Pacific County):
(a) From the Highway 101 Bridge to the mouth of the Middle Fork:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: Open September 1 through January 31:
(A) Daily limit 6; up to 2 may be adults.
(B) Release wild Chinook and wild coho.
(b) From the confluence with the Middle Fork upstream and all forks, including South Fork Palix and Canon rivers:
(i) August 16 through October 15:
(A) Anti-snagging rule.
(B) Night closure.
(ii) The Saturday before Memorial Day through August 15, and December 16 through March 31: Selective gear rules.
(iii) Open the Saturday before Memorial Day through October 15, and December 16 through March 31.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(74) Peabody Creek (Clallam County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(75) Pleasant Lake (Clallam County): Game fish: Statewide minimum length/daily limit, except:
(a) Kokanee: Daily limit 5; minimum length 8 inches, maximum length 18 inches.
(b) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(c) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(d) Channel catfish: Daily limit 10; no size restriction.
(e) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(76) Pysht River (Clallam County):
(a) Open the Saturday before Memorial Day through January 31.
(b) Selective gear rules.
(c) The Saturday before Memorial Day through October 31.
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Release cutthroat trout and wild rainbow trout.
(d) November 1 through January 31:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(77) Quigg Lake (Grays Harbor County):
(a) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) Salmon:
(i) Open October 1 through January 31.
(ii) Daily limit 6 hatchery coho salmon; up to 4 may be adult hatchery coho.
(78) Quillayute River (Clallam County), outside of Olympic National Park:
(a) Open year-round, except ((elosed August 1 through September 15. Also)) closed Mondays and Tuesdays ((September 16)) August 29 through ( (Scptember 30 and Mondays october 1 through october 20)) October 11 .
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) It is unlawful to use anything other than one single-point barbless hook.
(i) Game fish: Statewide minimum length/daily limit, except:
(A) Release wild rainbow trout.
(B) Cutthroat trout: Minimum length 14 inches.
(ii) November 1 through the last day in February: Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open February 1 through ((July)) August 31:
(A) Daily limit 4; up to 2 adults may be retained.
(B) Release sockeye, wild adult Chinook and wild adult coho.
(ii) Open September ((16)) $\underline{1}$ through ((November 30)) September

15:
(A) Daily limit 6; up to 3 ((zdults)) may be ((fetained)) adults, of which only 1 may be a wild Chinook.
(B) Release sockeye and wild adult coho.
(iii) Open September 16 through December 15:
(A) Daily limit 6; up to 3 may be adults, of which only 1 may be a wild Chinook and only 1 may be a wild coho.
(B) Release sockeye.
(79) Quinault River (Grays Harbor County) : From the mouth at the upper end of Quinault Lake upstream to the Olympic National Park boundary:
(a) Open the Saturday before Memorial Day through April 15.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) It is unlawful to use anything other than one barbless hook.
(d) It is unlawful to use bait the Saturday before Memorial Day through September 30 and February 16 through April 15.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(f) It is permissible to retain steelhead with a dorsal fin height of less than $21 / 8$ inches or with an adipose or ventral fin clip.
(g) Salmon:
(i) Open July 1 through September 30: Daily limit 6 jack salmon only.
(ii) Open October 1 through November 30:
(A) Daily limit 6; only 2 adults may be retained.
(B) Release sockeye and chum.
(80) Rocky Brook (Jefferson County) (Dosewallips River tributary) : From the mouth upstream: Closed waters.
(81) Salmon Creek (Pacific County) (tributary of Naselle River):
(a) Open the Saturday before Memorial Day through the last day in February.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(82) Salmon River (Jefferson County), outside Olympic National Park and the Quinault Indian Reservation:
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one barbless hook.
(c) It is unlawful to use bait the Saturday before Memorial Day through August 31.
(d) Open the Saturday before Memorial Day through September 30 and December 1 through the last day in February.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(iii) Saturday before Memorial Day through September 30: It is permissible to retain steelhead with a dorsal fin height of less than $21 / 8$ inches or with an adipose or ventral fin clip.
(iv) December 1 through the last day in February: Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(f) Salmon:
(i) Open September 1 through ((September)) November 30:
(ii) Daily limit 6; up to $((z)) \underline{1}$ may be an adult ( (s and only 1 of the adults may be a Chinook)).
(iii) Release wild coho.
(83) Salt Creek (Clallam County): From the mouth to the bridge on Highway 112:
(a) Selective gear rules.
(b) Open the Saturday before Memorial Day through January 31:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Release cutthroat trout and wild rainbow trout.
(84) Satsop River and East Fork (Grays Harbor County):
(a) From the mouth to the bridge at Schafer State Park:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through March 31:
(A) Game fish: Statewide minimum length/daily limit, except:
(B) Cutthroat trout and wild rainbow trout: Minimum length 14 in-
ches.
(iii) Salmon: ((Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B)) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From the bridge at Schafer State Park upstream to 400 feet below Bingham Creek Hatchery barrier dam:
(i) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) August 16 through October 31:
(A) Night closure.
(B) Single-point barbless hooks are required.
(c) From 400 feet downstream of the Bingham Creek Hatchery barrier dam upstream to the dam:
(i) Open within posted markers to anglers with disabilities who permanently use a wheelchair and possess a designated harvester companion card.
(ii) Night closure.
(iii) August 16 through November 30: Single-point barbless hooks are required.
(iv) Open the Saturday before Memorial Day through March 31:
(A) Game fish: Statewide minimum length/daily limit, except:
(B) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Salmon: ( (Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B))) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(85) Satsop River, Middle Fork (Turnow Branch) (Grays Harbor

County):
(a) August 16 through November 30:
(i) Anti-snagging rule.
(ii) Night closure.
(b) Open the Saturday before Memorial Day through the last day in February:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Cutthroat trout and wild rainbow trout: Minimum length 14
inches.
(86) Satsop River, West Fork (Grays Harbor County) :
(a) August 16 through November 30:
(i) Anti-snagging rule.
(ii) Night closure.
(b) Open the Saturday before Memorial Day through the last day in February:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Cutthroat trout and wild rainbow trout: Minimum length 14
inches.
(87) Sekiu River (Clallam County): From mouth to forks:
(a) Open the Saturday before Memorial Day through January 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(88) Siebert Creek (Clallam County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(89) Sitkum River (Clallam County) (Calawah River tributary):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) It is unlawful to use bait.
(d) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(90) Skookumchuck River (Thurston County): From the mouth to 100 feet below the outlet of the TransAlta/WDFW steelhead rearing pond located at the base of the Skookumchuck Dam:
(a) August 16 through November 30:
(i) Night closure.
(ii) Single-point barbless hooks are required.
(b) Open the Saturday before Memorial Day through April 30:
(i) Game fish: Statewide minimum length/daily limit, except:
(ii) Cutthroat trout and wild rainbow trout: Minimum length 14
inches.
(c) Salmon: ( (Open October 16 through December 31.
(i) Daily limit 6; up to 1 may be an adult.
(ii))) (i) Open October 16 through October 31:
(A) Daily limit 6; up to 2 may be adults.
(B) Release adult Chinook.
(ii) Open November 1 through November 30:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook.
(iii) Open December 1 through December 31:
(A) Daily limit 6; up to 1 may be an adult.
(B) Release Chinook and wild coho.
(91) Smith Creek (near North River) (Pacific County):
(a) From the mouth to the Highway 101 Bridge:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through the last day
in February.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: Open October 1 through December 31:
(A) Daily limit 6 ; up to 2 may be adults, of which 1 may be a
wild coho.
(B) Release wild Chinook.
(b) From the Highway 101 Bridge upstream:
(i) Selective gear rules.
(ii) Open the Saturday before Memorial Day through the last day in February.
(iii) Game fish: Statewide minimum length/daily limit, except:
(iv) Cutthroat trout and wild rainbow trout: Minimum length 14
inches.
(92) Snahapish River (Jefferson County) (Clearwater River tributary) :
(a) Open the Saturday before Memorial Day through ((September 30)) October 31.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) It is unlawful to use anything other than one barbless hook.
(d) It is unlawful to use bait.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(93) Snow Creek and all tributaries (Jefferson County): Closed waters.
(94) Sol Duc River (Clallam County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) From the mouth to the concrete pump station at the Sol Duc Hatchery:
(i) It is unlawful to use bait July 16 through ((July)) August 31 and February 16 through April 30.
(ii) Game fish: Open year-round((; except closed August 1 through Septemer 15)): Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(iii) Salmon:
(A) Open February 1 through ((July)) August 31:
(I) Daily limit 4; up to 2 adults may be retained.
(II) Release sockeye, wild adult Chinook and wild adult coho.
(B) Open September ((16)) 1 through ((November 30)) September 15:
(I) Daily limit 6; up to $3^{-}$((zdults)) may be ((fetained)) adults, of which only 1 may be a wild Chinook.
(II) Release sockeye and wild adult coho.
(C) Open September 16 through December 15:
(I) Daily limit 6 ; up to 3 may be adults, of which only 1 may be a wild Chinook and only 1 may be a wild coho.
(II) Release sockeye.
(d) From the concrete pump station at Sol Duc Hatchery to the Highway 101 Bridge upstream of Klahowya Campground:
(i) Open the Saturday before Memorial Day ((through July 31 and september 16)) through April 30.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(e) From the Highway 101 Bridge upstream of Klahowya Campground to the Olympic National Park boundary:
(i) Open the Saturday before Memorial Day ((through July 31 and september 16)) through October 31.
(ii) It is unlawful to use bait.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(95) Sol Duc River tributaries unless otherwise listed (Clallam County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(96) Solleks River (Jefferson County) (Clearwater River tributary) :
(a) Open the Saturday before Memorial Day through ((Septembex 30)) October 31.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) It is unlawful to use anything other than one barbless hook.
(d) It is unlawful to use bait.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(97) Sooes River (Tsoo-Yess River) (Clallam County), outside of Makah Indian Reservation: Open the Saturday before Memorial Day through the last day in February.
(98) Soules Pond (Pacific County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(99) South Bend Mill Pond (Pacific County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(100) Stevens Creek (Grays Harbor County): From the mouth to the Highway 101 Bridge:
(a) From the WDFW hatchery outlet downstream to the cable crossing: Closed waters.
(b) Open the Saturday before Memorial Day through September 30 and December 1 through the last day in February.
(c) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(101) Sutherland Lake (Clallam County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except: Kokanee: Daily limit 5; minimum length 8 inches and maximum length 18 inches.
(102) Thrash Creek (Pacific/Lewis County): Closed waters.
(103) Thunder Creek (Clallam County) (Tributary to East Fork

## Dickey River) :

(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) It is unlawful to use anything other than one single-point barbless hook.
(c) It is unlawful to use bait.
(d) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow trout.
(ii) Cutthroat trout: Minimum length 14 inches.
(e) From mouth to D2400 Road: Open the Saturday before Memorial Day through April 30.
(f) From D2400 Road upstream: Open the Saturday before Memorial Day through October 31.
(104) Thunder Lake (Clallam County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(105) Valley Creek (Clallam County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(106) Vance Creek/Elma Ponds (Grays Harbor County), Pond One (Bowers Lake) and Pond Two (Lake Ines): Pond One/Bowers Lake is open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(107) Van Winkle Creek (Grays Harbor County):
(a) August 16 through November 30:
(i) Night closure.
(ii) Anti-snagging rule.
(b) From the mouth to 400 feet below the outlet of Lake Aberdeen Hatchery:
(i) Open the Saturday before Memorial Day through January 31.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) Salmon: ( (Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B))) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(108) West Twin River (Clallam County):
(a) Selective gear rules.
(b) Release all fish.
(109) Willapa River (Pacific County):
(a) From the mouth (city of South Bend boat launch) to the WDFW access site at the mouth of Ward/Wilson creeks:
(i) August 1 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Open December 1 through January 31.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (((A))) Open August 1 through January 31((-
(B)) ):
(A) Daily limit 6; up to 2 ((zdults)) may be ((retained)) adults, of which 1 may be a wild coho.
(( (C))) (B) Release wild Chinook ((and wild cohe)).
(b) From the WDFW access site at the mouth of Ward/Wilson creeks to the second bridge on Camp One Road:
(i) August 1 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (((A))) Open August 1 through January 31 ( $(-$ (B)) ):
(A) Daily limit 6; up to 2 ((zdults)) may be ((retained)) adults, of which 1 may be a wild coho.
(( (C))) (B) Release wild Chinook ((and wild coho)).
(c) From the second bridge on Camp One Road upstream to the mouth of Mill Creek (approximately 0.5 miles):
(i) August 1 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Stationary gear restriction.
(D) It is unlawful to fish from a floating device.
(ii) Open the Saturday before Memorial Day through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (( (A))) Open August 1 through January 31 ( $(-$
(B)) ):
(A) Daily limit 6; up to 2 ((zdults)) may be ((fetained)) adults, of which 1 may be a wild coho.
(((C))) (B) Release wild Chinook ((and wild coho)).
(d) From the mouth of Mill Creek to the Highway 6 bridge (approximately 2 miles below the mouth of Trap Creek):
(i) August 1 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 31.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (((A))) Open August 1 through January 31((-
(B)) ):
(A) Daily limit 6; up to 2 ((zdults)) may be ((fetained)) adults, of which 1 may be a wild coho.
(((C))) (B) Release wild Chinook ((and wild coh )).
(e) From Highway 6 Bridge (approximately 2 miles below the mouth of Trap Creek) to Fork Creek:
(i) August 16 through November 30:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 31:
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (((A))) Open August 16 through January 31((-
(B)) ) :
(A) Daily limit 6; up to 2 ((adults)) may be ((fetainca)) adults, of which 1 may be a wild coho.
(( (C))) (B) Release wild Chinook ((and wild coho)).
(f) From Fork Creek upstream to the Highway 6 Bridge near the
town of Lebam:
(i) August 16 through October 31:
(A) Night closure.
(B) Single-point barbless hooks are required.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 31:
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: (((A))) Open October 1 through January 31 ( ( -
(B)) ): Daily limit 6; up to 2 ((adults)) may be ((xetained)) adults, of which 1 may be a wild coho.
(( (C))) (B) Release wild Chinook ((and wild coho)).
(g) From the Highway 6 Bridge near the town of Lebam upstream:
(i) August 16 through October 31:
(A) Night closure.
(B) Single-point barbless hooks are required.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(110) Willapa River, South Fork (Pacific County):
(a) From the mouth to the ((bridge on)) Pehl Road bridge:
(i) From the falls/fish ladder downstream 400 feet in Section 6, Township 13 North, and Range 8 West: Closed waters.
(ii) The Saturday before Memorial Day through July 31: Selective gear rules.
(iii) August 1 through November 30:
(A) Night closure.
(B) Anti-snagging rule.
(C) Barbless hooks are required.
(b) Open the Saturday before Memorial Day through the last day in

February:
(i) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) Salmon: (((A))) Open August 1 through ((Scptember 30)) January 31:
((B))) (A) Daily limit 6; up to 2 ((adults)) may be ((fetained)) adults, of which 1 may be a wild coho.
(( (C)) ) (B) Release wild Chinook ((and wild coho)).
(c) From Pehl Road bridge upstream:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(111) Wirkkala Pond 1 (Pacific County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(112) Wishkah River (Grays Harbor County):
(a) August 16 through November 30: Single-point barbless hooks are required.
(b) From the mouth to 200 feet below the weir at the Wishkah Rearing Ponds:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) Salmon: ( (Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B)) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(iv) From 150 feet upstream to 150 feet downstream of the Wishkah adult attraction channel/outfall structure (within the posted fishing boundary): Open only to anglers with disabilities who permanently use a wheelchair and have a designated harvester companion card.
(113) Wynoochee River (Grays Harbor County):
(a) From the mouth to the WDFW White Bridge Access Site:
(i) August 16 through November 30: Single-point barbless hooks are required.
(ii) Open the Saturday before Memorial Day through March 31:
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: ( (Open October 1 through December 31.
(A) Daily limit 6; up to 1 may be an adult.
(B)) (A) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release adult Chinook.
(B) Open November 1 through November 30:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook.
(C) Open December 1 through December 31:
(I) Daily limit 6; up to 1 may be an adult.
(II) Release Chinook and wild coho.
(b) From the WDFW White Bridge Access Site to the 7400 line bridge:
(i) From August 16 through November 30: Single-point barbless hooks are required.
(ii) From September 16 through November 30: It is unlawful to use bait.
(iii) Open the Saturday before Memorial Day through March 31:
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(c) From the 7400 line bridge to 400 feet below Wynoochee Dam:
(i) From 400 feet downstream of Wynoochee Dam to the Wynoochee dam and from the barrier dam near Grisdale to the barrier dam: Closed waters.
(ii) Open the Saturday before Memorial Day through March 31:
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Selective gear rules.
(d) From the confluence of the Wynoochee Reservoir upstream to Wynoochee Falls:
(i) Open the Saturday before Memorial Day through March 31:
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(114) Wynoochee Reservoir (Grays Harbor County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 22-05-066 (Order 22-06), § 220-312-020, filed 2/11/22, effective 7/1/22. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), § 220-312-020, filed 7/2/21, effective 8/2/21; WSR 20-14-052 (Order 20-97), § 220-312-020, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 20-03-130 (Order 20-09), § 220-312-020, filed 1/17/20, effective 2/17/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), § 220-312-020, filed 7/12/19, effective 8/12/19. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.04.130. WSR 19-03-003 (Order 19-01), § 220-312-020, filed 1/2/19, effective 2/2/19. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 18-15-065 (Order 18-163), § 220-312-020, filed 7/16/18, effective 8/16/18. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 18-06-045 (Order 18-30), § 220-312-020, filed 3/1/18, effective 4/1/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-19-008 (Order 17-229), § 220-312-020, filed 9/7/17, effective 10/8/17; WSR 17-05-112 (Order 17-04), amended and recodified as $\$ 220-312-020$, filed $2 / 15 / 17$, effective $3 / 18 / 17$; WSR 16-14-045 (Order 16-160), § 220-310-180, filed 6/28/16, effective 7/29/16. Statutory Authority: RCW 77.04.012 and 77.12.047. WSR 16-06-073 (Order 16-30), § 220-310-180, filed 2/26/16, effective 7/1/16. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 15-17-010 (Order 15-245), § 220-310-180, filed 8/6/15, effective 9/6/15. Statutory Authority: RCW 77.04.012, $77.04 .020,77.04 .055,77.12 .045$, and 77.12.047. WSR 14-16-027 (Order 14-185), § 220-310-180, filed 7/25/14, effective 8/25/14. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 14-04-120 (Order 14-26), § 220-310-180, filed 2/4/14, effective 3/7/14.]

OTS-3768.1

AMENDATORY SECTION (Amending WSR 22-05-066, filed 2/11/22, effective 7/1/22)

WAC 220-312-030 Freshwater exceptions to statewide rules-Southwest. (1) Abernathy Creek and tributaries (Cowlitz County):
(a) From 200 feet above Abernathy Falls to posted markers 500 feet downstream from the Abernathy Fish Technology Center: Closed waters.
(b) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(c) Selective gear rules, except: Use of barbed hooks is allowed.
(d) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(e) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(2) Beaver Creek (Wahkiakum County): Closed waters.
(3) Blue Creek (Lewis County), from the mouth to Spencer Road:
(a) From posted sign above rearing pond outlet to Spencer Road: Closed waters.
(b) Anti-snagging rule.
(c) Night closure.
(d) Open Saturday before Memorial Day through April 15.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 5; minimum length 8 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(f) Salmon:
(i) Open August 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(4) Blue Lake (Cowlitz County):
(a) Open the fourth Saturday in April through October 31.
(b) Selective gear rules.
(c) Release all fish.
(5) Blue Lake Creek (Lewis County): Selective gear rules.
(6) Butter Creek (Lewis County): Selective gear rules.
(7) Canyon Creek (Clark County): Game fish: Statewide minimum
length/daily limit, except: Trout: Daily limit 5.
(8) Carlisle Lake (Lewis County):
(a) Open year-round.
(b) Landlocked salmon rules.
(9) Cedar Creek and tributaries (tributary of N.F. Lewis) (Clark

County):
(a) From the Grist Mill Bridge to 100 feet upstream of the falls: Closed waters.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(d) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(e) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(iii) Release all salmon except hatchery Chinook and hatchery co-
ho.
(10) Chinook River (Pacific County) : From the Highway 101 Bridge upstream:
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(11) Cispus River (Lewis County) : From the mouth to the falls, not including the North Fork:
(a) Open year-round, except closed to all angling within posted "Closed Waters" signs around the adult fish release site.
(b) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(c) Salmon:
(i) Daily limit 6; up to 2 may be adults.
(ii) Only hatchery Chinook and hatchery coho may be retained.
(12) Cispus River, North Fork (Lewis County): Selective gear rules.
(13) Coal Creek (Cowlitz County):
(a) From the mouth to 400 feet below the falls:
(i) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(ii) Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open November 1 through December 31.
(B) Daily limit 6; up to 2 may be adults.
(C) Only hatchery Chinook and hatchery coho may be retained.
(b) From 400 feet below the falls to the falls: Closed waters.
(14) Coldwater Lake (Cowlitz County):
(a) The Coldwater Lake inlet and outlet streams: Closed waters.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except:

Trout: Daily limit 1; minimum length 18 inches.
(15) Cougar Creek (tributary to Yale Reservoir) (Cowlitz County):
(a) Selective gear rules.
(b) Open the Saturday before Memorial Day through August 31.
(16) Coweeman River and tributaries (Cowlitz County):
(a) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(17) Cowlitz Falls Reservoir (Lake Scanewa) (Lewis County):
(a) The upstream boundary of the reservoir in the Cowlitz arm is at the posted Lewis County PUD sign on Peters Road.
(b) The upstream boundary of the reservoir in the Cispus arm is at the posted markers at the Lewis County PUD kayak launch, approximately 1.5 miles upstream from the confluence of the Cowlitz and Cispus arm.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Release wild rainbow and wild cutthroat trout.
(ii) Trout: Daily limit 10; minimum length 8 inches.
(iii) Largemouth bass: Daily limit $10 ;$ no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iv) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(v) Channel catfish: Daily limit 10; no size restriction.
(vi) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(d) Salmon:
(i) Daily limit 6; minimum length 12 inches.
(ii) Up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(18) Cowlitz River (Lewis/Cowlitz counties):
(a) From the boundary markers at the mouth to Lexington Bridge:
(i) July 1 through September 30: Night closure for salmon and steelhead fishing.
(ii) Game fish:
(A) Trout:
(I) Open the Saturday before Memorial Day through March 31: Daily limit 5; minimum length 8 inches. Release wild rainbow and wild cutthroat trout.
(II) Open April 1 through the Friday before Memorial Day: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(B) Steelhead:
(I) Open July 1 through July 31: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(II) August 1 through August 31: Closed.
(III) Open September 1 through September 30: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(IV) Open October 1 through June 30: Daily limit 3 hatchery steelhead, minimum length 20 inches.
(C) Other game fish: Open year-round, statewide minimum size/ daily limit.
(iii) Salmon:
(A) Open January 1 through July 31.
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31.
(I) Daily limit 6; up to 3 may be adults, of which 1 may be a Chinook.
(II) Only hatchery ((eoho)) salmon may be retained.
(b) From the Lexington Bridge to the mouth of Mill Creek:
(i) Within a 100 foot radius of the new Cowlitz Trout Hatchery outfall structure, except open to anglers with disabilities who permanently use a wheelchair and possess a designated harvester companion card within posted markers when adjacent waters are open: Closed waters.
(ii) Game fish:
(A) Trout:
(I) Open the Saturday before Memorial Day through March 31: Daily limit 5; minimum length 8 inches. Release wild rainbow and wild cutthroat trout.
(II) Open April 1 through the Friday before Memorial Day: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(B) Steelhead: Open year-round; daily limit 3 hatchery steelhead; minimum length 20 inches.
(C) Other game fish: Open year-round, statewide minimum size/ daily limit.
(iii) Salmon:
(A) Open January 1 through July 31.
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31.
(I) Daily limit 6; up to 3 may be adults, of which 1 may be a

Chinook.
(II) Only hatchery ((eoho)) salmon may be retained.
(c) From the mouth of Mill Creek to 1,700 feet upstream of the Cowlitz Salmon Hatchery barrier dam:
(i) From 400 feet or posted markers below Cowlitz Salmon Hatchery barrier dam to boundary markers near the Cowlitz Salmon Hatchery water intake approximately 1,700 feet upstream of the Cowlitz Salmon Hatchery barrier dam: Closed waters.
(ii) Within a 100 foot radius of the Cowlitz Salmon Hatchery wheelchair ramp (within the posted fishing boundary) except for anglers with disabilities and who have a designated harvester companion card: Closed waters.
(iii) It is unlawful to fish from a floating device.
(iv) April 1 through November 30:
(A) Anti-snagging rule.
(B) Night closure.
(v) May 1 through June 15: It is unlawful to fish from the south side of the river.
(vi) Game fish:
(A) Trout:
(I) Open the Saturday before Memorial Day through March 31: Daily limit 5; minimum length 8 inches. Release wild rainbow and wild cutthroat trout.
(II) Open April 1 through the Friday before Memorial Day: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(B) Steelhead: Open year-round; daily limit 3 hatchery steelhead; minimum length 20 inches.
(C) Other game fish: Open year-round, statewide minimum size/ daily limit.
(vii) Salmon:
(A) Open January 1 through July 31.
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31.
(I) Daily limit 6; up to 3 may be adults, of which 1 may be a Chinook.
(II) Only hatchery ((eoh $\theta$ )) salmon may be retained.
(d) From 1,700 feet upstream of the Cowlitz Salmon Hatchery barrier dam to Mayfield Dam.
(i) From 400 feet below the Mayfield powerhouse upstream to Mayfield Dam: Closed waters.
(ii) Game fish:
(A) Trout:
(I) Open the Saturday before Memorial Day through March 31: Daily limit 5; minimum length 8 inches. Release wild rainbow and wild cutthroat trout.
(II) Open April 1 through the Friday before Memorial Day: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(B) Steelhead: Open year-round; daily limit 3 hatchery steelhead; minimum length 20 inches.
(C) Other game fish: Open year-round, statewide minimum size/ daily limit.
(iii) Salmon:
(A) Open January 1 through July 31.
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31.
(I) Daily limit 6; up to 3 may be adults, of which 1 may be a Chinook.
(II) Only hatchery ((eohө)) salmon may be retained.
(e) From the posted PUD sign on Peters Road to the Forest Road 1270 (old Jody's Bridge):
(i) Closed to all angling within posted "Closed Waters" signs around the adult fish release site.
(ii) September 1 through October 31: Anti-snagging rule and night closure.
(iii) Open year-round.
(iv) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(v) Salmon:
(A) Open year-round.
(B) Daily limit 6; up to 2 may be adults.
(C) Only hatchery Chinook and hatchery coho may be retained.
(f) From Forest Road 1270 (old Jody's Bridge) upstream and tributaries.
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(19) Deep River (Wahkiakum County):
(a) Open year-round.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Daily limit 6 ; up to 2 may be adults.
(ii) Only hatchery Chinook and hatchery coho may be retained.
(20) Delameter Creek (Cowlitz County):
(a) From 400 feet below to 200 feet above the temporary weir while the weir is installed in the creek: Closed waters.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(d) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(21) Drano Lake (Skamania County): In the waters downstream of markers on point of land downstream and across from Little White Salmon National Fish Hatchery and upstream of the Highway 14 Bridge:
(a) Closed on Wednesdays beginning the second Wednesday in April through June 30.
(b) Closed from 6 p.m. Tuesdays through 6 p.m. Wednesdays during the month of October.
(c) March 16 through October 31: Night closure.
(d) August 1 through December 31: Anti-snagging rule.
(e) May 1 through June 30 and October 1 through December 31:
(i) Each angler aboard a vessel may deploy salmon/steelhead angling gear until the salmon/steelhead limit for all anglers aboard has been achieved.
(ii) Two-pole fishing for salmon/steelhead is permissible so long as the angler possesses a two-pole endorsement.
(f) April 16 through June 30: The area west of a line projected from the easternmost pillar of the Highway 14 Bridge to a posted marker on the north shore is open only to bank fishing.
(g) Open year-round.
(i) Game fish: Statewide minimum length/daily limit, except:
(A) Bass: No limit and no size restriction.
(B) Channel catfish: No limit.
(C) Walleye: No limit and no size restriction.
(D) Release trout.
(E) Steelhead: From January 1 through March 15; daily limit 2 hatchery steelhead; minimum length 20 inches.
(ii) Salmon and steelhead: Open March 16 through December 31:
(A) March 16 through June 30: Daily limit 2 hatchery steelhead or 2 hatchery Chinook, or one of each. Release all other salmon.
(B) July 1 through July 31:
(I) Daily limit 2 hatchery Chinook. Closed to fishing for or retaining steelhead.
(II) Release all other salmon.
(C) August 1 through October 31: Daily limit 6; no more than 1 adult salmon. Closed to fishing for or retaining steelhead.
(D) November 1 through December 31: Daily limit 6; up to 1 may be an adult salmon or hatchery steelhead.
(22) Elochoman River (Wahkiakum County):
(a) From the mouth to Foster (Risk) Road Bridge:
(i) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon: Open the Saturday before Memorial Day through March 15.
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(v) Salmon and steelhead: Open April 16 through the Friday before Memorial Day: Daily limit 6; of which 3 may be adult hatchery Chinook or hatchery steelhead. Release wild Chinook.
(b) From Foster (Risk) Road Bridge upstream to 200 feet above the WDFW temporary weir:
(i) From Foster (Risk) Road Bridge to 200 feet above the WDFW temporary weir while the weir is installed in the river: Closed waters.
(ii) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(iii) Open the Saturday before Memorial Day through March 15. (iv) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(v) Salmon: Open the Saturday before Memorial Day through March 15.
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(vi) Salmon and steelhead: Open April 16 through the Friday before Memorial Day: Daily limit 6; of which 3 may be adult hatchery Chinook or hatchery steelhead. Release wild Chinook.
(c) From 200 feet above the WDFW temporary weir to the Beaver Creek Road Bridge:
(i) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon: Open the Saturday before Memorial Day through March 15.
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(v) Salmon and steelhead:
(A) Open April 16 through the Friday before Memorial Day.
(B) Daily limit 6; up to 3 may be adult hatchery Chinook or hatchery steelhead. Release wild Chinook.
(d) From the Beaver Creek Road Bridge to the Elochoman Hatchery Bridge:
(i) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon: Open the Saturday before Memorial Day through March 15.
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(v) Salmon and steelhead:
(A) Open April 16 through the Friday before Memorial Day.
(B) Daily limit 6; up to 3 may be adult hatchery Chinook or hatchery steelhead. Release wild Chinook.
(e) Elochoman Hatchery Bridge to West Fork:
(i) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon: Open the Saturday before Memorial Day through March 15.
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(f) From West Fork upstream:
(i) Game fish: Statewide minimum length/daily limit, except: Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(ii) Salmon:
(A) Daily limit 6; up to 2 may be adults.
(B) Only hatchery Chinook and hatchery coho may be retained.
(C) All Chinook must be adipose and/or ventral fin clipped to be retained.
(23) Franz Lake (Skamania County): Closed waters.
(24) Germany Creek (Cowlitz County) and all tributaries:
(a) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(25) Grays River (Wahkiakum County): From the mouth to South

Fork:
(a) From mouth to Barr Road Bridge:
(i) August 1 through November 15:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) January 1 through March 15: Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Open Saturday before Memorial Day through March 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(v) Salmon:
(A) Open Saturday before Memorial Day through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery coho and hatchery Chinook may be retained.
(III) All Chinook must be adipose and/or ventral fin clipped to be retained.
(b) From Barr Road Bridge to Highway 4 Bridge:
(i) August 1 through November 15:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(ii) January 1 through March 15: Selective gear rules, except:

Use of barbed hooks is allowed.
(iii) Open Saturday before Memorial Day through March 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Re-
lease cutthroat trout and wild rainbow trout.
(v) Salmon:
(A) Open Saturday before Memorial Day through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery coho and hatchery Chinook may be retained.
(III) All Chinook must be adipose and/or ventral fin clipped to be retained.
(c) From the Highway 4 Bridge to the mouth of South Fork:
(i) From 400 feet below to 200 feet above the temporary weir while the weir is installed in the river: Closed waters.
(ii) August 1 through November 15:
(A) Anti-snagging rule.
(B) Night closure.
(C) Stationary gear restriction.
(iii) January 1 through March 15: Selective gear rules, except:

Use of barbed hooks is allowed.
(iv) Open Saturday before Memorial Day through March 15.
(v) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(vi) Salmon:
(A) Open Saturday before Memorial Day through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(III) All Chinook must be adipose and/or ventral fin clipped to be retained.
(d) From South Fork upstream:
(i) Selective gear rules, except: Use of barbed hooks is allowed.
(ii) Open the Saturday before Memorial Day through March 15.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(iv) Salmon:
(A) Open the Saturday before Memorial Day through December 31.
(B) Daily limit 6; minimum length 12 inches. Up to 2 adults may be retained.
(C) Only hatchery Chinook and hatchery coho may be retained. All Chinook must be adipose and/or ventral fin clipped to be retained.
(26) Grays River tributaries (unless otherwise listed) (Wahkiakum County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(27) Grays River, East Fork (Wahkiakum County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Open the Saturday before Memorial Day through October 31.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(d) Salmon:
(i) Open the Saturday before Memorial Day through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(iv) Effective August 1, all Chinook must be adipose and/or ven-
tral fin clipped to be kept.
(28) Grays River, East Fork tributaries (unless otherwise listed) (Wahkiakum County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(29) Grays River, South Fork (Wahkiakum County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Open the Saturday before Memorial Day through October 31.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(d) Salmon:
(i) Open the Saturday before Memorial Day through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained;
all Chinook must be adipose and/or ventral fin clipped to be kept.
(30) Grays River, South Fork tributaries (unless otherwise lis-
ted) (Wahkiakum County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(31) Grays River, West Fork (Wahkiakum County):
(a) Open the Saturday before Memorial Day through December 31.
(b) August 1 through November 15: Anti-snagging rule, night closure and stationary gear restriction.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(d) Salmon: Open the Saturday before Memorial Day through December 31.
(i) Daily limit 6; up to 2 may be adults.
(ii) Only hatchery Chinook and hatchery coho may be retained; all Chinook must be adipose and/or ventral fin clipped to be kept.
(32) Grays River, West Fork tributaries (unless otherwise listed) (Wahkiakum County) :
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(33) Green River (Cowlitz County):
(a) From the mouth to Miner's Creek:
(i) From 400 feet above and 400 feet below the salmon hatchery rack (or from the posted signs above and below the salmon hatchery rack) when the rack is installed in the river: Closed waters.
(ii) From 400 feet below to 400 feet above the water intake at the upper end of the hatchery grounds from September 1 through November 30: Closed waters.
(iii) September 1 through October 31: Anti-snagging rule applies and night closure in effect from the mouth to 400 feet below the salmon hatchery rack.
(iv) Selective gear rules, except: Use of barbed hooks is allowed from the Saturday before Memorial Day through July 31 and December 1 through March 15.
(v) Open the Saturday before Memorial Day through March 15. Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(vi) Salmon:
(A) Open August 1 through November 30.
(B) Daily limit 6; up to 3 may be adults, of which 1 may be a

Chinook.
(C) Only hatchery Chinook and hatchery coho may be retained.
(b) From Miner's Creek upstream:
(i) Selective gear rules, except: Use of barbed hooks is allowed.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(34) Green River tributaries (Cowlitz County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(35) Grizzly Lake (Skamania County): Closed waters.
(36) Hamilton Creek (Skamania County):
(a) Tributaries downstream from the Highway 14 Bridge: Closed waters.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(37) Horsethief Lake (Klickitat County): Open the fourth Saturday in April through October 31.
(38) Indian Heaven Wilderness Lakes (Skamania County): Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 2; minimum length 8 inches.
(39) Johnson Creek (Lewis County) (Cowlitz River tributary): Selective gear rules.
(40) Kalama River (Cowlitz County):
(a) From the mouth to the railroad bridge below Interstate 5:
(i) July 1 through October 31: Night closure.
(ii) Game fish: Open year-round.
(A) Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(iii) Steelhead:
(A) Open July 1 through July 31: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(B) August 1 through August 31: Closed.
(C) Open September 1 through September 30: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(D) Open October 1 through June 30: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open January 1 through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 3 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(b) From the railroad bridge below Interstate 5 to Modrow Bridge:
(i) From Modrow Bridge downstream to the markers approximately

1,000 feet below the temporary rack when the rack is installed below Modrow Bridge: Closed waters.
(ii) April 1 through October 31:
(A) Night closure.
(B) Anti-snagging rule.
(iii) Game fish: Open year-round.
(A) Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(C) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open January 1 through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 3 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(c) From the Modrow Bridge to the natural gas pipeline crossing:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) April 1 through October 31:
(A) Night closure.
(B) Anti-snagging rule.
(iii) Game fish: Open year-round.
(A) Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(C) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(iv) Salmon:
(A) Open January 1 through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 3 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(d) From the natural gas pipeline crossing to the deadline at the intake to the lower salmon hatchery:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) April 1 through October 31:
(A) Night closure.
(B) Anti-snagging rule.
(iii) Open September 1 through October 31 for fly fishing only, except: Use of barbed hooks is allowed.
(iv) Game fish: Open year-round.
(A) Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(C) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(v) Salmon:
(A) Open January 1 through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 3 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(e) From the Fallert Creek hatchery intake to 1,000 feet below fishway at the Kalama Falls hatchery:
(i) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(ii) Game fish: Open year-round.
(A) Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(C) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iii) Salmon:
(A) Open January 1 through July 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(B) Open August 1 through December 31:
(I) Daily limit 6; up to 3 may be adults.
(II) Only hatchery Chinook and hatchery coho may be retained.
(f) From 1,000 feet below to 1,000 feet above the fishway at the Kalama Falls hatchery: Closed waters.
(g) From 1,000 feet above the fishway at the Kalama Falls hatchery, upstream to Summers Creek:
(i) Open year-round.
(ii) Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(h) From Summers Creek upstream to the intersection of 6000 and 6420 roads: Open year-round:
(i) Fly fishing only, except: Use of barbed hooks is allowed.
(ii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(i) From the intersection of 6000 and 6420 roads to the 6600 road bridge immediately downstream of Jacks Creek:
(i) Selective gear rules, except: Use of barbed hooks is allowed.
(ii) Open the Saturday before Memorial Day through November 30.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(j) From the 6600 road bridge immediately downstream of Jacks

Creek to Kalama Falls and tributaries: Closed waters.
(41) Klickitat River (Klickitat County) :
(a) From the mouth (Burlington Northern Railroad Bridge) to Fisher Hill Bridge:
(i) April 1 through the Friday before Memorial Day:
(A) Anti-snagging rule.
(B) Night closure.
(ii) July 1 through July 31: Night closure.
(iii) August 1 through January 31:
(A) Anti-snagging rule.
(B) Night closure.
(iv) Game fish:
(A) Open Saturday before Memorial Day through January 31.
(B) Statewide minimum length/daily limit, except:
(C) Trout: Daily limit 2; minimum length 14 inches.
(v) Steelhead:
(A) Open Saturday before Memorial Day through June 30: Daily limit 3 hatchery steelhead, minimum length 20 inches.
(B) July 1 through October 31: Closed.
(C) Open November 1 through January 31: Daily limit 3 hatchery steelhead, minimum length 20 inches.
(vi) Salmon:
(A) Open Saturday before Memorial Day through July 31: Daily limit 6; up to 2 adults may be retained. Release wild Chinook.
(B) Open August 1 through January 31: Daily limit 6; up to 2 adults may be retained.
(vii) Salmon and steelhead: Open April 1 to the Friday before Memorial Day for salmon and steelhead on Mondays, Wednesdays, and Saturdays only:
(A) Daily limit 2; no more than 2 hatchery steelhead, or 2 salmon, or one of each, may be retained.
(B) Release wild Chinook.
(b) From Fisher Hill Bridge to the boundary markers above Klickitat Salmon Hatchery, the following waters are closed: From Fishery Hill Bridge to 400 feet above \#5 fishway, tributaries except Bird, Blockhouse, Bowman, Spring, Outlet creeks and the Little Klickitat River, and the waters from the boundary markers above Klickitat Salmon Hatchery to the boundary markers below the hatchery.
(c) From 400 feet above \#5 fishway to the boundary markers below Klickitat Salmon Hatchery:
(i) Open the Saturday before Memorial Day through November 30:
(A) Game fish: Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(C) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(ii) Whitefish:
(A) Open December 1 through the last day in February for Whitefish only.
(B) Whitefish gear rules.
(iii) Salmon:
(A) Saturday before Memorial Day through July 31:
(I) Daily limit 6 fish; no more than 2 adults may be retained.
(II) Release wild Chinook.
(B) August 1 through November 30: Daily limit 6 fish; no more
than 2 may be adults.
(d) From the boundary markers above Klickitat Salmon Hatchery to the Yakama Indian Reservation boundary:
(i) Game fish open the Saturday before Memorial Day through November 30.
(ii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iii) Whitefish:
(A) Open December 1 through the last day in February for whitefish only.
(B) Whitefish gear rules.
(42) Lacamas Creek (Clark County):
(a) From the mouth to the footbridge at the lower falls:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(b) From the footbridge at the lower falls upstream: It is permissible to fish up to the base of Lacamas Lake Dam.
(43) Lacamas Creek, tributary of Cowlitz River (Lewis County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(44) Lewis River (Clark County):
(a) From the mouth to the mouth of the East Fork Lewis River:
(i) July 1 through September 30: Night closure for salmon and steelhead fishing.
(ii) Game fish:
(A) Open year-round.
(B) Statewide minimum length/daily limit, except: Trout: Daily limit 2; minimum length 14 inches.
(iii) Steelhead:
(A) July 1 through July 31: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(B) August 1 through August 31: Closed.
(C) Open September 1 through September 30: Daily limit 1 hatchery steelhead; minimum length 20 inches.
(D) Open October 1 through June 30: Daily limit 3 steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open January 1 through April 30: Daily limit 6 hatchery Chinook; up to 1 may be an adult.
(B) Open August 1 through September 30:
(I) Daily limit 6; up to 3 adults ((, of which 2 may be Chinook)).
(II) Only hatchery Chinook and hatchery coho may be retained.
(C) Open October 1 through December 31:
(I) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(II) Only Chinook and hatchery coho may be retained.
(b) From the mouth of the East Fork Lewis River to Johnson Creek.
(i) Game fish:
(A) Open year-round.
(B) Statewide minimum length/daily limit, except:
(I) Trout: Daily limit 2; minimum length 14 inches.
(II) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(ii) Salmon:
(A) Open January 1 through April 30: Daily limit 6 hatchery Chinook; up to 1 may be an adult.
(B) Open August 1 through September 30:
(I) Daily limit 6; up to 3 adults ( (, of which 2 may be Chinook)).
(II) Only hatchery Chinook and hatchery coho may be retained.
(C) Open October 1 through December 31:
(I) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(II) Only Chinook and hatchery coho may be retained.
(c) From Johnson Creek to Colvin Creek:
(i) May 1 through May 31: Closed waters.
(ii) Those waters shoreward of the cable buoy and corkline at the mouth of the Lewis River Salmon Hatchery fish ladder: Closed waters.
(iii) June 1 through November 30 and April 1 through April 30:

Anti-snagging rule and night closure.
(iv) Game fish:
(A) Open June 1 through April 30.
(B) Statewide minimum length/daily limit, except:
(I) Trout: Daily limit 2; minimum length 14 inches.
(II) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(v) Salmon:
(A) Open January 1 through April 30: Daily limit 6 hatchery Chinook; up to 1 may be an adult.
(B) Open August 1 through September 30:
(I) Daily limit 6; up to 3 adults ((, of which 2 may be Chinook)).
(II) Only hatchery Chinook and hatchery coho may be retained.
(C) Open October 1 through December 31:
(I) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(II) Only Chinook and hatchery coho may be retained.
(d) From the mouth of Colvin Creek to the overhead powerlines at Merwin Dam:
(i) Open June 1 through October 31 and December 16 through April 30.
(ii) Anti-snagging rule and night closure April 1 through April 30 and June 1 through October 31.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open January 1 through April 30: Daily limit 6 hatchery Chinook; up to 1 may be an adult.
(B) Open August 1 through September 30:
(I) Daily limit 6; up to 3 adults ((, of which 2 may be Chinook)).
(II) Only hatchery Chinook and hatchery coho may be retained.
(C) Open October 1 through October 31:
(I) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(II) Only Chinook and hatchery coho may be retained.
(D) Open December 16 through December 31:
(I) Daily limit 6; up to 3 adults, of which 2 may be Chinook.
(II) Only Chinook and hatchery coho may be retained.
(e) From the overhead powerlines below Merwin Dam to Merwin Dam: Closed waters.
(f) From the cable crossing 1,300 yards below Yale Dam to Yale Dam: Closed waters.
(g) From the old Lewis River streambed between Swift No. 1 Powerhouse and Swift No. 2 Powerhouse: Closed waters.
(h) Lewis River Power Canal:
(i) Open the fourth Saturday in April through October 31.
(ii) It is unlawful to fish from a floating device.
(iii) Game fish: Statewide minimum length/daily limit, except:
(iv) Trout: Daily limit 5; no minimum length.
(i) From Eagle Cliff Bridge to Muddy River, including all tributaries except Muddy River:
(i) Selective gear rules.
(ii) Open the Saturday before Memorial Day through July 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 10; minimum length 8 inches.
(B) Release wild trout.
(j) From the Muddy River to the lower falls and tributaries (including the Muddy River):
(i) Selective gear rules.
(ii) Release all fish.
(45) Lewis River, East Fork (Clark/Skamania counties):
(a) From the posted markers at the lower end of Big Eddy to 100
feet above Lucia Falls: Closed waters.
(b) From 400 feet below to 400 feet above Moulton Falls: Closed waters.
(c) From 400 feet below Horseshoe Falls upstream, including tributaries above Horseshoe Falls: Closed waters.
(d) From the mouth to 400 feet below Horseshoe Falls:
(i) Open the Saturday before Memorial Day through July 15 and September 16 through March 15.
(ii) Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(iv) Salmon:
(A) Open September 16 through December 31.
(B) Daily limit 6; up to 2 may be adults.
(C) Only hatchery Chinook and hatchery coho may be retained.
(e) Tributaries from the mouth to 400 feet below Horseshoe Falls:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(46) Little Klickitat River (Klickitat County): Within Goldendale city limits:
(a) Open the fourth Saturday in April through the Friday before Memorial Day to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(b) Open the Saturday before Memorial Day through October 31 to all anglers.
(c) Game fish: Statewide minimum length/daily limit, except: Trout: Limit 5; no minimum length.
(47) Little Washougal River (Clark County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(48) Little White Salmon River (Skamania County):
(a) From the orange fishing boundary markers at Drano Lake upstream to the intake near the north boundary of the Little White Salmon National Fish Hatchery: Closed waters.
(b) Game fish: Statewide minimum length/daily limit, except:

Trout: Daily limit 5; minimum length 8 inches.
(49) Love Lake (Clark County): Closed waters.
(50) Mayfield Lake (Reservoir) (Lewis County):
(a) Open from the Mayfield Dam to Onion Rock Bridge.
(b) From the Tacoma Power safety signs at Onion Rock Bridge to Mossyrock Dam: Closed waters.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 10; minimum length 8 inches.
(ii) Release wild rainbow trout and wild cutthroat trout.
(iii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iv) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(v) Channel catfish: Daily limit 10; no size restriction.
(vi) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(d) Salmon:
(i) Open September 1 through December 31:
(ii) Daily limit 6; minimum length 12 inches.
(iii) Up to 2 may be adults.
(iv) Only hatchery Chinook and hatchery coho may be retained.
(51) Merrill Lake (Cowlitz County):
(a) Fly fishing only.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Release all fish.
(52) Merwin Lake (Reservoir) (Clark/Cowlitz counties): Landlocked salmon rules.
(53) Mill Creek (Cowlitz County):
(a) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(54) Mill Creek (Lewis County): From the mouth to the hatchery road crossing culvert.
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Open the Saturday before Memorial Day through October 31 and

December 1 through December 31.
(c) Anti-snagging rule from December 1 through December 31.
(d) Night closure from December 1 through December 31.
(e) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(f) Salmon:
(i) Open August 1 through October 31 and December 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(55) Mineral Lake (Lewis County): Open the fourth Saturday in

April through September 30.
(56) Olequa Creek (Lewis/Cowlitz counties):
(a) From 400 feet below to 200 feet above the temporary weir while the weir is installed in the creek: Closed waters.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(d) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(57) Ostrander Creek (Cowlitz County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(58) Outlet Creek (Silver Lake) (Cowlitz County):
(a) From the Saturday before Memorial Day through November 30.
(b) Selective gear rules, except: Use of barbed hooks is allowed.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open August 1 through November 30.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(59) Rainey Creek (Lewis County):
(a) From mouth to Highway 12.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 5; minimum length 8 inches.
(ii) Release wild rainbow and cutthroat trout.
(60) Riffe Lake (Reservoir) (Lewis County):
(a) Open from Mossyrock Dam to Cowlitz Falls Dam:
(b) From Cowlitz Falls Dam downstream to the Lewis County PuD safety signs located approximately 800 feet below the dam: Closed waters.
(c) It is permissible to fish up to the base of Swofford Pond Dam.
(d) Landlocked salmon rules.
(61) Rock Creek (Klickitat County):
(a) From Army Corps of Engineers Park upstream to the source: Closed waters.
(b) Open year-round from the mouth to the Army Corps of Engineers Park. Limits, size restrictions, and gear restrictions are the same as those in the adjacent portion of the Columbia River.
(62) Rock Creek (Skamania County): From the mouth to the falls at approximately river mile one:
(a) Open the Saturday before Memorial Day through March 15.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Open August 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(63) Rowland Lake, North (Klickitat County) : Open the fourth Saturday in April through March 31.
(64) Salmon Creek (Clark County): From the mouth to 182 nd Avenue Bridge:
(a) Open the Saturday before Memorial Day through March 15.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(c) Salmon:
(i) Open August 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(65) Salmon Creek (Lewis County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(c) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook or hatchery coho may be retained.
(66) Silver Lake (Cowlitz County): Game fish: Statewide minimum length/daily limit, except:
(a) Crappie: Daily limit 10; minimum length 9 inches.
(b) Grass carp: No limit and no minimum length.
(c) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(d) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(e) Channel catfish: Daily limit 10; no size restriction.
(f) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(67) Silver Creek (tributary to Cowlitz River) (Lewis County): From the mouth to USFS Road 4778. Selective gear rules.
(68) Skamokawa Creek (Wahkiakum County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Open the Saturday before Memorial Day through August 31 and November 1 through March 15.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(d) Salmon:
(i) Open November 1 through December 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(69) Skate Creek (tributary to Cowlitz River) (Lewis County): Selective gear rules.
(70) Spearfish Lake (Klickitat County): Open the fourth Saturday in April through March 31.
(71) Spirit Lake (Skamania County): Closed waters.
(72) Spring Creek (Klickitat County): From Hill Road upstream to the Goldendale Hatchery: Game fish: Statewide minimum length/daily limit, except: Trout: Limit 5; minimum length 8 inches.
(73) Stillwater Creek (Lewis County):
(a) Selective gear rules, except: Use of barbed hooks is allowed.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(c) Salmon:
(i) Open August 1 through October 31.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery Chinook and hatchery coho may be retained.
(74) Swift Reservoir (Skamania County):
(a) From dam to posted markers approximately $3 / 8$ mile below Eagle Cliff Bridge:
(i) Open the Saturday before Memorial Day through November 30.
(ii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 10; minimum length 8 inches.
(B) Release wild trout.
(C) Release all steelhead.
(iii) Salmon:
(A) Open the Saturday before Memorial Day through November 30.
(B) Salmon count toward trout daily limit.
(C) Minimum length 8 inches.
(D) Maximum length 15 inches.
(E) No catch record card required.
(b) From the posted markers approximately $3 / 8$ mile below Eagle Cliff Bridge to the bridge:
(i) Selective gear rules.
(ii) Open the Saturday before Memorial Day through July 15.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 10; minimum length 8 inches.
(B) Release wild trout.
(C) Release all steelhead.
(iv) Salmon:
(A) Open the Saturday before Memorial Day through July 15.
(B) Landlocked salmon rules.
(C) Maximum length 15 inches.
(75) Tilton River (Lewis County) : From the mouth to the West

Fork:
(a) Within posted "Closed Waters" signs around the adult fish release sites: Closed waters.
(b) Anti-snagging rule from September 1 through October 31.
(c) Night closure from September 1 through October 31.
(d) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout. Open year-round.
(e) Salmon:
(i) Open year-round.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Only hatchery coho may be retained.
(76) Tilton River, East, North, South and West Forks (Lewis County): Selective gear rules.
(77) Toutle River (Cowlitz County) : From the mouth to the forks:
(a) Open the Saturday before Memorial Day through March 15.
(b) Game fish: Statewide minimum length/daily limit, except:

Trout: Daily limit 2; minimum length 14 inches.
(c) Salmon open August 1 through November 30:
(i) Daily limit 6; up to 3 may be adults, of which 1 may be a

Chinook.
(ii) Only hatchery Chinook and hatchery coho may be retained.
(78) Toutle River tributaries (unless otherwise listed) (Cowlitz County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release wild trout.
(79) Toutle River, North Fork (Cowlitz County):
(a) From the mouth to the posted deadline below the fish collection facility:
(i) Open the Saturday before Memorial Day through March 15.
(ii) September 1 through October 15: Anti-snagging rule and night closure on the North Fork from the confluence with the South Fork to the mouth of Green River.
(iii) Selective gear rules, except: Use of barbed hooks is allowed the Saturday before Memorial Day through July 31 and December 1 through March 15.
(iv) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(v) Salmon open August 1 through Nov 30:
(A) Daily limit 6; up to 3 adults, of which 1 may be a Chinook.
(B) Only hatchery Chinook and hatchery coho may be retained.
(b) From the posted deadline downstream of the fish collection facility upstream and tributaries: Closed waters.
(80) Toutle River, North Fork tributaries from the mouth to the posted deadline below the fish collection facility (unless otherwise listed) (Cowlitz County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(81) Toutle River, South Fork (Cowlitz County):
(a) From the mouth to 4700 Road Bridge:
(i) Open April 16 through the Friday before Memorial Day:
(A) Selective gear rules, except: Use of barbed hooks is allowed.
(B) Game fish: Statewide minimum length/daily limit, except:
(I) Release trout.
(II) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(ii) Open the Saturday before Memorial Day through November 30:

Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iii) Open December 1 through March 15:
(A) Selective gear rules, except: Use of barbed hooks is allowed.
(B) Game fish: Statewide minimum length/daily limit, except:
(I) Trout: Daily limit 2; minimum length 14 inches.
(II) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(C) Salmon:
(I) Open August 1 through November 30.
(II) Daily limit 6; up to 2 may be adults.
(III) Only hatchery Chinook and hatchery coho may be retained.
(b) From 4700 Road Bridge upstream:
(i) Open the Saturday before Memorial Day through March 15.
(ii) From December 1 through March 15: Selective gear rules, except: Use of barbed hooks is allowed.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open August 1 through November 30.
(B) Daily limit 6; up to 2 may be adults.
(C) Only hatchery Chinook and hatchery coho may be retained.
(82) Vancouver Lake and all other waters west of Burlington Northern Railroad from the Columbia River drawbridge near Vancouver downstream to Lewis River (Clark County):
(a) Vancouver Lake flushing channel and the lake shoreline 400
feet east and west of the channel exit: Closed April 1 through May 31.
(b) Chumming is permissible.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(83) Walupt Lake (Lewis County) : All inlet streams: Closed waters.
(84) Washougal River (Clark County):
(a) From the mouth to the boat ramp at the WDFW county line access site:
(i) From 1,000 feet (or posted markers) below to 200 feet above the temporary weir when the weir is installed in the river: Closed waters.
(ii) Night closure.
(iii) July 1 through October 31: Anti-snagging rule.
(iv) Open April 16 through the Friday before Memorial Day:
(A) Selective gear rules, except: Use of barbed hooks is allowed.
(B) Game fish: Statewide minimum length/daily limit, except: Re-
lease all trout.
(v) Open the Saturday before Memorial Day through March 15.
(A) Game fish: Statewide minimum length/daily limit, except:
(B) Trout: Daily limit 2; minimum length 14 inches.
(vi) March 16 through April 15: Closed.
(vii) Steelhead:
(A) Open April 16 through March 15: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(B) March 16 through April 15: Closed.
(viii) Salmon:
(A) Open August 1 through December 31.
(B) Daily limit 6; up to 3 adults may be retained, of which ((1)) $\underline{2}$ may be ((z)) Chinook.
(C) Only hatchery Chinook and hatchery coho may be retained.
(b) From the boat ramp at the WDFW county line access site to the bridge at Salmon Falls:
(i) From 1,000 feet (or posted markers) below to 200 feet above the temporary weir when the weir is installed in the river: Closed waters.
(ii) August 1 through October 31:
(A) Anti-snagging rule.
(B) Night closure.
(iii) Game fish:
(A) Open from the Saturday before Memorial Day through March 15.
(B) Game fish: Statewide minimum length/daily limit, except:
(C) Trout: Daily limit 2; minimum length 14 inches.
(D) Steelhead: Daily limit 3 hatchery steelhead; minimum length 20 inches.
(iv) Salmon:
(A) Open August 1 through December 31.
(B) Daily limit 6; up to 3 adults may be retained, of which ((1)) $\underline{2}$ may be ((च)) Chinook.
(C) Only hatchery Chinook and hatchery coho may be retained.
(c) From the bridge at Salmon Falls upstream and tributaries: Closed waters.
(85) Washougal River, West (North) Fork (Clark/Skamania counties):
(a) From the mouth to the water intake at the department hatchery: Closed waters.
(b) From the intake at the department hatchery upstream:
(i) Open the Saturday before Memorial Day through March 15.
(ii) Game fish: Statewide minimum length/daily limit, except:
(A) Trout: Daily limit 2; minimum length 14 inches.
(B) Steelhead: Daily limit 3 hatchery steelhead; minimum length

20 inches.
(iii) Salmon:
(A) Open August 1 through December 31.
(B) Daily limit 6; up to 2 may be adults.
(C) Only hatchery Chinook and hatchery coho may be retained.
(86) White Salmon River (Klickitat/Skamania counties):
(a) From the mouth (Burlington Northern Railroad Bridge) to the county road bridge below the former location of the powerhouse:
(i) Open year-round.
(ii) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat.
(iii) July 1 through October 31: Night closure for salmon and steelhead.
(iv) August 1 through December 31: Anti-snagging rule.
(v) Salmon and steelhead:
(A) Open April 1 through June 30:
(I) Daily limit 2; up to 2 salmon, or 2 hatchery steelhead, or one of each, may be retained.
(II) Release wild Chinook.
(B) Open July 1 through July 31:
(I) Daily limit 2; up to 2 salmon.
(II) Release wild Chinook. Closed to fishing for or retaining steelhead.
(C) Open August 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon. Closed to fishing for or retaining steelhead.
(II) Only hatchery Chinook and hatchery coho may be retained.
(D) Open November 1 through March 31:
(I) Daily limit 6; up to 2 salmon, or 2 hatchery steelhead, or one of each, may be retained.
(II) Only hatchery Chinook and hatchery coho may be retained.
(b) From the county road bridge below the former location of the powerhouse upstream to Big Brother Falls (river mile 16):
(i) From Big Brother Falls downstream 400 feet: Closed waters.
(ii) Game fish: Statewide minimum length/daily limit, except: Release wild rainbow and wild cutthroat trout.
(iii) Selective gear rules, except: Use of barbed hooks is allowed.
(iv) Salmon and steelhead:
(A) Open Saturday before Memorial Day through July 31:
(I) Daily limit 2 fish, up to 2 salmon, or 2 steelhead, or one of each may be retained.
(II) Only hatchery salmon and hatchery steelhead may be retained.
(B) Open August 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon, or 2 steelhead, or one of each may be retained.
(II) Only hatchery salmon and hatchery steelhead may be retained.
(87) Wind River (Skamania County):
(a) From the mouth to the Highway 14 Bridge:
(i) Open year-round.
(ii) March 16 through June 30: Night closure.
(iii) March 16 through June 30: Each angler aboard a vessel may deploy salmon/steelhead angling gear until the salmon/steelhead limit for all anglers aboard has been achieved.
(iv) March 16 through June 30: Two-pole fishing for salmon/steelhead is permissible so long as the angler possesses a two-pole endorsement.
(v) July 1 through October 31: Night closure for salmon and steelhead fishing.
(vi) August 1 through October 31: Anti-snagging rule applies.
(vii) Game fish: Statewide minimum length/daily limit, except:
(A) Release cutthroat trout and wild rainbow trout.
(B) Steelhead: Open November 1 through March 15; daily limit 3 hatchery steelhead; minimum length 20 inches.
(viii) Salmon and steelhead:
(A) Open March 16 through June 30: Daily limit 6; up to 2 adult salmon, or 2 hatchery steelhead, or one of each, may be retained. Release wild Chinook and wild coho.
(B) Open July 1 through ((October 31)) September 30:
(I) Daily limit 6; up to 2 adult salmon may be retained. Closed to fishing for or retaining steelhead.
(II) Release wild Chinook and wild coho.
(C) Open October 1 through October 31:
(I) Daily limit 6; up to 2 may be adults. Closed to fishing for or retaining steelhead.
(II) Release wild coho.
(b) From the Highway 14 Bridge to 400 feet below Shipherd Falls:
(i) Open year-round.
(ii) March 16 through June 30: Night closure.
(iii) July 1 through October 31: Night closure for salmon and steelhead fishing.
(iv) Anti-snagging rule from May 1 through June 30 and August 1 through October 31.
(v) Game fish: Statewide minimum length/daily limit, except:
(A) Release cutthroat trout and wild rainbow trout.
(B) Steelhead: Open November 1 through March 15; daily limit 3 hatchery steelhead; minimum length 20 inches.
(vi) Salmon and steelhead:
(A) Open March 16 through June 30: Daily limit 6; up to 2 adult salmon, or 2 hatchery steelhead, or one of each, may be retained. Release wild Chinook and wild coho.
(B) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon may be retained. Closed to fishing for or retaining steelhead.
(II) Release wild Chinook and wild coho.
(C) Open August 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon may be retained. Closed to fishing for or retaining steelhead.
(II) Release wild Chinook and wild coho.
(c) From 400 feet below to 100 feet above Shipherd Falls fish ladder: Closed waters.
(d) From 100 feet above Shipherd Falls fish ladder to 400 feet below the Coffer Dam:
(i) Anti-snagging rule.
(ii) Night closure.
(iii) Open September 16 through November 30:
(A) Release all fish.
(B) Selective gear rules, except: Use of barbed hooks is allowed.
(iv) Salmon and steelhead:
(A) Open May 1 through June 30.
(B) Daily limit 6; up to 2 adult salmon, or 2 hatchery steelhead, or one of each, may be retained.
(e) From 400 feet below the Coffer Dam to 100 feet above the Coffer Dam: Closed waters.
(f) From 100 feet above the Coffer Dam to 800 yards downstream from Carson National Fish Hatchery:
(i) Anti-snagging rule.
(ii) Night closure.
(iii) Open September 16 through November 30:
(A) Release all fish.
(B) Selective gear rules, except: Use of barbed hooks is allowed.
(iv) Salmon and steelhead open May 1 through June 30: Daily limit

6 ; up to 2 adult salmon, or 2 hatchery steelhead, or one of each, may be retained.
(g) From 800 yards downstream from Carson National Fish Hatchery upstream to Moore Bridge:
(i) Open September 16 through November 30.
(ii) Release all fish.
(iii) Selective gear rules, except: Use of barbed hooks is allowed.
(h) From Moore Bridge upstream: Closed waters.
(88) Wind River tributaries (Skamania County): Closed waters.
(89) Yale Reservoir (Cowlitz County): Landlocked salmon rules.
(90) Yellowjacket Creek (tributary to Cispus River) (Lewis Coun-
ty): Selective gear rules.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 22-05-066 (Order 22-06), § 220-312-030, filed 2/11/22, effective 7/1/22. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), $\$$ 220-312-030, filed 7/2/21, effective 8/2/21; WSR 20-14-052 (Order 20-97), § 220-312-030, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 20-03-130 (Order 20-09), § 220-312-030, filed 1/17/20, effective 2/17/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), § 220-312-030, filed 7/12/19, effective 8/12/19; WSR 18-15-065 (Order 18-163), § 220-312-030, filed 7/16/18, effective 8/16/18. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 18-06-045 (Order 18-30), § 220-312-030, filed 3/1/18, effective 4/1/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-17-029, § 220-312-030, filed 8/8/17, effective 9/8/17; WSR 17-05-112 (Order 17-04), recodified as § 220-312-030, filed 2/15/17, effective 3/18/17; WSR 16-14-038 (Order 16-158), § 220-310-185, filed 6/28/16, effective 7/29/16. Statutory Authority: RCW 77.04.012 and 77.12.047. WSR 16-06-073 (Order 16-30), § 220-310-185, filed 2/26/16, effective 7/1/16. Statutory Authority: RCW $77.04 .012,77.04 .013,77.04 .020,77.04 .055$, and 77.12.047. WSR 15-13-081 (Order 15-177), § 220-310-185, filed 6/12/15, effective 7/13/15. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 15-06-065 and 15-06-006 (Order 15-033), § 220-310-185, filed 3/4/15 and 2/20/15, effective 7/1/15. Statutory Authority: RCW 77.04 .012 , 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 14-16-027 (Order 14-185), § 220-310-185, filed 7/25/14, effective 8/25/14. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 14-04-120 (Order 14-26), § 220-310-185, filed 2/4/14, effective 3/7/14.]

OTS-3772. 2

AMENDATORY SECTION (Amending WSR 22-05-066, filed 2/11/22, effective 7/1/22)

WAC 220-312-040 Freshwater exceptions to statewide rules-Puget Sound. (1) Beaver ponds located within or adjacent to streams that drain into Puget Sound listed as open to trout and other game fish follow the same rules as the adjacent stream.
(2) County-wide freshwater exceptions to statewide rules:
(a) Beaver ponds in Kitsap County and Mason County on Tahuya Peninsula west of Belfair-Bremerton Highway (S.R. 3):
(i) Open the fourth Saturday in April through October 31.
(ii) Trout: No minimum length.
(b) Beaver ponds in Kitsap County and Mason County east of Bel-fair-Bremerton Highway (S.R. 3):
(i) Open the first Saturday in June through October 31.
(ii) Trout: No minimum length.
(3) AKL Pond (King County): Game fish: Statewide minimum length/ daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(4) Aldrich Lake (Mason County): Open the fourth Saturday in April through October 31.
(5) Alexander Lake (Kitsap County): Closed waters.
(6) American Lake (Pierce County):
(a) Chumming is permissible.
(b) Game fish: Statewide minimum length/daily limit, except: Combined daily limit of trout and kokanee is 5, any length.
(7) Anderson Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(8) Armstrong Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(9) Bainbridge Island - All streams (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(10) Baker Lake (Whatcom County):
(a) Closed waters within a 200 -foot radius around the pump discharge at the south end of the lake.
(b) Chumming is permissible.
(c) Open the fourth Saturday in April through October 31.
(d) Game fish: Statewide minimum length/daily limit, except: Kokanee: Minimum length 8 inches and maximum length 18 inches.
(e) Salmon: Open July 9 through August 31: Daily limit 2 sockeye only. Minimum size 18 inches. Release all other salmon. Each angler aboard a vessel may deploy salmon angling gear until the salmon limit for all anglers aboard has been achieved.
(11) Baker River (Skagit/Whatcom County): From the mouth to the Lower Baker Dam: Closed waters.
(12) Ballinger Lake (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(13) Beaver Lake (Skagit County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(14) Beecher, Lake (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(15) Benson Lake (Mason County): Open the fourth Saturday in April through October 31.
(16) Big Beaver Creek (Whatcom County), from $1 / 4$ mile upstream of the closed water markers on Ross Lake upstream, including tributary streams and beaver ponds:
(a) Open July 1 through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(17) Big Beef Creek (Kitsap County):
(a) From Seabeck Highway Bridge to Lake Symington:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(iv) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(v) From August 1 through August 31: Closed waters within 100 feet of the Seabeck Highway N.W. Bridge.
(b) From Lake Symington upstream:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(18) Big Lake (Skagit County):
(a) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(b) Landlocked salmon rules.
(19) Big Mission Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(20) Big Quilcene River (Jefferson County):
(a) From the mouth to Rodgers Street: Open the Saturday before Memorial Day through August 15:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(b) From Rodgers Street to the Highway 101 Bridge:
(i) From the Saturday before Memorial Day through August 15: Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(iii) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(iv) From August 16 through October 31:
(A) Night closure.
(B) Anti-snagging rules.
(v) Salmon:
(A) Open August 16 through October 31.
(B) Daily limit 4 coho only; minimum length 12 inches.
(c) From the Highway 101 Bridge to the weir at Quilcene National

Fish Hatchery: Closed waters.
(d) From the weir at Quilcene National Fish Hatchery to the upper boundary of Falls View campground:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(21) Big Soos Creek (King County) : From the mouth to the hatchery rack:
(a) Open the Saturday before Memorial Day through August 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(22) Black Lake (Thurston County): Game fish: Statewide minimum length/daily limit, except: Crappie: Daily limit 10; minimum length 9 inches.
(23) Blackjack Creek (Kitsap County) :
(a) Open Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(24) Blacksmith Pond (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(25) Boise Creek (King County) (White River tributary) : From the mouth to the Highway 410 crossing: Closed waters.
(26) Bosworth Lake (Snohomish County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(27) Boulder River (Snohomish County) (N.F. Stillaguamish River tributary): From the mouth to Boulder Falls:
(a) Open September 16 through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(28) Bradley Lake (Pierce County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(29) Buck Lake (Kitsap County): Open the fourth Saturday in April through October 31.
(30) Buffington Pond (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(31) Burley Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(32) Cady Lake (Mason County):
(a) Fly fishing only.
(b) Release all fish.
(c) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(33) Cain Lake (Whatcom County): Open the fourth Saturday in April through October 31.
(34) Calligan Lake (King County): It is unlawful to use lead weights or lead jigs that measure $1 / 2$ inch or less along the longest axis.
(35) Campbell Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(36) Campbell Lake (Skagit County): Grass carp: No daily limit for anglers and bow and arrow fishing allowed.
(37) Canyon Creek (Snohomish County) (S.F. Stillaguamish River):
(a) From the mouth to the forks (North Fork and South Fork):
(i) Open September 16 through January 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(b) From the forks (North Fork and South Fork) upstream: Closed waters.
(38) Capitol Lake (Thurston County): Closed waters.
(39) Carbon River (Pierce County):
(a) From the mouth to Voight Creek:
(i) From September 1 through ((Novembex)) September 30:
(A) Night closure.
(B) Anti-snagging rules.
(C) Barbless hooks required.
(ii) Open September 1 through ((November)) September 30.
(iii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Open December 1 through January 15:
(A) Selective gear rules.
(B) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(v) Salmon:
(A) Open September 1 through ((November)) September 30, Wednesdays through Saturdays only.
(B) Daily limit 6; up to 2 may be adults, minimum length 12 inches.
(C) Release wild Chinook and chum.
(b) From Voight Creek to the Highway 162 Bridge:
(i) Open from December 1 through January 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(40) Carney Lake (Pierce County):
(a) Open the fourth Saturday in April through October 31.
(b) Salmon: Landlocked salmon rules.
(41) Carpenter Lake (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(42) Cascade Creek (San Juan County):
(a) From the mouth to Mountain Lake.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(43) Cascade Lake (San Juan County): Open the fourth Saturday in April through October 31.
(44) Cascade River (Skagit County):
(a) From the mouth to the Rockport-Cascade Road Bridge:
(i) Open July 1 through July 15: ((Tuesdays)) Wednesdays through Saturdays only:
(A) Anti-snagging rules and night closure.
(B) Game fish: Statewide minimum length/daily limit, except:
(I) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(II) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(C) Salmon: Daily limit 4 hatchery Chinook; up to 2 may be adults.
(I) Release all other salmon.
(II) Minimum length 12 inches.
(ii) Open September 16 through October ((15: Tuesdays)) 31: Wednesdays through Saturdays only:
(A) Anti-snagging rules and night closure.
(B) Salmon: Daily limit 4 coho.
(I) Release all other salmon.
(II) Minimum length 12 inches.
(C) Game fish: Statewide length/daily limit, except:
(I) Cutthroat trout and wild rainbow: Minimum length 14 inches.
(II) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(iii) Open December 1 through January 31:
(A) Game fish: Statewide length/daily limit, except:
(I) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(II) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(B) Salmon: Closed.
(b) From the Rockport-Cascade Road Bridge upstream:
(i) Open June 1 through January 31.
(ii) Selective gear rules.
(iii) Release all fish except hatchery steelhead.
(45) Cass Pond (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(46) Cavanaugh Lake (Skagit County): Chumming is permissible.
(47) Cedar River (King County):
(a) From the mouth to Landsburg Road:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Night closure.
(iv) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(v) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) From Landsburg Bridge upstream to the falls: Closed waters.
(48) Chain Lake (Snohomish County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(49) Chambers Creek (Pierce County):
(a) From the mouth (Burlington Northern Bridge) to the markers 400 feet below the Boise-Cascade Dam:
(i) Selective gear rules, except bait is permissible September 1 through October 15.
(ii) Open the Saturday before Memorial Day through November 15 for game fish.
(iii) Night closure.
(iv) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(v) Salmon:
(A) Open July 1 through November 15:
(B) Daily limit 6; up to 4 may be adults; minimum length 12 inches.
(C) Release chum, wild Chinook, and wild coho.
(b) From Boise-Cascade Dam to Steilacoom Lake:
(i) Selective gear rules.
(ii) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(50) Chambers Lake (within Ft. Lewis Military Reservation) (Pierce County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Release cutthroat trout and wild rainbow trout.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(51) Channel Creek (Whatcom County) (Baker River tributary): Open the Saturday before Memorial Day through August 31.
(52) Chaplain Creek (Snohomish County) (Sultan River tributary): Waters adjacent to the water filtration plant, from the inlet to the beaver pond (Grass Lake) below the water filtration plant gate to the waterfall approximately . 4 miles upstream: Closed waters.
(53) Cherry Creek (King/Snohomish County) (tributary to the Snoqualmie River): From the mouth to Cherry Creek Falls: Selective gear rules.
(54) Chico Creek (Kitsap County):
(a) Open Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(55) Christine, Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(56) Church Creek (Mason County): From the mouth to the bridge on
U.S. Forest Service Road \#2361: Closed waters.
(57) Clarks Creek (Pierce County): Closed waters.
(58) Clear Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(59) Clear Lake (Pierce County):
(a) Open the fourth Saturday in April through October 31.
(b) Chumming is permissible.
(60) Clear Lake (Skagit County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(61) Clear Lake (Thurston County): Open the fourth Saturday in April through October 31.
(62) Clearwater River (Pierce County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(63) Clover Creek (Pierce County): From the mouth upstream to Steilacoom Lake: Closed waters.
(64) Cottage Creek South Pond (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(65) Cottage Lake (King County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may
be retained.
(66) Coulter Creek (Kitsap/Mason counties):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(67) County Line Ponds (Skagit County): Closed waters.

Washington State Register, Issue 22-14
WSR 22-14-054
(68) Crabapple Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(69) Cranberry Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(70) Cranberry Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(71) Crescent Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(72) Crescent Lake (Pierce County): Open the fourth Saturday in April through October 31.
(73) Crocker Lake (Jefferson County): Game fish: Statewide minimum length/daily limit, except: Closed to trout fishing.
(74) Cushman Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Kokanee: Minimum length 8 inches and maximum length 18 inches.
(b) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(c) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(d) Channel catfish: Daily limit 10; no size restriction.
(e) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(75) Dakota Creek (Whatcom County): From the mouth to Giles Road Bridge.
(a) Open the Saturday before Memorial Day through December 31.
(b) Selective gear rules.
(76) De Coursey Pond (Pierce County): Open the fourth Saturday in April through October 31 to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(77) Deer Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(78) Deer Creek (Snohomish/Skagit counties) (Tributary to the N.F. Stillaguamish) and all tributaries: Closed waters.
(79) Deer Lake (Island County): Open the fourth Saturday in April through October 31.
(80) Deer Lake (Mason County): Open the fourth Saturday in April through October 31.
(81) Deschutes River (Thurston County) : From Old Highway 99 Bridge upstream:
(a) Selective gear rules.
(b) Game fish:
(i) Open year-round.
(ii) Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(c) Salmon:
(i) Open year-round.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Release coho.
(82) Devereaux Lake (Mason County): Open the fourth Saturday in

April through October 31.
(83) Dewatto River (Mason County):
(a) From the mouth to Dewatto-Holly Road Bridge:
(i) Open the Saturday before Memorial Day through August 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: (( (A))) Release cutthroat trout and wild rainbow trout.
(( (B) No steclhead retention.))
(b) From Dewatto-Holly Road Bridge upstream:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Re-
lease cutthroat trout and wild rainbow trout.
(84) Dogfish Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(85) Don Lake (also known as "Clara Lake") (Mason County): Open the fourth Saturday in April through October 31.
(86) Dosewallips River (Jefferson County):
(a) From the mouth to Highway 101 Bridge:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(iv) Salmon:
(A) Open November 1 through December 15.
(B) Limit 2 chum only.
(b) From Highway 101 Bridge to Olympic National Park boundary about three-quarters of a mile downstream of the falls:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(87) Duckabush River (Jefferson County):
(a) From the mouth to Mason County PUD \#1 overhead distribution line:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(iv) Salmon:
(A) Open November 1 through December 15.
(B) Daily limit 2 chum only.
(b) From Mason County PUD \#1 overhead distribution line to the Olympic National Park boundary:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(88) Echo Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(89) Eglon Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(90) Elson Creek (Thurston County): Closed waters.
(91) Erdman Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(92) Erickson Pond (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(93) Erickson Reservoir (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(94) Erie Lake (Skagit County): Open the fourth Saturday in April through October 31.
(95) Fawn Lake (Upper and Lower) (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(96) Fazon Lake (Whatcom County): It is unlawful to fish from any floating device from the first Friday in October through January 27.
(97) Finch Creek (Mason County): Anglers with disabilities who permanently use a wheelchair and possess a designated harvester companion card may fish from the ADA accessible site at the Hoodsport

Salmon Hatchery, so long as those anglers follow all applicable rules of the adjoining waters of Marine Area 12.
(98) Finney Creek (Skagit County) : From the mouth up to the USFS 17 road bridge: Closed waters.
(99) Fisher Creek Slough (Skagit County): From the mouth to the I-5 Bridge: Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(100) Fortson Mill Pond \#1 (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(101) Fortson Mill Pond \#2 (Snohomish County):
(a) Open the fourth Saturday in April through October 31 for juvenile anglers only.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(102) Fulton Creek (Mason County) : From the mouth to falls at river mile 0.8:
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(103) Geneva Lake (King County): Open the fourth Saturday in April through October 31.
(104) Gibbs Lake (Jefferson County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 1; minimum length 18 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(105) Gissberg Pond, North (Snohomish County): Open for juvenile anglers only.
(106) Goat Ranch Pond (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(107) Goldsborough Creek and tributaries (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(108) Goodwin Lake (Snohomish County) : Chumming is permissible.
(109) Goss Lake (Island County): Open the fourth Saturday in April through October 31.
(110) Gorst Creek (Kitsap County):
(a) Open the Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(111) Grandy Lake (Skagit County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(112) Granite Lakes (near Marblemount) (Skagit County): Game fish: Statewide minimum length/daily limit, except: Release Grayling.
(113) Grass Lake (Mason County) : Open the fourth Saturday in April through October 31.
(114) Green (Duwamish) River (King County):
(a) From an east-west line extending through the southernmost tip of Harbor Island to Tukwila International Boulevard/Old Highway 99:
(i) Open for game fish the Saturday before Memorial Day through July 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) In years ending in odd numbers, open for game fish and salmon August 20 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Daily limit 6 salmon of which no more than 3 may be any combination of adult coho and adult chum.
(I) Release Chinook.
(II) Salmon minimum length 12 inches.
(III) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) In years ending in even numbers, open for game fish and salmon September 1 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Salmon: Daily limit 6 salmon of which no more than 3 adults may be retained. Release Chinook.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From Tukwila International Boulevard/Old Highway 99 to the South 212 th Street Bridge:
(i) Open for game fish the Saturday before Memorial Day through July 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) In years ending in odd numbers: Open for salmon and game fish August 20 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Salmon: Daily limit 6; up to 3 may be any combination of adult coho, chum, or adult Chinook. Up to 2 of the daily limit may be Chinook, anglers must keep the first 2 Chinook caught.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) In years ending in even numbers, open for game fish and salmon September 1 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Salmon: Daily limit 6; up to 3 ((zdults may be retained, of which one may be a Chinook)) may be adults of which up to 2 of the daily limit may be Chinook. Anglers must keep the first 2 adult Chinook caught.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(c) From the South 212th Street Bridge to the Highway 18 Eastbound Bridge:
(i) Open for game fish the Saturday before Memorial Day through August 15.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) In years ending in odd numbers, open for game fish and salmon September 16 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Salmon: Daily limit 6; up to 3 may be any combination of adult coho and adult chum. Release Chinook.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) In years ending in even numbers, open for game fish and salmon October 1 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Salmon: Daily limit 6; up to 3 adults may be retained. Release Chinook.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) From Highway 18 Eastbound Bridge to the Auburn-Black Diamond Road Bridge: Closed waters.
(e) From the Auburn-Black Diamond Road Bridge to Tacoma Municipal Watershed Boundary Marker (1.3 miles downstream of Tacoma Headworks Dam) :
(i) From 150 feet upstream and 150 feet downstream from a point directly across the river from the mouth of Keta Creek (Crisp) including both banks of the river: Closed waters.
(ii) Open for game fish the Saturday before Memorial Day through September 15.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Open for game fish and salmon November 1 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(C) Daily limit 6; up to 3 may be ( (any combination of adult coho and adult chum)) adults. Release Chinook.
(D) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(f) From Tacoma Municipal Watershed Boundary Marker (1.3 miles downstream of Tacoma Headworks Dam) to Friday Creek: Closed waters.
(115) Greenwater River (King County): From the mouth to Greenwater Lakes:
(a) Open December 1 through last day in February for whitefish only.
(b) Whitefish gear rules.
(116) Grovers Creek (Kitsap County):
(a) Open the Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(117) Hamma Hamma River (Mason County): From the mouth to 400 feet below the falls:
(a) Open the Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(118) Hancock Lake (King County): It is unlawful to use lead weights or lead jigs that measure $1 / 2$ inch or less along the longest axis.
(119) Harvey Creek (Snohomish County) : Closed waters.
(120) Haven Lake (Mason County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(121) Heart Lake (near Anacortes) (Skagit County): Open the fourth Saturday in April through October 31.
(122) Heins Lake (Kitsap County): Closed waters.
(123) Hicks Lake (Thurston County): Open the fourth Saturday in April through October 31.
(124) Horseshoe Lake (Jefferson County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 1; minimum length 18 inches.
(125) Horseshoe Lake (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(126) Horseshoe Lake (Kitsap County): Open the fourth Saturday in April through October 31.
(127) Howard Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(128) Howell Lake (Mason County): Open the fourth Saturday in April through October 31.
(129) Hozomeen Lake (Whatcom County): It is unlawful to use lead weights or lead jigs that measure $1 / 2$ inch or less along the longest axis.
(130) Illahee Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(131) Isabella Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit $16 ;$ only 1 walleye over 22 inches may be retained.
(132) Issaquah Creek (King County): Open the Saturday before Memorial Day through August 31.
(133) Jackson Lake (Pierce County): Open the fourth Saturday in April through October 31.
(134) Jennings Park Pond (Snohomish County): Open for juvenile anglers, senior anglers and anglers with a disability who possess a designated harvester companion card.
(135) Jimmy-come-lately Creek (Clallam County): From the mouth to the confluence with East Fork. Open the Saturday before Memorial Day through August 31.
(136) Johns Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(137) Joy, Lake (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(138) Kapowsin, Lake (Pierce County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(139) Keefe Lake (Whatcom County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit $16 ;$ only 1 walleye over 22 inches may be retained.
(140) Kendall Creek (Whatcom County) (N.F. Nooksack tributary): From the mouth through the hatchery to the hatchery boundary fence: Closed waters.
(141) Kennedy Creek (Mason County):
(a) From the mouth to Highway 101 Bridge:
(i) Open the Saturday before Memorial Day through September 30 .
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(iii) Salmon: Closed.
(b) From Highway 101 Bridge upstream:
(i) Open the Saturday before Memorial Day through September 30.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(142) Ki Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(143) Kings Lake Bog (King County): Closed waters.
(144) Kitsap Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(145) Kitsap Lake (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(146) Koeneman Lake (Fern Lake) (Kitsap County):
(a) Open the fourth Saturday in April through October 31.
(b) Selective gear rules.
(c) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(d) Release all fish.
(147) Langlois Lake (King County): Open the fourth Saturday in April through October 31.
(148) Larsen Lake (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(149) LeBar Creek (Mason County): From the mouth to the falls at river mile 1: Closed waters.
(150) Lilliwaup River (Mason County): From the mouth to 200 feet below the falls:
(a) Open the Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(151) Limerick Lake (Mason County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(152) Little Menzel Lake (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(153) Little Quilcene River (Jefferson County) : From the mouth to the Little Quilcene River Bridge on Penny Creek Road:
(a) From the mouth to the Highway 101 Bridge: Open the Saturday before Memorial Day through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(154) Little Scandia Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(155) Lois Lakes (Thurston County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(156) Lone Lake (Island County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 1; minimum length 18 inches.
(ii) Grass carp: No limit for anglers and bow and arrow fishing.
(157) Long Lake (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(158) Long's Pond (Thurston County): Open for juvenile anglers, senior anglers and anglers with a disability who possess a designated harvester companion card only.
(159) Maggie Lake (Mason County): Open the fourth Saturday in April through October 31.
(160) Malaney Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(161) Margaret Lake (King County): Open the fourth Saturday in April through October 31.
(162) Martha Lake (Alderwood Manor) (Snohomish County): Open the fourth Saturday in April through October 31.
(163) Martha Lake (Warm Beach) (Snohomish County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 2; minimum length 14 inches.
(164) Mashel River (Pierce County): Closed waters.
(165) Mason Lake (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(166) McAllister Creek (Thurston County):
(a) Open the Saturday before Memorial Day through November 15.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(c) Salmon:
(i) Open July 1 through November 15.
(ii) Daily limit 6; up to 2 may be adults.
(iii) Release chum, wild coho, and wild Chinook.
(167) McLane Creek (Thurston County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(c) Night closure.
(168) McMurray Lake (Skagit County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(c) Landlocked salmon rules.
(169) Melbourne Lake (Mason County): Open the fourth Saturday in April through October 31.
(170) Mill Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(171) Mill Pond (Auburn) (King County): Open for juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card only.
(172) Millers Pond (King County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(173) Minter Creek (Pierce/Kitsap counties): From the mouth to the fishing boundary markers approximately 50 feet downstream of the hatchery rack:
(a) Open for salmon September 1 through December 31.
(b) Night closure.
(c) Anti-snagging rule.
(d) Daily limit 6; up to 4 may be adults, of which only 2 may be coho or Chinook. Release wild coho.
(e) Game fish: Closed.
(174) Mission Lake (Kitsap County):
(a) Open the fourth Saturday in April through October 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(175) Mission Lower Pond (Kitsap County) : Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(176) Monte Cristo Lake (Snohomish County):
(a) Open June 1 through August 31.
(b) Selective gear rules.
(c) Release all fish except hatchery steelhead.
(177) Muck Lake (Pierce County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(178) Mud Lake (Mason County): Open the fourth Saturday in April through October 31.
(179) Munn Lake (Thurston County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Release all fish.
(180) Nisqually River (Pierce County):
(a) From the mouth to Military Tank Crossing Bridge:
(i) Anti-snagging rules.
(ii) Night closure.
(iii) Barbless hooks are required.
(iv) Open July 1 through November 15. From August ((Z2 through September 6 and from October 1 through November 15: Closed Sundays and Mondays) ) 7 through August 30, Wednesdays through Saturdays only. Closed August 24, August 31, and September 1. From September 4 through November 7, Tuesdays through Saturday only.
(v) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(vi) Salmon:
(A) Daily limit 6; up to 2 may be adults.
(B) Release chum, wild coho, and wild Chinook.
(b) From Military Tank Crossing Bridge to 400 feet below La Grande Powerhouse:
(i) Open July 1 through October 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(181) Nisqually River tributaries downstream of Alder Dam not otherwise listed (Pierce County):
(a) Open July 1 through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Re-
lease cutthroat trout and wild rainbow trout.
(182) Nooksack River (Whatcom County):
(a) From the Lummi Indian Reservation boundary to the yellow marker at the FFA High School barn at Deming:
(i) Open the Saturday before Memorial Day through January 31.
(ii) From the Saturday before Memorial Day through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Steelhead:
(A) Open the Saturday before Memorial Day through September 30: Statewide minimum size/daily limit.
(B) From October 1 through December 31: Closed to retention.
(C) Open January 1 through January 31: Statewide minimum sizel daily limit.
(v) Salmon:
(A) Open August 1 through September 30:
(I) Daily limit ( (z; plus 2 additional pinks or hatchery coho or 1 of each) ) 4 ; of which up to 2 may be wild coho and up to 2 may be hatchery Chinook.
(II) Release chum and wild Chinook.
(B) Open October 1 through December 31:
(I) Daily limit ( $(z$; plus 2 additional pinks or hatchery coho or 1 of cach)) 4; of which up to 2 may be wild coho and up to 2 may be Chinook.
(II) Release chum.
(b) From the yellow marker at the FFA High School barn in Deming to the confluence of the forks:
(i) Open ((from)) October 1 through January 31.
(ii) October 1 through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Steelhead:
(A) From October 1 through December 31: Closed to retention.
(B) Open January 1 through January 31: Statewide minimum size/ daily limit.
(v) Salmon:
(A) Open October 1 through December 31:
(B) Daily limit ( $(z$; plus 2 additional pinks or hatchery coho or 1 of each)) 4; up to 2 may be wild coho.
(C) Release chum.
(183) Nooksack River, North Fork (Whatcom County):
(a) From the mouth to the Highway 9 bridge: Closed waters.
(b) From the Highway 9 bridge to the yellow marker at the upstream side of Kendall Hatchery:
(i) Open the Saturday before Memorial Day through February 15.
(ii) The Saturday before Memorial Day through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(iii) November 1 through February 15: It is unlawful to fish from a floating device equipped with a motor.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Steelhead:
(A) Open the Saturday before Memorial Day through September 30: Statewide minimum size/daily limit.
(B) From October 1 through December 31: Closed.
(C) Open January 1 through February 15: Statewide minimum size/ daily limit.
(vi) Salmon:
(A) Open October 1 through November 30.
(B) Daily limit ((z; plus 2 additional hatchery)) 4; up to 2 may be wild coho.
(C) Release chum.
(c) From the yellow marker at the upstream side of Kendall Hatchery to Maple Creek:
(i) Open the Saturday before Memorial Day through February 15.
(ii) From the Saturday before Memorial Day through December 31:
(A) Anti-snagging rules.
(B) Night closure.
(iii) November 1 through February 15: It is unlawful to fish from a floating device equipped with a motor.
(iv) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Steelhead:
(A) Open the Saturday before Memorial Day through September 30: Statewide minimum size/daily limit.
(B) From October 1 through December 31: Closed to retention.
(C) Open January 1 through February 15: Statewide minimum size/ daily limit.
(vi) Salmon:
(A) Open October 1 through November 30.
(B) Daily limit ((z; plus 2 additional hatchery)) 4; up to 2 may be wild coho.
(C) Release chum.
(d) From Maple Creek to Nooksack Falls:
(i) Open the Saturday before Memorial Day through January 31.
(ii) Selective gear rules.
(iii) November 1 through January 31: It is unlawful to fish from a floating device equipped with a motor.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(184) Nooksack River, Middle Fork (Whatcom County): From the mouth to the former city of Bellingham diversion dam:
(a) November 1 through January 31: It is unlawful to use motors.
(b) Open the Saturday before Memorial Day through January 31.
(c) Selective gear rules.
(d) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(185) Nooksack River, South Fork (Skagit/Whatcom counties):
(a) From the mouth to Skookum Creek:
(i) Open October 1 through January 31.
(ii) Game fish: Statewide minimum length/daily limit, except:

Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) Only one single-point hook allowed.
(iv) From October 1 through ((November 30)) December 31: Night closure.
(v) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(vi) Steelhead:
(A) From October 1 through December 31: Closed to retention.
(B) Open January 1 through January 31: Statewide minimum size/ daily limit.
(vii) Salmon:
(A) Open October 1 through October 15:
(I) Daily limit ((z; plus 4 additional hatchery coho)) 6; of which up to 2 may be wild coho or 2 hatchery Chinook or 1 of each.
(II) Release chum and wild Chinook.
(B) Open October 16 through December 31:
(I) Daily limit ((z; plus 4 additional hatchexy coho)) 6; of which up to 2 may be wild coho or 2 Chinook or 1 of each.
(II) Release chum.
(b) From Skookum Creek upstream to Wanlick Creek: Closed waters.
(c) Upstream from and including Wanlick Creek, including all
tributaries:
(i) Open the Saturday before Memorial Day through October 31 for fly fishing only.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(186) North Lake (King County) : Open the fourth Saturday in April through October 31.
(187) Northern State Hospital Pond (Skagit County): Open for juvenile anglers only.
(188) Ohop Lake (Pierce County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(189) Olalla Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(190) Old Fishing Hole Pond (Kent, King County): Open to juvenile anglers, senior anglers, and anglers with a disability who possess a designated harvester companion card.
(191) Osborne Lake (Mason County): Open the fourth Saturday in April through October 31.
(192) Padden Lake (Whatcom County): Open the fourth Saturday in April through October 31.
(193) Panther Lake (Kitsap/Mason counties): Open the fourth Saturday in April through October 31.
(194) Panther Lake (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(195) Pass Lake (Skagit County):
(a) Fly fishing only.
(b) All motors prohibited.
(c) Game fish: Statewide minimum length/daily limit, except: Release all trout.
(196) Perry Creek (Thurston County): From the mouth to the falls:
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(197) Phillips Lake (Mason County): Open the fourth Saturday in April through October 31.
(198) Pilchuck Creek (Snohomish County):
(a) From the mouth to the Highway 9 Bridge:
(i) Open September ((16)) 1 through January 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From the Highway 9 Bridge to Pilchuck Falls:
(i) Open the Saturday before Memorial Day through January 31.
(ii) From the Saturday before Memorial Day through November 30; selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(199) Pilchuck River (Snohomish County):
(a) From the mouth to 500 feet downstream from the Snohomish City diversion dam:
(i) Open from December 1 through January 31.
(ii) It is unlawful to fish from any floating device.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From 500 feet downstream from the Snohomish City diversion dam upstream: Closed waters.
(200) Pine Lake (King County): Open the fourth Saturday in April through October 31.
(201) Pioneer Ponds (tributary to Stillaguamish River) (Snohomish County): Closed waters.
(202) Pipers Creek (King County) and tributaries: Closed waters.
(203) Portage Creek (Snohomish County): Closed waters.
(204) Prices Lake (Mason County):
(a) Selective gear rules.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(c) Release all fish.
(205) Puyallup River (Pierce County) :
(a) From the 11th Street Bridge to 400 feet downstream of Clarks Creek:
(i) From August 16 through ((August 31 all waters closed Sundays.
(ii) From September 1 through September 30 all waters closed Sundays, Mondays, and Tuesdays.
(iii) August 16 through November 30:)) September 30 all waters open Wednesdays through Saturdays.
(A) Anti-snagging rules.
(B) Night closure.
(C) Barbless hooks are required.
((立)) (ii) Open for game fish August 16 through ( (Novembex))
September 30. Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
( ( (v) ) ) (iii) Salmon: Open August 16 through ((November)) September 30 .
(A) Daily limit 6; up to ((4)) $\underline{2}$ may be adults ( (, of which only $z$ may be coho or Chinook)).
(B) Release chum and wild Chinook.
(b) From 400 feet downstream to 400 feet upstream of Clarks Creek: Closed waters.
(c) From 400 feet upstream of Clarks Creek to East Main Bridge:
(i) From August 16 through ((August 31 all waters elosed Sundays.
(ii) From September 1 through September 30 all waters closed Sun= days, Mondays, and Tuesdays.
(iii) August 16 through November 30:)) September 30 all waters open Wednesdays through Saturdays.
(A) Anti-snagging rules.
(B) Night closure.
(C) Barbless hooks are required.
(((iv))) (ii) Game fish: Open August 16 through ((November)) September 30: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(( (v)) ) (iii) Salmon: Open August 16 through ((Novembex)) September 30 .
(A) Daily limit 6; up to ((4)) $\underline{2}$ may be adults ( (, of which 2 may be coho or Chinook)).
(B) Release chum and wild Chinook.
(d) From East Main Bridge to Carbon River:
(i) August 16 through ((November)) September 30 open Wednesdays through Saturdays:
(A) Anti-snagging rules.
(B) Night closure.
(C) Barbless hooks are required.
(ii) Game fish:
(A) Open August 16 through ((Novembex)) September 30.
(B) Statewide minimum length/daily limit except: Release cutthroat trout and wild rainbow trout.
(iii) Salmon:
(A) Open August 16 through ((Novembex)) September 30.
(B) Daily limit 6; up to ((4)) $\underline{2}$ may be adults ((, of which only $z$ may be coho or Chinook)).
(C) Release chum and wild Chinook.
(e) From Carbon River upstream:
(i) Open the Saturday before Memorial Day through January 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(206) Raging River (King County): From the mouth to the Highway 18 Bridge:
(a) Open the Saturday before Memorial Day through January 31.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(207) Rapjohn Lake (Pierce County): Open the fourth Saturday in April through October 31.
(208) Rattlesnake Lake (King County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 2; minimum length 14 inches.
(209) Ravensdale Lake (King County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Trout: Daily limit 2; minimum length 14 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(210) Riley Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(211) Robbins Lake (Mason County): Open the fourth Saturday in April through October 31.
(212) Rocky Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat and wild rainbow trout.
(213) Roesiger Lake (Snohomish County): Game fish: statewide minimum length/daily limit, except: Crappie: Daily limit 10; minimum length 9 inches.
(214) Ross Lake (Reservoir) (Whatcom County):
(a) Open July 1 through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Trout except eastern brook trout: Daily limit 1; minimum length 16 inches.
(ii) Eastern brook trout: Daily limit 5; no minimum size.
(215) Ross Lake tributary streams, and their tributaries, except Big Beaver Creek and Ruby Creek (Whatcom County):
(a) From mouth to one mile upstream: Closed waters.
(b) From one mile above the mouths to the headwaters: Open July 1 through October 31.
(216) Ruby Creek (Whatcom County): Closed waters.
(217) Ruby Creek tributaries (Whatcom County): Open July 1 through October 31.
(218) Salmon Creek and all forks (Jefferson/Clallam counties): Closed waters.
(219) Salmonberry Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(220) Samish Lake (Whatcom County): Game fish: Statewide minimum length/daily limit, except:
(a) Cutthroat trout: Daily limit 2; minimum length 14 inches.
(b) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(c) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(d) Channel catfish: Daily limit 10; no size restriction.
(e) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(221) Samish River (Skagit County):
(a) From the mouth to the Thomas Road Bridge:
(i) Open the Saturday before Memorial Day through September 13 and October 1 through November 30.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 1 through November 30:
(A) Night closure.
(B) It is unlawful to use anything other than one single-point hook.
(iv) Salmon:
(A) Open August 1 through September 13.
(B) Daily limit 2; anglers may only retain fish hooked inside the mouth.
(C) Release chum((, pink,)) and wild coho.
(b) From Thomas Road Bridge to the I-5 Bridge:
(i) Open the Saturday before Memorial Day through July 31 and October 1 through November 30.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) August 1 through November 30:
(A) Night closure.
(B) It is unlawful to use anything other than one single-point hook.
(c) From the I-5 Bridge to the Old Highway 99 Bridge:
(i) Open the Saturday before Memorial Day through August 30.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) From the Old Highway 99 Bridge to the Samish hatchery salmon rack: Closed waters.
(e) From upstream of the Samish hatchery rack to Hickson Bridge:
(i) Open the Saturday before Memorial Day through November 30.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(222) Sammamish Lake (King County):
(a) Closed waters within 100 yards of the mouth of Issaquah Creek August 16 through November 30.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Release all kokanee.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(c) December 1 through June 30: Release all steelhead and rainbow trout over 20 inches in length.
(d) Landlocked salmon rules apply for December 1 through May 31. Hatchery coho only may be retained as part of the trout daily limit under the landlocked salmon rules, minimum length 12 inches.
(e) Salmon: ((Elosed)) Open October 1 through November 30: Daily limit 4 coho only. Release all other salmon.
(223) Sammamish River (Slough) (King County): From the 68th Avenue N.E. Bridge to Lake Sammamish:
(a) Open from January 1 through August 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(224) Sandyshore Lake (Jefferson County): Open the fourth Saturday in April through October 31.
(225) Sauk River (Skagit/Snohomish counties):
(a) Selective gear rules.
(b) Release all fish except hatchery steelhead.
(c) From the mouth to Darrington Bridge:
(i) Open June 1 through January 31.
(ii) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(d) From Darrington Bridge to the mouth of the White Chuck River: Open June 1 through January 31.
(e) From the Whitechuck River to the headwaters, including the North Fork from mouth to North Forks Falls and the South Fork from mouth to Elliot Creek: Open June 1 through October 31.
(f) In the South Fork upstream from Elliot Creek: Open June 1 through August 31.
(226) Sawyer Lake (King County):
(a) Chumming is permissible.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(227) Schneider Creek (Thurston County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(228) Serene Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(229) Shady Lake (King County) : Open the fourth Saturday in April through October 31.
(230) Shannon, Lake (Skagit County):
(a) Open the fourth Saturday in April through October 31.
(b) Chumming is permissible.
(c) Game fish: Statewide minimum length/daily limit, except: Kokanee: Minimum length 8 inches.
(231) Shelton Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(232) Sherwood Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(233) Sherwood Creek Mill Pond (Mason County): Game fish: Statewide minimum length/daily limit, except:
(a) Trout: Daily limit 2; minimum length 14 inches.
(b) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(c) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(d) Channel catfish: Daily limit 10; no size restriction.
(e) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(234) Shoe Lake (Mason County) : Open the fourth Saturday in April through October 31.
(235) Silent Lake (Jefferson County): Open the fourth Saturday in April through October 31.
(236) Silver Lake (Pierce County): Open the fourth Saturday in April through October 31.
(237) Silver Lake (Whatcom County): Open the fourth Saturday in April through October 31.
(238) Sixteen Lake (Skagit County): Open the fourth Saturday in April through October 31.
(239) Skagit River (Skagit/Whatcom counties):
(a) From the mouth to the Memorial Highway Bridge (Highway 536 at Mt. Vernon) :
(i) Open March 1 through January 31.
(ii) March 1 through August ((13)) 31:
(A) Selective gear rule except anglers fishing for sturgeon must use bait.
(B) It is unlawful to use hooks other than those measuring $1 / 2$ inch or less from point to shank, except anglers fishing for sturgeon may use single-point barbless hooks of any size.
(iii) ((August 14)) September 1 through October ((15)) 31: Night closure.
(iv) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Dolly Varden/Bull Trout: Minimum length of 20 inches as part of the trout limit.
(vi) Salmon: (( ( $\AA$ ) Open August 14 through August 31: Daily limit 4 pink salmon only. Relcase all other salmon.
(B)) Open September 1 through October ((15)) 31: ((I))) Daily limit 2 salmon ( (, plus 2 additional pinks.
(II)) . Release Chinook and chum.
(b) From Memorial Highway Bridge (Highway 536 at Mt. Vernon) upstream to Gilligan Creek:
(i) Open June 1 through January 31.
(ii) ((August 14)) July 1 through July 15 and September 1 through October ((15)) 31: Night closure.
(iii) June 1 through August ((13)) 31:
(A) Selective gear rules except for sturgeon.
(B) It is unlawful to use hooks other than those measuring $1 / 2$
inch or less from point to shank, except anglers fishing for sturgeon may use single-point barbless hooks of any size.
(iv) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Dolly Varden/Bull Trout: Minimum length of 20 inches as part of the trout limit.
(vi) Salmon:
(A) ( (Open August 14 through August 31: Daily limit 4 pink salmon only. Release all other salmon.
(B)) ) Open July 1 through July 15:
(I) Daily limit 2 sockeye only.
(II) Release all other salmon.
(B) Open September 1 through October ((15)) 31:
(I) Daily limit 2 salmon((, plus 2 additional pink salmon)).
(II) Release Chinook and chum.
(c) From Gilligan Creek to The Dalles Bridge at Concrete:
(i) Open June 1 through January 31.
(ii) June 1 through August 31:
(A) Selective gear rules.
(B) It is unlawful to use hooks other than those measuring $1 / 2$
inch or less from point to shank.
(iii) June 1 through October ((15)) 31: Night closure.
(iv) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(v) Dolly Varden/Bull Trout: Minimum length of 20 inches as part of the trout limit.
(vi) Salmon:
(A) Open July 1 through July 15:
(I) Daily limit 2 sockeye only.
(II) Release all other salmon.
(B) Open September 1 through October ((15)) 31:
(( (A)) ) (I) Daily limit 2 salmon ( (, plus 2 additional pink salmøn)).
(((B))) (II) Release Chinook and chum.
(d) From The Dalles Bridge at Concrete to the Highway 530 Bridge at Rockport:
(i) Open June 1 through January 31.
(ii) June 1 through August 31: Closed waters between a line projected across the thread of the river 200 feet above the east bank of the Baker River to a line projected across the thread of the river 200 feet below the west bank of the Baker River.
(iii) June 1 through August 31:
(A) Selective gear rules.
(B) It is unlawful to use hooks other than those measuring 1/2
inch or less from point to shank.
(iv) June 1 through October ((15)) 31: Night closure.
(v) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(vi) Dolly Varden/Bull Trout: Minimum length of 20 inches as part of the trout limit.
(vii) Salmon: Open September 1 through October ((15)) 31: (((A))) Daily limit 2 salmon ( (, plus 2 additional pink salmon.
(B)) . Release Chinook and chum.
(e) From the Highway 530 Bridge at Rockport to the Cascade River Road (Marblemount Bridge):
(i) Open June 1 through January 31:
(A) June 1 through July 15; anti-snagging rules.
(B) June 1 through July 15 and September 1 through October 15; night closure.
(C) July 16 through August 31: Selective gear rules and it is unlawful to use hooks other than those measuring 1/2 inch or less from point to shank.
(ii) Salmon:
(A) Open July 1 through July 15: Daily limit 4 hatchery Chinook only; up to 2 may be adults.
(B) Open September 1 through October ((15)) 31: (((I))) Daily
limit $2(($, plus 2 additional pink salmon.
(II)) © Release Chinook and chum.
(f) From Cascade River Road to the Gorge Powerhouse:
(i) Open June 1 through January 31.
(ii) Selective gear rules.
(iii) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(iv) Release all fish except hatchery steelhead.
(240) Skokomish River (Mason County):
(a) From the mouth to the city of Tacoma PUD overhead distribution lines: Closed waters.
(b) From the city of Tacoma PUD overhead distribution lines to the Bonneville Transmission lines west of Highway 101: Closed waters.
(c) From the Bonneville Transmission lines west of Highway 101 to the forks:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release steelhead, cutthroat trout, and wild rainbow trout.
(241) Skokomish River, North Fork (Mason County):
(a) From the mouth to the lower dam:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release steelhead, cutthroat trout, and wild rainbow trout.
(b) Above Lake Cushman, from the mouth to Olympic National Park boundary:
(i) Open the Saturday before Memorial Day through August 31.
(ii) Selective gear rules.
(iii) Release all fish.
(242) Skokomish River, South Fork (Mason County):
(a) From the mouth to the mouth of LeBar Creek:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release steelhead, cutthroat trout, and wild rainbow trout.
(b) From LeBar Creek to Rule Creek: Closed waters.
(243) Skookum Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(244) Skykomish River (Snohomish County):
(a) Game fish: Statewide minimum length/daily limit, except:
(i) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(b) From the mouth to the mouth of Wallace River:
(i) Open the Saturday before Memorial Day through January 31.
(ii) From August 1 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) From November 1 through January 31 : It is unlawful to fish from any floating device from the boat ramp below Lewis Street Bridge at Monroe downstream 2,500 feet.
(iv) Salmon: ( ((A))) Open the Saturday before Memorial Day
through July 31: Daily limit 4 hatchery Chinook; up to 2 may be adults. Release all other salmon.
( ( $(\mathrm{B})$ Open August 30 through September 19: Daily limit 4 pink and hatchery coho only.) )
(c) From the mouth of the Wallace River to the forks:
(i) Open the Saturday before Memorial Day through February 15.
(ii) August 1 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) From the Saturday before Memorial Day through February 15: It is unlawful to fish from any floating device in the area 1,500 feet upstream and 1,000 feet downstream of the outlet at Reiter Ponds.
(( (iv) Salmon: Open August 30 through September 19: Daily limit 4, pink and hatchery coho only.) )
(245) Skykomish River, North Fork (Snohomish County):
(a) From the mouth to 1,000 feet downstream of Bear Creek Falls:
(i) Open the Saturday before Memorial Day through January 31.
(ii) Selective gear rules.
(iii) Release all fish except hatchery steelhead.
(b) From 1000 feet downstream of Bear Creek Falls to Deer Falls and all tributaries: Closed waters.
(246) Skykomish River, South Fork (King/Snohomish counties):
(a) From the mouth to 600 feet downstream from the Sunset Falls fishway:
(i) Open the Saturday before Memorial Day through January 31.
(ii) From August 1 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From 600 feet downstream of Sunset Falls fishway to Sunset Falls: Closed waters.
(c) From Sunset Falls to the source:
(i) Open the Saturday before Memorial Day through the last day in February.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) All tributaries and their tributaries above Sunset Falls:
(i) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) Selective gear rules.
(247) Snohomish River (Snohomish County):
(a) From the Burlington-Northern Railroad bridges to Highway 9 Bridge, including all channels, sloughs, and interconnected waterways, but excluding all tributaries:
(i) Sturgeon catch and release is permissible year-round.
(ii) August 1 through November 30:
(A) Anti-snagging rules; except anglers fishing for sturgeon may use single-point barbless hooks of any size.
(B) Night closure.
(iii) Open the Saturday before Memorial Day through January 31.
(iv) Game fish: Statewide minimum length/daily limit, except:
(A) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
( ( (v) Salmon: Open August 23 through September 19: Daily limit 4, pink and hatchery coho only.))
(b) From the Highway 9 Bridge to the confluence of the Skykomish and Snoqualmie rivers and all channels:
(i) Open the Saturday before Memorial Day through January 31.
(ii) August 1 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(()iv) Salmon: Open August 23 through September 19: Daily limit 4, pink and hatchery coho only.))
(248) Snoqualmie River (King County):
(a) From the mouth to Snoqualmie Falls:
(i) From the Saturday before Memorial Day through November 30: Selective gear rules.
(ii) From September 1 through November 30: Night closure.
(iii) From the mouth to the boat ramp at the Plum access: Open the Saturday before Memorial Day through January 31.
(iv) From the boat ramp at the Plum access to the falls: Open the Saturday before Memorial Day through February 15.
(v) From November 1 through February 15: It is unlawful to fish from any floating device in the waters from the boat ramp at the Plum access to the mouth of Tokul Creek (about $1 / 4 \mathrm{mile}$ ).
(vi) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From Snoqualmie Falls upstream, including the North Fork, South Fork, all tributaries except Middle Fork and tributaries to the Middle Fork:
(i) Selective gear rules.
(ii) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(iii) Open the Saturday before Memorial Day through October 31.
(iv) Open November 1 through the Friday before Memorial Day: Release all fish.
(c) Middle Fork from the mouth to the source, including all tributaries:
(i) Open year-round.
(ii) Selective gear rules.
(iii) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(iv) Release all fish.
(249) South Prairie Creek (Pierce County): From the mouth to the city of Buckley diversion dam: Closed waters.
(250) Spada Lake (Reservoir) (Snohomish County):
(a) Open the fourth Saturday in April through October 31.
(b) Selective gear rules.
(c) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(d) Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 5; maximum length 12 inches.
(251) Spada Lake (Reservoir) tributaries (Snohomish County): Closed waters.
(252) Spanaway Lake and Spanaway Lake outlet downstream to the dam (approximately 800 feet) (Pierce County): Open year-round.
(253) Sprague Pond (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(254) Squalicum Lake (Whatcom County):
(a) Fly fishing only.
(b) All motors prohibited.
(c) Game fish: Statewide minimum length/daily limit, except:

Trout: Daily limit 2; minimum length 14 inches.
(255) Squire Creek (Snohomish County) (N.F. Stillaguamish River tributary):
(a) Open September 16 through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(256) Steel Lake (King County) : Open the fourth Saturday in April through October 31 .
(257) Stetattle Creek (Whatcom County) : From the mouth to Bucket Creek: Closed waters.
(258) Stevens, Lake (Snohomish County):
(a) Chumming is permissible.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(ii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iii) Channel catfish: Daily limit 10; no size restriction.
(iv) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(259) Steilacoom Lake (Pierce County) : Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(260) Steves Lake (Stevens Lake) (Mason County) : Open the fourth Saturday in April through October 31.
(261) Stickney Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(262) Stillaguamish River (Snohomish County):
(a) From the mouth to Marine Drive, including all sloughs:
(i) Open year-round.
(ii) Night closure.
(iii) From August 1 through November 30: Anti-snagging rules, except anglers fishing for sturgeon may use single-point barbless hooks of any size.
(iv) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From Marine Drive to the forks:
(i) From the barrier dam (downstream of I-5) downstream 200 feet: Closed waters.
(ii) Open September ((16)) 1 through November ((15)) 30:
(A) Selective gear rules.
(B) Night closure.
(C) Release all fish except hatchery steelhead.
(iii) Open from December 1 through January 31. Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iv) Salmon: ((Elosed)) Open September 1 through November 15: Daily limit 2 coho only. Release all other salmon.
(263) Stillaguamish River, North Fork (Snohomish County):
(a) From the North Fork mouth to the mouth of French Creek:
(i) It is unlawful to fish from any floating device upstream of the Highway 530 Bridge at mile post 28.8 (Cicero Bridge).
(ii) It is unlawful to fish from any floating device equipped with a motor downstream from the Highway 530 Bridge.
(iii) Open the September 16 through November 30:
(A) Fly fishing only.
(B) From September 16 through November 30; night closure.
(C) Release all fish except hatchery steelhead.
(iv) Open from December 1 through January 31. Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From the mouth of French Creek to Swede Heaven Bridge:
(i) From September 16 through November 30:
(A) Night closure.
(B) Anti-snagging rules.
(ii) Open September 16 through November 30:
(A) Fly fishing only.
(B) Release all fish except hatchery steelhead.
(iii) Open from December 1 through February 15. Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(c) From Swede Heaven Bridge to North Forks Falls approximately one mile upstream of Cascade Creek:
(i) Open September 16 through November 30.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(264) Stillaguamish River, South Fork (Snohomish County):
(a) From the mouth to 400 feet downstream of the outlet to Granite Falls fishway:
(i) Open September 16 through January 31.
(ii) From September 16 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From 400 feet below the Granite Falls Fishway to the Mountain Loop Highway Bridge above Granite Falls: Closed waters.
(c) From the Mountain Loop Highway Bridge above Granite Falls upstream to the source:
(i) Open Saturday before Memorial Day through November 30.
(ii) From August 1 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(265) Stitch Lake (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(266) Storm Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(267) Suiattle River (Skagit/Snohomish County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Dolly Varden/Bull trout: Minimum length of 20 inches as part of trout limit.
(268) Sultan River (Snohomish County) : From the mouth to a point 400 feet downstream from the diversion dam at river mile 9.7:
(a) Open the Saturday before Memorial Day through January 31.
(b) Game fish: Statewide minimum length/daily limit, except:
(i) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(ii) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(269) Sultan River; North Fork (Snohomish County): Closed waters.
(270) Sultan River; South Fork (Snohomish County): Closed waters.
(271) Summit Lake (Thurston County): Open the fourth Saturday in April through October 31.
(272) Sunset Lake (Whatcom County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(273) Susan Lake (Thurston County):
(a) Selective gear rules.
(b) Release all fish.
(274) Swan's Mill Pond (Stossel Creek) (King County) : Open the Saturday before Memorial Day through October 31.
(275) Symington Lake (Kitsap County):
(a) Open the fourth Saturday in April through October 31.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except:
(i) Release cutthroat trout and wild rainbow trout.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(276) Tahuya Lake (Kitsap County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(277) Tahuya River (Mason County):
(a) From the mouth to the Belfair Tahuya Road Bridge:
(i) Open the Saturday before Memorial Day through August 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(b) From the Belfair Tahuya Road Bridge upstream:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(278) Tanwax Lake (Pierce County): Game fish: Statewide minimum length/daily limit, except: Crappie: Daily limit 10; minimum length 9 inches.
(279) Tapps Lake (Reservoir) and Tapps Lake (Reservoir) intake canal (Pierce County), to within 400 feet of the screen at Dingle Basin: Open year-round.
(280) Tarboo Creek (Jefferson County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(281) Tarboo Lake (Jefferson County):
(a) Open the fourth Saturday in April through October 31.
(b) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(282) Teal Lake (Jefferson County):
(a) It is unlawful to fish from a floating device equipped with an internal combustion motor.
(b) Selective gear rules.
(c) Game fish: Statewide minimum length/daily limit, except: Trout: Daily limit 1; minimum length 18 inches.
(283) Tenas Lake (Mason County): Open the fourth Saturday in April through October 31.
(284) Tennant Lake (Whatcom County): It is unlawful to fish from any floating device from the first Friday in October through January 27.
(285) Terrell, Lake (Whatcom County): It is unlawful to fish from any floating device from the first Saturday after Labor Day through the following Friday and from October 1 through January 31, except fishing from a floating dock is permissible.
(286) Thornton Creek (Whatcom County) : Game fish: Statewide minimum length/daily limit, except: Cutthroat trout: No daily limit; no minimum length.
(287) Thornton Lake, lower (Whatcom County): Game fish: Statewide minimum length/daily limit, except: Cutthroat trout: No daily limit; no minimum length.
(288) Tiger Lake (Kitsap/Mason counties) : Open the fourth Saturday in April through October 31.
(289) Toad Lake (Whatcom County): Open the fourth Saturday in April through October 31.
(290) Tokul Creek (King County) (Snoqualmie River tributary):
(a) From the mouth to the Fish Hatchery Road Bridge:
(i) Open December 1 through February 15, except closed waters
from 5:00 p.m. to 7:00 a.m.
(ii) Anti-snagging rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From Fish Hatchery Road Bridge to the posted boundary marker located downstream of the diversion dam:
(i) Open January 15 through February 15, except closed waters from 5:00 p.m. to 7:00 a.m.
(ii) Anti-snagging rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(c) From the posted boundary marker downstream of the diversion dam to Tokul Road S.E.: Closed waters.
(291) Tolt River (King County):
(a) From the mouth to the USGS trolley cable near the confluence of the North and South Forks:
(i) Open the Saturday before Memorial Day through January 31.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(b) From the USGS trolley cable just below the confluence of the North Fork and South Forks to the forks: Closed waters.
(292) Tolt River, North Fork (King County):
(a) From the mouth upstream to the falls approximately $1 / 3$ miles above the Northeast North Fork Road Bridge (Pipeline Bridge): Closed waters.
(b) From the falls approximately $1 / 3$ mile above the Northeast North Fork Road Bridge (Pipeline Bridge) upstream, including all tributaries:
(i) Selective gear rules.
(ii) Release all fish.
(293) Tolt River, South Fork (King County) : From the mouth upstream to the dam: Closed waters.
(294) U Lake (Mason County): Open the fourth Saturday in April through October 31.
(295) Uncle John Creek (Mason County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(296) Union River (Mason County):
(a) From the mouth to the lower bridge on Old Belfair Highway:
(i) Open the Saturday before Memorial Day through August 15.
(ii) Selective gear rules.
(iii) Game fish: Statewide minimum length/daily limit, except:

Release cutthroat trout and wild rainbow trout.
(b) From the lower bridge on Old Belfair Highway upstream:
(i) Selective gear rules.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(297) Vogler Lake (Skagit County):
(a) Fly fishing only.
(b) Release all fish.
(298) Voight Creek (Pierce County) : From the mouth to the Highway 162 Bridge: Closed waters.
(299) Wagners Lake (Snohomish County): Open the fourth Saturday in April through October 31.
(300) Walker Lake (King County) : Open the fourth Saturday in

April through October 31.
(301) Wallace River (Snohomish County):
(a) From the mouth to 363rd Ave. S.E./Reece Rd:
(i) Open from the Saturday before Memorial Day through February
15.
(ii) From the Saturday before Memorial Day through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) From November 1 through February 15: It is unlawful to fish from any floating device.
(iv) Game fish: Statewide minimum length/daily limit, except:
(A) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(v) Salmon:
(A) Open October 1 through November 30.
(B) Daily limit 2 hatchery coho only.
(b) From 363rd Avenue S.E./Reece Road to 200 feet downstream of the water intake of the salmon hatchery:
(i) Open September 16 through February 15.
(ii) September 16 through November 30:
(A) Anti-snagging rules.
(B) Night closure.
(iii) November 1 through February 15: It is unlawful to fish from any floating device.
(iv) Game fish: Statewide minimum length/daily limit, except:
(A) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(v) Salmon:
(A) Open October 1 through November 30.
(B) Daily limit 2 hatchery coho only.
(c) From 200 feet downstream of the water intake to 200 feet upstream of the water intake: Closed waters when the hatchery weir is in operation.
(d) From 200 feet upstream of the water intake of the salmon hatchery to Wallace Falls:
(i) Open November 1 through January 31.
(ii) It is unlawful to fish from any floating device.
(iii) Game fish: Statewide minimum length/daily limit, except:
(A) Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(B) Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(302) Walsh Lake (King County) : Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(303) Wapato Lake (Pierce County) : Open to juvenile anglers, senior anglers and anglers with a disability who possess a designated harvester companion card.
(304) Washington Lake, including that portion of the Sammamish River from the 68 th Avenue N.E. Bridge downstream and Mercer slough (King County):
(a) Open year-round.
(b) Chumming is permissible.
(c) From July 1 through November 30: Game fish: Statewide minimum length/daily limit, except:
(i) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(ii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iii) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(iv) Channel catfish: Daily limit 10; no size restriction.
(v) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(d) December 1 through the last day in February:
(i) Game fish: Statewide minimum length/daily limit, except: Release steelhead and rainbow trout over 20 inches in length.
(ii) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(iii) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(iv) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(v) Channel catfish: Daily limit 10; no size restriction.
(vi) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(e) March 1 through June 30: Game fish: Statewide minimum length/ daily limit, except:
(i) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(ii) Trout: Minimum length 12 inches.
(iii) Release steelhead and rainbow trout over 20 inches in length.
(iv) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(v) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(vi) Channel catfish: Daily limit 10; no size restriction.
(vii) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(f) Salmon: ((Elosed)) Open September 16 through October 31: North of Highway 520 bridge and east of Montlake Bridge. Daily limit 4 coho only. Release all other salmon.
(305) Washington Lake, Ship Canal (King County) (waters east of a north-south line 400 feet west of the fish ladder at the Chittenden Locks and west of a north-south line at the eastern ends of the concrete abutments east of the Montlake Bridge):
(a) East of the Fremont Bridge: Chumming is permissible.
(b) From the west boundary to a north-south line 400 feet east of the eastern end of the northern wing wall of Chittenden Locks: Closed waters.
(c) From 400 feet east of the eastern end of the northern wing wall of Chittenden Locks to the east boundary:
(i) From July 1 through November 30: Game fish: Statewide minimum length/daily limit, except:
(A) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(B) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(C) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(D) Channel catfish: Daily limit 10; no size restriction.
(E) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(ii) From December 1 through the last day in February: Game fish: Statewide minimum length/daily limit, except:
(A) Release steelhead and rainbow trout over 20 inches in length.
(B) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(C) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(D) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(E) Channel catfish: Daily limit 10; no size restriction.
(F) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(iii) March 1 through June 30: Game fish: Statewide minimum length/daily limit, except:
(A) Kokanee: Daily limit 5; minimum length 8 inches; maximum length 18 inches.
(B) Trout: Minimum length 12 inches.
(C) Release steelhead and rainbow trout over 20 inches in length.
(D) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(E) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(F) Channel catfish: Daily limit 10; no size restriction.
(G) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(306) Whatcom Creek (Whatcom County):
(a) From the mouth to the markers below the footbridge below Dupont Street in Bellingham:
(i) Open the Saturday before Memorial Day through July 31.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(iii) Anglers fishing lawfully within 50 yards of the Bellingham Technical College Hatchery Collection Tube and on the hatchery side of the creek that hook and land chum salmon may remove those chum salmon from the water and immediately place them unharmed into the Hatchery Collection Tube.
(b) From the markers below the footbridge below Dupont Street in Bellingham to the footbridge below Dupont Street: Closed waters.
(c) From the footbridge below Dupont Street in Bellingham to the stone bridge at Whatcom Falls Park:
(i) August 1 through October 31:
(A) Anti-snagging rules.
(B) Night closure.
(ii) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(d) From the stone bridge at Whatcom Falls Park upstream to Lake Whatcom: Open the fourth Saturday in April through October 31 for juvenile anglers only.
(e) Game fish: Statewide minimum length/daily limit, except:

Trout: No minimum length.
(307) Whatcom, Lake (Whatcom County) :
(a) The waters between the Electric Avenue Bridge and the outlet dam: Closed waters.
(b) Open the fourth Saturday in April through October 31.
(c) Game fish: Statewide minimum length/daily limit, except: Release all cutthroat trout.
(308) Whatcom, Lake, tributaries (Whatcom County) : Closed waters. (309) White (Stuck) River (Pierce County):
(a) From October 1 through October 31:
(i) Night closure.
(ii) Selective gear rules.
(b) Release all fish.
(c) Cascade Water Alliance canal, including the screen bypass channel above the screen at Dingle Basin: Closed waters.
(d) Whitefish: Open December 1 through the last day in February: Whitefish gear rules.
(310) White Chuck River (Snohomish County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Dolly Varden/Bull trout: Minimum length of 20 inches as part of the trout limit.
(311) Wildcat Creek (Kitsap County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(312) Wildcat Lake (Kitsap County): Open the fourth Saturday in April through October 31.
(313) Wilderness Lake (King County):
(a) Open the fourth Saturday in April through October 31.
(b) Landlocked salmon rules.
(314) Wilkeson Creek (Pierce County) (South Prairie Creek tributary): From the mouth to the confluence with Gale Creek: Closed waters.
(315) Woodard Creek (Thurston County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Cutthroat trout and wild rainbow trout: Minimum length 14 inches.
(316) Wood Lake (Mason County): Open the fourth Saturday in April through October 31.
(317) Woodland Creek (Thurston County):
(a) Selective gear rules.
(b) Game fish: Statewide minimum length/daily limit, except: Release cutthroat trout and wild rainbow trout.
(318) Woodland Farm Reservoir (Snohomish County): Game fish: Statewide minimum length/daily limit, except:
(a) Largemouth bass: Daily limit 10; no minimum length; only largemouth bass under 12 inches may be retained, except 1 over 17 inches may be retained.
(b) Smallmouth bass: Daily limit 15; no minimum length; only 1 smallmouth bass over 14 inches may be retained.
(c) Channel catfish: Daily limit 10; no size restriction.
(d) Walleye: Daily limit 16; only 1 walleye over 22 inches may be retained.
(319) Wooten Lake (Mason County): Open the fourth Saturday in April through October 31.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 22-05-066 (Order 22-06), § 220-312-040, filed 2/11/22, effective 7/1/22. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), $£$ 220-312-040, filed 7/2/21, effective 8/2/21; WSR 20-14-052 (Order 20-97), § 220-312-040, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 20-03-130 (Order 20-09), S 220-312-040, filed 1/17/20, effective 2/17/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), $S$ 220-312-040, filed 7/12/19, effective 8/12/19; WSR 18-15-065 (Order 18-163), § 220-312-040, filed 7/16/18, effective 8/16/18. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 18-06-045 (Order 18-30), § 220-312-040, filed 3/1/18, effective 4/1/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-16-109 (Order 17-147), § 220-312-040, filed 7/28/17, effective 8/28/17; WSR 17-05-112 (Order 17-04), amended and recodified as § 220-312-040, filed 2/15/17, effective 3/18/17; WSR 16-17-008 (Order 16-201), § 220-310-190, filed 8/4/16, effective 9/4/16; WSR 16-14-038 (Order 16-158), § 220-310-190, filed 6/28/16, effective 7/29/16. Statutory Authority: RCW 77.04.012 and 77.12.047. WSR 16-06-073 (Order 16-30), § 220-310-190, filed 2/26/16, effective 7/1/16. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 15-13-081 (Order 15-177), § 220-310-190, filed 6/12/15, effective 7/13/15. Statutory Authority: RCW 77.04.012, $77.04 .020,77.04 .055,77.12 .045$, and 77.12.047. WSR 14-16-027 (Order 14-185), § 220-310-190, filed 7/25/14, effective 8/25/14. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 14-04-120 (Order 14-26), § 220-310-190, filed 2/4/14, effective 3/7/14.]

OTS-3774.2

AMENDATORY SECTION (Amending WSR 22-05-066, filed 2/11/22, effective 7/1/22)

WAC 220-312-060 Freshwater exceptions to statewide rules-Columbia. The following exceptions to statewide rules apply to the Columbia River, including impoundments and all connecting sloughs, except Wells Ponds:

## (1) General Columbia River rules:

(a) In the concurrent waters of the Columbia River between Washington and Oregon, the license of either state is valid when fishing from a vessel.
(i) Anglers must comply with the fishing regulations of the state in which they are fishing.
(ii) This subsection does not allow an angler licensed in Oregon to fish on the Washington shore, or in the sloughs or tributaries in Washington except as otherwise provided by department rule.
(iii) Anglers fishing the Columbia River are restricted to one limit, as defined by the laws of the state in which they are fishing, even if they are licensed by both states.
(b) It is unlawful to possess in the field salmon or steelhead mutilated so that size, species, or fin clip cannot be determined until the angler has reached their automobile or principal means of land transportation and completed his or her daily angling.
(c) Salmon and trout handling rules provided in WAC 220-310-100 apply to the Columbia River, except from February 15 through June 15 in the mainstem Columbia from the Rocky Point/Tongue Point line upstream to the Washington-Oregon border where WAC 220-310-100 applies only to anglers fishing from vessels less than 30 feet in length (as substantiated by Coast Guard documentation or Marine Board registration).
(d) From Buoy 10 to the Washington/Oregon border:
(i) From August 1 through December 31, each angler aboard a vessel may deploy salmon/steelhead angling gear until the salmon/steelhead limit for all anglers aboard has been achieved.
(ii) Barbless hooks are required for salmon and steelhead.
(e) Open year-round unless otherwise provided.
(f) Year-round night closure for salmon and steelhead fishing from Buoy 10 to Chief Joseph Dam.
(2) Rules by river section:
(a) Fishing from the north jetty is permissible when Marine Area 1 or Buoy 10 areas are open for salmon, and the limit and minimum size restrictions follow the most liberal regulations if both areas are open. Only single point barbless hooks may be used for salmon and steelhead.
(b) From a true north-south line through Buoy 10 to the Megler Astoria Bridge:
(i) The Youngs Bay Control Zone is defined as those waters southerly of a line originating on the Oregon shore at the east end of the seawall at the Warrenton Fiber log yard (approximately river mile 10.1) northeasterly through green navigation buoys 29, 31, 33, and 35A to the center of the Astoria-Megler Bridge abutment adjacent to, and north of the ship channel, and continuing southerly in line with the center of the Megler Bridge span to the Oregon shore.
(ii) The Youngs Bay Control Zone is closed to recreational angling from August 1 through September 15.
(iii) Game fish: Statewide minimum length/daily limit, except: Release trout.
(iv) Salmon and steelhead:
(A) April 1 through July 31: Closed.
(B) Open August 1 through August ((10)) 24:
(I) Daily limit 2; of which only 1 may be a Chinook.
(II) Release all salmon and steelhead except hatchery Chinook and hatchery coho.
(III) Chinook minimum length 24 inches.
(IV) Coho minimum length 16 inches.
(C) Open August ((11)) 25 through September ( ( 6 )) 7:
(I) Daily limit 2; of which 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(III) Chinook minimum length 24 inches.
(IV) Coho minimum length 16 inches.
(D) Open September ((7)) 8 through September 30:
(I) Daily limit 3.
(II) Release all salmon and steelhead except hatchery coho.
(III) Coho minimum length 16 inches.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 3 adult salmon ((may be retained)), of which 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(III) ((Cohө)) Salmon minimum length 12 inches.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 3 adults ((salmon or 1 adult salmon)) $\perp$ of which up to 1 may be a Chinook and up to 2 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(III) ((Coh○)) Salmon minimum length 12 inches.
(G) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon, or 2 hatchery steelhead, or 1 of each, may be retained.
(II) Release all salmon except hatchery Chinook.
(v) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(vi) Forage fish and bottomfish: Marine Area 1 general rules apply; eulachon closed.
(c) From the Megler Astoria Bridge to a projected line from Rocky Point on the Washington bank through Red Buoy 44 to the red navigation marker 2 at Tongue Point on the Oregon bank:
(i) Game fish: Statewide minimum length/daily limit, except: Release trout.
(ii) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open from June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(III) Salmon minimum length 12 inches.
(C) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 may be adults, of which up to 1 may be
a sockeye and up to 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 may be adults, of which up to 1 may be a sockeye and up to 1 hatchery steelhead may be retained.
(II) Relcase all salmon except sockeye and hatchery jack Chinook.
(玉))) Open August 1 through August ((10)) 24:
(I) Daily limit 2; of which 1 may be a Chinook.
(II) Release all salmon and steelhead except hatchery coho and
hatchery Chinook.
(III) Chinook minimum length 24 inches.
(IV) Coho minimum length 16 inches.
(( (F))) (D) Open August ((11)) 25 through September ((6)) 7:
(I) Daily limit 2; of which 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(III) Chinook minimum length 24 inches.
(IV) Coho minimum length 16 inches.
((G))) (E) Open September ((7)) 8 through September 30:
(I) Daily limit 3.
(II) Release all salmon and steelhead except hatchery coho.
(III) Coho minimum length 16 inches.
((H)) (F) Open October 1 through October 31:
(I) Daily limit 6; up to 3 adult salmon ((may be retained)) of which 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(III) ( (Coh $\theta)$ Salmon minimum length 12 inches.
((I)) (G) Open November 1 through December 31:
(I) Daily limit 6; up to 3 ( (adult salmon or 1 adult salmon and)) adults, of which up to 1 may be a Chinook and up to 2 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(III) ( (Cohヵ) ) Salmon minimum length 12 inches.
(((J))) (H) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon, or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except hatchery Chinook.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(iv) Forage fish and bottomfish: Marine Area 1 general rules apply; eulachon closed.
(d) From a line at Rocky Point on the Washington bank through Red Buoy 44 to red navigation marker 2 at Tongue Point on the Oregon bank upstream to a line at the west end of Puget Island projected from green navigation marker 39 on the Washington bank to green navigation marker 41 , then to red navigation marker 42 , and terminating at red navigation marker 44A on the Oregon bank:
(i) The Blind Slough Select Area is defined as waters of Blind Slough and Gnat Creek from a north-south line represented by regulatory markers at the mouth of Blind Slough upstream to a regulatory marker in Gnat Creek located approximately 0.5 miles southeasterly (upstream) of the Barendse Road Bridge.
(ii) The Knappa Slough Select Area is defined as waters of Knappa Slough, Calendar Slough, and Big Creek Slough bounded to the north (upstream) by a line projecting from a regulatory marker on the eastern shore of Karlson Island to the northernmost regulatory marker at the mouth of Blind Slough and bounded to the west (downstream) by a line projecting southerly from a regulatory marker on the southwestern tip of Karlson Island through regulatory markers on the western tips of Minaker Island to a marker on the Oregon shore.
(A) Game fish: Statewide minimum length/daily limit, except: Release trout.
(B) Salmon: Daily limit is 2 adult salmon or 2 steelhead or 1 of each and 5 jacks. No more than 2 daily jack limits in possession. 12" minimum size. Release all salmon other than hatchery Chinook, hatchery coho, and hatchery steelhead. Use of barbed hooks allowed.
(C) Shad: Open year-round.
(iii) Game fish: Statewide minimum size/daily limit, except:
(A) Trout: Open May 16 through March 31:
(B) Daily limit 2 hatchery cutthroat; minimum length 12 inches.
(C) Release all trout except hatchery cutthroat.
(D) Barbless hooks required for cutthroat trout.
(iv) Salmon and steelhead:
(A) April 1 through May 15: Closed.
(B) Open May 16 through June 15:
(I) Daily limit 6; up to 2 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open June 16 through ((June 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which up to 1 may be a sockeye and up to 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(玉) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and

1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery jack Chinook.
(F))) Open August 1 through ((Scptember 9)) August 24:
(I) Daily limit 6; up to 2 may be adults of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except hatchery Chinook and hatchery coho.
(E) Open August 25 through September 7:
(I) Daily limit 6; up to 2 may be adult salmon of which only 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(III) Salmon minimum length 12 inches.
(F) Open September 8 through September 30:
(I) Daily limit 6; up to 3 may be adults.
(II) Release all salmon and steelhead except hatchery coho.
(III) Coho minimum length 12 inches.
(G) Open ((Scptember 10)) October 1 through October 31:
(I) Daily limit 6; up to ((Z adult salmon may be retained)) 3 may be adult salmon, of which 1 may be a Chinook.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(H) Open November 1 through December 31:
(I) Daily limit 6; up to ( ( $Z$ adult salmon or 2 hatchery steclhead or 1 of each may be retained)) 3 may be adults, of which up to 1 may be a Chinook and up to 2 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(I) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except hatchery Chinook.
(v) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(e) From a line at the west end of Puget Island projected from green navigation marker 39 on the Washington bank to green navigation marker 41, then to red navigation marker 42, and terminating at red navigation marker 44A on the Oregon bank, upstream to the Longview Bridge:
(i) Game fish: Statewide minimum size/daily limit, except:
(A) Trout: Open May 16 through March 31.
(B) Release all trout except hatchery cutthroat.
(C) Daily limit 2 hatchery cutthroat; minimum length 12 inches.
(D) Barbless hooks are required for cutthroat trout.
(ii) Salmon and steelhead:
(A) April 1 through May 15: Closed.
(B) Open May 16 through June 15:
(I) Daily limit 6; up to 2 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) ( Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sock $=$ eye and 1 hatchery steelhead may be retained.
(II) Relcase all salmon except sockeye and hatchery Chinook.
(玉) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and

1 hatchery steclhead may be retained.
(II) Release all salmon except sockeyc and hatchery jack Chinook. (F)) Open August 1 through September (( $\mathcal{( I ) )}$ ) :
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
((G) Open)) (E) September ( (10)) 8 through September 30: Closed. (F) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
((H)) (G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
((II)) (H) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except hatchery Chinook.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(f) From the Longview Bridge to a line projected from the Warrior Rock lighthouse through Red Buoy 4 to the marker atop the piling dolphin located at the downstream end of Bachelor Island on the Washington shore (Warrior Rock line):
(i) Game fish: Statewide minimum size/daily limit, except:
(A) Trout: Open May 16 through March 31.
(B) Release all trout except hatchery cutthroat.
(C) Daily limit 2 hatchery cutthroat; minimum length 12 inches.
(D) Barbless hooks are required for cutthroat trout.
(ii) Salmon and steelhead:
(A) April 1 through May 15: Closed.
(B) Open May 16 through June 15:
(I) Daily limit 6; up to 2 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open June 16 through ((June 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) ( Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sock= eye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(F) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Relcasc all salmon except sockeyc and hatchery jack Chinook.
(F)) ) Open August 1 through September ((9)) 7:
(I) Daily limit 6 ; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
( ( (G)) ) (E) September 8 through September 30: Closed.
(F) Open ((September 10)) October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(( $(\mathrm{H}))$ ) (G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chi-
nook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
((II)) (H) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except hatchery Chinook.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(g) From a line projected from the Warrior Rock lighthouse through Red Buoy 4 to the marker atop the piling dolphin located at the downstream end of Bachelor Island on the Washington shore (Warrior Rock line) to the $I-5$ Bridge:
(i) Game fish: Statewide minimum size/daily limit, except:
(A) Trout: Open May 16 through March 31.
(B) Release all trout except hatchery cutthroat.
(C) Daily limit 2 hatchery cutthroat; minimum length 12 inches.
(D) Barbless hooks are required for cutthroat trout.
(ii) Salmon and steelhead:
(A) April 1 through May 15: Closed.
(B) Open May 16 through June 15:
(I) Daily limit 6; up to 2 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sockeye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(ङ) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery jack Chinook. (F)) ) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(E) September 14 through September 30: Closed.
(F) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon, of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(H) Open January 1 through March 31:
(I) Daily limit 6; up to 2 adult salmon or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except hatchery Chinook.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(h) From the I-5 Bridge to a line crossing the Columbia from Navigation Marker 82 on the Oregon shore westerly to the boundary marker on the Washington shore upstream of Fir Point 9 miles downstream from Bonneville Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sock= eye and 1 hatchery steelhead may be retained.
(II) Relcase all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Relcasc all salmon except sockeye and hatchery jack Chinook.
(E)) ) Open August 1 through ((Qctober 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(G) January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(i) Camas Slough:
(i) It is permissible for an angler licensed in Oregon or Washington to fish from a floating device.
(ii) In the waters of the Columbia River downstream from the mouth of the Washougal River, north of Lady Island, and downstream of the Highway 14 Bridge at the upstream end of Lady Island.
(iii) ( (Erom August 1 through December 31: Each anglex aboard a vessel may deploy salmon/stcelhead angling gear until the salmon/ stcelhead limit for all anglers aboard has been achicved.
(iv) Open for salmon when the adjacent mainstem Columbia or Washougal rivers are open for salmon.
(v) The limit for salmon is the same as the most liberal regulation of either area, except anglexs may only retain hatchery Chinook and hatchery coho; release all other salmon.)) Additional angling rules for Camas Slough are the same as the special rules or effective emergency rule in the adjacent mainstem Columbia.
(j) From a line between the upstream end of Sand Island (near Rooster Rock) on the Columbia River, to the boundary marker on the Oregon shore, downstream to a line between the lower end of Sand Island and the boundary marker on the Oregon shore:
(i) January 1 through April 30: Closed waters.
(ii) Game fish:
(A) Open May 1 through December 31.
(B) Statewide minimum size/daily limit, except: Release all
trout.
(iii) Salmon and steelhead:
(A) May 1 through June 15: Closed.
(B) Open June 16 through ((June 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery jack Chinook.
(玉))) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chi-
nook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(G) January 1 through April 30: Closed waters.
(iv) Shad:
(A) May 1 through May 15: Closed.
(B) Open May 16 through December 31.
(k) From a line crossing the Columbia from Navigation Marker 82 on the Oregon shore westerly to the boundary marker on the Washington shore upstream of Fir Point 9 miles downstream from Bonneville Dam to Beacon Rock:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open June 16 through ((June 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sockeyc and 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchexy jack Chinook.
(玉)) ) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chi-
nook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(G) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(l) From Beacon Rock to a line from the Hamilton Island boat ramp to an Oregon boundary marker on the westernmost point of Robins Island to a marker on the Oregon mainland shore:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open June 16 through ((June 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( (Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sockeye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and

1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery jack chinook. (玉)) ) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) November 1 through December 31: Closed.
(G) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(iii) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(m) From a line from the Hamilton Island boat ramp to an Oregon boundary marker on the westernmost point of Robins Island to a marker on the Oregon mainland shore to a line projected from a boundary marker about 4,000 feet downstream from the fish ladder at the new Bonneville Dam Powerhouse south to the downstream end of Cascade Island and across to the Oregon angling boundary on Bradford Island (about 850 feet downstream from the fish ladder) :
(i) It is unlawful to fish from any floating device.
(ii) Closed to any method of angling except hand-casted gear from shore.
(iii) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(iv) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( (open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sockeye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchery jack chinook.
(E)) ) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(G) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(v) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(n) Inside the south navigation lock at Bonneville Dam, from a marker on the westernmost point of Robins Island to a marker on the Oregon mainland shore: Closed waters.
(o) From a boundary marker about 4,000 feet downstream from the fish ladder at the new Bonneville Dam Powerhouse south to the downstream end of Cascade Island and across to the Oregon angling boundary on Bradford Island (about 850 feet downstream from the fish ladder) to a point 600 feet below the fish ladder at Bonneville Dam powerhouse:
(i) It is unlawful to fish from any floating device.
(ii) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(iii) Salmon and steelhead:
(A) April 1 through June 15: Closed.
(B) Open June 16 through ((Junc 30)) July 31:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) ( Open July 1 through July 5:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a sock= eye and 1 hatchery steelhead may be retained.
(II) Release all salmon except sockeye and hatchery Chinook.
(D) Open July 6 through July 31:
(I) Daily limit 6; up to 2 adults of which 1 may be a sockeye and 1 hatchery steclhead may be retained.
(II) Release all salmon except sockeye and hatchexy jack Chinook.
(Е)) ) Open August 1 through ((October 31)) September 13:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(D) September 14 through September 30: Closed.
(E) Open October 1 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(F) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook
or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(G) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(iv) Shad:
(A) April 1 through May 15: Closed.
(B) Open May 16 through March 31.
(p) From a point 600 feet below the fish ladder at the new Bonneville Dam Powerhouse to the upstream line of Bonneville Dam: Closed waters.
(q) From Bonneville Dam to the Hood River Bridge:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open from March 16 through June 15: Bank fishing only.
(B) When open from March 16 through June 15: Only hand-cast lines may be used.
(C) When open from March 16 through June 15: It is unlawful to use a floating device to set lines for salmon and steelhead.
(D) When open from August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(E) April 1 through June 15: Closed.
(F) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(G) Open July 1 through July 31:
(I) Daily limit 6; ( (up to 2 adult salmon of which 1 may be a
sockeye and 1 hatchery steelhead)) 2 adult salmon or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeyc and)) hatchery Chinook.
(H) Open August 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(I) Open October 16 through October 31:
(I) Daily limit 6 ; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and hatchery coho.
(J) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and hatchery coho.
(K) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(r) Waters within $1 / 4$ mile of the USFWS Spring Creek Hatchery grounds between posted markers located $1 / 4$ mile on either side of the fish ladder entrance: Closed waters.
(s) From Hood River Bridge to the Tower Island power lines:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open from March 16 through June 15: Bank fishing only.
(B) When open from March 16 through June 15: Only hand-cast lines may be used.
(C) When open from March 16 through June 15: It is unlawful to use a floating device to set lines for salmon and steelhead.
(D) When open from August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(E) April 1 through June 15: Closed.
(F) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(G) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( $\theta$ f which 1 may be a sockeye and 1 hatchery steclhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(H) Open August 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(I) Open October 16 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(J) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and coho.
(K) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(t) From Tower Island power lines to a line from the east (upstream) dock at the Port of The Dalles boat ramp straight across to a boundary marker on the Washington shore (approximately 1.8 miles below The Dalles Dam):
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open from August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) April 1 through June 15: Closed.
(C) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( $f$ which 1 may be a sockeye and 1 hatchery stcelhead) ) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(E) Open August 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and coho.
(H) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(u) From a line from the east (upstream) dock at the Port of The Dalles boat ramp straight across to a boundary marker on the Washington shore to the upstream side of the Interstate (Highway 197) Bridge:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open from August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) April 1 through June 15: Closed.
(C) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( (of which 1 may be a sockeyc and 1 hatchery stcelhead) ) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ( (sockeye and)) hatchery Chinook.
(E) Open August 1 through October 15:
(I) Daily limit 6 ; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and coho.
(H) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(v) From the Washington shore from the upstream side of the Interstate (Highway 197) Bridge to the navigation lock wall:
(i) It is unlawful to fish from a floating device.
(ii) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(iii) Salmon and steelhead:
(A) When open from August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) April 1 through June 15: Closed.
(C) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(D) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( (of which 1 may be a sockeye and 1 hatchery steelhead) ) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(E) Open August 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through October 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) Open November 1 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook or 2 hatchery steelhead or 1 of each may be retained.
(II) Release all salmon except Chinook and coho.
(H) Open January 1 through March 31:
(I) Daily limit 2 hatchery steelhead.
(II) Release all salmon.
(w) From the Interstate (Highway 197) Bridge to the upstream line of The Dalles Dam except the Washington shore from the upstream side of the Interstate Bridge to the navigation lock wall: Closed waters.
(x) From The Dalles Dam to a line starting from a fishing boundary sign on the Washington north shore located approximately 1,300 feet upstream of The Dalles Dam and Lock boat ramp projected easterly across the Columbia River to a boundary sign on the Washington southern shore located approximately 200 feet above the fish ladder exit:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead: Closed.
(y) From a line starting from a fishing boundary sign on the Washington north shore located approximately 1,300 feet upstream of The Dalles Dam and Lock boat ramp projected easterly across the Columbia River to a boundary sign on the Washington southern shore located approximately 200 feet above the fish ladder exit to the west end of the grain silo at Rufus, Oregon 2.4 miles downstream of John Day Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Re-
lease all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( f f which 1 may be sockeye and 1 hatchery steelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
$((\mathrm{y}))$ ) (z) From the west end of the grain silo at Rufus, Oregon 2.4 miles downstream of John Day Dam to markers approximately 3,000 feet downstream of John Day Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( $\theta$ f which 1 may be sockeye and 1 hatchery steelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
(( $(\mathrm{z})$ )) (aa) From markers approximately 3,000 feet downstream of John Day Dam to 400 feet below the fishway entrance:
(i) It is unlawful to fish from a floating device.
(ii) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(iii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( 0 f which 1 may be sockeye and 1 hatchery steelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
( ( (az)) ) (bb) From 400 feet below the John Day Dam fishway entrance to the upstream line of John Day Dam: Closed waters.
(((bb))) (cc) From John Day Dam to a line from the grain elevators at Patterson Ferry Road on the Oregon shore, straight across to a marker on the Washington shore at the west end of the old concrete foundation:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( $\theta$ f which 1 may be a sockeye and 1 hatchery steelhead) ) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
((fcc)) (dd) From a line from the grain elevators at Patterson Ferry Road on the Oregon shore, straight across to a marker on the Washington shore at the west end of the old concrete foundation to the Interstate 82/Highway 395 Bridge:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( (of which 1 may be sockeyc and 1 hatchery stcelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockey and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
( ((dd))) (ee) From the Interstate $82 /$ Highway 395 Bridge to a red and white marker on the Oregon shore on a line that intersects the downstream end of the wingwall of the boat lock near the Washington shore:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( ( $f$ f wich 1 may be sock $=$ eye and 1 hatchery steelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeye and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
((fec)) (ff) From a line across the river from the red and white marker on the Oregon shore on a line that intersects the downstream end of the wingwall of the boat lock near the Washington shore to the upstream line of McNary Dam: Closed waters.
(((ff))) (gg) From McNary Dam to Highway 730 at Washington/Oregon border:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( (of which 1 may be sock= eye and 1 hatchery steelhead) ) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeyc and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6 ; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
( ((gg)) ) (hh) From Highway 730 at Washington/Oregon border to the Highway 395 Bridge at Pasco:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Salmon and steelhead:
(A) When open August 1 through October 15: Anti-snagging rule applies. When the anti-snagging rule is in effect, only fish hooked inside the mouth may be retained.
(B) Open June 16 through June 30:
(I) Daily limit 6; up to 1 hatchery steelhead may be retained.
(II) Release all salmon except hatchery jack Chinook.
(C) Open July 1 through July 31:
(I) Daily limit 6; up to 2 adult salmon ( (of which 1 may be sockeye and 1 hatchery stcelhead)) or 1 hatchery steelhead and 1 adult salmon may be retained.
(II) Release all salmon except ((sockeyc and)) hatchery Chinook.
(D) Open August 1 through August 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be Chinook and 1 hatchery steelhead may be retained.
(II) Release all salmon except Chinook and coho.
(E) September 1 through October 15:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(F) Open October 16 through December 31:
(I) Daily limit 6; up to 2 adult salmon of which 1 may be a Chinook may be retained.
(II) Release all salmon and steelhead except Chinook and coho.
(G) January 1 through June 15: Closed.
(( (hh)) ) (ii) From the Highway 395 Bridge at Pasco to the Interstate 182 Bridge:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon: Open August 16 through October 31: Daily limit 6; up to 2 adult salmon may be retained. Release all salmon except Chinook and coho.
(((ii))) (jj) Within a 400 foot radius of the Columbia Irrigation District (CID) fish barrier at the mouth of the CID wasteway at Columbia Park: Closed waters.
( ( $(j \dot{j})$ ) ) (kk) From the Interstate 182 Bridge to WDFW markers $1 / 4$ mile downstream from the South Columbia Basin Irrigation PE16.4 wasteway (Ringold wasteway) outlet:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: ((Closed to fishing for or retaining-)) Open October 1 through March 31: Statewide minimum size/daily limit except steelhead must be both adipose fin clipped and ventral fin clipped to be retained.
(iii) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through ((Qctobex)) December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
( ( (kk) ) ) (ll) West Branch Esquatzel Coulee Block 1 Irrigation
Wasteway Lagoon in the Columbia River:
(i) September 1 through November 30: Closed waters.
(ii) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(iii) Steelhead: Closed to fishing for or retaining.
(iv) Salmon:
(A) Open July 1 through August 15:
(B) Daily limit 6 salmon; up to 2 may be adults.
(C) Release wild adult Chinook.
(v) Open August 16 through August 31:
(A) Daily limit 6; up to 2 adult salmon may be retained.
(B) Release all salmon except Chinook and coho.
( ( (ll) ) ) (mm) From WDFW markers $1 / 4$ mile downstream from the South Columbia Basin Irrigation PE16.4 wasteway (Ringold wasteway) outlet to WDFW markers $1 / 2$ mile upstream from Ringold Springs Hatchery Creek:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: ((Closed to fishing for or retaining-))
(A) Open October 1 through March 31: Statewide minimum size/daily limit except steelhead must be both adipose fin clipped and ventral fin clipped to be retained.
(B) Open April 1 through April 15: Statewide minimum size/daily limit except steelhead must be both adipose fin clipped and ventral fin clipped to be retained. Open only to fishing from the bank on the hatchery side of the river only.
(iii) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through ((Qctober)) December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
( ((mm)) ) (nn) Between the markers located 100 feet upstream and 100 feet downstream of the Ringold Springs Hatchery Creek, and extending 100 feet towards the middle of the river: Closed waters.
(((nn))) (oo) From WDFW markers $1 / 2$ mile upstream from Ringold Springs Hatchery Creek to the Old Hanford townsite powerline crossing:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: ((Elosed to fishing for or retaining.) ) Open October 1 through March 31: Statewide minimum size/daily limit except steelhead must be both adipose fin clipped and ventral fin clipped to be retained.
(iii) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through ((Өctober)) December 31:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
((()))) (pp) From the Old Hanford townsite powerline crossing to Vernita Bridge (Highway 24):
(i) Open February 1 through October 15.
(ii) Game fish: Statewide minimum size/daily limit, except: Re-
lease all trout.
(iii) Steelhead: Closed to fishing for or retaining.
(iv) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through October 15:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
(((pp))) (qq) From Vernita Bridge (Highway 24) to 400 feet down-
stream of the Priest Rapids Hatchery outlet channel (Jackson Creek):
(i) Game fish: Statewide minimum size/daily limit, except: Re-
lease all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through October 15:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
( ((q) ) ) (rr) From the marker 400 feet downstream of the mouth of the Priest Rapids Hatchery outlet channel (Jackson Creek) to boundary markers 650 feet below the fish ladders at Priest Rapids Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon:
(A) Open July 1 through August 15:
(I) Daily limit 6 salmon; up to 2 may be adults.
(II) Release wild adult Chinook.
(B) Open August 16 through October 15:
(I) Daily limit 6; up to 2 may be adults.
(II) Release all salmon other than Chinook and coho.
( ( (rr)) ) (SS) At Priest Rapids Hatchery outlet channel (Jackson Creek) extending to midstream of the Columbia River between boundary markers located 400 feet downstream of outlet channel to 100 feet upstream: Closed waters.
(() (ss) ) (tt) From boundary markers 650 feet below the fish ladders at Priest Rapids Dam to the upstream line of the dam: Closed waters.
( (ftt) ) (uu) From Priest Rapids Dam to a line from boundary markers 750 feet downstream of the east fish ladder and 500 feet downstream of west fish ladder at Wanapum Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon:
(A) Open July 1 through August 31:
(I) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye may be retained.
(II) Release coho and wild adult Chinook.
(B) Open September 1 through October 15: Daily limit 6 Chinook only; up to 2 adults may be retained.
(( (uu)) ) (Vv) From a line from boundary markers 750 feet downstream of the east fish ladder and 500 feet downstream of the west fish ladder to the Wanapum Dam: Closed waters.
( ((VV)) ) (ww) From the Wanapum Dam to boundary markers 400 feet downstream of the fish ladders at Rock Island Dam:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon:
(A) Open July 1 through August 31:
(I) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(II) Release coho and wild adult Chinook.
(B) Open September 1 through October 15: Daily limit 6 Chinook only; up to 2 adults may be retained.
(((WW))) (xx) From the boundary markers 400 feet downstream of the fish ladders at Rock Island Dam to the upstream line of the dam: Closed waters.
( ( (XX) ) ) (Yy) From the upstream line of Rock Island Dam to boundary markers 400 feet downstream of the Rocky Reach Dam fish ladders:
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon: Open July 1 through October 15:
(A) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(B) Release coho and wild adult Chinook.
$(((Y Y)))$ (zz) From boundary markers 400 feet downstream of the Rocky Reach Dam fish ladders to the upstream line of Rocky Reach Dam: Closed waters.
( ( (zz) ) ) (aaa) From the upstream line of Rocky Reach Dam to boundary markers 400 feet downstream of the spawning channel discharge (on Chelan County side) and fish ladder at Wells Dam (on Douglas County side):
(i) Game fish: Statewide minimum size/daily limit, except: Release all trout.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon: Open July 1 through October 15:
(A) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(B) Release coho and wild adult Chinook.
((taaa)) ) (b.b.b) From the boundary markers 400 feet downstream of the spawning channel discharge (on Chelan County side) and fish ladder at Wells Dam (on Douglas County side) to the upstream line of Wells Dam: Closed waters.
(((bbb))) (ccc) From Wells Dam to Highway 173 Bridge at Brewster:
(i) Game fish: Statewide minimum size/daily limit, except: Hatchery trout: Open July 16 through August 15. Minimum size 12 inches. Daily limit 10. Barbless hooks required.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon: Open July 16 through September 30:
(A) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(B) Release coho and wild adult Chinook.
(()(ece)) ) (ddd) From Highway 173 Bridge at Brewster to the Highway 17 Bridge:
(i) Game fish: Statewide minimum size/daily limit, except: Hatchery trout: Open July 1 through August 15. Minimum 12 inches. Daily limit 10. Barbless hooks required.
(ii) Steelhead: Closed to fishing for or retaining.
(iii) Salmon: Open July 1 through October 15:
(A) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(B) Release coho and wild adult Chinook.
(((ddd))) (eee) From the Highway 17 Bridge to the Corps of Engineers safety marker on the Douglas County shore to the rock jetty at the upstream shoreline of Foster Creek:
(i) From the Okanogan County shore between Chief Joseph Dam and the Highway 17 Bridge: Closed waters.
(ii) From the Douglas County shore from Chief Joseph Dam to the rock jetty at the upstream shoreline of Foster Creek: Closed waters.
(iii) It is unlawful to fish from a floating device downstream of Chief Joseph Dam from the boundary marker to the Corps of Engineers safety zone marker.
(iv) Hatchery trout: Open July 1 through August 15. Minimum 12 inches. Daily limit 10. Barbless hooks required.
(v) Steelhead: Closed to fishing for or retaining.
(vi) Salmon: Open July 1 through ((Septembex)) October 15:
(A) Daily limit 6; up to 2 adult hatchery Chinook and up to 2 sockeye.
(B) Release coho and wild adult Chinook.
((fec)) ) (fff) Above Chief Joseph Dam: See Rufus Woods Lake in WAC 220-312-050.
(((fff))) (ggg) Above Grand Coulee Dam: See Lake Roosevelt in WAC 220-312-050.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 22-05-066 (Order 22-06), § 220-312-060, filed 2/11/22, effective 7/1/22. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), § 220-312-060, filed 7/2/21, effective 8/2/21; WSR 20-14-052 (Order 20-97), § 220-312-060, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), § 220-312-060, filed 7/12/19, effective 8/12/19. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.04.130. WSR 19-03-003 (Order 19-01), § 220-312-060, filed 1/2/19, effective 2/2/19. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 18-15-065 (Order 18-163), §

220-312-060, filed 7/16/18, effective 8/16/18. Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 18-06-045 (Order 18-30), § 220-312-060, filed 3/1/18, effective 4/1/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-17-029, § 220-312-060, filed 8/8/17, effective 9/8/17; WSR 17-05-112 (Order 17-04), recodified as $\S 220-312-060$, filed 2/15/17, effective 3/18/17; WSR 16-14-038 (Order 16-158), § 220-310-200, filed 6/28/16, effective 7/29/16. Statutory Authority: RCW 77.04.012 and 77.12.047. WSR 16-06-073 (Order 16-30), § 220-310-200, filed 2/26/16, effective 7/1/16. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 15-13-081 (Order 15-177), § 220-310-200, filed 6/12/15, effective 7/13/15. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 15-06-065 and 15-06-006 (Order 15-033), § 220-310-200, filed 3/4/15 and 2/20/15, effective 7/1/15. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 14-16-027 (Order 14-185), § 220-310-200, filed 7/25/14, effective 8/25/14. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.055, and 77.12.047. WSR 14-04-120 (Order 14-26), § 220-310-200, filed 2/4/14, effective 3/7/14.]

OTS-3773.5

AMENDATORY SECTION (Amending WSR 21-14-067, filed 7/2/21, effective 8/2/21)

WAC 220-313-060 Puget Sound salmon-Saltwater seasons and daily limits. (1) It is unlawful to fish for or possess salmon taken by angling for personal use except from the following Puget Sound areas and during the seasons, in the quantities, and for the species designated in this section, and in the sizes as defined in WAC 220-313-010. An area is open when a daily limit is provided. Puget Sound waters west of the mouth of the Sekiu River are managed concurrent with ocean waters under WAC 220-313-070.
(2) Catch Record Card Area 5:
(a) May 1 through June 30: Closed.
(b) Open July 1 through August 15:
(i) Daily limit 2 salmon; up to 1 may be a Chinook.
(ii) Release chum, wild Chinook and wild coho.
(c) Open August 16 through September ((30)) 28:
(i) Daily limit 2 salmon.
(ii) Release chum, Chinook and wild coho.
(d) ((Qetober 1)) September 29 through last day in February: Closed.
(e) Open March 1 through April 30:
(i) Daily limit 2 salmon; up to 1 may be a Chinook.
(ii) Release coho and wild Chinook.
(3) Catch Record Card Area 6:
(a) May 1 through June 30: Closed.
(b) Open July 1 through August 15:
(ii) Daily limit 2 salmon; up to 1 may be a Chinook.
(iii) Release chum, Chinook and wild coho.
(iv) Waters east of a true north-south line through the Number 2

Buoy immediately east of Ediz Hook: Release all Chinook. ( ( $(i)$ Open July 1 through August 15 .
(ii) Daily limit 2 salmon.
(iii) Relcase chum, Chinook and wild coho.))
(c) Waters of Port Angeles Harbor west of a line from the tip of Ediz Hook to the ITT Rayonier Dock: Closed July 1 through August 15.
( (i) Open July 1 through August 15 .
(ii) Daily limit 2 salmon.
(iii) Release chum, wild Chinook and wild coho-))
(d) Open August 16 through September ((30)) 28:
(i) Daily limit 2 salmon.
(ii) Release chum, Chinook and wild coho.
(e) ((October 1)) September 29 through April 30: Closed except in

Dungeness Bay as described in this section.
(f) Waters of Dungeness Bay inside a line from Dungeness Spit Lighthouse to the Number 2 Red Buoy, and then to the Port Williams Boat Ramp are closed except:
(i) Open October 1 through October 31.
(ii) Daily limit 2 hatchery coho only.
(4) Catch Record Card Area 7:
(a) May 1 through ((June 30)) July 13: Closed.
(b) Open July ((1)) 14 through July ((31)) 16:
(i) Daily limit 2 salmon; up to 1 may be a hatchery Chinook.
(ii) Release chum, wild coho, and wild Chinook.
(((iii) Closed to salmon fishing in the Southern)) (c) Waters of

Rosario Strait and Eastern Strait of Juan de Fuca closure area described in WAC 220-313-020(7) : Closed to salmon fishing July 1 through September 30.
(((c))) (d) July 17 through August 15: Closed.
(e) Open August ((1)) 16 through September 30:
(i) Daily limit 2 salmon.
(ii) Release chum, Chinook, and wild coho.
((d))) (f) Lummi Bay: Waters east of a line from Gooseberry Point to Sandy Point: Closed the Tuesday after Labor Day through September 30 .
(g) October 1 through April 30: Closed.
(((c))) (h) Closed to salmon fishing in Samish Bay area described in WAC 220-313-020(7).
(((f))) (i) Waters of Bellingham Bay described in WAC 220-313-020(1):
(i) July 1 through August 15: Closed.
(ii) Open August 16 through September 30: Daily limit 4 salmon; up to 2 may be Chinook salmon.
(iii) October 1 through April 30: Closed.
(5) Catch Record Card Area 8-1:
(a) May 1 through July 31: Closed.
(b) Open August 1 through ((september 19)) October 9:
(i) Daily limit 2 salmon.
(ii) Release Chinook and chum.
(c) ((September 20)) October 10 through April 30: Closed.
(6) Catch Record Card Area 8-2:
(a) ((May 1 through August 13)) Year-round: Closed, except waters described in this subsection.
(b) Waters west of Tulalip Bay and within 2,000 feet of shore from the pilings at Old Bower's Resort to a fishing boundary marker approximately 1.4 miles northwest of Hermosa Point:
(i) Open May ((Z\&)) $\underline{27}$ through September ( ( 6 ) ) $\underline{5}$; only from Friday through 11:59 a.m. the following Monday of each week. Daily limit 2 salmon.
(ii) Open September ((11)) 10 through September ((Z6)) 25; only from Saturdays through Sundays of each week. Daily limit 2 salmon.
(c) Waters from south of a line drawn from the base of the Mukilteo fishing pier (( Clinton ferry dock. Open August ((14)) 13 through September 19:
(i) Daily limit 2 salmon.
(ii) Release Chinook, chum, and wild coho.
(7) Catch Record Card Area 9:
(a) May 1 through July ((15)) 13: Closed.
(b) Open July ((16)) 14 through ((August 15)) July 27, Thursdays through Saturdays only of each week:
(i) Daily limit 2 salmon; up to 1 may be a hatchery Chinook salmon.
(ii) Release chum, wild coho, and wild Chinook.
(iii) Waters south of a line from Foulweather Bluff to Olele

Point: Closed.
(c) Open July 28 through August 15:
(i) Daily limit 2 salmon; up to 1 may be a hatchery Chinook.
(ii) Release chum, wild coho, and wild Chinook.
(iii) Waters south of a line from Foulweather Bluff to Olele

Point: Closed.
(d) Open August 16 through September ((30)) 25:
(i) Daily limit 2 salmon.
(ii) Release Chinook, chum, and wild coho.
((d) October 1)) (e) September 26 through April 30: Closed.
(((c))) (f) Edmonds Fishing Pier:
(i) Open October 1 through July 31: Daily limit 2 salmon; up to 1 may be a Chinook salmon.
(ii) Open August 1 through September 30:
(A) Daily limit 2 salmon; up to 1 may be a Chinook salmon.
(B) Release chum.
(8) Catch Record Card Area 10:
(a) May 1 through June 15: Closed.
(b) Open June 16 through July ((15)) 13:
(i) Daily limit 2 salmon.
(ii) Release Chinook and chum.
(c) Open July ((16)) 14 through August 31:
(i) Daily limit 2 salmon; up to 1 may be a hatchery Chinook ((salmon)).
(ii) Release chum and wild Chinook.
(d) Open September 1 through October 31:
(i) Daily limit 2 salmon.
(ii) Release Chinook and chum.
(e) November 1 through ((December)) January 31: Closed.
(f) Open ((January)) February 1 through March 31.
(i) Daily limit 2 salmon; up to 1 may be a Chinook.
(ii) Release wild Chinook.
(g) April 1 through April 30: Closed.
(h) Waters of Shilshole Bay southeast of a line from Meadow Point to West Point: Closed July 1 through August 31.
(i) West ((Elliot)) Elliott Bay: Waters of Elliott Bay between a line from West Point to Alki Point and a line from Duwamish Head to Pier 91.
(i) May 1 through June 15: Closed.
(ii) Open June 16 through June 30:
(A) Daily limit 2 salmon.
(B) Release ((ehum, and)) Chinook and chum.
(iii) July 1 through August ((19)) 31: Closed.
(iv) Open ((August 20 through August 31)) September 1 through October 31:
(A) Daily limit 2 salmon.
(B) Release Chinook and chum.
(v) ((Open September 1 through October 31:
(A) Daily limit 2 salmon.
(B) Relcase Chinook and chum.
(vi)) ) November 1 through ((December)) January 31: Closed.
(((vii))) (vi) Open ((January)) February 1 through March 31:
(A) Daily limit 2 salmon; up to 1 may be a Chinook.
(B) Release wild Chinook.
(( (viii))) (vii) April 1 through April 30: Closed.
(j) East ((Elliot)) Elliott Bay: Waters of Elliott Bay between a
line from Duwamish Head to Pier 91 up to the mouth of the Duwamish
River including Harbor Island (Duwamish Waterways).
(i) May 1 through May 31: Closed.
(ii) Open June (( $\mathbf{( 1 ) ) ~ 1 6}$ through June 30:
(A) Daily limit 2 salmon.
(B) Release ((ehum and)) Chinook and chum.
(iii) July 1 through August ((19)) $\underline{4}$ : Closed.
(iv) Open August ((20 through August 31)) 5 through August 7 at

11:59 a.m. Daily limit 2 salmon. Release chum.
(v) August 7 at 12:00 p.m. through August 31: Closed.
(vi) Open September 1 through October 31:
(A) Daily limit 2 salmon.
(B) Release Chinook and chum.
(( (v) Open September 1 through Oetober 31:
(A) Daily limit of 2 salmon.
(B) Relcase Chinook and chum.
(vi)) ) (vii) November 1 through ((Decembex)) January 31: Closed.
(((vii))) (viii) Open ((January)) February 1 through March
$31($ (-)) :
(A) Daily limit 2 salmon; up to 1 may be a Chinook.
(B) Release wild Chinook.
(((viii))) (ix) April 1 through April 30: Closed.
(k) Waters of Sinclair Inlet and Port Orchard south of the Manette Bridge in Bremerton, south of a line true west from Battle Point, and west of a line drawn true south from Point White:
(i) May 1 through June 15: Closed.
(ii) Open June 16 through ((July 15)) June 30:
(A) Daily limit 2 salmon.
(B) Release Chinook and chum.
(((ii))) (iii) Open July ((16)) 1 through September 30:
(A) Daily limit 3 salmon.
(B) Release chum and wild Chinook.
(((iii))) (iv) Open October 1 through October 31:
(A) Daily limit 2 salmon.
(B) Release Chinook and chum.
(((iv))) (v) November 1 through ((December)) January 31: Closed.
(( (v) Open January 1 through Maxch 31.) ) (vi) Open February 1
through March 31:
(A) Daily limit 2 salmon; up to 1 may be a Chinook.
(B) Release wild Chinook.
(((vi))) (vii) April 1 through April 30: Closed.
(1) Waters of Agate Pass west of a line from Point Monroe to Indianola and east of a line from Point Bolin to Battle Point: Fly fishing only, lead core lines prohibited, and catch and release from January 1 through ((January)) March 31. April 1 through April 30: Closed.
(m) Elliott Bay Fishing Pier at Terminal 86, Seacrest Pier, Waterman Pier, Bremerton Boardwalk, and Illahee State Park Pier, open year-round: (((i))) Daily limit 2 salmon; up to 1 may be a Chinook salmon. (((ii))) Release chum.
(n) Duwamish Waterway downstream from an east-west line projected through southernmost tip of Harbor Island to a line extending from Jack Block Park through the northernmost tip of Harbor Island extending to shore northeast of the North Waterway ( $47^{\circ} 35.47{ }^{\prime} N$, $\left.122^{\circ} 20.58^{\prime} \mathrm{W}\right)$, from July 1 through October 31 night closure, anti-snagging rule, and only fish hooked inside the mouth may be retained.
(o) Free-flowing freshwaters are closed downstream of the mouth at Gorst Creek, Blackjack Creek, Chico Creek, Curley Creek, Grovers Creek from July 1 through December 31.
(9) Catch Record Card Area 11:
(a) May 1 through ((Junc 15)) May 31: Closed.
(b) Open June ((16)) 1 through September 30: Wednesdays through Saturdays of each week only.
(i) Daily limit 2 salmon; up to 1 may be a hatchery Chinook.
(ii) Release chum and wild Chinook.
(c) Open October 1 through October 31:
(i) Daily limit 2 salmon.
(ii) Release Chinook and chum.
(d) Open November 1 through December 31:
(i) Daily limit 2 salmon.
(ii) Release coho, chum, and wild Chinook.
(e) January 1 through April 30: Closed.
(f) Waters of Commencement Bay east of a line from the Cliff House Restaurant to the Sperry Ocean Dock:
(i) June 1 through July 31 ((and April 1 through April 30)): Closed.
(ii) Open August 1 through September 30:
(A) Daily limit 2 salmon; up to 1 may be a hatchery Chinook.
(B) Release chum and wild Chinook.
(C) Open Wednesdays through Saturdays only.
(iii) Open October 1 through October 31:
(A) Daily limit 2 salmon.
(B) Release Chinook and chum.
(C) Open Wednesdays through Saturdays only.
(iv) Open November 1 through December 31:
(A) Daily limit 2 salmon; up to 1 may be a Chinook.
(B) Release coho, chum, and wild Chinook.
(v) January 1 through April 30: Closed.
(g) Dash Point Dock, Les Davis Pier, Des Moines Pier, Redondo Pier, and Point Defiance Boathouse Dock: ((ti)) Open year-round. (((ii))) Daily limit 2 salmon; up to 1 may be a Chinook salmon. ((fiii))) Release chum.
(10) Catch Record Card Area 12:
(a) May 1 through June 30: Closed.
(b) ( (Open July 1 through September 30:
(i) Daily limit 4 salmon.
(ii) Release chum and wild Chinook.
(c) Open october 1 through october 15:
(i) Daily limit 4 salmon.
(ii) Relcasc chum and Chinook.
(d) Open October 16 through November 30:
(i) Daily limit 4 salmon.
(ii) Relcase Chinook.
(c) December 1 through April 30: Closed.
(f)) ) In waters south of Ayock Point including waters within a 2,000-foot arc seaward of yellow buoys at the mouth of Finch Creek at Hoodsport Salmon Hatchery:
(i) ( (May 1 through June 30: Closed.
(ii)) ) Open July 1 through September 30:
(A) Daily limit 4 salmon.
(B) Release chum and wild Chinook.
(((iii))) (ii) Open October 1 through October 15:
(A) Daily limit 4 salmon.
(B) Release chum and Chinook.
(((iv))) (iii) Open October 16 through ((November 30)) October

31:
(A) Daily limit 4 salmon.
(B) Release Chinook.
(iv) Open November 1 through November 30:
(A) Daily limit 4 salmon.
(B) Release Chinook and coho.
(v) December 1 through April 30: Closed.
(vi) It is unlawful to fish for or possess salmon taken from these waters from one hour after sunset to one hour before sunrise.
(vii) Those waters of Hood Canal inshore of the 2 yellow buoy markers to the mouth of Finch Creek, waters within the channel created by Finch Creek on exposed tideland and fishing from any Hoodsport Hatchery structure are closed except to persons with disabilities who permanently use a wheelchair and who have a designated harvester card may fish from the ADA-access site at the Hoodsport Salmon Hatchery, as long as persons follow all applicable department rules.
$((f)))(c)$ In waters north of Ayock Point except waters north of a true east line from the mouth of Turner Creek to the Toandos Peninsula:
(i) ( May 1 through July 10)) July 1 through August 31: Closed.
(ii) Open ( (July 11)) September 1 through September 30:
(A) Daily limit 4 salmon.
(B) Release chum and Chinook.
(iii) Open October 1 through October 15:
(A) Daily limit 4 salmon.
(B) Release chum and Chinook.
(iv) Open October 16 through ( (November 30)) October 31:
(A) Daily limit 4 salmon.
(B) Release Chinook.
(v) Open November 1 through November 30:
(A) Daily limit 4 salmon.
(B) Release Chinook and coho.
(vi) December 1 through April 30: Closed.
(( (h) September 16 through December 31:)) (d) In waters north of a true east line from the mouth of Turner Creek to the Toandos Peninsula (Quilcene Bay):
(i) Open August 1 through August 31: Daily limit 4 coho only. Release all other salmon.
(ii) Open September 1 through September 30:
(A) Daily limit 4 salmon.
(B) Release chum and Chinook.
(iii) Open October 16 through October 31:
(A) Daily limit 4 salmon.
(B) Release Chinook.
(iv) Open November 1 through November 30:
(A) Daily limit 4 salmon.
(B) Release Chinook and coho.
(v) December 1 through April 30: Closed.
(vi) Waters north of a line true east from Broad Spit (Tarboo

Bay): September 19 through December 31: Closed.
(((i))) (e) July 1 through October 15: Free-flowing freshwater is closed to all fishing downstream of the mouth of the Dewatto, Dosewallips, Duckabush, Hamma Hamma, and Skokomish rivers.
(11) Catch Record Card Area 13:
(a) Open May 1 through June 30:
(i) Daily limit 2 salmon.
(ii) Release chum, wild Chinook, and wild coho.
(b) Open July 1 through September 30:
(i) Daily limit 2 salmon.
(ii) Release chum, wild Chinook, and wild coho.
(iii) Chinook minimum length 20 inches.
(c) Open October 1 through April 30:
(i) Daily limit 2 salmon.
(ii) Release chum, wild Chinook, and wild coho.
(d) Waters at the mouth of Minter Creek within 1,000 feet of the outer oyster stakes: April 16 through September 15: Closed.
(e) Waters of Budd Inlet south of the Fourth Avenue Bridge: Closed.
(f) Contiguous waters north of the Fourth Avenue Bridge and south of a line from the northwest corner of the Thriftway Market building and a point 100 yards north of the railroad bridge on the western shore: July 16 through October 31: Closed.
(g) Waters north of the Thriftway Market-railroad bridge line and south of a line projected due west from the KGY radio tower: July 16 through October 31: Night closure and anti-snagging rule.
(h) Fox Island Public Fishing Pier:
(i) Open May 1 through June 30: (((A))) Daily limit 2 salmon; up to 1 may be a Chinook salmon. (((B))) Release chum.
(ii) Open July 1 through September 30:
(A) Daily limit 2 salmon; up to 1 may be a Chinook salmon.
(B) Chinook minimum length 20 inches.
(C) Release chum.
(iii) Open October 1 through April 30: (( $(\AA))$ Daily limit 2 salmon; up to 1 may be a Chinook salmon. (((B))) Release chum.
(12) A violation of this section is an infraction, punishable under RCW 77.15.160, unless the person has harvested salmon. If the person has harvested salmon, the violation is punishable under RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, unless the salmon are taken in the amounts or manner to constitute a violation of RCW 77.15.370, Unlawful recreational fishing in the first degree-Penalty.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), § 220-313-060, filed 7/2/21, effective 8/2/21; WSR 20-14-052 (Order 20-97), § 220-313-060, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012,
77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), § 220-313-060, filed 7/12/19, effective 8/12/19; WSR 18-15-065 (Order 18-163), § 220-313-060, filed 7/16/18, effective 8/16/18; WSR 17-16-109 (Order 17-147), § 220-313-060, filed 7/28/17, effective 8/28/17; WSR 17-05-112 (Order 17-04), amended and recodified as § 220-313-060, filed 2/15/17, effective 3/18/17; WSR 16-17-008 (Order 16-201), § 232-28-621, filed 8/4/16, effective 9/4/16; WSR 15-13-081 (Order 15-177), § 232-28-621, filed 6/12/15, effective 7/13/15. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 14-16-027 (Order 14-185), § 232-28-621, filed 7/25/14, effective 8/25/14; WSR 13-20-021 (Order 13-210), § 232-28-621, filed 9/23/13, effective 10/24/13. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 12-18-006 (Order 12-190), § 232-28-621, filed 8/23/12, effective 9/23/12; WSR 11-21-038 (Order 11-273), § 232-28-621, filed 10/11/11, effective 11/11/11; WSR 10-12-062 (Order 10-137), § 232-28-621, filed 5/27/10, effective 6/27/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-035 (Order 09-133), § 232-28-621, filed 7/8/09, effective 8/8/09; WSR 08-15-002 (Order 08-165), § 232-28-621, filed 7/3/08, effective 8/3/08; WSR 07-16-056, § 232-28-621, filed 7/26/07, effective 8/26/07. Statutory Authority: RCW 77.12.047. WSR 06-16-096 (Order 06-174), § 232-28-621, filed 7/31/06, effective 8/31/06; WSR 05-17-007 (Order 05-168), § 232-28-621, filed 8/3/05, effective 9/3/05; WSR 04-16-006 (Order 04-182), § 232-28-621, filed 7/22/04, effective 8/22/04; WSR 03-16-109 (Order 03-182), § 232-28-621, filed 8/6/03, effective 9/6/03; WSR 03-05-057 (Order 03-24), § 232-28-621, filed 2/14/03, effective 5/1/03; WSR 02-15-097 (Order 02-158), § 232-28-621, filed 7/16/02, effective 8/16/02; WSR 02-08-048 (Order 02-53), § 232-28-621, filed 3/29/02, effective 5/1/02; WSR 01-14-001 (Order 01-107), § 232-28-621, filed 6/21/01, effective 7/22/01. Statutory Authority: 2000 c 107 § 7. WSR 00-16-091 (Order 00-134), amended and recodified as § 232-28-621, filed 7/31/00, effective 8/31/00. Statutory Authority: RCW 75.08.080. WSR 00-01-103 (Order 99-215), § 220-56-191, filed 12/16/99, effective 1/16/00. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 99-15-081 (Order 99-102), § 220-56-191, filed 7/20/99, effective 8/20/99; WSR 98-15-081 (Order 98-122), § 220-56-191, filed 7/15/98, effective 8/15/98; WSR 98-06-031, § 220-56-191, filed 2/26/98, effective 5/1/98. Statutory Authority: RCW 75.08.080 and 75.12.040. WSR 97-18-035, § 220-56-191, filed 8/27/97, effective 9/27/97. Statutory Authority: RCW 75.08.080. WSR 96-11-078 (Order 96-44), § 220-56-191, filed 5/13/96, effective 6/13/96; WSR 95-12-027 (Order 95-46), § 220-56-191, filed 5/31/95, effective 7/1/95; WSR 94-14-069, § 220-56-191, filed 7/1/94, effective 8/1/94; WSR 93-14-043 (Order 93-36), § 220-56-191, filed 6/29/93, effective 7/30/93.]

OTS-3769. 2

AMENDATORY SECTION (Amending WSR 21-14-067, filed 7/2/21, effective 8/2/21)

WAC 220-313-070 Coastal salmon-Saltwater seasons and daily limits. It is unlawful to take, fish for, or possess salmon taken by angling for personal use except from the following coastal areas, during the following seasons, in the quantities and the sizes provided for in WAC 220-313-010, and for the species designated in this section. An area is open when a daily limit is provided:
(1) Willapa Bay (Catch Record Card Area 2-1):
(a) Open concurrent with Area 2 as specified in WAC 220-313-075; otherwise closed, except as described in (b) of this subsection.
(b) Open August 1 through January 31:
(i) Daily limit 6 salmon; up to 2 may be adult salmon.
(ii) Release wild Chinook ((and wild coho)).
(iii) ( (Beginning August 1, the Willapa Bay Control Zone is
open.) ) Waters of the Willapa Bay Control Zone area ((is)) defined as waters east of a line drawn from Leadbetter Point (46³9.20'N, $124^{\circ} 3.516^{\prime} W$ ) due west to $46^{\circ} 39.20^{\prime} N$, $124^{\circ} 5.3^{\prime} W$ then due north to the westerly most landfall on Cape Shoalwater ( $46^{\circ} 44.66^{\prime} \mathrm{N}, 124^{\circ} 5.3^{\prime} \mathrm{W}$ ) and west from a line drawn from Leadbetter Point ( $46^{\circ} 39.20^{\prime} N$, $124^{\circ} 3.516^{\prime} W$ ) through green marker 11 to landfall: Closed August 1 through September 30 .
(iv) Anglers in possession of a valid two-pole endorsement may use up to two lines while fishing.
(v) Waters north of a line from Toke Point channel marker 3 easterly through Willapa Harbor channel marker 13 (green) then, northeasterly to the power transmission pole located at $46^{\circ} 43.19{ }^{\prime} \mathrm{N}, 123^{\circ} 50.83^{\prime} \mathrm{W}$ are closed August 1 through September 30.
(2) Grays Harbor (Catch Record Card Area 2-2 east of the Buoy 13 line):
(a) May 1 through July 31: Closed.
(b) Humptulips North Bay Fishery is defined as northerly of a line running from the south end of the eastern jetty at Ocean Shores Marina, then to a fishing boundary marker on Sand Island (4657.52'N, $\left.124^{\circ} 03.36^{\prime} \mathrm{W}\right)$ then to the Tripod Station located at $46^{\circ} 59.12{ }^{\prime} \mathrm{N}$, $124^{\circ} 00.72^{\prime} \mathrm{W}$ on Brackenridge Bluff. Open August 1 through September ((Z3)) 15:
(i) Daily limit 1 salmon.
(ii) Release ((wild Chinook and)) wild coho.
(c) East Grays Harbor Fishery is defined as easterly of a projected line from the mouth of Johns River (Highway 105 bridge) to the Tripod Station on Brackenridge Bluff (4659.12'N, $124^{\circ} 00.72^{\prime}$ W) through channel marker 27 (green).
(i) Open ((October 1)) September 16 through ((November 30)) October 31:
(A) Daily limit ((1)) $\underline{2}$ salmon.
(B) Release Chinook.
(ii) Open November 1 through November 30:
(A) Daily limit 1 salmon.
(B) Release Chinook.
(iii) Waters south of a line running from the south end of the eastern jetty at Ocean Shores Marina to the fishing boundary marker on Sand Island ( $46^{\circ} 57.52 \prime N, 124^{\circ} 03.36^{\prime}$ W) to the Tripod Station on Brackenridge Bluff ( $46^{\circ} 59.12^{\prime} N, 124^{\circ} 00.72^{\prime} W$ ) and waters west of a line running from the Tripod Station on Brackenridge Bluff (4659.12'N,
$124^{\circ} 00.72^{\prime} \mathrm{W}$ ) through channel marker 27 (green) to the mouth of Johns River (Highway 105 Bridge) : Closed.
(d) Notwithstanding the provisions of this subsection, the Westport Boat Basin and Ocean Shores Boat Basin are open only August 16 through January 31:
(i) Daily limit 6 salmon; up to 4 may be adult salmon.
(ii) Release Chinook.
(iii) Night closure and anti-snagging rule in effect.
(3) Grays Harbor (Catch Record Card Area 2-2 west of the Buoy 13 line): Closed, except open concurrent with openings of the Grays Harbor Control Zone as specified in WAC 220-313-075.
(4) A violation of this section is an infraction, punishable under RCW 77.15.160, unless the person has harvested salmon. If the person has harvested salmon, the violation is punishable under RCW 77.15.380 Unlawful recreational fishing in the second degree-Penalty, unless the salmon are taken in the amounts or manner to constitute a violation of RCW 77.15.370 Unlawful recreational fishing in the first degree—Penalty-Criminal wildlife penalty assessment.
[Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 21-14-067 (Order 21-95), § 220-313-070, filed 7/2/21, effective 8/2/21. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 20-22-101 (Order 20-242), § 220-313-070, filed 11/3/20, effective 12/4/20. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047. WSR 20-14-052 (Order 20-97), § 220-313-070, filed 6/25/20, effective 7/26/20. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 19-15-050 (Order 19-139), § 220-313-070, filed 7/12/19, effective 8/12/19; WSR 18-15-065 (Order 18-163), § 220-313-070, filed 7/16/18, effective 8/16/18. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 17-19-009 (Order 17-230), § 220-313-070, filed 9/7/17, effective 10/8/17. Statutory Authority: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047. WSR 17-05-112 (Order 17-04), amended and recodified as § 220-313-070, filed 2/15/17, effective 3/18/17; WSR 16-14-038 (Order 16-158), § 232-28-620, filed 6/28/16, effective 7/29/16; WSR 15-13-081 (Order 15-177), § 232-28-620, filed 6/12/15, effective 7/13/15. Statutory Authority: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047. WSR 14-16-027 (Order 14-185), § 232-28-620, filed 7/25/14, effective 8/25/14; WSR 13-20-021 (Order 13-210), § 232-28-620, filed 9/23/13, effective 10/24/13. Statutory Authority: RCW 77.04.020, 77.12.045, and 77.12.047. WSR 12-18-006 (Order 12-190), § 232-28-620, filed 8/23/12, effective 9/23/12; WSR 11-21-038 (Order 11-273), § 232-28-620, filed 10/11/11, effective 11/11/11; WSR 10-12-061 (Order 09-108), § 232-28-620, filed 5/27/10, effective 6/27/10. Statutory Authority: RCW 77.12.047 and 77.04.020. WSR 09-15-035 (Order 09-133), § 232-28-620, filed 7/8/09, effective 8/8/09; WSR 08-15-002 (Order 08-165), § 232-28-620, filed 7/3/08, effective 8/3/08; WSR 07-16-056, § 232-28-620, filed 7/26/07, effective 8/26/07. Statutory Authority: RCW 77.12.047. WSR 06-16-096 (Order 06-174), § 232-28-620, filed 7/31/06, effective 8/31/06; WSR 05-17-007 (Order 05-168), § 232-28-620, filed 8/3/05, effective 9/3/05; WSR 04-16-006 (Order 04-182), § 232-28-620, filed 7/22/04, effective 8/22/04; WSR 03-16-109 (Order 03-182), § 232-28-620, filed 8/6/03, effective 9/6/03; WSR 02-15-097 (Order 02-158), § 232-28-620, filed 7/16/02, effective 8/16/02; WSR 01-14-001 (Order 01-107), §

232-28-620, filed 6/21/01, effective 7/22/01. Statutory Authority: 2000 c 107 § 7. WSR 00-16-091 (Order 00-134), amended and recodified as § 232-28-620, filed 7/31/00, effective 8/31/00. Statutory Authority: RCW 75.08.080 and 77.12.040. WSR 99-15-081 (Order 99-102), § 220-56-190, filed 7/20/99, effective 8/20/99; WSR 98-15-081 (Order 98-122), § 220-56-190, filed 7/15/98, effective 8/15/98; WSR 97-18-035, § 220-56-190, filed 8/27/97, effective 9/27/97. Statutory Authority: RCW 75.08.080. WSR 96-11-078 (Order 96-44), § 220-56-190, filed 5/13/96, effective 6/13/96; WSR 95-12-027 (Order 95-46), § 220-56-190, filed 5/31/95, effective 7/1/95; WSR 94-14-069, § 220-56-190, filed 7/1/94, effective 8/1/94; WSR 93-14-043 (Order 93-36), § 220-56-190, filed 6/29/93, effective 7/30/93; WSR 91-08-054 (Order 91-13), § 220-56-190, filed 4/2/91, effective 5/3/91; WSR 90-06-026, § 220-56-190, filed 2/28/90, effective 3/31/90; WSR 89-07-060 (Order 89-12), § 220-56-190, filed 3/16/89; WSR 87-09-066 (Order 87-16), § 220-56-190, filed 4/21/87; WSR 86-09-020 (Order 86-08), § 220-56-190, filed 4/9/86; WSR 85-09-017 (Order 85-20), § 220-56-190, filed 4/9/85; WSR 84-09-026 (Order 84-22), § 220-56-190, filed 4/11/84; WSR 83-07-043 (Order 83-16), § 220-56-190, filed 3/17/83; WSR 82-13-040 (Order 82-61), § 220-56-190, filed 6/9/82; WSR 82-07-047 (Order 82-19), § 220-56-190, filed 3/18/82; WSR 80-03-064 (Order 80-12), § 220-56-190, filed 2/27/80, effective 4/1/80. Formerly WAC 220-56-064.]

WSR 22-14-055
PERMANENT RULES
UTILITIES AND TRANSPORTATION COMMISSION
[Docket UE-210183, General Order R-604—Filed June 29, 2022, 9:10 a.m.]

Reviser's note: The material contained in this filing exceeded the page-count limitations of wAC 1-21-040 for appearance in this issue of the Register. It will appear in the $22-15$ issue of the Register.

Effective Date of Rule: Thirty-one days after filing.
Purpose: Amendments to WAC 388-829-0085 clarify when continuing education credits must be completed. New WAC 388-829-0086 establishes training deadlines for direct support professionals employed during the COVID-19 public health emergency. New WAC 388-829-0087 grants 12 hours of continuing education credits for direct support professionals employed between March 1, 2020, and February 28, 2021, due to the on-the-job training completed during the public health emergency. WAC 388-829-0087 also extends continuing education deadlines for all direct support professionals until December 31, 2022, or 120 days from the end of the COVID-19 training waivers established by gubernatorial proclamation, whichever is later.

Citation of Rules Affected by this Order: New WAC 388-829-0086 and 388-829-0087; and amending WAC 388-829-0085.

Statutory Authority for Adoption: RCW 74.39A. 074 .
Other Authority: RCW 71A.12.030.
Adopted under notice filed as WSR 22-10-051 on April 29, 2022.
A final cost-benefit analysis is available by contacting Chantelle Diaz, P.O Box 45310, Olympia, WA 98504-5310, phone 360-407-1500, fax 360-407-0955, TTY 1-800-833-6388, email
Chantelle.Diaz@dshs.wa.gov.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 2, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 2, Amended 1, Repealed 0. Date Adopted: June 29, 2022.
ary 1, 2016, service providers)) A direct support professional must complete ((twelve)) 12 hours of continuing education: ((fE)))
(a) Each calendar year, except in the calendar year they complete ((the)) one-time basic training ((xequirement.)); or (b) By their birth date each year if the direct support professional is also a:
(i) Registered nurse;
(ii) Licensed practical nurse;
(iii) Nurse technician;
(iv) Advanced registered nurse practitioner; or (v) Home care aide certified.
(( $(2)$ Service providers who are not credentialed through the de-
partment of health (DOH) must complete their CE by the end of the calendar year.
(3) Service providers must complete DOH required CE (such as home
eare aide certification) by their birth date each year.))
(2) A direct support professional employed during the COVID-19
public health emergency must complete:
(a) Training according to WAC 388-829-0086; and
(b) Continuing education according to WAC 388-829-0087.
[Statutory Authority: RCW 71A.12.030, 74.39A.074, 74.39A.341, 74.39A.351, and 18.88B.041. WSR 17-14-090, § 388-829-0085, filed 6/30/17, effective 8/1/17.]

NEW SECTION
WAC 388-829-0086 When must a direct support professional employed during the COVID-19 public health emergency complete training, including specialty training? (1) A direct support professional employed during the COVID-19 public health emergency must complete training, including specialty training, as follows:

| Worker hired during <br> the time frame of: | Must complete 75-hour <br> new employee training no <br> later than: |
| :--- | :--- |
| $8 / 17 / 2019$ to $9 / 30 / 2020$ | $10 / 31 / 2022$ |
| $10 / 1 / 2020$ to $4 / 30 / 2021$ | $1 / 31 / 2023$ |
| $5 / 1 / 2021$ to $3 / 31 / 2022$ | $4 / 30 / 2023$ |
| $4 / 1 / 2022$ to $9 / 30 / 2022$ | $8 / 31 / 2023$ |
| $10 / 1 / 2022$ <br> or the end of the $12 / 31 / 2022$ <br> COVID-19 training <br> waivers established by <br> gubernatorial <br> proclamation, <br> whichever is later | $9 / 30 / 2023$ or no more than <br> 120 days after the end of the <br> COVII-19 training waivers <br> established by gubernatorial <br> proclamation, whichever is <br> later |
| After the end of the <br> COVID-19 training <br> waivers established by <br> gubernatorial <br> proclamation or <br> beginning $1 / 1 / 2023$, <br> whichever is later | As required under WAC <br> $388-829-0015$ |

(2) Nothing in this section prevents a direct support professional hired between 8/17/2019 and 9/30/2022 from completing training in advance of the deadlines in subsection (1) of this section.
[]

## NEW SECTION

WAC 388-829-0087 What continuing education credit is granted to direct support professionals employed during the pandemic and when must continuing education be completed? (1) The department finds that direct support professionals employed during the COVID-19 pandemic between March 1, 2020, and February 28, 2021, required emergent and intensive on-the-job training. Direct support professionals received critical, ongoing training in such topics as:
(a) Donning and doffing personal protective equipment (PPE);
(b) Hand hygiene;
(c) Disinfection of high-touch surfaces;
(d) Managing visitations and physical distancing;
(e) Responding to newly infected residents;
(f) Promotion of vaccination;
(g) Protocols for quarantine;
(h) Use of cloth face coverings;
(i) Personal protection outside of the work environment; and
(j) How to reduce exposure and spread.
(2) This on-the-job training was required of all service providers under WAC 388-829-0005. Instruction included infection control and the availability and distribution of personal protective equipment. Recognition of this training as a valid learning experience, in its various forms, was agreed upon with input from consumer and worker representatives, as the content was based on guidelines established by the Centers for Disease Control (CDC) and other federal, state, and local health care authorities.
(3) During this time, direct support professionals required ongoing critical training because guidance from the CDC, department of labor and industries, and other health authorities changed as more was learned about the SARS-CoV-2 virus. The department finds that this unprecedented on-the-job training comprised of at least 12 hours of continuing education between March 1, 2020, and February 28, 2021, and that this training:
(a) Is not considered to be repeated training as described in WAC 388-829-0100; and
(b) Satisfies the 12 hours of annual continuing education training.
(4) The direct support professional may apply the 12 hours of on-the-job training towards continuing education for either 2020 or 2021. The hours must be applied no later than December 31, 2021.
(5) All direct support professionals employed during the dates in subsection (3) of this section are granted 12 hours of DSHS-approved continuing education credit for the training entitled "COVID-19 On-The-Job Training Protocols," bearing the DSHS approval code CE2135218. No physical certificate for this training will be issued or required.
(6) The department recognizes that direct support professionals may not have completed training hours in excess of the 12 hours of CE granted in subsection (4) of this section due to the COVID-19 public
health emergency. All direct support professionals have until December 31, 2022, or 120 days from the end of the COVID-19 training waivers established by gubernatorial proclamation, whichever is later, to complete any additional $C E$ that may have become due while training waivers were in place in excess of the 12 hours of $C E$ granted in subsection (4) of this section. For an employee required to complete training by their birthday under WAC 388-101D-0085 (1)(b), the employee will have 120 days from the end of the training waivers to complete the required CE if the employee's birthday is fewer than 120 days after the training waivers are lifted.
[]

# Washington State Register, Issue 22-14 

Effective Date of Rule: July 1, 2022.
Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: This rule will go into effect immediately upon filing, allowed under RCW 34.05.380(3), because the changes made by ESHB 1097, codified in RCW 49.17.160, become effective on July 1, 2022. The rules need to be effective the same day so that any complaints alleging discrimination or retaliation are handled in alignment with the legislative intent and statutory updates.

Purpose: The Washington Industrial Safety and Health Act (WISHA), under chapter 49.17 RCW, protects workers from discrimination or retaliation for exercising their rights under WISHA to a safe and healthy workplace.

ESHB 1097, which became law in 2021, made changes to the WISHA discrimination protections under RCW 49.17.160. The department of labor and industries has subsequently updated chapter 296-360 WAC, Discrimination, to better align with ESHB 1097. These updates include:

- Division of occupational safety and health (DOSH) has the authority to issue administrative orders when investigations of discrimination complaints find sufficient evidence that an employer violated RCW 49.17.160.
- A process for issuance of citations and notices of assessments to order relief to the worker and penalties to the employer, and a process for employer and employee appeals of the citation and notice of assessment.
- The time allowed to file a safety and health discrimination complaint has changed from 30 to 90 days.
- The definition of "discrimination" has been amended for clarification.

Additionally, chapter 296-360 WAC, Discrimination, has also been updated to align with Washington state case law specific to "substantial factor" causation test, where a violation of RCW 49.17.160 occurs when an employee's engagement in protected activity was a substantial factor in the employer's decision for the adverse action. Previously, certain provisions within the rule were based on the Occupational Safety and Health Administration's interpretative rules applying federal case law to discrimination under Section $11(c)$ of the Occupational Safety and Health Act. The change to apply Washington case law is necessary to ensure that DOSH applies the appropriate standard used by Washington courts in its investigations and orders issued under ESHB 1097.

Citation of Rules Affected by this Order: New WAC 296-360-045, 296-360-175 and 296-360-180; and amending WAC 296-360-005, 296-360-010, 296-360-020, 296-360-030, 296-360-040, 296-360-050, 296-360-060, 296-360-070, 296-360-080, 296-360-090, 296-360-150, and 296-360-160.

Statutory Authority for Adoption: RCW 49.17.040 and 49.17.050.
Adopted under notice filed as WSR 22-10-107 on May 4, 2022.
Changes Other than Editing from Proposed to Adopted Version: WAC 296-360-045(1), added the word "all" before "appropriate relief." This change was requested during formal comments, and is made to align rule
language with both statute and new WAC 296-360-040. This makes the rule clear and consistent.

WAC 296-360-150(4), reorganized subsection to read more clearly and ensure employees understand when refusal of work due to a hazard or unsafe condition is protected.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 3, Amended 12, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 3, Amended 12, Repealed 0. Date Adopted: July 1, 2022.

Joel Sacks Director

## OTS-3642. 4

AMENDATORY SECTION (Amending WSR 94-15-096, filed 7/20/94, effective 9/20/94)

WAC 296-360-005 Definitions. For the purposes of this chapter.
(1) "Assistant director" ((-)) means the assistant director for the division of ((eonsultation and compliance)) occupational safety and health at the department of labor and industries.
(2) "Department" means the department of labor and industries.
(((2))) (3) "Division" ((-)) or "DOSH" means the division of ((eonsultation and compliance)) occupational safety and health of the department of labor and industries.
(4) "Director" means the director of the department of labor and industries.
(5) "Employ" has the same meaning as in WAC 296-360-080.
(6) "Employee" has the same meaning as in RCW 49.17.020.
(7) "Person" has the same meaning as in RCW 49.17.020.
(8) "Repeat violation" means a violation where the employer has
been cited one or more times previously for violation of RCW 49.17.160 and the prior violation has become a final order no more than five years prior to the employer committed the violation being cited.
[Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-360-005, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-005, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-010 Introduction. (( (1) Chapter 49.17 RCW, the Washington Industrial Safety and Health Act (WISHA), is designed to regulate employment conditions affecting industrial safety and health and to achieve safer and healthier work places throughout the state. WISHA requires every person who has employees to furnish each of his or her employecs employment and a place of employment free from recognized hazards that are causing or likely to cause death or serious physical harm, and to comply with industrial safety and health standards promulgated under WISHA.
(2) Employees and representatives of employees are afforded a wide range of substantive and procedural rights under WISHA. Effective implementation of WISHA and achievement of its goals depend in large part upon the active but orderly participation of employees, individually and through their representatives.
(3)) ) This chapter deals ((essentially)) with the rights of employees afforded under RCW 49.17.160 ((. RCW 49.17.160)) , which prohibits reprisals, in any form, against employees who exercise rights under WISHA. The purpose of this chapter is to make available in one place interpretations of the various provisions of ((section 16 of WISHA) ) RCW 49.17.160 that will guide the assistant director in the performance of ((his or hex)) their duties ((thereundex)).
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-010, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-020 General requirements of RCW 49.17.160 of WISHA. ((RCW 49.17.160 provides that)) (1) No person shall discharge or in any manner discriminate against any employee because the employee has: (a) Filed any complaint under or related to WISHA( ( $\boldsymbol{\text { ( } ) ~ ) ~}$
(b) Instituted or caused to be instituted any proceeding under or related to WISHA( (т)) $\dot{1}$
(c) Testified or is about to testify in any proceeding under or related to WISHA ( $(\boldsymbol{\tau})$ ) i or
(d) Exercised on ((his or hex)) their own behalf or on behalf of others any right afforded by WISHA.
(2) Any employee who believes ((that he/she has)) they have been discriminated against in violation of ((section 16 of WISHA may, with in thirty days after the violation occurs, file a complaint with the assistant director alleging the violation. The division shall investigate the complaint and, if the assistant director determines that section 16 of WISHA has been violated, the division may bring a civil action against the violator in superior court. The suit may ask the court to restrain violations of RCW 49.17 .160 and to grant other ap propriate relicf, including rehiring or reinstating the employee to his or her former position with back pay)) RCW 49.17 .160 may file a complaint alleging a violation, within 90 days after such violation.
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-020, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 82-13-045, filed 6/11/82)
WAC 296-360-030 Filing a complaint of discrimination. (1) Who may file. A complaint ( (of RCW 49.17.160)) alleging discrimination may be filed by the employee ( (him-or herself)), or by ( ( a$)$ ) the employee's authorized representative ( (authorized to do so on his or her behalf) ) .
(2) Nature of filing. No particular form of complaint is required.
(3) Place of filing. The complaint should be filed with the division by the following methods:
(a) Department website: https://lni.wa.gov/workers-rights/ workplace-complaints/discrimination-in-the-workplace.
(b) In person:

Department of Labor and Industries
DOSH-Discrimination Program
7273 Linderson Way S.W.
Tumwater, WA 98501
(c) Mail:

Department of Labor and Industries
DOSH-Discrimination Program
P.O. Box 44600

Olympia, WA 98504-4600; or
(d) Phone: 360-902-6088 or 1-800-423-7233.
(4) Time for filing. ( (RCW 49.17.160(3) provides that an employee who believes that he or she has been discriminated against in violation of RCW 49.17.160 "may, within thirty days aftcr such violation occurs" file a complaint with the assistant dircctor. A major purpose of the thirty-day period is to allow the assistant director to decline to entertain complaints that have become stale. Accordingly, the division will presume that complaints not filed within thirty days of an alleged violation are untimely. There may be circumstances, however, ) The complaint must be filed timely as stated in WAC 296-360-020 (2). Circumstances may exist that justify tolling, meaning pause, delay, or extend, the ((thirty-day)) 90-day period on recognized equitable principles or because strongly extenuating circumstances exist, e.g., where the employer has concealed, or misled the employee regarding the grounds for, discharge or other adverse action; or where the discrimination is in the nature of a continuing violation. In the absence of circumstances justifying a tolling of the ((thirty-day)) 90-day period, the division ((shall)) will not accept untimely complaints.
[Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 82-13-045 (Order 82-22), § 296-360-030, filed 6/11/82. Statutory Authority: RCW $49.17 .040,49.17 .050,49.17 .240$, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-030, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 94-15-096, filed 7/20/94, effective 9/20/94)

WAC 296-360-040 Discrimination, determination, and notification ((of assistant director's determination)). (1) ((RCN 49.17.160(3) provides that)) The assistant director ((is to)) must determine if a
violation of RCW 49.17.160 has occurred, or whether there was insufficient evidence to determine if a violation occurred.
(2) The assistant director will notify a complainant and their employer of the determination made under subsection (1) of this section within ((nincty)) 90 days of receipt of the complaint ( (of his detcrmination whether prohibited discrimination has occurred. This mincty-day provision is dircctory, not mandatory. Although)). The department may extend the 90-day period by providing advance written notice to the complainant and the employer setting forth good cause for an extension of the period, and specifying the duration of the extension.
(a) Violation occurred. If the assistant director determines that RCW 49.17.160 has been violated, the assistant director will issue a citation and notice of assessment describing the violation to the employer, ordering all appropriate relief as described in WAC 296-360-045, and may assess a civil penalty as described in WAC 296-360-175. Complainants and employers have the right to appeal the citation and notice of assessment in accordance with WAC 296-360-180.
(b) Insufficient evidence. If the assistant director finds there is insufficient evidence to determine that a violation occurred, the assistant director will issue a letter of closure and the employee may institute the action on their own behalf within 30 days of such determination as allowed in RCW 49.17.160.
(i) The complainant may file a written request for review by the director within 15 working days of receipt of the determination. The request for director review must set forth the basis for the request. The request must be filed by mail to the address in WAC 296-360-030 (3) (c) or in-person to the address in WAC 296-360-030 (3) (b).
(ii) Upon review the director may set aside the assistant director's determination and issue a citation and notice of assessment, remand the matter for further investigation, or affirm the determination of the assistant director.
(3) Every effort will be made to notify complainants of the ((assistant director's determination within ninety days, there may be instances when it is not possible to do so) ) determination using a method of mailing that can be tracked or delivery that can be confirmed.
( ( $(2)$ If a complainant receives a determination from the assistant director that prohibited discrimination has not occurred, the complainant may file a written request for review by the director within fifteen working days of receipt of the determination. The request for review must set forth the basis for the request. The request shall be filed by mailing or delivering the request to the Director of mabor and Industries, P.O. Box 44000, Olympia, Washington 98504-4000. Upon review the director may set aside the assistant director's determination, remand the matter for further investigation, or affirm the determination of the assistant director. The director shall notify the complainant of the decision after review.) )
[Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-360-040, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 85-10-004 (Order 85-09), § 296-360-040, filed 4/19/85. Statutory Authority: RCW 49.17.040, 49.17 .050 , 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-040, filed 11/13/80.]

## NEW SECTION

## WAC 296-360-045 Appropriate relief for violations of RCW

49.17.160. (1) A citation and notice of assessment issued for a violation of RCW 49.17.160 as required by WAC 296-360-040, must include all appropriate relief which may include, but is not limited to, the following:
(a) Restoring the complainant to the position of employment held by the complainant when the discrimination occurred, or restoring the complainant to an equivalent position with equivalent employment hours, work schedule, benefits, pay, and other terms and conditions of employment; and
(b) Ordering the employer to make payable to the complainant earnings that the complainant did not receive due to the employer's discriminatory action, including interest of one percent per month on all earnings owed. The earnings and interest owed will be calculated from the first date earnings were owed to the employee.
(2) A civil penalty may be issued in accordance with WAC 296-360-175, Penalties for violations of RCW 49.17.160.
[]

AMENDATORY SECTION (Amending WSR 94-15-096, filed 7/20/94, effective 9/20/94)

WAC 296-360-050 Withdrawal of complaint. Enforcing the provisions of RCW 49.17 .160 is not only a matter of protecting rights of individual employees, but also of protecting the public interest. Attempts by an employee to withdraw a filed complaint will not necessarily result in termination of the division's investigation. A voluntary and uncoerced request from a complainant to withdraw a complaint will be given careful consideration; however, the division's jurisdiction cannot be foreclosed as a matter of law by unilateral action of the employee. ( (However, a voluntary and uncocreed request from a com= plainant to withdraw his/her complaint shall genexally be aceepted.))
[Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-360-050, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-050, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-060 Arbitration or other agency proceedings. General.
(a) An employee who files a complaint under RCW 49.17.160 may pursue remedies under grievance arbitration proceedings in collective bargaining agreements, and may also resort to other agencies, such as the National Labor Relations Board, for relief. The division's jurisdiction to entertain RCW 49.17 .160 complaints, to investigate, and to determine whether discrimination has occurred, is independent of the jurisdiction of other agencies or bodies. The division may file an ac-
tion in superior court regardless of the pendency of other proceedings.
(b) ((Where it is possible, hover,)) The division favors voluntary resolution, where possible, of disputes under procedures in collective bargaining agreements. ((Alsor)) The division should defer to the jurisdiction of other forums established to resolve disputes that may also be related to RCW 49.17 .160 complaints. Thus, where a complainant is pursuing remedies other than those provided by RCW 49.17.160 it may be proper to postpone the assistant director's determination whether discrimination has occurred, and defer to the results of such proceedings.
(2) Postponement of determination. Postponement of determination is justified where the rights asserted in other proceedings are substantially the same as rights under RCW 49.17.160 and those proceedings are not likely to violate the rights guaranteed by RCW 49.17.160. The factual issues in the ( (such)) proceedings must be substantially the same as those raised by the RCW 49.17.160 complaint, and the forum hearing the matter must have the power to determine the ultimate issue of discrimination.
(3) Deferral to outcome of other proceedings. Determinations to defer to the outcome of another proceeding ((begun)) initiated by a complainant must be made after careful scrutiny. It must be clear that the proceeding dealt adequately with all factual issues, that it was fair, regular, and free of procedural infirmities, and that its outcome did not violate the purpose and policy of WISHA. If another action ((begum)) initiated by a complainant is dismissed without an adjudicatory hearing on the merits, the division will not necessarily regard the dismissal as determinative of the merits of the RCW 49.17.160 complaint.
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-060, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-070 Persons prohibited from discriminating. RCW 49.17.160 specifically states that "no person shall discharge or in any manner discriminate against any employee" because the employee has exercised rights under WISHA. RCW 49.17.020(5), defines "person" as "one or more individuals, partnerships, associations, corporations, business trusts, legal representatives, or any organized group of persons." Consequently, the prohibitions of RCW 49.17 .160 are not limited to actions taken by employers against their own employees. A person may be charged with discriminating against an employee of another person. RCW 49.17.160 extends to such entities as organizations representing employees in collective bargaining, employment agencies, or any other person in a position to discriminate against an employee. ( (See Meck v. United States, 136 F.2d 679 (6th Cir., 1943); Bowe v. Judson C. Burns, 137 F.2d 37 (3rd Cir., 1943).))
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-070, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 94-15-096, filed 7/20/94, effective 9/20/94)

WAC 296-360-080 Persons protected by RCW 49.17.160. (1) All employees are afforded the full protection of RCW 49.17.160. WISHA defines an employee as "an employee of an employer who is employed in a business of ((his/hex)) their employer which affects commerce." RCW 49.17.020(4). WISHA does not define "employ"; however, the broad remedial nature of WISHA demonstrates a clear intent that the existence of an employment relationship, for purposes of RCW 49.17.160, is to be based upon economic realities rather than upon common law doctrines and concepts. ((Sec U.S. V. Silk, 331 U.S. 704 (1947); Rutherford Food Corporation v. MeComb, 331 U.S. 722 (1947).))
(2) For purposes of RCW 49.17.160, an applicant for employment could be considered an employee. ( (See NLRB v. Lamar Creamery, 246 F.2d 8 (5th Cir., 1957).))
[Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-360-080, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-080, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 94-15-096, filed 7/20/94, effective 9/20/94)

WAC 296-360-090 Unprotected activities distinguished. ((1) An employer or others may base actions that adversely affect an employee upon nondiscriminatory grounds. An employee's engagement in activities protected by WISHA does not automatically render him/her immune from discharge or discipline for legitimate reasons, or from adverse action dictated by nonprohibited considerations. See NIRB v. Dixie Motox Goach Corp. 128 F.2d 201 (5th Cir., 1942).
(2) To establish a violation of RCW 49.17.160, the employee's engagement in protected activity need not be the sole consideration behind discharge or other adverse action. If protected activity was a substantial reason for the action, or if the discharge or other adverse action would not have taken place "but for" the employec's engagement in protected activity, RCW 49.17.160 has been violated.) ) If the employee's engagement in protected activities was a substantial factor in bringing about the employer's decision, RCW 49.17.160 has been violated. "Substantial factor" means a significant motivating factor in bringing about the employer's decision. "Substantial factor" does not mean the only factor or the main factor in the challenged act or decision. Ultimately, the issue as to whether an employee's engagement in protected activities was a substantial factor for the discharge or other adverse action is determined on the basis of the facts in the particular case.
[Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-360-090, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-090, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-150 Discrimination because of exercise of right afforded by WISHA-Refusal to work in an unsafe condition. (1) Review of WISHA and examination of the legislative history discloses that, as a general matter, WISHA grants no specific right to employees to walk off the job because of potential unsafe conditions at the work place. A hazardous condition that may violate WISHA will ordinarily be corrected by the employer, once brought to its attention. If the employer does not correct a hazard, or if there is a dispute about the existence of a hazard, the employee normally can ask the division to inspect the work place pursuant to RCW 49.17.110, or can seek help from other public agencies that have responsibility for safety and health. Under such circumstances, an employer would not violate RCW 49.17.160 by disciplining an employee who refuses to work because of an alleged safety or health hazard.
(2) Occasions arise, however, when an employee is confronted with a choice between not performing assigned tasks or subjecting him- or herself to serious injury or death arising from a hazard at the work place. If the employee, with no reasonable alternative, refuses in good faith to expose him- or herself to the dangerous condition, he or she is protected against subsequent discrimination.
(3) An employee's refusal to work is protected if he or she meets the following requirements:
(a) The refusal to work must be in good faith, and must not be a disguised attempt to harass the employer or disrupt the employer's business;
(b) The hazard causing the employee's apprehension of death or injury must be such that a reasonable person, under the circumstances then confronting the employee, would conclude that there is a real danger of death or serious injury; and
(c) There must be insufficient time, due to the urgency of the situation, to eliminate the danger through resort to regular statutory enforcement channels.
(4) As indicated in subsection (3) of this section, an employee's refusal to work is ((not)) protected ((unless)) if it is a good faith response to a hazardous condition. To determine whether an employee has acted in good faith, the division will consider, among other factors, whether the employer knew that the hazard could cause serious injury, death, or that the hazard was prescribed by a specific safety standard promulgated under WISHA or any other law that relates to the safety and health of a place of employment. The division may also consider whether the employee( ( $:$
(a))) asked the employer to correct the hazard((;
(b))), asked for other work ((i
(c)) ), remained on the job until ordered to leave by the employ$\operatorname{er}((\dot{\Gamma})) \perp$ or $(((d)))$ informed the employer that, if the hazard was not corrected, the employee would refuse to work.

The lack of one or more of these factors ((shall)) must not necessarily preclude a finding of good faith if other factors do establish good faith. ((The division will also consider whether the employer knew that the hazard could cause serious injury or death, or that the hazard was prescribed by a specific safety standard promulgated under WISHA or any other law that relates to the safety and health of a place of employment.))
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-150, filed 11/13/80.]

AMENDATORY SECTION (Amending WSR 80-17-015, filed 11/13/80)
WAC 296-360-160 Payment of damages to employee discriminated against. (1) If an employer discriminates against an employee such that the employee earns less than he or she would have earned absent the discrimination, the employer ((shall)) must pay the employee the difference between the wages that the employee would have earned absent the discrimination and the wages the employee actually earned after the discrimination.
(2) If an employer discriminates against an employee for a refusal to work that is protected under WAC 296-360-150, the employer need not pay the employee's wages for the time spent fixing the hazard, or that would have been spent fixing the hazard, if the employer (a) had to or would have had to shut down the job to make the repair and (b) had not other work the employee could have done.
[Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. WSR 80-17-015 (Order 80-21), § 296-360-160, filed 11/13/80.]

NEW SECTION
WAC 296-360-175 Penalties for violations of RCW 49.17.160.
(1) (a) Penalties for violations of RCW 49.17 .160 are as follows:

| Employer Size | Penalty Amount <br> Per Violation |
| :---: | :---: |
| $1-25$ | $\$ 5,000$ |
| $26-100$ | $\$ 7,000$ |
| $101-250$ | $\$ 10,000$ |
| $251+$ | $\$ 14,000$ |

(b) Employer size is determined by the maximum number of workers employed in the 12 -month period since the alleged violation occurred.
(2) Repeat violations. Penalty amounts will increase for repeat violations. The number of repeated violations will be calculated based on the number of violations found within the last five years.
(a) The first repeat violation the base penalty amount under subsection (1) (b) of this section will be multiplied by three.
(b) Any violation above a single reoccurrence the base penalty under subsection (1)(b) of this section will be multiplied by five.
[]

NEW SECTION
WAC 296-360-180 Appeals of citations and notices of assessments. (1) WAC 296-900-17005 and 296-900-17010 apply to appeals described in this section. The remainder of the section outlines the timelines for notifying the department about appeals of the citation and notice of assessment issued by the department.
(2) Citation and notice of assessment appeal. Both the employer and the complainant have a right to appeal determinations made under WAC 296-360-040.
(a) Notification to the department.
(i) An employer has 30 calendar days of receipt of the citation and notice of assessment to notify the department that the employer wishes to appeal the citation or notice of assessment; and
(ii) The complainant has 15 working days from receipt of the citation and notice of assessment to notify the department that the complainant wishes to appeal the order of appropriate relief stated in the notice of assessment.
(b) The citation and notice of assessment will become a final order of the department, not subject to review by any court or agency, if the department does not receive notification of appeal from the employer or complainant as stated in (a) of this subsection.
(3) The department may reassume jurisdiction according to the timeline, process for hearing, and issuance of corrective notices of redetermination under RCW 49.17.140(4) upon receiving notice of appeal from the employer, employee, or both.
(a) The redetermination will become the final order subject to direct appeal by an employer or complainant to the board of industrial insurance appeals within 15 working days of such redetermination with service of notice of appeal upon the director.
(b) In the event that the department does not reassume jurisdiction, the department must notify the state board of industrial insurance appeals of all notifications of intention to appeal the citation and notice of assessment and certify a full copy of the record in such appeal matters to the board.
(4) A notice of appeal filed under this section will stay the effectiveness of any citation or notice of assessment except orders of reinstatement pending review by the board of industrial appeals.
[ ]

[Filed July 1, 2022, 3:02 p.m., effective July 1, 2023]

Effective Date of Rule: July 1, 2023.
Purpose: Adoption of the 2021 Washington State Energy Code, Commercial provisions under chapter 51-11C WAC.

Citation of Rules Affected by this Order: New chapter 51-11C WAC,
31 sections; and amending chapter $51-11 \mathrm{C}$ WAC, 150 sections.
Statutory Authority for Adoption: RCW 19.27A.020, 19.27A.025, 19.27A. 160 .

Other Authority: Chapters 19.27A, 19.27 RCW.
Adopted under notice filed as WSR 22-02-076 on January 5, 2022.
Changes Other than Editing from Proposed to Adopted Version: Sec-
tion C103.2: In the required documentation section, added a reference to Section C501 for existing buildings.

Definition of building thermal envelope was modified for clarity and to conform with all types of space included under Section C402.1.1.

Definitions of commercial boiler and process boiler were removed based on changes to Section C403.3.4. They were replaced by the new definition process application. These changes bring the code closer to the language that will be adopted by the ICC in 2024.

Definition of dedicated outdoor air system was modified for clarity; it is allowable for the ventilation system to be integrated with HVAC ductwork as long as the systems are not interlocked.

Definition of demand control kitchen ventilation was simplified for clarity.

Definitions of multi-pass and single-pass were modified to include heat pump for clarity.

Definition of unconditioned space was modified for clarity and to conform with all types of space included under Section C402.1.1.

Section C401.2: New section C 412 was added to the list as mandatory for the prescriptive and outcome-based compliance methods.

Section C401.2.2: Reference to the new boiler requirements was added to the process equipment section.

Table C402.1.3: Option 1 was struck and the proposed changes to the CMU footnote c were not adopted.

Table C402.1.4: Option 1 was struck and the proposed changes to the CMU footnote d were not adopted.

Section C402.5.2: Modification to clarify the requirements for units exceeding the air leakage target for both individual units and sample testing.

Section C403.1: Reference to the new boiler requirements was added to the process equipment exception.

Section C403.1.4: The first exception for the heat pump space heating requirement was modified to remove the proposed second sentence as it is redundant to the first sentence and unnecessary.

The second exception was edited for clarity.
Exception 18 was added based on public testimony that hospitals are required to provide redundant backup systems; it was felt that since the requirement for redundant backup heating applied to both Group I-2 and I-3 occupancies, both should be included in the exception.

Section C403.3.2.3: The second sentence of Exception 4 was struck. The information is now included in the efficiency table for air to water heat pumps, Table C403.3.2(15).

Tables C403.3.2(1) and C403.3.2(2): These tables were modified to delete the requirements for efficiency ratings prior to January 1, 2023, as this code will go into effect after that date.

Table C403.3.2(15): The missing footnotes were added to the table.

Section C403.3.4.3: This section was modified to clean up the language and provide a clearer separation between process and nonprocess boilers. An exception was added for multifamily buildings as these were not found to be cost effective in a Title 24 case study.

Table C403.3.4.3: This table was modified to coordinate with the changes made to the charging section, and the column heading for oxygen concentration was corrected.

Section C403.3.5.1: This section was modified for clarity, and Exception 3 was provided with a pointer to the requirements for sensible recovery effectiveness.

Section C403.3.8.1: Exception 4 was corrected to cite the cooling plant equipment manufacturer's instructions.

Section C403.3.8.2: Exception 2 was modified to reflect the correct cfm threshold and clarify what exemption applies.

Section C403.5: A second Group R economizer exception 1b. was added for Group R occupancies with ERVs with a higher effectiveness than required by the base code. This will allow for some small PTHP units with inverter driven compressors that cannot comply with the efficiency requirements of Exception 5. Exception 5 was modified to list the applicable efficiency tables.

Section C403.7.1.1: The first sentence was corrected, as both conditions apply. The thresholds for DCV in Exception 4 were increased for small rooms, based on testimony from the proponent that the lower threshold was too aggressive.

Section C403.7.1.2: The exceptions to this section were revised for clarity.

Section C403.7.6: This section was modified to correct the language from an "or" statement to an "and" statement.

Section C403.7.6.1: This section was modified to reference the outdoor air requirements in the International Mechanical Code and testing criteria was added to correlate with Section C403.7.6.2.

Section C403.7.6.2: This section was modified to include energy recovery effectiveness requirements to align with the requirements in C403.3.5.1.

Section C404.2: Option 2 for heat pump water heating requirements was selected and the language under Option 1 was removed.

Section C404.2.1: This section was modified to allow for a backup gas water heating system, and two additional exceptions were added: One for low-carbon district energy systems and one for Group I-2 and I-3 facilities required to provide backup redundant systems.

Section C404.2.1.1: This section was modified to reduce the required heat pump capacity by half, allowing the difference to be made up by a complying supplemental system, including gas water heating. The remaining subsections were modified to remove specifications for electric resistance backup and insert an allowance for fossil fuel.

Section C404.2.1.4: This section was modified to remove redundant language in Item 4.2. The testing conditions are already stated in the testing standard.

Section C404.2.1.5: The title for this section was changed from alarms to system fault detection for clarity.

Table C404.2: Missing footnotes were reapplied to the table, along with a new footnote pointer to the heat pump water heater requirements in Section C404.2.1.

Section C405.2.1: This section was revised to include the original recommended language as noted in the full summary of changes in the CR-102. The applicable control requirements by use type are now shown in a table format.

Section C405.2.8.3: The phrase "from full output" was removed from the last sentence to eliminate confusion.

Section C405.2.9.3: This is also an errata clean up changes as noted in the full summary of changes in the CR-102. "All of" was struck from the first sentence and the list was reordered.

Section C405.3: Based on public testimony, specifications were added on how to measure the efficacy of plant lighting.

Table C405.4.2(2): An erroneous footnote $i$ was removed from the Common Space-by-Space Types table heading.

Table C405.5.3(3): The first row title was changed from base site allowance to the correct building façade title.

Section C405.9.2.1: The proposed second sentence of this section pertaining to escalator design was removed via ICC errata.

Section C406.1: The exceptions for low energy spaces (1) and building additions (2) were revised to reflect a percentage of base credits rather than specifying a number of credits, as the credits vary by building use.

Section C406.1.1.1: "On-site" was removed from the title of this section as the code now has provisions for the use of off-site renewable energy.

Section C406.1.2: This section was revised for clarity on application to buildings with different lighting power allowances in different areas.

WAC 51-11C-40602, Section C406.2: This section was erroneously retained from the 2018 code and the requirements here are duplicated under the new WAC number. The requirements are located under WAC 51-11C-40620, Section C406.2.

Table C406.2:
Item 3: The credits were adjusted up based on updated energy calculations.

Items 5 and 6: The titles were simplified for clarity.
Item 17: The rule was proposed with two options for Item 17 based on the adoption of heat pump water heater requirements. Although a revised version of the heat pump water heater requirements were adopted, the Council elected to provide the full credit value as if the measure was not adopted.

Item 21: PNNL provided credit values for the high performance service hot water temperature maintenance system after modeling and calculations with the credits each represent 0.1 percent of emission reduction compared to total building baseline emissions.

Footnote e: This footnote was modified to clarify that the credit could not be taken if refrigeration recovery is required by Section C403.9.2.3.

Equation 4-15 (Section C406.2.2.2.2) : The equation was modified to include methods for calculating the cooling efficiency improvement.

Equation 4-16 (Section C406.2.2.3.2): The equation was modified to include a method of calculating heating efficiency improvement.

Section C406.2.3: Editorial changes for clarity; correction of section numbering.

Section C406.2.4.1: Item 2 was modified to specify that a minimum of two switched receptacles are required for this credit.

Section C406.2.4.2: The language for prorating of credits changed "tuned lighted floor area" to the clarified "Floor area with high end trim."

Equation 4-17 (Section C406.2.5): The equation was converted to SI units and corrected to account for all renewable energy types.

Section C406.2.6: The section was modified for clarity.
Section C406.2.6.2: The terminology was corrected from "watercooled chiller systems" to "condenser water systems."

Section C406.2.6.3: Option 1 was removed, as Option 2 and the requirements in Section C404.2, Option 2 were selected to go forward.

Section C406.2.6.3.1: The section was modified to remove the initial specification for air-source heat pump technology, as it conflicted with later requirements for water-source heat pump specifications.

Section C406.2.9: The language in this section was simplified for clarity.

Section C406.2.12: The language in this section was simplified for clarity.

Section C406.2.13: This section with its subsections was reformatted to remove redundant testing procedures already specified in Section C402. Sections C406.2.13.1 and C406.2.13.2 (previously C406.2.13.2 and C406.2.13.3) were reworded to reference a percentage reduction of the maximum leakage allowed in $C 402$ rather than a specific rate.

Sections C406.2.15, C406.2.16: These sections were revised to specify that 90 percent of appliances comply with Energy Star ratings, rather than all, based on testimony that in some cases there may not be any accessible appliances that meet the rating.

Section C406.2.17: This section contains the same revision from all to 90 percent of the installed dryers comply. In addition, the language was simplified and an allowance for a mix of in-unit and central laundry rooms was added.

Section C406.3: This section was modified to add an additional sentence to define "peak period." There were also some editorial changes for clarity.

Section C406.3.2: The language in this section was simplified for clarity.

Section C406.3.4: The calculation for prorating credits was corrected.

Sections C406.3.5, C406.3.6: The language in these sections was simplified for clarity and reference to pricing was removed.

Table C407.2: New sections missing from the mandatory compliance table were added. These include C403.1.4, Use of electric resistance and fossil fuel-fired HVAC heating equipment; C411, Renewable energy (title change only); and C412, Compressed air systems. A footnote was also added to C411 to clarify that compliance with this section also includes any exceptions.

Section C407.3: Item 2.2 was modified to include a sentence noting that renewable energy production is to be subtracted from the proposed building annual site energy use.

Sections C407.3.3.1, C407.3.3.2: Item 3 in both sections was modified to clarify the intent.

Tables C407.3(2) and C407.3(3): Both tables were updated based on the changes to the electricity carbon emissions factors and the limi-
tations on fossil fuel space and water heating. The column title for the second column in Table C407.3(3) was also corrected.

Section C409.4.3: Minor editorial change to the last sentence for clarity.

Section C411.1: The redundant language in Exception 3 was replaced with a requirement to document lack of roof area.

Section C411.1.1: This section was reformatted for clarity.
Section C411.2.1: This section was reformatted and the section references were corrected. The numbering of associated table was also corrected.

Section C411.3.1: This section was modified to include exemption of service clearances from the roof area calculation.

Section C503.2: The requirements for change in space conditioning were moved to Section C505 and should have been struck.

Section C503.4: Option 2 was selected to move forward, so option 1 language was struck.

Section C503.4.3: This section was modified to correlate with the DOAS exceptions to the economizer requirements.

Table C503.4.6: Item 4 was modified to specify 80 percent of served coils.

Section C503.5: Options 1 and 2 were merged in the final adopted version. The exceptions to the section were reformatted slightly for clarity.

Table D601.10.1: Systems 3 and 4 were modified to clarify that they include split systems.

Table D601.10.2: VAV and DOAS systems were added to the list of system types for direct expansion coil number of stages and furnace efficiency. Adds variable flow primary and secondary to heating water loop configuration and chilled water loop configuration. Heating plant loop and water loop temperature control is added as a parameter that is available for credit.

A final cost-benefit analysis is available by contacting Stoyan Bumbalov, 1500 Jefferson [Street] S.E., P.O. Box 41449, Olympia, WA 98504-1449, phone 360-407-9277, email Stoyan.bumbalov@des.wa.gov, website sbcc.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 31, Amended 150, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: April 22, 2022.
Tony Doan
Council Chair

## AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-10100 Section C101-Scope and general requirements.
C101.1 Title. This code shall be known as the Washington State Energy Code, and shall be cited as such. It is referred to herein as "this code."

The 2021 edition of the Washington State Energy Code is hereby adopted. The Washington State Energy Code adopted under chapter 51-11C WAC shall become effective in all counties and cities of this state on July 1, 2023.
C101.2 Scope. This code applies to commercial buildings and the buildings sites and associated systems and equipment. References in this code to Group $R$ shall include Group I-1, Condition 2 assisted living facilities licensed by Washington state under chapter 388-78A WAC and Group I-1, Condition 2 residential treatment facilities licensed by Washington state under chapter 246-337 WAC. Building areas that contain Group $R$ sleeping units, regardless of the number of stories in height, are required to comply with the commercial sections of the energy code.
EXCEPTION: The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants including ornamental plants, flowers, vegetables, and fruits. A temporary growing structure is not considered a building for the purposes of this code. However, the installation of other than listed, portable mechanical equipment or listed, portable lighting fixtures is not allowed.
C101.3 Intent. This code shall regulate the design and construction of buildings for the use and conservation of energy over the life of each building. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-10100, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, and chapters 19.27, 19.27A, and 34.05 RCW. WSR 17-17-162, § 51-11C-10100, filed 8/23/17, effective 10/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-10100, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10100, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-10200 Section C102-Alternative materials, design and methods of construction and equipment.

C102.1 General. The provisions of this code are not intended to prevent the installation of any material, or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. ( (An alternative material, design or method of construction shall be approved where)) The code official shall have the authority to approve an alternate material, design or method of construction upon the written application of the owner or the owner's authorized agent. The code official shall first find((s)) that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability, energy conservation, and safety. ( (Where the alternative material, design or method of construction is not approved,) The code official shall respond to the applicant, in writing, stating the reasons why the alternative was approved or was not approved.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-10200, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10200, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-10300 Section C103-Construction documents.

C103.1 General. Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the building official, with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require necessary construction documents to be prepared by a registered design professional.
EXCEPTION: The code official is authorized to waive the requirements for construction documents or other supporting data if the code official determines they are not necessary to confirm compliance with this code.
C103.2 Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documents are permitted to be submitted when approved by the code official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems and equipment as herein governed. Details shall include, but are not limited to, as applicable:

1. Energy compliance path per Section C401 or C501.
2. Insulation materials and their $R$-values.
( ( $Z_{.}$)) 3. Fenestration U-factors and SHGCs.
((3.)) 4. Area-weighted U-factor and SHGC calculations.
((4.)) 5 . Mechanical system design criteria.
((5.)) 6. Mechanical and service water heating system and equip-
ment types, sizes and efficiencies.
((6.)) 7. Economizer description.
((7.)) 8. Equipment and systems controls.
((8.)) 9. Fan motor horsepower (hp) and controls.
((9.)) 10. Duct sealing, duct and pipe insulation and location.
$((10)$.$) 11. Lighting fixture schedule with wattage and control$
narrative.
((11.)) 12. Location of daylight zones on floor plan.
((12.)) 13. Air barrier details including all air barrier boundaries and associated square foot calculations on all six sides of the air barrier as applicable.

C103.2.1 Building thermal envelope depiction. The building's thermal envelope shall be represented on the construction documents.
C103.3 Examination of documents. The code official shall examine or cause to be examined the accompanying construction documents and shall ascertain whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

C103.3.1 Approval of construction documents. When the code official issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "Reviewed for Code Compliance." Such approved construction documents shall not be changed, modified or altered without authorization from the code official. Work shall be done in accordance with the approved construction documents.

One set of construction documents so reviewed shall be retained by the code official. The other set shall be returned to the applicant, kept at the site of work and shall be open to inspection by the code official or a duly authorized representative.
C103.3.2 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.
C103.3.3 Phased approval. The code official shall have the authority to issue a permit for the construction of part of an energy conservation system before the construction documents for the entire system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire energy conservation system will be granted.
C103.4 Amended construction documents. Changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.
C103.5 Retention of construction documents. One set of approved construction documents shall be retained by the code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.

## C103.6 Building documentation and close out submittal requirements.

 The construction documents shall specify that the documents described in this section be provided to the building owner or owner's author-ized agent within a maximum of 90 days of the date of receipt of the certificate of occupancy.
C103.6.1 Record documents. Construction documents shall be updated by the installing contractor and architect or engineer of record to convey a record of the completed work. Such updates shall include building envelope, mechanical, plumbing, electrical and control drawings red-lined, or redrawn if specified, that show all changes to size, type and locations of components, equipment and assemblies. Record documents shall include the location and model number of each piece of equipment as installed. The architect, engineer of record or installing contractor is required to provide consolidated record drawings in compliance with this section to the building owner or owner's authorized agent with the timeline specified in Section C103.6.
C103.6.2 Building operations and maintenance information. Required regular maintenance actions for equipment and systems shall be clearly stated on a readily visible label on the equipment. The label shall include the title or publication number for the operation and maintenance manual for that particular model and type of product and the manufacture date or installation date.
C103.6.2.1 Manuals. An operating and maintenance manual shall be provided for each component, device, piece of equipment, and system governed by this code. The manual shall include all of the following:

1. Submittal data indicating all selected options for each piece of equipment and control devices.
2. Manufacturer's operation manuals and maintenance manuals for each device, piece of equipment, and system requiring maintenance, except equipment not furnished as part of the project. Required routine maintenance actions, cleaning and recommended relamping shall be clearly identified.
3. Name and address of at least one service agency.
4. Controls system inspection schedule, maintenance and calibration information, wiring diagrams, schematics, and control sequence descriptions. A schedule for inspecting and recalibrating all lighting controls. Desired or field-determined setpoints shall be permanently recorded on control drawings at control devices or, for digital control systems, on the graphic where settings may be changed.
5. A narrative of how each system is intended to operate, including recommended setpoints. Sequence of operation alone is not acceptable for this requirement.
C103.6.3 Compliance documentation. All energy code compliance forms and calculations shall be delivered in one document to the building owner as part of the project record documents or manuals, or as a standalone document. This document shall include the specific energy code year utilized for compliance determination for each system. NFRC certificates for the installed windows, list of total area for each NFRC certificate, the interior lighting power compliance path (building area, space-by-space) used to calculate the lighting power allowance.

For projects complying with Section C401.2 Item 1, the documentation shall include:

1. The envelope insulation compliance path (prescriptive or component performance).
2. All completed code compliance forms, and all compliance calculations including, but not limited to, those required by sections C402.1.5, C403.2.12.1, C405.4, and C405.5.

For projects complying with Section C401.2 Item 2, the documentation shall include:

1. A list of all proposed envelope component types, areas and $U-$ values.
2. A list of all lighting area types with areas, lighting power allowance, and installed lighting power density.
3. A list of each HVAC system modeled with the assigned and proposed system type.
4. Electronic copies of the baseline and proposed model input and output file. The input files shall be in a format suitable for rerunning the model and shall not consist solely of formatted reports of the inputs.
C103.6.4 Systems operation training. Training of the maintenance staff for equipment included in the manuals required by Section C103.6.2 shall include at a minimum:
5. Review of manuals and permanent certificate.
6. Hands-on demonstration of all normal maintenance procedures, normal operating modes, and all emergency shutdown and start-up procedures.
7. Training completion report.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-10300, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-10300, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-10300, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-10300, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10300, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-10400 Section C104-((Inspections)) Fees.

((C104.1 General. Construction or work for which a permit is required shall be subject to inspection by the code official, his or her designated agent, or an approved agency, and such construction or work shall remain visible and able to be accessed for inspection purposes until approved. Approval as a result of an inspection shall not be eonstrued to be an approval of a violation of the provisions of this eode or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material, product, system or building component required to allow inspection to validate compliance with this code.

C104.2 Required inspections. The code official, his or her designated agent, or an approved agency, upon notification, shall make the in= spections set forth in sections $\mathrm{Cl04.2.1}$ through C104.2.6.
C104.2.1 Footing and foundation insulation. Inspections shall verify footing and/or foundation insulation R-value, location, thickness, depth of burial and protection of insulation as required by the code, approved plans and specifications.

C104.2.2 Thermal envelope. Inspections shall be made before application of interior finish and shall verify that envelope components with the correct type of insulation, the $R$-values, the correct location of insulation, the correct fenestration, the U-factor, SHGC, VT, and air leakage controls are properly installed as required by the code, approved plans and specifications, including envelope components in future tenant spaces of multitenant buildings.
C104.2.3 Plumbing system. Inspections shall verify the type of insulation, the $R$-values, the protection required, controls, and heat traps as required by the code, approved plans and specifications.

C104.2.4 Mechanical system. Inspections shall verify the installed HVAC equipment for the correct type and size, controls, duct and piping insulation $R$-values, duct system and damper air leakage, minimum fan efficicncy, encrgy recovery and cconomizer as required by the eode, approved plans and specifications.
C104.2.5 Electrical system. Inspections shall verify lighting system controls, components, meters, motors and installation of an clectric meter for each dwelling unit as required by the code, approved plans and specifications.
C104.2.6 Final inspection. The final inspection shall include verifieation of the installation and proper operation of all required building controls, and documentation verifying activities associated with required building commissioning have been conducted in accordance with Section C408.

C104.3 Reinspection. A building shall be reinspected when determined necessary by the code official.

C104.4 Approved inspection agencies. The code official is authorized to accept reports of approved inspection agencies, provided such ageneies satisfy the requirements as to qualifications and reliability relevant to the building components and systems they are inspecting.

C104.5 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

C104.6 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achicve compliance with this code. The work or installation shall then be resubmitted to the code official for inspection and testing.
C104.7 Approval. After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the code official.

C104.7.1 Revocation. The code official is authorized to, in writing, suspend or revoke a notice of approval issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure, premise, or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.))

C104.1 Fees. A permit shall not be issued until the fees prescribed in Section C104.2 have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
C104.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.
C104. 3 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional fee established by the code official, which shall be in addition to the required permit fees.
C104.4 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
C104.5 Refunds. The code official is authorized to establish a refund policy.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-10400, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-10400, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-10400, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27.020, and 19.27.074. WSR 14-24-122, § 51-11C-10400, filed 12/3/14, effective 1/3/15. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10400, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

## WAC 51-11C-10500 Section C105-((Validity)) Inspections.

C105.1 General. ( (If a portion of this code is held to be illegal or void, such a decision shall not affect the validity of the remainder of this code.)) Construction or work for which a permit is required shall be subject to inspection by the code official, his or her designated agent, or an approved agency, and such construction or work shall remain visible and able to be accessed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall
be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material, product, system or building component required to allow inspection to validate compliance with this code.
C105.2 Required inspections. The code official, his or her designated agent, or an approved agency, upon notification, shall make the inspections set forth in Sections C105.2.1 through C105.2.6.
C105.2.1 Footing and foundation insulation. Inspections shall verify footing and/or foundation insulation $R$-value, location, thickness, depth of burial and protection of insulation as required by the code, approved plans and specifications.
C105.2.2 Thermal envelope. Inspections shall be made before application of interior finish and shall verify that envelope components with the correct type of insulation, the $R$-values, the correct location of insulation, the correct fenestration, the $U$-factor, SHGC, VT, and air leakage controls are properly installed as required by the code, approved plans and specifications, including envelope components in future tenant spaces of multitenant buildings.
C105.2.3 Plumbing system. Inspections shall verify the type of insulation, the $R$-values, the protection required, controls, and heat traps as required by the code, approved plans and specifications.
C105.2.4 Mechanical system. Inspections shall verify the installed HVAC equipment for the correct type and size, controls, duct and piping insulation $R$-values, duct system and damper air leakage, minimum fan efficiency, energy recovery and economizer as required by the code, approved plans and specifications.
C105.2.5 Electrical system. Inspections shall verify lighting system controls, components, meters, motors and installation of an electric meter for each dwelling unit as required by the code, approved plans and specifications.
C105.2.6 Final inspection. The final inspection shall include verification of the installation and proper operation of all required building controls, and documentation verifying activities associated with required building commissioning have been conducted in accordance with Section C408.
C105.3 Reinspection. A building shall be reinspected when determined necessary by the code official.
C105.4 Approved inspection agencies. The code official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability relevant to the building components and systems they are inspecting.
C105.5 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.
C105.6 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or
installation shall then be resubmitted to the code official for inspection and testing.
[Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10500, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

WAC 51-11C-10600 Section C106-( (Referenced standards)) Notice of approval.
( (C106.1 Referenced codes and standards. The codes and standards ref erenced in this code shall be those listed in Chapter 5, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in sections C106.1.1 and C106.1.2.

C106.1.1 Conflicts. Where differences oceur between provisions of this eode and referenced codes and standards, the provisions of this code shall apply.
C106.1.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.
C106.2 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this eode.

C106.3 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law. In addition to the requirements of this code, all occupancics shall conform to the provisions included in the State Building Code (chapter 19.27 RCW). In ease of conflicts among the codes cnumerated in RCW 19.27.031 (1) through (4) and this code, an carlier named code shall govern over those following. In the case of conflict between the duct sealing and insulation requirements of this code and the duct insulation requirements of Sections 603 and 604 of the International Mechanical Code, the duct insulation requirements of this code, or where applicable, a local jurisdiction's energy code shall govern.) )
C106.1 Approval. After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the code official.
C106.2 Revocation. The code official is authorized to, in writing, suspend or revoke a notice of approval issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure, premise, or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-10600, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10600, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

## WAC 51-11C-10700 Section C107-((Fees)) Validity.

( (C107.1 Fees. A permit shall not be issued until the fees prescribed in Section $C 107.2$ have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
C107. 2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule as established by the applieable governing authority.
C107.3 Work commencing before permit issuance. Any person who commenees any work before obtaining the necessary permits shall be subject to an additional fec established by the code official, which shall be in addition to the required permit fees.

C107.4 Related fees. The payment of the fec for the construction, alteration, removal or demolition of work done in connection to or coneurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
C107.5 Refunds. The code official is authorized to establish a refund policy.))
C107.1 General. If a portion of this code is held to be illegal or void, such a decision shall not affect the validity of the remainder of this code.
[Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10700, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

WAC 51-11C-10800 Section C108-( (Stop work order)) Referenced standards.
( (C108.1 Authority. Whenever the code official finds any work regulated by this code being performed in a manner cither contrary to the provisions of this code or dangerous or unsafe, the code official is authorized to issue a stop work order.
C108.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the pexson doing the work. Upon issuance of a stop woxk oxdex, the cited work shall immediately cease. The stop work order shall
state the reason for the order, and the conditions under which the eited work will be permitted to resume.
C108.3 Emexgencies. Where an emexgency exists, the code official shall not be required to give a written notice prior to stopping the work.
C108.4 Failure to comply. Any person who shall continue any work aftex having been sexved with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a finc as set by the applicable governing authority.))
C108.1 Referenced codes and standards. The codes and standards referenced in this code shall be those listed in Chapter 5, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections C108.1.1 and C108.1.2.
C108.1.1 Conflicts. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.
C108.1.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.
C108.2 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section, or provision of this code.
C108.3 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law. In addition to the requirements of this code, all occupancies shall conform to the provisions included in the State Building Code (chapter 19.27 RCW ). In case of conflicts among the codes enumerated in RCW 19.27.031 (1) through (4) and this code, an earlier named code shall govern over those following. In the case of conflict between the duct sealing and insulation requirements of this code and the duct insulation requirements of Sections 603 and 604 of the International Mechanical Code, the duct insulation requirements of this code, or where applicable, a local jurisdiction's energy code shall govern.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-10800, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10800, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

## WAC 51-11C-10900 Section C109-((Board of appeals)) Stop work order.

( (C109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the ap-
plication and intexpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex offitio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

C109. 2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or bettex form of construction is proposed. The board shall have no authority to waive requirements of this code.
C109.3 Qualifications. The board of appeals shall consist of members who are qualified by expericnce and training and are not employces of the jurisdiction.) )

C109.1 Authority. Whenever the code official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the code official is authorized to issue a stop work order.

C109.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
C109.3 Emergencies. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work.

C109.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine as set by the applicable governing authority.
[Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-10900, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

WAC 51-11C-11000 Section C110-((Violations)) Board of appeals. ( (It shall be unlawful for any person, firm, or corporation to exect or construct any building, or remodel or rehabilitate any existing building or structure in the state, or allow the same to be done, con= traxy to or in violation of any of the provisions of this code.) )
C110.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex offi-
cio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

C110.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.
C110.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.
[Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, S 51-11C-11000, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

## WAC 51-11C-11100 Section C111-( (玉iability)) Violations.

( (Nothing contained in this code is intended to be nox shall be construed to create or form the basis for any liability on the part of any city or county or its officers, employces or agents for any injury or damage resulting from the failure of a building to conform to the provisions of this code.) ) It shall be unlawful for any person, firm, or corporation to erect or construct any building, or remodel or rehabilitate any existing building or structure in the state, or allow the same to be done, contrary to or in violation of any of the provisions of this code.
[Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-11100, filed 2/1/13, effective 7/1/13.]

NEW SECTION

WAC 51-11C-11200 Section C112-Liability. Nothing contained in this code is intended to be nor shall be construed to create or form the basis for any liability on the part of any city or county or its officers, employees, or agents for any injury or damage resulting from the failure of a building to conform to the provisions of this code.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20201 Section C202.1-A.

above-grade wall. ((A wall enclosing conditioned space)) that portion of a wall in the building envelope that is not a below-grade wall. This includes between-floor spandrels, peripheral edges of floors, roof ((and basement) ) knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and skylight shafts.
access (то). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction.
addrion. An extension or increase in the conditioned space floor area, number of stories, or height of a building or structure.
air barrier. One or more materials joined together in a continuous manner to restrict or prevent the passage of air through the building thermal envelope and its assemblies.
air curtain. A device, installed at the building entrance, that generates and discharges a laminar air stream intended to prevent the infiltration of external, unconditioned air into the conditioned spaces, or the loss of interior, conditioned air to the outside.
aLTERNATING CURRENT-OUTPUT UNINTERRUPTIBLE POWER SUPPLY (AC-OUTPUT UPS). A combination of convertors, switches and energy storage devices, such as batteries, constituting a power system for maintaining continuity of load power in case of input power failure. Input power failure occurs when voltage and frequency are outside rated steady state and transient tolerance bands or when distortion or interruptions are outside the limits specified for the uninterruptible power supply. An AC-output UPC is an uninterruptible power supply that supplies power with a continuous flow of electric charge that periodically reverses direction.
ALteration. Any construction, retrofit or renovation to an existing structure other than repair or addition. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the original installation.
APproved. Acceptable to the code official.
approved agency. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, or furnishing product certification research reports, when such agency has been approved by the code official.
attic and other roofs. ((All othex)) Roofs other than roofs with insulation entirely above deck and metal building roofs, including roofs with insulation entirely below (inside of) the roof structure (i.e., attics, cathedral ceilings, and single-rafter ceilings), roofs with insulation both above and below the roof structure, and roofs without insulation ( (but excluding roofs with insulation entirely above deck and metal building roofs)).
automatic. Self-acting, operating by its own mechanism when actuated by some impersonal influence, as, for example, a change in current strength, pressure, temperature or mechanical configuration (see "Manual").
aUTOMATIC CONTROL DEVICE. A device capable of automatically controlling equipment and devices without manual intervention.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20201, filed 11/26/19, effec-
tive 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20201, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20201, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20202 Section C202.2-B.

below-grade wall. That portion of a wall in the building envelope that is entirely below the finish grade and in contact with the ground. biogas. A mixture of hydrocarbons that is a gas at $60^{\circ} \mathrm{F}\left(15.5^{\circ} \mathrm{C}\right)$ and one atmosphere of pressure that is produced through the anaerobic digestion of organic matter.
Bromass. Nonfossilized and biodegradable organic material originating from plants, animals and/or micro-organisms, including products, byproducts, residues and waste from agriculture, forestry and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of nonfossilized and biodegradable organic material.
вцоск. A generic concept used in energy simulation. It can include one or more thermal zones. It represents a whole building or portion of a building with the same use type served by the same HVAC system type. boiler, modulating. A boiler that is capable of more than a single firing rate in response to a varying temperature or heating load.
boiler system. One or more boilers, their piping and controls that work together to supply steam or hot water to heat output devices remote from the boiler.
bubble point. The refrigerant liquid saturation temperature at a specified pressure.
building. Any structure used or intended for supporting or sheltering any use or occupancy, including any mechanical systems, service water heating systems and electric power and lighting systems located on the building site and supporting the building.
building commissioning. A process that verifies and documents that the building systems have been installed and function according to the approved construction documents.
building entrance. Any doorway, set of doors, revolving door, vestibule or other form of portal (including elevator doors such as in parking garages) that is ordinarily used to gain access to the building or to exit from the building by its users and occupants. This does not include doors solely used to directly enter mechanical, electrical and other building utility service equipment rooms, or doors for emergency egress only. Where buildings have separate one-way doors to enter or leave, any doors ordinarily used to leave the building are also deemed a building entrance.
building site. A contiguous area of land that is under the ownership or control of one entity.
building thermal envelope. The below-grade walls, above-grade walls, floors, ceilings, roofs, and any other building element assemblies that ((enelose conditioned space or provides a boundary between conditioned
space, semiheated space and exempt or unconditioned space)) meet one or more of the following criteria:

1. Separates conditioned areas of all types from unconditioned or unenclosed areas.
2. Separates conditioned areas of differing types including elements between fully conditioned areas, low energy, semi-heated, greenhouse, and refrigerated areas.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20202, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20202, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20202, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20203 Section C202.3-C.

c-factor (thermal conductance). The coefficient of heat transmission (surface to surface) through a building component or assembly, equal to the time rate of heat flow per unit area and the unit temperature difference between the warm side and cold side surfaces (Btu/h $\mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F}$ ) [W/(m) m K) ].
captive key device. A lighting control that will not release the key that activates the override when the lighting is on.
cavity insulation. Insulating material located between framing members. ceiling fan. A nonportable device suspended from a ceiling or overhead structure for circulating air via the rotation of the blades. See also LARGE-DIAMETER CEILING FAN.
Certified commissioning professional. An individual who is certified by an ANSI/ISO/IEC 17024:2012 accredited organization to lead, plan, coordinate and manage commissioning teams and implement the commissioning process.
change of occupancy. A change in the use of a building or a portion of a building that results in any of the following:

1. A change of occupancy classification.
2. A change from one group to another group within an occupancy classification.
3. Any change in use within a group for which there is a change in the application of the requirements of this code.
circulating hot water system. A specifically designed water distribution system where one or more pumps are operated in the service hot water piping to circulate heated water from the water-heating equipment to the fixture supply and back to the water-heating equipment.
clerestory fenestration. See "fenestration."
climate zone. A geographical region based on climatic criteria as specified in this code.
code official. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.
Coefficient of performance (cop) - cooling. The ratio of the rate of heat removal to the rate of energy input, in consistent units, for a complete refrig-
erating system or some specific portion of that system under designated operating conditions.
coefficient of performance (cop) - heating. The ratio of the rate of heat removal to the rate of heat delivered to the rate of energy input, in consistent units, for a complete heat pump system, including the compressor and, if applicable, auxiliary heat, under designated operating conditions. commercial building. For this code, all buildings that are not included in the definition of "Residential buildings."
community renewable energy system. An off-site renewable energy system for which the owner has purchased or leased renewable energy capacity along with other subscribers.
COMPRESSED AIR SYSTEM. A system of at least one compressor providing compressed air at 40 psig or higher.
COMPUTER Room. A room whose primary function is to house equipment for the processing and storage of electronic data and that has a design total information technology equipment (ITE) equipment power density less than or equal to 20 watts per square foot ( 215 watts per $\mathrm{m}^{2}$ ) of conditioned floor area or a design ITE equipment load less than or equal to 10 kW . See also data center.
condensing unit. A factory-made assembly of refrigeration components designed to compress and liquefy a specific refrigerant. The unit consists of one or more refrigerant compressors, refrigerant condensers (air-cooled, evaporatively cooled, or water-cooled), condenser fans and motors (where used) and factory-supplied accessories.
conditioned floor area. The horizontal projection of the floors associated with the conditioned space.
conditioned space. An area, room or space that is enclosed within the building thermal envelope and that is directly heated or cooled or that is indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from conditioned spaces by uninsulated walls, floors or ceilings, or where they contain uninsulated ducts, piping or other sources of heating or cooling. Elevator shafts, stair enclosures, enclosed corridors connecting conditioned spaces, and enclosed spaces through which conditioned air is intentionally transferred at a rate exceeding three air changes per hour are considered conditioned spaces for the purposes of the building thermal envelope requirements. continuous insulation (Ci). Insulating material that is continuous across all structural members without metal thermal bridges other than fasteners that have a total cross-sectional area not greater than 0.04 percent (0.12 percent where all metal thermal bridges are stainless steel) of the envelope surface through which they penetrate, and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope.
controlled plant growth environment. Group $F$ and U buildings or spaces that are used exclusively for and specifically controlled to facilitate and enhance plant growth and production by manipulating various indoor environmental conditions. Technologies include indoor agriculture, cannabis growing, hydroponics, aquaculture and aquaponics. Controlled indoor environment variables include, but are not limited to, temperature, air quality, humidity, and carbon dioxide.
controlled receptacle. An electrical receptacle that is controlled by an automatic control device.
curtain wall. Fenestration products used to create an external nonloadbearing wall that is designed to separate the exterior and interior environments.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20203, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-20203, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20203, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20203, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20204 Section C202.4-D.

data acquisition system. An electronic system managed by the building owner to collect, tabulate and display metering information.
data center. A room or series of rooms that share data center systems whose primary function is to house equipment for the processing and storage of electronic data, which has a design total information technology equipment (ITE) power density exceeding 20 watts per square foot ( 215 watts per $\mathrm{m}^{2}$ ) of conditioned area and a total design ITE equipment load greater than 10 kW .
data center systems. hVAC systems, electrical systems, equipment, or portions thereof used to condition ITE or electrical systems in a data center.
daylight responsive control. A device or system that provides automatic control of electric light levels based on the amount of daylight in a space. daylight zone. The portion of the building interior floor area that is illuminated by natural daylight through sidelit and toplit fenestration. decorative appliance, vented. A vented appliance wherein the primary function lies in the aesthetic effect of the flames.
DEDICATED OUTDOOR AIR SYSTEM (DOAS). A ventilation system that supplies 100 percent outdoor air primarily for the purpose of ventilation without requiring operation of a space-conditioning system fan for outdoor air delivery.
DEMAND CONTROL KITCHEN VENTILATTON (DCKV). A system that provides automatic, continuous control over exhaust hood, where required, and make-up air fan speed in response to one or more sensors that monitor cooking activity or through direct communication with cooking appliances.
demand control ventilation (dCv). A ventilation system capability that provides for the automatic reduction of outdoor air intake below design rates when the actual occupancy of spaces served by the system is less than design occupancy.
demand rectrculation water system. A water distribution system having one or more recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe.
demand response signal. A signal that indicates a price or a request to modify electricity consumption for a limited time period.
DEMAND RESPONSIVE CONTROL. A control capable of receiving and automatically responding to a demand response signal.

Desiccant dehumidification system. A mechanical dehumidification technology that uses a solid or liquid material to remove moisture from the air. DIRECT DIGITAL CONTROL (DDC). A type of control where controlled and monitored analog or binary data such as temperature and contact closures are converted to digital format for manipulation and calculations by a digital computer or microprocessor, then converted back to analog or binary form to control physical devices.
DIRECTLY OWNED OFF-SITE RENEWABLE ENERGY SYSTEM. An off-site renewable energy system owned by the building project owner.
DOor, GARAGE. Nonswinging doors rated by ( (ASMA) ) DASMA 105 with a single panel or horizontally hinged sectional panels.
DOor, nonswinging. Roll-up, tilt-up, metal coiling and sliding doors, access hatches, and all other doors that are not swinging doors or garage doors with less than or equal to 14 percent glazing.
DOor, swinging. Doors that are hinged on one side and revolving doors. рист. A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts.
дист system. A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.
dwelling unit. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.
dx-dedicated outdoor air system units (dx-doas units). A type of air-cooled, watercooled or water source factory assembled product that dehumidifies 100 percent outdoor air to a low dew point and includes reheat that is capable of controlling the supply dry-bulb temperature of the dehumidified air to the designated supply air temperature. This conditioned outdoor air is then delivered directly or indirectly to the conditioned spaces. It may precondition outdoor air by containing an enthalpy wheel, sensible wheel, desiccant wheel, plate heat exchanger, heat pipes, or other heat or mass transfer apparatus.
dynamic glazing. Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, SHGC, or VT.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-20204, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, S 51-11C-20204, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20204, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20204, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20205 Section C202.5-E.

economizer, air. A duct and damper arrangement and automatic control system that allows a cooling system to supply outside air to reduce or eliminate the need for mechanical cooling during mild or cold weather.
economizer, water. A system where the supply air of a cooling system is cooled indirectly with water that is itself cooled by heat or mass transfer to the environment without the use of mechanical cooling. ( (eimetrieal iond compfieient (eic). In a data center, the ratio of the sum of three specific clectrical losses (or losses calculated from efficieneies) to the ITP load itsclf. Specifically, EIC equals the sum of the incoming (to ITE) electrical sexvice losses, UPS losses, and ITE distribution losses all divided by the peak ITE load. The design FIC is ealculated at the full load design condition with active redundant equipment engaged, and the annual EIC is calculated the same way beeause it is assumed that ITE runs constantly at full power all year.)) enclosed space. A volume surrounded by solid surfaces such as walls, floors, roofs, and openable devices such as doors and operable windows. Unconditioned crawlspaces, attics, and parking garages with natural or mechanical ventilation are not considered enclosed spaces. end use category. A load or group of loads that consume energy in a common or similar manner.
energy analysis. A method for estimating the annual energy use of the proposed design and standard reference design based on estimates of energy use.
energy cost. The total estimated annual cost for purchased energy for the building functions regulated by this code, including applicable demand charges.
energy recovery ventilation system. Systems that employ air-to-air heat exchangers to recover energy from exhaust air for the purpose of preheating, precooling, humidifying or dehumidifying outdoor ventilation air prior to supplying the air to a space, either directly or as part of an HVAC system.
energy simulation tool. An approved software program or calculation-based methodology that projects the annual energy use of a building. energy source meter. A meter placed at the source of the incoming energy that measures the energy delivered to the whole building or metered space.
enthalpy recovery ratio (err). Change in the enthalpy of the outdoor air supply divided by the difference between the outdoor air and entering exhaust air enthalpy, expressed as a percentage.
entrance door. A vertical fenestration product used for occupant ingress, egress and access in nonresidential buildings including, but not limited to, exterior entrances utilizing latching hardware and automatic closers and containing over 50 percent glazing specifically designed to withstand heavy duty usage.
equipment room. A space that contains either electrical equipment, mechanical equipment, machinery, water pumps or hydraulic pumps that are a function of the building's services.
exterior wall. Walls including both above-grade walls and below-grade walls.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20205, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20205, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20206 Section C202.6-F.

fan, embedded. A fan that is part of a manufactured assembly where the assembly includes functions other than air movement.
fan array. Multiple fans in parallel between two plenum sections in an air distribution system.
fan brake horsepower (bhp). The horsepower delivered to the fan's shaft. Brake horsepower does not include the mechanical drive losses (belts, gears, etc.).
((fan efficiency grade (feg). A numexical rating identifying the fan's aexodynamic ability to convert shaft power, or impeller power in the case of a direct-driven fan, to air power.) )
fan electrical input power (Fan $k W_{\text {design) }}$ ) The electrical input power in kilowatts required to operate an individual fan or fan array at design conditions. It includes the power consumption of motor controllers, if present.
fan energy index (fei). The ratio of the electric input power of a reference fan to the electric input power of the actual fan as calculated in accordance with AMCA 208.
fan system. Includes all the fans that contribute to the movement of air through a point of a common duct, plenum, or cabinet.
FAN SYSTEM, CoMplex. A fan system that combines supply, exhaust and/or other fans, or is not captured by other fan system types.
fan system, exhaust/relief. A fan system dedicated to the removal of air from interior spaces to the outdoors.
fan system, multi-zone variable air volume (vav). A fan system that serves three or more space-conditioning zones where airflow to each zone is individually controlled based on heating, cooling and/or ventilation requirements, indoor fan airflow varies as a function of load, and the sum of the minimum zone airflows is 40 percent or less of the fan system design conditions.
fan system, return. A fan system dedicated to removing air from interior where some or all the air is to be recirculated except during economizer operation.
fan system, single-cabinet. A fan system where a single fan, single fan array, a single set of fans operating in parallel, or fans or fan arrays in series and embedded in the same cabinet, that both supplies air to a space and recirculates the air.
fan system, supply-only. A fan system that provides supply air to interior spaces and does not recirculate the air.
fan system, transfer. A fan system that exclusively moves air from one occupied space to another.
fan system airflow (cfm). The sum of the airflow of all fans with fan electrical input power greater than 1 kW at fan system design conditions, excluding the airflow that passes through downstream fans with fan input power less than 1 kW .
fan system bhp. The sum of the fan brake horsepower of all fans that are required to operate at fan system design conditions to supply air from the heating or cooling source to the conditioned space(s) and return it to the source or exhaust it to the outdoors.
fan system design conditions. Operating conditions that can be expected to occur during normal system operation that result in the highest supply fan airflow rate to conditioned spaces served by the system, other than during air economizer operation.

FAN SYSTEM ELECTRICAL INPUT POWER (Fan $\mathbf{k W}_{\text {design, system). The sum of the fan elec- }}$ trical input power (Fan kWdesign) of all fans that are required to operate at fan system design conditions to supply air from the heating or cooling source to the conditioned spaces, return it to the source, exhaust it to the outdoors, or transfer it to another space. fan system motor nameplate hr. The sum of the motor nameplate horsepower of all fans that are required to operate at design conditions to supply air from the heating or cooling source to the conditioned space (s) and return it to the source or exhaust it to the outdoors.
FAULT DETECTION AND DIAGNOSTICS (FDD) SYSTEM. A SOftware platform that utilizes building analytic algorithms to convert data provided by sensors and devices to automatically identify faults in building systems and provide a prioritized list of actionable resolutions to those faults based on cost or energy avoidance, comfort and maintenance impact. fenestration. Products classified as either skylights or vertical fenestration.
skylights. Glass or other transparent or translucent glazing material installed at a slope of less than 60 degrees (91.05 rad) from horizontal, including unit skylights, tubular daylighting devices and glazing materials in solariums, sunrooms, roofs, greenhouses, and sloped walls.
vertical fenestration. Windows that are fixed or operable, doors with more than 50 percent glazed area and glazed block composed of glass or other transparent or translucent glazing materials and installed at a slope not less than 60 degrees (91.05 rad) from horizontal. Opaque areas such as spandrel panels are not considered vertical fenestration.
clerestory fenestration. An upper region of vertical fenestration provided for the purpose of admitting daylight beyond the perimeter of a space. The entire clerestory fenestration assembly is installed at a height greater than 8 feet above the finished floor.
fenestration area. Total area of the fenestration measured using the rough opening, and including the glazing, sash and frame.
fenestration product, field-fabricated. A fenestration product whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration.
fenestration product, site-built. A fenestration designed to be made up of fieldglazed or field-assembled units using specific factory cut or otherwise factory-formed framing and glazing units. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.
F-FACTOR. The perimeter heat loss factor for slab-on-grade floors (Btu/h $\left.\times \mathrm{ft} \times{ }_{\mathrm{F}}\right) \quad[\mathrm{W} /(\mathrm{m} \times \mathrm{K})]$.
floor area, net. The actual occupied area not including unoccupied accessory areas such as corridors, stairways, toilet rooms, mechanical rooms and closets.
furnace electricity ratio. The ratio of furnace electricity use to total furnace energy computed as ratio $\left.=\left(3.412 \times E_{A E}\right) / 1000 \times E_{F}+3.412 \times E_{A E}\right)$ where $E_{A E}$ (average annual auxiliary electrical consumption) and $E_{F}$ (average annual fuel energy consumption) are defined in Appendix $N$ to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations and $E_{F}$ is expressed in millions of Btus per year.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20206, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20206, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20206, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20207 Section C202.7-G.

general lighting. Interior lighting that provides a substantially uniform level of illumination throughout ((an area)) a space. General lighting shall not include lighting that provides a dissimilar level of illumination to serve a specific application or decorative feature within such area.
greenhouse. A ((permanent)) structure or a thermally isolated area of a building that maintains a specialized sunlit environment ((that is used)) exclusively used for, and is essential to, the cultivation, protection or maintenance of plants. Greenhouses are those that are erected for a period of 180 days or more.
groupr. Buildings or portions of buildings that contain any of the following occupancies as established in the International Building Code:

1. Group R-1.
2. Group R-2 where located more than three stories in height above grade plane.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20207, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20207, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20207, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20208 Section C202.8-H.

heat trap. An arrangement of piping and fittings, such as elbows, or a commercially available heat trap that prevents thermosyphoning of hot water during standby periods.
heat trap, pipe configured. A pipe configured heat trap is either, as applicable:

1. A device specifically designed for the purpose or an arrangement of tubing that forms a loop of 360 degrees; or
2. Piping that from the point of connection to the water heater (inlet or outlet) includes a length of piping directed downward before
connection to the vertical piping of the supply water or hot-water distribution system.
heated slab-on-grade floor. Slab-on-grade floor construction in which the heating elements, hydronic tubing, or hot air distribution system is in contact with, or placed within or under, the slab.
heated water circulation system. A water distribution system having one or more recirculation pumps that pump water from a heated water source through a dedicated hot water circulation pipe or piping system.
high speed door. A nonswinging door used primarily to facilitate vehicular access or material transportation, with a minimum opening rate of 32 inches ( 813 mm ) per second, a minimum closing rate of 24 inches (610 mm ) per second and that includes an automatic-closing device. historic buildings. ((Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.)) Any building or structure that is one or more of the following:
3. Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places. 2. Designated as historic under an applicable state or local law. 3. Certified as a contributing resource within a National Regis-ter-listed, state-designated or locally designated historic district. humidistat. A regulatory device, actuated by changes in humidity, used for automatic control of relative humidity.
hVac total system performance ratio (hvac tspr). The ratio of the sum of a building's annual heating and cooling load in thousands of Btus to the sum of annual carbon emissions in pounds from energy consumption of the building HVAC systems. Carbon emissions shall be calculated by multiplying site energy consumption by the carbon emission factors from Table C407.1.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20208, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20208, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20208, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20209 Section C202.9—I.

iec design н motor. An electric motor that meets all of the following:

1. It is an induction motor designed for use with three-phase
power.
2. It contains a cage rotor.
3. It is capable of direct-on-line starting.
4. It has 4, 6 or 8 poles.
5. It is rated from 0.4 kW to 1600 kW at a frequency of 60 Hz . iec design n motor. An electric motor that meets all of the following:
6. It is an inductor motor designed for use with three-phase power.
7. It contains a cage rotor.
8. It is capable of direct-on-line starting.
9. It has $2,4,6$ or 8 poles.
10. It is rated from 0.4 kW to 1600 kW at a frequency of 60 Hz . infiltration. The uncontrolled inward air leakage into a building caused by the pressure effects of wind or the effect of differences in the indoor and outdoor air density or both.
information technology equipment (ite). ((ite includes)) Items including computers, data storage, servers ((and network/communications)), network, and communication equipment.
insulation entirely above deck. A roof with all insulation:
11. Installed above (outside of) the roof structure; and
12. Continuous (i.e., uninterrupted by framing members).
integrated energy efficiency ratio (ieer). A single-number figure of merit expressing cooling part-load EER efficiency for unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities for the equipment.
integrated hvac system. An hVAC system designed to handle both sensible and latent heat removal. Integrated HVAC systems may include, but are not limited to, HVAC systems with a sensible heat ratio of 0.65 or less and the capability of providing cooling, dedicated outdoor air systems, single package air conditioners with at least one refrigerant circuit providing hot gas reheat, and stand-alone dehumidifiers modified to allow external heat rejection.
integrated part load value (iplv). A single number figure of merit based on partload EER, COP, or kW/ton expressing part-load efficiency for air conditioning and heat pump equipment on the basis of weighted operation at various load capacities for equipment.
integrated seasonal coefficient of performance (iscop). A seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the two COP values for the heating season of a DX-DOAS unit water or air source heat pump, expressed in $W / W$.
integrated seasonal moisture removal effictency (ismbe). A seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the four dehumidification moisture removal efficiency (MRE) ratings required for DX-DOAS units, expressed in lb. of moisture/kWh. INTERNAL CURTATN SYSTEM. A system consisting of moveable panels of fabric or plastic film used to cover and uncover the space enclosed in a greenhouse on a daily basis.
isolation devices. Devices that isolate hVAC zones so they can be operated independently of one another. Isolation devices include separate systems, isolation dampers and controls providing shutoff at terminal boxes.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20209, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20209, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20209, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20212 Section C202.12-L.

labeled. Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, approved agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.
LARGe-DiAMeter ceiling fan. A ceiling fan that is greater than seven feet (2134 mm ) in diameter. These fans are sometimes referred to as High-Volume, Low-Speed (HVLS) fans.
Largest net capacity increment. The largest increase in capacity when switching between combinations of base compressors that is expected to occur under the compressed air system control scheme.
Liner system (Ls). A system that includes the following:

1. A continuous vapor barrier liner membrane that is installed below the purlins and that is uninterrupted by framing members.
2. An uncompressed, unfaced insulation resting on top of the liner membrane and located between the purlins.

For multilayer installations, the last rated $R$-value of insulation is for unfaced insulation draped over purlins and then compressed when the metal roof panels are attached.
uisted. Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.
Low-CARbon district energy exchange system. Any system serving multiple buildings providing energy in the form of a circulated fluid that can accept or reject heat from individual buildings. Energy can be indirectly converted to meet building heating or cooling loads by serving as the heat source or sink for heat-pump systems. Examples include, but are not limited to, low temperature condenser water, ground source condenser water, or sewer heat recovery.

Low-carbon district energy exchange systems must demonstrate that 25 percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources and no more than 25 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources.
LOW-CARBON DISTRICT HEATING AND COOLING OR HEATING ONLY sYSTEM. Any system serving multiple buildings providing energy in the form of direct heating and cooling, or heating only to a building. Energy can be directly converted to meet building heating or cooling loads through a heat exchanger. Examples include, but are not limited to, steam, hot water, and chilled water.

Low-carbon district systems must demonstrate the following:

1. Distribution losses must be accounted for and may not exceed 10 percent of the annual load delivered to buildings served by the system.
2. Twenty-five percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat or renewable energy resources and no more than 25 percent of the annual heat input to the system comes from fossil fuel or electric resistance sources; or
3. No more than 10 percent of the system annual heat input to the system comes from fossil fuel or electric resistance sources.
Low-sloped roof. A roof having a slope less than 2 units vertical in 12 units horizontal.
low-voltage dry-type distribution transformer. A transformer that is air-cooled, does not use oil as a coolant, has an input voltage less than or equal to 600 volts and is rated for operation at a frequency of 60 hertz.
low-voltage lighting. A lighting system consisting of an isolating power supply, the low voltage luminaires, and associated equipment that are all identified for the use.
Luminaire. A complete lighting unit consisting of a lamp or lamps together with the housing designed to distribute the light, position and protect the lamps, and connect the lamps to the power supply.
luminaire-level lighting control. A lighting system consisting of one or more luminaires where each luminaire has embedded lighting control logic, occupancy and ambient light sensors, and local override switching capability, where required. Each luminaire shall also have local or central wireless networking capabilities to detect and share information with other luminaires to adjust to occupancy and/or daylight in the space.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20212, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-20212, filed 5/2/17, effective 6/2/17; WSR 16-24-070, § 51-11C-20212, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20212, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20212, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20213 Section C202.13-M.

manual. Capable of being operated by personal intervention (see "Automatic").
mass transfer deck slab ((edge)). ((That portion of the above-grade wall made up of the concrete slab where it extends past the footprint of the floor above, and there is space (conditioned or unconditioned) below the slab.)) A concrete slab designed to transfer structural load from the building perimeter wall or column line above, laterally to an offset wall or column line below, and which has conditioned or semiheated space on the inside of the upper wall and exterior or unconditioned space on the outside of the upper wall. The area of the slab edge shall be defined as the thickness of the slab multiplied by the ( (perimetex) ) length of the edge condition. Examples of this condition in-
clude, but are not limited to, the transition from an above-grade structure to a below-grade structure or the transition from a tower to a podium. A cantilevered ((balconies do not meet this definition)) concrete balcony does not constitute a mass transfer deck slab.

mechanical cooling. Reducing the temperature of a gas or liquid by using vapor compression, absorption, desiccant dehumidification combined with evaporative cooling, or another energy-driven thermodynamic cycle. Indirect or direct evaporative cooling alone is not considered mechanical cooling.
mechanical heating. Raising the temperature of a gas or liquid by use of fossil fuel burners, electric resistance heaters, heat pumps, or other systems that require energy to operate.
mechanical load coefficient (mic). In a data center, the ratio of the cooling system's net use of energy to that of the ITE. ((The design MLC is ealculated for a local peak weather condition (stipulated in ASHRAF Standard 90.4) and equals the sum of all active cooling equipment input power, divided by total power into the ITF.)) The annual MLC is calculated using hourly ((TMY3)) weather data for the data center's location and equals the sum of all energy flowing into the cooling system to respond to that weather, minus any energy successfully recovered to avoid any new energy use, all divided by the energy flowing into the ITE during the same period.
MECHANICAL ROom. A room or space in which mechanical equipment and appliances are located that has sufficient room for access and maintenance of the equipment or appliances with room energy doors closed.
metal building roof. A roof that:

1. Is constructed with a metal, structural, weathering surface;
2. Has no ventilated cavity; and
3. Has the insulation entirely below deck (i.e., does not include composite concrete and metal deck construction nor a roof framing system that is separated from the superstructure by a wood substrate) and whose structure consists of one or more of the following configurations:
a. Metal roofing in direct contact with the steel framing members;
b. Metal roofing separated from the steel framing members by insulation;
c. Insulated metal roofing panels installed as described in a or b.
metai building wall. A wall whose structure consists of metal spanning members supported by steel structural members (i.e., does not include spandrel glass or metal panels in curtain wall systems).
meter. A device that measures the flow of energy.
microcell. A wireless communication facility consisting of an antenna that is either: (a) Four (4) feet in height and with an area of not more than 580 square inches; or (b) if a tubular antenna, no more than four (4) inches in diameter and no more than six (6) feet in length; and the associated equipment cabinet that is six (6) feet or less in height and no more than 48 square feet in floor area.
multi-pass heat pump water heater. A heat pump water heater control strategy requiring multiple passes of water through the heat pump to reach the final target storage water temperature.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20213, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20213, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20213, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-20214 Section C202.14-N.
nameplate horsepower. The nominal motor output power rating stamped on the motor nameplate.
nema design a motor. A squirrel-cage motor that meets all of the following:

1. It is designed to withstand full-voltage starting and develop-
ing locked-rotor torque as shown in paragraph 12.38.1 of NEMA MG 1.
2. It has pull-up torque not less than the values shown in paragraph 12.40.1 of NEMA MG 1 .
3. It has breakdown torque not less than the values shown in paragraph 12.39 .1 of NEMA MG 1.
4. It has a locked-rotor current higher than the values shown in paragraph 12.35 .1 of NEMA MG 1 for 60 Hz and paragraph 12.35.2 of NEMA MG 1 for 50 Hz .
5. It has a slip at rated load of less than 5 percent for motors with fewer than 10 poles.
nema design b motor. A squirrel-cage motor that meets all of the following:
6. It is designed to withstand full-voltage starting.
7. It develops locked-rotor, breakdown and pull-up torques adequate for general application as specified in Sections 12.38, 12.39 and 12.40 of NEMA MG 1.
8. It draws locked-rotor current not to exceed the values shown in paragraph 12.35.1 of NEMA MG 1 for 60 Hz and paragraph 12.35.2 of NEMA MG 1 for 50 Hz .
9. It has a slip at rated load of less than 5 percent for motors with fewer than 10 poles.
nema design c motor. A squirrel-cage motor that meets all of the following:
10. It is designed to withstand full-voltage starting and developing locked-rotor torque for high-torque applications up to the values shown in paragraph 12.38 .2 of NEMA MG 1 (incorporated by reference; see Sec. 431.15).
11. It has pull-up torque not less than the values shown in paragraph 12.40.2 of NEMA MG 1.
12. It has breakdown torque not less than the values shown in paragraph 12.39.2 of NEMA MG 1.
13. It has a locked-rotor current not to exceed the values shown in paragraph 12.35 .1 of NEMA MG 1 for 60 Hz and paragraph 12.35 .2 of NEMA MG 1 for 50 Hz .
14. It has a slip at rated load of less than 5 percent.
networked guest room controi system. A control system, ((accessible)) with access from the front desk or other central location associated with a Group R-1 building, that is capable of identifying the ((eccupancy)) rented and unrented status of each guest room according to a timed schedule, and is capable of controlling HVAC in each hotel and motel guest room separately.
nonstandard part load value (nplv). A single-number part-load efficiency figure of merit calculated and referenced to conditions other than IPLV conditions, for units that are not designed to operate at ARI standard rating conditions.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20214, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20214, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20215 Section C202.15-0.

occupant sensor control. An automatic control device or system that detects the presence or absence of people within an area and causes lighting, equipment or appliances to be regulated accordingly. on-site renewable energy. Energy ( (derived from solar radiation, wind, waves, tides, landfill gas, biogas, biomass, or the internal heat of the earth. The energy system providing on-site rencwable energy shall be located on the project site)) from renewable energy resources harvested at the building site.
opaque door. A door that is not less than 50 percent opaque in surface area.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20215, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20215, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20215, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

```
WAC 51-11C-20216 Section C202.16-P.
```

personal wireless service facility. A wireless communication facility (WCF), including a microcell, which is a facility for the transmission and/or reception of radio frequency signals and which may include antennas, equipment shelter or cabinet, transmission cables, a support structure to achieve the necessary elevation, and reception and/or transmission devices or antennas.
photosynthetic photon efficacy (ppe). Photosynthetic photon flux divided by input electric power in units of micromoles per second per watt, or micromoles per joule as defined by ANSI/ASABE S640.
powered roof/wall ventilators. A fan consisting of a centrifugal or axial impeller with an integral driver in a weather-resistant housing and with a base designed to fit, usually by means of a curb, over a wall or roof opening.
power-over-ethernet lighting (poe). Lighting sources powered by DC current utilizing Ethernet cables.
primary storage. Compressed air storage located upstream of the distribution system and any pressure flow regulators.
process application. A manufacturing, industrial, or commercial procedure or activity where the primary purpose is other than conditioning spaces and maintaining comfort and amenities for the occupants of a building. proposed design. A description of the proposed building used to estimate annual energy use and carbon emissions from energy consumption for determining compliance based on total building performance and HVAC total performance ratio.
public lavatory faucet. A lavatory faucet that is not intended for private use as defined by the Uniform Plumbing Code and that is supplied with both potable cold and hot water.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20216, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20216, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20216, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20218 Section C202.18-R.

radiant heating system. A heating system that transfers heat to objects and surfaces within a conditioned space, primarily by infrared radiation.
 directly reached, without requiring the removal or movement of any panel or similar obstruction.
refrigerant dew point. The refrigerant vapor saturation temperature at a specified pressure.
refrigerated warehouse cooler. An enclosed storage space that has a total chilled storage area of $3,000 \mathrm{ft}^{2}$ or greater and is designed to maintain a temperature of greater than $32^{\circ} \mathrm{F}$ but less than $55^{\circ} \mathrm{F}$.
refrigerated warehouse freezer. An enclosed storage space that has a total chilled storage area of $3,000 \mathrm{ft}^{2}$ or greater and is designed to maintain a temperature at or below $32^{\circ} \mathrm{F}$.
refrigeration system, low temperature. Systems for maintaining food product in a frozen state in refrigeration applications.
refrigeration system, medium temperature. Systems for maintaining food product above freezing in refrigeration applications.
registered design professional. An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.
renewable energy resources. Energy derived from solar radiation, wind, waves, tides, biogas, biomass or extracted from hot fluid or steam heated within the earth.
renewable power purchase agreement. A power purchase agreement for off-site renewable energy where the owner agrees to purchase renewable energy output and the associated renewable energy certificates at a fixed price schedule.
repair. The reconstruction or renewal of any part of an existing building.
replacement air. Outdoor air that is used to replace air removed from a building through an exhaust system. Replacement air may be derived from one or more of the following: Make-up air, supply air, transfer air and infiltration. However, the ultimate source of all replacement air is outdoor air. When replacement air exceeds exhaust, the result is exfiltration.
reroofing. The process of recovering or replacing an existing roof covering. See "Roof Recover" and "Roof Replacement."
residential building. For this code, includes detached one- and two-family dwellings and multiple single-family dwellings (townhouses) as well as Group R-2 and R-3 buildings three stories or less in height above grade plane.
roof assembly. A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof covering, underlayment, roof deck, insulation, vapor retarder and interior finish. See also attic and other roofs, metal building roof, roof with insulation entirely above deck and single-rafter roof.
roof recover. The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.
roof repair. Reconstruction or renewal of any part of an existing roof for the purposes of its maintenance.
roof replacement. The process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering. ROOFTOP MONITOR. A raised section of a roof containing vertical fenestration along one or more sides.
r-value (thermal resistance). The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other surface for a unit temperature difference between the two surfaces, under steady state conditions, per unit area (h • ft ${ }^{2}$ • $\left.{ }^{\circ} \mathrm{F} / \mathrm{Btu}\right)$ [( $\mathrm{m}^{2}$ • K)/W].
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20218, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20218, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27.020, and 19.27.074. WSR 14-24-054, § 51-11C-20218, filed 11/25/14, effec-
tive 5/1/15. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20218, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20219 Section C202.19—S.

saturated-condensing temperature. The saturation temperature corresponding to the measured refrigerant pressure at the condenser inlet for single component and azeotropic refrigerants, and the arithmetic average of the dew point and bubble point temperatures corresponding to the refrigerant pressure at the condenser entrance for zeotropic refrigerants. semi-heated space. An enclosed space within a building, including adjacent connected spaces separated by an uninsulated component (e.g., basements, utility rooms, garages, corridors), which:

1. Is heated but not cooled, and has an installed heating system output capacity greater than or equal to $3.4 \mathrm{Btu} /\left(\mathrm{h}-\mathrm{f} \mathrm{t}^{2}\right)$ but not greater than 8 Btu/(h-ft $\left.{ }^{2}\right)$;
2. Is not a walk-in ( (өx)) cooler, walk-in freezer, refrigerated warehouse cooler or refrigerated warehouse freezer space.
sensible recovery effectiveness. Change in the dry-bulb temperature of the outdoor air supply divided by the difference between the outdoor air and return air dry-bulb temperatures, expressed as a percentage, governed by AHRI Standard 1060 .
service water heating. Heating water for domestic or commercial purposes other than space heating and process requirements.
sidelit. See Section (( 6405.2 .4 .2$)$ ) c405.2.5.2.
SINGLE-PASS HEAT PUMP WATER HEATER. A heat pump water heater control strategy using variable flow or variable capacity to deliver water from the heat pump at the final target storage water temperature in a single-pass through the heat exchanger with variable incoming water temperatures. single-rafter roof. A roof where the roof above and the ceiling below are both attached to the same wood rafter and where insulation is located in the space between these wood rafters.
skylight. See "Fenestration."
slab below grade. Any portion of a slab floor in contact with the ground which is more than 24 inches below the final elevation of the nearest exterior grade.
sLAB-ON-GRADE FLOOR. That portion of a slab floor of the building envelope that is in contact with the ground and that is either above grade or is less than or equal to 24 inches below the final elevation of the nearest exterior grade.
sleeping unit. A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units.
small electric motor. A general purpose, alternating current, single speed induction motor.
small business. Any business entity (including a sole proprietorship, corporation, partnership or other legal entity) which is owned and oper-
ated independently from all other businesses, which has the purpose of making a profit, and which has fifty or fewer employees.
solar heat gain coefficient (shgc). The ratio of the solar heat gain entering the space through the fenestration assembly to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation which is then reradiated, conducted or convected into the space.
solar zone. A clear area or areas reserved solely for current and future installation of photovoltaic or solar hot water systems.
space conditioning category. Categories are based on the allowed peak space conditioning output capacity per square foot of conditioned floor area, or the design set point temperature, for a building or space. Space conditioning categories include: Low energy, semi-heated, conditioned, refrigerated walk-in and warehouse coolers, and refrigerated walk-in and warehouse freezers.
STAND-ALONE DEHUMIDIFIER. A product with the sole purpose of dehumidifying the space that does not include a portable air conditioner, room air conditioner, or packaged terminal air conditioner. Stand-alone dehumidifier is a self-contained, electrically operated, and mechanically encased assembly consisting of:
3. A refrigerated surface (evaporator) that condenses moisture
from the atmosphere;
4. A refrigerating system, including an electric motor;
5. An air-circulating fan; and
6. A means for collecting or disposing of the condensate.
standard reference design. A version of the proposed design that meets the minimum requirements of this code and is used to determine the maximum annual energy use requirement and carbon emissions from energy consumption for compliance based on total building performance and HVAC total system performance ratio.
steed-framed wail. A wall with a cavity (insulated or otherwise) whose exterior surfaces are separated by steel framing members (i.e., typical steel stud walls and curtain wall systems).
storefront. A system of doors and windows mulled as a composite fenestration structure that has been designed to resist heavy use. Storefront systems include, but are not limited to, exterior fenestration systems that span from the floor level or above to the ceiling of the same story on commercial buildings, with or without mulled windows and doors.
subsystem meter. A meter placed downstream of the energy supply meter that measures the energy delivered to a load or a group of loads.
system. A combination of equipment and auxiliary devices (e.g., controls, accessories, interconnecting means and terminal elements) by which energy is transformed so it performs a specific function, such as HVAC, service water heating or lighting.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20219, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20219, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20219, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20220 Section C202.20—T.

temperature maintenance. The system used to maintain the temperature of the building service hot water delivery system, typically by circulation and reheating or by a heat trace system.
temporary growing structure. A temporary growing structure has sides and roof covered with polyethylene, polyvinyl or similar flexible synthetic material and is used to provide plants with either frost protection or increased heat retention. Temporary structures are those that are erected for a period of less than 180 days.
testing unit enclosure area. The area sum of all the boundary surfaces that define the dwelling unit, sleeping unit, or occupiable conditioned space including top/ceiling, bottom/floor and all side walls. This does not include interior partition walls within the dwelling unit, sleeping unit, or occupiable conditioned space. Wall height shall be measured from the finished floor of the conditioned space to the finished floor or roof/ceiling air barrier above.
THERMAL DISTRIBUTION EFFICIENCY (TDE). The resistance to changes in air heat as air is conveyed through a distance of air duct. TDE is a heat loss calculation evaluating the difference in the heat of the air between the air duct inlet and outlet caused by differences in temperatures between the air in the duct and the duct material. TDE is expressed as a percent difference between the inlet and outlet heat in the duct.
тнеrmostat. An automatic control device used to maintain temperature at a fixed or adjustable set point.
time switch control. An automatic control device or system that controls lighting or other loads, including switching off, based on time schedules.
торlit. See Section ((6405.2.4.3)) c405.2.5.3.
tubular daylighting device (tid). A nonoperable skylight device primarily designed to transmit daylight from a roof surface to an interior ceiling surface via a tubular conduit. The device consists of an exterior glazed weathering surface, a light transmitting tube with a reflective inside surface and an interior sealing device, such as a translucent ceiling panel.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20220, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20220, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20220, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

## WAC 51-11C-20221 Section C202.21-U.

U-factor (thermal transmittance). The coefficient of heat transmission (air to air) through a building component or assembly, equal to the time rate
of heat flow per unit area and unit temperature difference between the warm side and cold side air films (Btu/h • ft ${ }^{2}$ • ${ }^{\circ} \mathrm{F}$ ) [W/(m² $\mathrm{K}^{2}$ )]. unconditioned space. An enclosed space within a building that is not a conditioned space and that is not categorized under Section c402.1.1. Crawlspaces, attics and parking garages with natural or mechanical ventilation are not considered enclosed spaces.
unheated slab-on-grade floor. A slab-on-grade floor that is not a heated slab-on-grade floor.
uniform illumination. A quality of illumination delivered by a lighting system typically comprised of similar fixtures mounted at a regular spacing interval. This lighting system provides a uniform contrast ratio of no greater than 5:1 maximum-to-minimum ratio throughout the entire area served, including task areas.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20221, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20221, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-20222 Section C202.22-V.

variable refrigerant flow system. An engineered direct-expansion (DX) refrigerant system that incorporates a common condensing unit, at least one variable capacity compressor, a distributed refrigerant piping network to multiple indoor fan heating and cooling units each capable of individual zone temperature control, through integral zone temperature control devices and a common communications network. Variable refrigerant flow utilizes three or more steps of control on common interconnecting piping.
ventilation. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.
ventilation air. That portion of supply air that comes from outside
(outdoors) plus any recirculated air that has been treated to maintain the desired quality of air within a designated space.
vertical fenestration. See "fenestration."
visible transmittance [vt]. The ratio of visible light entering the space through the fenestration product assembly to the incident visible light, visible transmittance, includes the effects of glazing material and frame and is expressed as a number between 0 and 1. For skylights, VT shall be measured and rated in accordance with NFRC 202.
visible transmittance - annual [vt-annual]. The ratio of visible light entering the space through the fenestration product assembly to the incident visible light during the course of a year, ((visible transmittance,)) which includes the effects of glazing material, frame, and light well or tubular conduit, and is expressed as a number between 0 and 1. For tubular daylighting devices, VT-annual shall be measured and rated in accordance with NFRC 203.
voltage drop. A decrease in voltage caused by losses in the wiring system that connect the power source to the load.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-20222, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20222, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20222, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

## WAC 51-11C-20223 Section C202.23-W.

walk-in cooler. An enclosed storage space capable of being refrigerated to temperatures above $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ and less than $55^{\circ} \mathrm{F}\left(12.8^{\circ} \mathrm{C}\right)$ that can be walked into, has a ceiling height of not less than 7 feet ( 2134 mm ) and has a total chilled storage area of less than 3,000 square feet (279 m${ }^{2}$ ).
walk-in freezer. An enclosed storage space capable of being refrigerated to temperatures at or below $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ that can be walked into, has a ceiling height of not less than 7 feet ( 2134 mm ) and has a total chilled storage area of less than 3,000 square feet ( $279 \mathrm{~m}^{2}$ ).
wall. That portion of the building envelope, including opaque area and fenestration, that is vertical or tilted at an angle of 60 degrees from horizontal or greater. This includes above-grade walls and belowgrade walls, between=floor spandrels, peripheral edges of floors, ((ad)) foundation walls, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and skylight shafts. water heater. Any heating appliance or equipment that heats potable water and supplies such water to the potable hot water distribution system. wood-framed and other walls. All other wall types, including wood stud walls.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-20223, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-20223, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-30310 Section 303.1—Identification.

C303.1 Identification. Materials, systems and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code.
C303.1.1 Building thermal envelope insulation. An $R$-value identification mark shall be applied by the manufacturer to each piece of building thermal envelope insulation 12 inches ( 305 mm ) or greater in width. Alternately, the insulation installers shall provide a certification listing the type, manufacturer and $R$-value of insulation in-
stalled in each element of the building thermal envelope. For blown or sprayed insulation (fiberglass and cellulose), the initial installed thickness, settled thickness, settled $R$-value, installed density, coverage area and number of bags installed shall be listed on the certification. For sprayed polyurethane foam (SPF) insulation, the installed thickness of the areas covered and $R$-value of installed thickness shall be listed on the certification. For insulated siding, the $R$-value shall be labeled on the product's package and shall be listed on the certification. The insulation installer shall sign, date and post the certification in a conspicuous location on the job site.
EXCEPTION: For roof insulation installed above the deck, the $R$-value shall be labeled as required by the material standards specified in Table 1508.2 of the International Building Code.

C303.1.1.1 Blown or sprayed roof/ceiling insulation. The thickness of blown-in or sprayed fiberglass and cellulose roof/ceiling insulation shall be written in inches (mm) on markers for every 300 square feet $\left(28 \mathrm{~m}^{2}\right)$ of attic area throughout the attic space. The markers shall be affixed to the trusses or joists and marked with the minimum initial installed thickness with numbers of not less than 1 inch ( 25 mm ) in height. Each marker shall face the attic access opening. Spray polyurethane foam thickness and installed $R$-value shall be listed on certification provided by the insulation installer.
C303.1.2 Insulation mark installation. Insulating materials shall be installed such that the manufacturer's $R$-value mark is readily observable upon inspection. For insulation materials that are installed without an observable manufacturer's $R$-value mark, such as blown or draped products, an insulation certificate complying with Section C303.1.1 shall be left immediately after installation by the installer, in a conspicuous location within the building, to certify the installed $R$-value of the insulation material.
C303.1.3 Fenestration product rating. U-factors of fenestration shall be determined as follows:

1. For windows, doors and skylights, U-factor ratings shall be determined in accordance with NFRC 100.
2. Where required for garage doors and rolling doors, U-factor ratings shall be determined in accordance with either NFRC 100 or ANSI/DASMA 105.

U-factors shall be determined by an accredited, independent laboratory, and labeled and certified by the manufacturer.

Products lacking such a labeled U-factor shall be assigned a default U-factor from Table C303.1.3(1), C303.1.3(2) or C303.1.3(4). The solar heat gain coefficient (SHGC) and visible transmittance (VT) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC or VT shall be assigned a default SHGC or VT from Table C303.1.3(3). For tubular daylighting devices, $\mathrm{VT}_{\text {annual }}$ shall be measured and rated in accordance with NFRC 203.
EXCEPTION: Units without NFRC ratings produced by a small business may be assigned default $U$-factors from Table C303.1.3(5) for vertical fenestration.
C303.1.4 Insulation product rating. The thermal resistance ( $R$-value) of insulation shall be determined in accordance with the U.S. Federal Trade Commission R-value rule (C.F.R. Title 16, Part 460) in units of $\mathrm{h} \times \mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F} /$ Btu at a mean temperature of $75^{\circ} \mathrm{F}\left(24^{\circ} \mathrm{C}\right)$.

C303.1.4.1 Insulated siding. The thermal resistance ( $R$-Value) shall be determined in accordance with ASTM C1363. Installation for testing shall be in accordance with the manufacturer's installation instructions.

C303.1.5 Spandrel panels in glass curtain walls. Table C303.1.5 provides default $U$-factors for the spandrel section of glass and other curtain wall systems. Design factors that affect performance are the type of framing, the type of spandrel panel and the $R$-value of insulation. Four framing conditions are considered in the table. The first is the common case where standard aluminum mullions are used. Standard mullions provide a thermal bridge through the insulation, reducing its effectiveness. The second case is for metal framing members that have a thermal break. A thermal break frame uses a urethane or other nonmetallic element to separate the metal exposed to outside conditions from the metal that is exposed to interior conditions. The third case is for structural glazing or systems where there are no exposed mullions on the exterior. The fourth case is for the condition where there is no framing or the insulation is continuous and uninterrupted by framing. The columns in the table can be used for any specified level of insulation between framing members installed in framed curtain walls or spandrel panels.
C303.1.5.1 Window wall application. Where "window wall" or similar assembly that is discontinuous at intermediate slab edges is used, the slab edge $U$-value shall be as listed in Appendix Table A103.3.7.1(3) or as determined using an approved calculation.
C303.1.5.2 Table value assumptions. In addition to the spandrel panel assembly, the construction assembly U-factors assume an air gap between the spandrel panel (with an $R$-value of 1.39) and one layer of 5/8-inch gypsum board (with an R-value of 0.56 ) that provides the interior finish. The gypsum board is assumed to span between the window sill and a channel at the floor. For assemblies that differ from these assumptions, custom U-factors can be calculated to account for any amount of continuous insulation or for unusual construction assemblies using Equations 3-1, 3-2 or 3-3 where appropriate. Spandrel panel Ufactors for assemblies other than those covered by Table C303.1.5 or Equations 3-1 through 3-3 may be determined using an alternate approved methodology. Equations 3-1 through 3-3 do not calculate the value of any insulation inboard of the curtain wall assembly.

Aluminum without Thermal Break
(Equation 3-1)


Aluminum with Thermal Break (Equation 3-2)


[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-30310, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-30310, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-30310, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40100 Section C401-General.

C401.1 Scope. The provisions in this chapter are applicable to commercial buildings and their building sites.
C401.2 Application. Commercial buildings shall comply with one of the following:

1. ( (The requirements of Sections C402, c403, c404, c405, C406, C408, C409, 4410 , and $C 411$.$) ) Prescriptive compliance. The prescrip-$ tive compliance option requires compliance with sections c402 through C406, and Sections C408, C409, C410, C411, and C412.
2. Total building performance. The ( (xcquirements of)) total building performance option requires compliance with Section $C 407$.
3. When adopted by the local jurisdiction, the requirements of Appendix $F$, Outcome-Based Energy Budget, Sections C408, C409, C410, C411, C412 and any specific sections in Table C407.2 as determined by the local jurisdiction. The Proposed Total UA of the proposed building shall be no more than 20 percent higher than the Allowed Total UA as defined in Section C402.1.5.

C401.2.1 Application to existing buildings. ( (Work on existing buildings shall comply with Chapter 5 in addition to the applicable provisions of Chapter 4.) ) Additions, alterations, repairs, and changes of space conditioning, occupancy, or use to existing buildings shall comply with Chapter 5.

C401.2.2 Application to process equipment. Energy using equipment used by a manufacturing, industrial, or commercial process other than for conditioning spaces or maintaining comfort and amenities for the occupants shall comply with Section C403.3.2, Tables C403.3.2(1) through (16) inclusive, Sections c403.3.4.1 through c403.3.4.3, C403.7.7, C403.9.2.1, C403.10.3, C403.11.2, C403.11.3, C404.2, Table C404.2, and sections C405.8, C410, and C412.

C401.3 Thermal envelope certificate. A permanent thermal envelope certificate shall be completed by an approved party. Such certificate shall be posted on a wall in the space where the space conditioning equipment is located, a utility room or other approved location. If located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. A copy of the certificate shall also be included in the construction files for the project. The certificate shall include:

1. R-values of insulation installed in or on ceilings, roofs, walls, foundations and slabs, crawlspace walls and floors, and ducts outside conditioned spaces.
2. U-factors and solar heat gain coefficients (SHGC) of fenestration.
3. Results from any building envelope air leakage testing performed on the building.

Where there is more than one value for any component of the building envelope, the certificate shall indicate the area-weighted average value where available. If the area-weighted average is not available, the certificate shall list each value that applies to 10 percent or more of the total component area.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40100, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40100, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-40100, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40100, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40100, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40211 Section C402.1.1-Low energy buildings.

## C402.1.1 Low energy buildings, semi-heated buildings and greenhouses.

 Low energy buildings shall comply with Section C402.1.1.1. Semi-heated buildings and spaces shall comply with Section C 402.1 .1 .2 . Greenhouses shall comply with Section C402.1.1.3.C402.1.1.1 Low energy buildings. The following buildings, or enclosed portions thereof, separated from the remainder of the building by building thermal envelope assemblies complying with this code shall be exempt from all thermal envelope provision of this code:

1. Those that are heated and/or cooled with a peak design rate of energy usage less than $3.4 \mathrm{Btu} / \mathrm{h} \times \mathrm{ft}^{2}\left(10.7 \mathrm{~W} / \mathrm{m}^{2}\right)$ or 1.0 watt $/ \mathrm{ft}^{2}$
$\left(10.7 \mathrm{~W} / \mathrm{m}^{2}\right)$ of floor area for space conditioning purposes.
2. Those that do not contain conditioned space.
3. Unstaffed equipment shelters or cabinets used solely for personal wireless service facilities.

C402.1.1.2 Semi-heated buildings and spaces. The building envelope of semi-heated buildings, or portions thereof, shall comply with the same requirements as that for conditioned spaces in Section C 402 , except as modified by this section. The total installed output capacity of mechanical space conditioning systems serving a semi-heated building or space shall comply with Section C202. Building envelope assemblies separating conditioned space from semi-heated space shall comply with exterior envelope insulation requirements. Semi-heated spaces ( (heated by mechanical systems that do not include electric resistance heating equipment)) are not required to comply with the opaque wall insulation provisions of Section C402.2.3 for walls that separate semi-heated spaces from the exterior or low energy spaces. Fenestration that forms part of the building thermal envelope enclosing semi-heated spaces shall comply with Section C402.4. Semi-heated spaces shall be calculated separately from other conditioned spaces for compliance purposes. Opaque walls in semi-heated spaces shall be calculated as fully code compliant opaque walls for both the target and proposed for the Target UA calculations for Component Performance compliance per Section C402.1.5, and for the ((Standard Reference)) Baseline Building Design for Total Building Performance compliance per Section C407. The capacity of heat trace temperature maintenance systems complying with Section C404.7.2 that are provided for freeze protection of piping and equipment only shall not be included in the total installed output capacity of mechanical space conditioning systems.
EXCEPTION: (Building or space may comply as semi-heated when served by one or more of the following system alternatives:

1. Electric infrared heating equipment for localized heating applications.
2. Heat pumps with cooling capacity permanently disabled, as preapproved by the jurisdiction.))

Provided the total installed heating output capacity of mechanical space conditioning does not exceed the criteria for semi-heated space as defined in Section C202, a semi-heated building or space may comply with this section when served by heat pumps without electric resistance back up and connected to a heating only thermostat.
C402.1.1.3 Greenhouses. Greenhouse structures or areas that comply with all of the following shall be exempt from the building envelope requirements of this code:

1. Exterior opaque envelope assemblies complying with Sections C402.2 and C402.4.4.
EXCEPTION: Low energy greenhouses that comply with Section C402.1.1.1.
2. Interior partition building thermal envelope assemblies that separate the greenhouse from conditioned space complying with Sections C402.2, C402.4.3 and C402.4.4.
3. ((Nonopaque envelope)) Fenestration assemblies complying with the thermal envelope requirements in Table C402.1.1.3. The U-factor for the ((nonopaque roof)) skylight shall be for the roof assembly or a roof that includes the assembly and an internal curtain system. EXCEPTION: Unheated greernouses.
4. No mechanical cooling is provided.
5. For heated greenhouses, heating is provided by a radiant heating system, a condensing natural gas-fired or condensing propane-fired heating system, or a heat pump with cooling capacity permanently disabled as preapproved by the jurisdiction.

Table C402.1.1.3
((Non-Opaque)) Fenestration Thermal Envelope Maximum Requirements

| $($ Component $\boldsymbol{U}$-Factor <br> BTU/h-ft ${ }^{\mathbf{-}} \mathbf{-} \mathbf{F}$ | Climate Zone 5 and <br> Marine $\mathbf{4}$ |
| :--- | :---: |
| Non-opaque roof | 0.5 |

Washington State Register, Issue 22-14
WSR 22-14-091

| $($ Component $\boldsymbol{U}$-Factor <br> BTU/h-ft ${ }^{\mathbf{2}} \mathbf{- 9} \mathbf{F}$ | Climate Zone 5 and <br> Marine 4 |
| :--- | :---: |
| Non- ppaque SEW wall | $\theta .7$ |
| Non-opaque N wall | $\theta .6))$ |


| Component | $\underline{\boldsymbol{U} \text {-Factor } \mathbf{B T U} / \mathbf{h - f t}{ }^{2}{ }^{\circ}{ }^{\circ} \mathbf{F}}$ |
| :--- | :---: |
| $\underline{\text { Skylights }}$ | $\underline{0.5}$ |
| Vertical fenestration | $\underline{0.6}$ |

[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40211, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40211, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40211, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40211, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40211, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40212 Section C402.1.2-Equipment buildings.

C402.1.2 Equipment buildings. Buildings that comply with all of the following shall be exempt from the building thermal envelope provisions of this code:

1. Are separate buildings with floor area no more than 500 square feet (50 $\mathrm{m}^{2}$ ).
2. Are intended to house ((electronic)) electric equipment with installed equipment power totaling at least 7 watts per square foot ( $75 \mathrm{~W} / \mathrm{m}^{2}$ ) and not intended for human occupancy.
3. Are served by mechanical cooling and heating systems sized in accordance with Sections C403.1.2 and C403.3.1.
4. Have a heating system capacity not greater than $17,000 \mathrm{Btu} / \mathrm{hr}$ ( 5 kW ) and a heating thermostat set point that is restricted to not more than $50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right)$.
5. Have an average wall and roof $U$-factor less than 0.200 .

EXCEPTION: Where the cooling and heating system is a heat pump, the heating capacity is allowed to exceed 17,000 Btu/h provided the heat pump cooling efficiency is at least 15 percent better than the requirements in Tables C403.3.2(2) and C403.3.2(14).
C402.1.2.1 Standalone elevator hoistways. Elevator hoistways that comply with all of the following shall be exempt from the building thermal envelope and envelope air barrier provisions of this code:

1. Are separate from any other conditioned spaces in the building (do not serve or open into any conditioned, semi-heated or indirectly conditioned space).
2. Have heating and/or cooling equipment sized only to serve the expected elevator loads with thermostat setpoints restricted to heating to no higher than $40^{\circ} \mathrm{F}$ and cooling to no lower than $95^{\circ} \mathrm{F}$.
3. Have an area weighted average wall, roof and floor (where applicable) U-factor of less than or equal to 0.20. Calculations must
include any floor-slab-edges that penetrate the hoistway and thus are considered part of the above-grade walls.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40212, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40212, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40212, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-402121 Table C402.1.3-Opaque thermal envelope assembly $R$-value requirements.

Table C402.1.3
Opaque Thermal Envelope Insulation Component Minimum Requirements, $R$-value Methoda, (i)) $\underline{j}$

| CLIMATE ZONE | 5 AND MARINE 4 |  |
| :---: | :---: | :---: |
|  | All Other | Group R |
| Roofs |  |  |
| Insulation entirely above deck | R-38ci | R-38ci |
| Metal buildings ${ }^{\text {b }}$ | R-25 + ((R-14)) R-22 LS | $\mathrm{R}-25+((\mathrm{R}-14)) \mathrm{R}-22 \mathrm{LS}$ |
| Attic and other | R-49 | R-49 |
| Walls, Above Grade_ |  |  |
| Mass ${ }^{\text {h }}$ | R-9.5ci(() ${ }^{\text {c }}$ ) | R-13.3ci |
| Mass transfer deck slab edge ${ }_{\text {g }}$ | ((R-5 | R-5)) |
| Metal buildings | $\begin{aligned} & ((\mathrm{R}-19 \mathrm{ci} \text { or } \mathrm{R}-13+13 \mathrm{ci})) \\ & \mathrm{R}-13+\mathrm{R}-14 \mathrm{ci} \end{aligned}$ | $\begin{aligned} & ((\text { R-19ei or } R-13+13 \mathrm{ei})) \\ & \mathrm{R}-13+\mathrm{R}-14 \mathrm{ci} \end{aligned}$ |
| Steel framed | R-13 + R-10ci | R-19 + R-8.5ci |
| Wood framed and other | $((\mathrm{R} 21$ int or R $15+5$ ci std $))$ $\mathrm{R}-13+\mathrm{R}-7.5 \mathrm{ci}$ std or R-20 + R-3.8ci std | $\begin{aligned} & \text { R-13 + R-7.5ci std or R-20 }+\underline{\mathrm{R}-3.8 \mathrm{ci}} \\ & \text { std or R- } 25 \text { std } \end{aligned}$ |
| Walls, Below Grade |  |  |
| Below-grade wall ${ }^{\text {d,h }}$ | Same as above grade | Same as above grade |
| Floors |  |  |
| Mass ${ }^{\text {f }}$ | R-30ci | R-30ci |
| Joist/framing | $\mathrm{R}-30^{\text {e }}$ | $\mathrm{R}-30^{\text {e }}$ |
| Slab-on-Grade Floors |  |  |
| Unheated slabs | R-10 for 24" below | R-10 for 24" below |
| Heated slabs | $\mathrm{R}-10$ perimeter \& under entire slab | R-10 perimeter \& under entire slab |
| ( Opaque Doorsg |  |  |
| Nonswinging | R-4.75 | R-4.75)) |

For SI: $\quad 1$ inch $=25.4 \mathrm{~mm} . \mathrm{ci}=$ Continuous insulation. $\mathrm{NR}=$ No requirement.
$\mathrm{LS}=\quad$ Liner system-A continuous membrane installed below the purlins and uninterrupted by framing members. Uncompressed, unfaced insulation rests on top of the membrane between the purlins.
a Assembly descriptions can be found in Chapter 2 and Appendix A.
b Where using $R$-value compliance method, a thermal spacer block with minimum thickness of $1 / 2$-inch and minimum $R$-value of R-3.5 shall be provided, otherwise use the $U$-factor compliance method in Table C402.1.4.
c Exception: Integral insulated concrete block walls complying with ASTM C90 with all cores filled and meeting both of the following:

1. At least 50 percent of cores must be filled with vermiculite or equivalent fill insulation; and
2. The building thermal envelope encloses one or more of the following uses: Warehouse (storage and retail), gymnasium, auditorium, church chapel, arena, kennel, manufacturing plant, indoor swimming pool, pump station, water and waste water treatment facility, storage facility, storage area, motor vehicle service facility. Where additional uses not listed (such as office, retail, etc.) are contained within the building, the exterior walls that enclose these areas may not utilize this exception and must comply with the appropriate mass wall $R$-value from Table $\mathrm{C} 402.1 .3 / U$-factor from Table C402.1.4.
d Where heated slabs are below grade, they shall comply with the insulation requirements for heated slabs.
e Steel floor joist systems shall be insulated to R-38 + R-10ci.
f "Mass floors" shall include floors weighing not less than:
3. 35 pounds per square foot of floor surface area; or
4. 25 pounds per square foot of floor surface area where the material weight is not more than 120 pounds per cubic foot.
g ((Not applieable to garage doors. See Table C402.1.4.)) Component performance in accordance with Section C402.1.5 shall be required for buildings with a mass transfer deck slab.
h Peripheral edges of intermediate concrete floors are included in the above-grade mass wall category and therefore must be insulated as abovegrade mass walls unless they meet the definition of Mass Transfer Deck Slab Edge. The area of the peripheral edges of concrete floors shall be defined as the thickness of the slab multiplied by the perimeter length of the edge condition. See Table A103.3.7.2 for typical default $U$-factors for above-grade slab edges and footnote ${ }^{\mathrm{c}}$ for typical conditions of above-grade slab edges.
i (For roof, wall or floor assemblies where the proposed assembly would not be continuous insulation, an alternate nominal $R$-value compliance option for assemblies with isolated metal penetrations of otherwise continuous insulation is:)) Where the total area of through-wall mechanical equipment is greater than 1 percent of the opaque above-grade wall area, use of the $R$-value method is not permitted. See Section C402.1.4.3.
j For roof, wall or floor assemblies where the proposed assembly would not be continuous insulation, alternate nominal $R$-value compliance options for assemblies with isolated metal fasteners that penetrate otherwise continuous insulation are as shown in columns B and C of Table C402.1.3(i):

Table C402.1.3(i)
Continuous Insulation Equivalents

| Column A | Column B | Column C |
| :---: | :---: | :---: |
| $\begin{gathered} \text { Assemblies with } \\ \text { continuous } \\ \text { insulation (see definition) } \end{gathered}$ | Alternate option for assemblies with metal penetrations, greater than $\mathbf{0 . 0 4 \%}$ but less than $\mathbf{0 . 0 8 \%}$ | Alternate option for assemblies with metal penetrations, greater than or equal to $\mathbf{0 . 0 8 \%}$ but less than $\mathbf{0 . 1 2 \%}$ |
| R-9.5ci | R-11.9ci | R-13ci |
| R-11.4ci | R-14.3ci | R-15.7ci |
| R-13.3ci | R-16.6ci | R-18.3ci |
| R-15.2ci | ((R-19.0ci)) R-19ci | R-21ci |
| R-30ci | R-38ci | R-42ci |
| R-38ci | R-48ci | R-53ci |
| $\mathrm{R}-13+\mathrm{R}-7.5 \mathrm{ci}$ | R-13 + R-9.4ci | R-13 + R-10.3ci |
| $\mathrm{R}-13+\mathrm{R}-10 \mathrm{ci}$ | R-13 + R-12.5ci | R-13 + R-13.8ci |
| $\mathrm{R}-13+\mathrm{R}-12.5 \mathrm{ci}$ | R-13 + R-15.6ci | $\mathrm{R}-13+\mathrm{R}-17.2 \mathrm{ci}$ |
| $\mathrm{R}-13+\mathrm{R}-13 \mathrm{ci}$ | R-13 + R-16.3ci | R-13 + R-17.9ci |
| R-19 + R-8.5ci | R-19 + R-10.6ci | R-19 + R-11.7ci |
| $\mathrm{R}-19+\mathrm{R}-14 \mathrm{ci}$ | R-19 + R-17.5ci | R-19 + R-19.2ci |
| $\mathrm{R}-19+\mathrm{R}-16 \mathrm{ci}$ | $\mathrm{R}-19+\mathrm{R}-20 \mathrm{ci}$ | $\mathrm{R}-19+\mathrm{R}-22 \mathrm{ci}$ |
| R-20 + R-3.8ci | $\mathrm{R}-20+\mathrm{R}-4.8 \mathrm{ci}$ | $\mathrm{R}-20+\mathrm{R}-5.3 \mathrm{ci}$ |
| $\mathrm{R}-21+\mathrm{R}-5 \mathrm{ci}$ | R-21 + R-6.3ci | R-21 + R-6.9ci |

Notes for Table C402.1.3(j)
((This)) These alternate nominal $R$-value compliance options ((is)) are allowed for projects complying with all of the following:
1a. The ratio of the cross-sectional area, as measured in the plane of the surface, of metal penetrations of otherwise continuous insulation to the opaque surface area of the assembly is greater than $0.0004(0.04 \%)$, but less than $0.0008(0.08 \%)$, for use of Column B equivalents, and greater than or equal to $0.008(0.08 \%)$, but less than $0.0012(0.12 \%)$, for use of Column C equivalents.
1b. Where all metal penetrations are stainless steel, Column B is permitted to be used for penetrations greater than $0.12 \%$, but less than $0.24 \%$ of opaque surface area, and Column C is permitted to be used for penetrations greater than or equal to $0.24 \%$, but less than $0.48 \%$ of opaque surface area.
2. The metal penetrations of otherwise continuous insulation are isolated or discontinuous (e.g., brick ties or other discontinuous metal attachments, offset brackets supporting shelf angles that allow insulation to go between the shelf angle and the primary portions of the wall structure). No continuous metal elements (e.g., metal studs, z-girts, z-channels, shelf angles) penetrate the otherwise continuous portion of the insulation.
3. Building permit drawings shall contain details showing the locations and dimensions of all the metal penetrations (e.g., brick ties or other discontinuous metal attachments, offset brackets, etc.) of otherwise continuous insulation. In addition, calculations shall be provided showing the ratio of the cross-sectional area of metal penetrations of otherwise continuous insulation to the overall opaque wall area.
For other cases where the proposed assembly is not continuous insulation, see Section C402.1.4 for determination of U-factors for assemblies that include metal other than screws and nails.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-402121, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-402121, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-402121, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-402121, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40213 Section C402.1.3-Insulation component R-value

 method.C402.1.3 Insulation component $R$-value-based method. Building thermal envelope opaque assemblies shall comply with the requirements of Section C402.2 based on the climate zone specified in Chapter 3. For opaque portions of the building thermal envelope intended to comply on an insulation component $R$-value basis, the $R$-values for cavity insulation and continuous insulation shall not be less than that specified in Table C402.1.3. Where cavity insulation is installed in multiple layers, the cavity insulation $R$-values shall be summed to determine compliance with the cavity insulation $R$-value requirements. Where continuous insulation is installed in multiple layers, the continuous insulation $R$ values shall be summed to determine compliance with the continuous insulation $R$-value requirements. Cavity insulation $R$-values shall not be used to determine compliance with the continuous insulation $R$-value requirements in Table C402.1.3. Commercial buildings or portions of commercial buildings enclosing Group $R$ occupancies shall use the $R$ values from the "Group R" column of Table C402.1.3. Commercial buildings or portions of commercial buildings enclosing occupancies other than Group R shall use the R-values from the "All other" column of Table C402.1.3.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40213, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40213, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40213, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27.020, and 19.27.074. WSR 14-24-122, § 51-11C-40213, filed 12/3/14, effective 1/3/15. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40213, filed 2/1/13, effective 7/1/13.]

WAC 51-11C-40214 Section C402.1.4-Assembly U-factor, C-factor, or $F$-factor-based method.

C402.1.4 Assembly $U$-factor, $C$-factor, or $F$-factor-based method. Building thermal envelope opaque assemblies shall meet the requirements of Section C402.2 based on the climate zone specified in Chapter 3. Building thermal envelope opaque assemblies intended to comply on an assembly $U-, C-$, or $F$-factor basis shall have a $U-, C-$, or $F$-factor not greater than that specified in Table C402.1.4. Commercial buildings or portions of commercial buildings enclosing Group R occupancies shall use the $U-, C-$, or $F$-factor from the "Group R" column of Table C402.1.4. Commercial buildings or portions of commercial buildings enclosing occupancies other than Group $R$ shall use the $U-, C-$, or $F$-factor from the "All other" column of Table C402.1.4. The U-factors for typical construction assemblies are included in Appendix A. These values shall be used for all calculations. Where proposed construction assemblies are not represented in Appendix A, values shall be calculated in accordance with the ASHRAE Handbook-Fundamentals using the framing factors listed in Appendix A where applicable and shall include the thermal bridging effects of framing materials.

C402.1.4.1 Roof/ceiling assembly. The maximum roof/ceiling assembly $U$ factor shall not exceed that specified in Table C402.1.4 based on construction materials used in the roof/ceiling assembly.
C402.1.4.1.1 Suspended ceilings. Insulation installed on suspended ceilings having removable ceiling tiles shall not be considered part of the assembly $U$-factor of the roof/ceiling construction.
C402.1.4.1.2 Joints staggered. Continuous insulation board shall be installed not less than two layers, and the edge joints between each layer of insulation shall be staggered, except where insulation tapers to the roof deck at a gutter edge, roof drain, or scupper.

C402.1.4.2 Thermal resistance of cold-formed steel stud walls. U-factors of walls with cold-formed steel studs shall be permitted to be determined in accordance with Equation 4-1:

## Equation 4-1:

$$
\mathrm{U}=1 /[\mathrm{Rs}+(\mathrm{ER})]
$$

Where:

| Rs $=$ | The cumulative $R$-value of the wall <br> components along the path of heat <br> transfer, excluding the cavity insulation <br> and steel studs. |
| :--- | :--- |
| ER $=$The effective $R$-value of the cavity <br> insulation with steel studs as specified in |  |
|  | Table C402.1.4.2. |

C402.1.4.3 Thermal resistance of mechanical equipment penetrations. When the total area of penetrations from through-wall mechanical equipment or equipment listed in Table C403.3.2(4) exceeds 1 percent of the opaque above-grade wall area, the mechanical equipment penetration area shall be calculated as a separate wall assembly with a default U-factor of 0.5 . Mechanical system ducts and louvers, including those for supply, exhaust and relief, and for condenser air intake and
outlet, are not considered to be mechanical equipment for the purposes of this section.
EXCEPTION: Where mechanical equipment has been tested in accordance with approved testing standards, the mechanical equipment penetration area is permitted to be calculated as a separate wall assembly using the $U$-factor determined by such test.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40214, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, S 51-11C-40214, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, s 51-11C-40214, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40214, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-402141 Table C402.1.4-Opaque thermal envelope requirements, $U$-factor method.

| $\begin{gathered} \text { Table C402.1.4 } \\ \text { Opaque Thermal Envelope Require- } \\ \text { ments }{ }^{\text {a,f }}=\text { - } \end{gathered}$ |  |  |
| :---: | :---: | :---: |
| CLIMATE ZONE | 5 AND MARINE 4 |  |
|  | All Other | Group R |
| Roofs |  |  |
| Insulation entirely above deck | U-0.027 | U-0.027 |
| Metal buildings | U-0.031 | U-0.031 |
| Attic and other | U-0.021 | U-0.021 |
| Joist or single rafter | U-0.027 | U-0.027 |
| Walls, Above Grade ${ }_{-}^{\mathbf{k}}$ |  |  |
| Mass ${ }^{\text {g }}$ | U-0.104((d)) | U-0.078 |
| Mass transfer deck slab ${ }_{-}^{i}$ ((edge)) | U-0.20 | U-0.20 |
| Metal building | $\begin{aligned} & ((\mathrm{U}-0.052)) \\ & \mathrm{U}-0.050 \end{aligned}$ | $\begin{aligned} & ((\mathrm{U}-0.052)) \\ & \mathrm{U}-0.050 \end{aligned}$ |
| Steel framed | U-0.055 | U-0.055 |
| Wood framed and other | $\begin{aligned} & ((\mathrm{U}-0.054)) \\ & \mathrm{U}-0.051 \end{aligned}$ | U-0.051 |
| Walls, Below Grade |  |  |
| Below-grade wall ${ }^{\text {b, } g}$ | Same as above grade | Same as above grade |
| Floors |  |  |
| Mass ${ }^{\text {e }}$ | U-0.031 | U-0.031 |
| Joist/framing | U-0.029 | U-0.029 |
| Slab-on-Grade Floors |  |  |
| Unheated slabs | F-0.54 | F-0.54 |


| CLIMATE ZONE | 5 AND MARINE 4 |  |
| :---: | :---: | :---: |
|  | All Other | Group R |
| Heated slabs ${ }^{\text {c }}$ | F-0.55 | F-0.55 |
| Opaque Doors |  |  |
| Nonswinging door | U-0.31 | U-0.31 |
| Swinging door_r | U-0.37 | U-0.37 |
| ((Nonswinging door | U-0.34 | U-0.34)) |
| Garage door <14\% glazing | U-0.31 | U-0.31 |
| $\begin{aligned} & \text { Garage door } \geq 14 \% \text { and } \\ & \leq 50 \% \text { glazing }^{\mathrm{i}} \end{aligned}$ | $\underline{\mathrm{U}-0.34}$ | $\underline{\mathrm{U}-0.34}$ |

a Use of opaque assembly $U$-factors, $C$-factors, and $F$-factors from Appendix A is required unless otherwise allowed by Section C402.1.4.
b Where heated slabs are below grade, they shall comply with the $F$-factor requirements for heated slabs.
c Heated slab $F$-factors shall be determined specifically for heated slabs. Unheated slab factors shall not be used.
d Exception: Integral insulated concrete block walls complying with ASTM C90 with all cores filled and meeting both of the following: 1. At least 50 percent of cores must be filled with vermiculite or equivalent fill insulation; and
2. The building thermal envelope encloses one or more of the following uses: Warehouse (storage and retail), gymnasium, auditorium, church chapel, arena, kennel, manufacturing plant, indoor swimming pool, pump station, water and waste water treatment facility, storage facility, storage area, motor vehicle service facility. Where additional uses not listed (such as office, retail, etc.) are contained within the building, the exterior walls that enclose these areas may not utilize this exception and must comply with the appropriate mass wall $R$-value from Table C402.1.3/U-factor from Table C402.1.4.
e "Mass floors" shall include floors weighing not less than: 1. 35 pounds per square foot of floor surface area; or 2. 25 pounds per square foot of floor surface area where the material weight is not more than 120 pounds per cubic foot.
f Opaque assembly $U$-factors based on designs tested in accordance with ASTM C1363 shall be permitted. The $R$-value of continuous insulation shall be permitted to be added or ((substracted)) subtracted from the original test design.
g Peripheral edges of intermediate concrete floors are included in the above-grade mass wall category and therefore must be insulated as above-grade mass walls unless they meet the definition of Mass Transfer Deck Slab ((Edge)). The area of the peripheral edges of concrete floors shall be defined as the thickness of the slab multiplied by the perimeter length of the edge condition. See Table A103.3.7.2 for typical default $U$-factors for above-grade slab edges and footnote ${ }^{\mathrm{c}}$ for typical conditions of above-grade slab edges.
h Swinging door $U$-factors shall be determined in accordance with

- NFRC-100.
i Garage doors having a single row of fenestration shall have an assembly $U$-factor less than or equal to 0.44 , provided that the fenestration area is not less than 14 percent and not more than 25 percent of the total door area.
j Component performance in accordance with Section C402.1.5 shall be required for buildings with a mass transfer deck slab. A mass transfer deck, due to its configuration, is not insulated. The table value (U-0.20) shall be used as the baseline value for component performance or total building performance path calculations. For the proposed value, the appropriate value from Table A104.3.7.2 shall be used.
${ }^{k}$ Through-wall mechanical equipment subject to Section C402.1.4.3 shall be calculated at the $U$-factor defined in Section C402.1.4.3. The areaweighted $U$-factor of the wall, including through-wall mechanical equipment, shall not exceed the value in the table.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-402141, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-402141, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-402141, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

WAC 51-11C-402142 Table ((C402.1.4.1)) C402.1.4.2-Effective $R$ values for steel stud wall assemblies.

Table ((C402.1.4.1)) C402.1.4.2
Effective $R$-values For Steel Stud Wall Assemblies

| NOMINAL STUD DEPTH (inches) | SPACING OF FRAMING (inches) | CAVITY R-VALUE (insulation) | CORRECTION FACTOR (Fc) | $\begin{gathered} \text { EFFECTIVE } \\ R \text {-VALUE }(E R) \\ (\text { Cavity } R \text {-Value } \times F c \text { ) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $31 / 2$ | 16 | 13 | 0.46 | 5.98 |
|  |  | 15 | 0.43 | 6.45 |
| $31 / 2$ | 24 | 13 | 0.55 | 7.15 |
|  |  | 15 | 0.52 | 7.80 |
| 6 | 16 | 19 | 0.37 | 7.03 |
|  |  | 21 | 0.35 | 7.35 |
| 6 | 24 | 19 | 0.45 | 8.55 |
|  |  | 21 | 0.43 | 9.03 |
| 8 | 16 | 25 | 0.31 | 7.75 |
|  | 24 | 25 | 0.38 | 9.50 |

[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-402142, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-40215 Section C402.1.5-Component performance alternative.
C402.1.5 Component performance alternative. Building envelope values and fenestration areas determined in accordance with Equation 4-2 shall be permitted in lieu of compliance with the $U$-factors and $F$-factors in Table C402.1.4 and C402.4 and the maximum allowable fenestration areas in Section C402.4.1.

For buildings with more than one space conditioning category, component performance compliance shall be demonstrated separately for each space conditioning category. Interior partition ceilings, walls, fenestration and floors that separate space conditioning areas shall be applied to the component performance calculations for the space conditioning category with the highest level of space conditioning.

## Equation 4-2

## Proposed Total UA $\leq$ Allowable Total UA

Where:

| Proposed Total UA $=$ | UA-glaz-prop + UA sky- |
| :--- | :--- |
|  | prop+ UA-opaque-prop + |
|  | FL-slab-prop |
| Allowable Total $=$ | UA-glaz-allow + UA-glaz- |
| UA | excess + UA sky-allow + |
|  | UA-sky-excess + UA- |
|  | opaque-allow + FL-slab- |
| allow |  |


| UA-glaz-prop |  | Sum of (proposed $U$-value x proposed area) for each distinct vertical fenestration type, up to code maximum area |
| :---: | :---: | :---: |
| UA-sky-prop | $=$ | Sum of (proposed $U$-value $x$ proposed area) for each distinct skylight type, up to the code maximum area |
| UA-opaque-prop | $=$ | Sum of (proposed $U$-value $x$ proposed area) for each distinct opaque thermal envelope type |
| FL-slab-prop | $=$ | Sum of (proposed $F$-value x proposed length) for each distinct slab on grade perimeter assembly |
| UA-glaz-allow | $=$ | Sum of (code maximum vertical fenestration $U$-value from Table C402.4, or Section C402.4.1.1.2 if applicable, x proposed area) for each distinct vertical fenestration type, not to exceed the code maximum area ${ }^{1}$ |
| UA-glaz-excess | = | $U$-value for the proposed wall type from Table C402.4 ${ }^{2}$ x vertical fenestration area in excess of the code maximum area |
| UA-sky-allow | $=$ | Sum of (code maximum skylight $U$-value from Table C402.4 x proposed area) for each distinct skylight type proposed, not to exceed the code maximum area |
| UA-sky-excess | = | $U$-value for the proposed roof type from Table C402.4 ${ }^{3} \mathrm{x}$ skylight area in excess of the code maximum area |
| UA-opaque-allow | $=$ | Code maximum opaque envelope $U$-value from Table C402.1.4 for each opaque door, wall, roof, and floor assembly x proposed area |
| FL-slab-allow | $=$ | Code maximum $F$-value for each slab-on-grade perimeter assembly x proposed length |
| Notes: $\quad{ }^{1}$ Where mult and the code be the avera proposed ve ${ }^{2}$ Where mu be the avera proposed ab ${ }^{3}$ Where mu be the avera proposed roof | le ve aximu Table ale cen le wall Table grad le roo Table area o | ical fenestration types are proposed m area is exceeded, the $U$-value shall C402.1.4 $U$-value weighted by the estration area of each type. <br> $l$ types are proposed the $U$-value shall C402.1.4 $U$-value weighted by the wall area of each type. <br> f types are proposed the $U$-value shall C402.1.4 $U$-value weighted by the each type. |

Appendix A. These values shall be used for all calculations. Where proposed construction assemblies are not represented in Chapter 3 or Appendix A, values shall be calculated in accordance with the ASHRAE Handbook-Fundamentals, using the framing factors listed in Appendix A.

For envelope assemblies containing metal framing, the U-factor shall be determined by one of the following methods:

1. Results of laboratory measurements according to acceptable methods of test.
2. ASHRAE Handbook-Fundamentals where the metal framing is bonded on one or both sides to a metal skin or covering.
3. The zone method as provided in ASHRAE Handbook-Fundamentals.
4. Effective framing/cavity R-values as provided in Appendix A.

When return air ceiling plenums are employed, the roof/ceiling assembly shall:
a. For thermal transmittance purposes, not include the ceiling proper nor the plenum space as part of the assembly; and
b. For gross area purposes, be based upon the interior face of the upper plenum surface.
5. Tables in ASHRAE 90.1 Normative Appendix A.
6. Calculation method for steel-framed walls in accordance with Section C402.1.4.1 and Table C402.1.4.1.

C402.1.5.2 SHGC rate calculations. Fenestration SHGC values for individual components and/or fenestration are permitted to exceed the SHGC values in Table C402.4 and/or the maximum allowable fenestration areas in Section C402.4.1 where the proposed total SHGCxA less than the allowable total SHGCxA as determined by Equation 4-3.

Equation 4-3-SHGC Rate Calculations

## Proposed Total SHGCxA $\leq$ Allowable Total SHGCxA

Where:

| Proposed Total <br> SHGCxA | $=$SHGCxA-glaz-prop + <br> SHGCxA-sky-prop |
| :--- | :--- |
| Allowable Total <br> SHGCxA | SHGCxA-glaz-allow + <br> SHGCxA-sky-allow |
| SHGCxA-glaz-prop $=$ | Sum of (proposed <br> SHGCx proposed area) for <br> each distinct vertical <br> fenestration type |
| SHGCxA-sky-prop $=$ | Sum of (proposed |
|  | SHGCx proposed area) for <br> each distinct skylight type |
| SHGCxA-glaz-allow $=$ | Sum of (code maximum <br> vertical fenestration SHGC <br> from Table C402.4, or |
|  | Section C402.4.1.3 if <br> applicable, x proposed <br> area) for each distinct |
| vertical fenestration type, |  |
| not to exceed the code |  |
| maximum area |  |

If the proposed vertical fenestration area does not exceed the Vertical Fenestration Area allowed, the target area for each vertical fenestration type shall equal the proposed area. If the proposed vertical fenestration area exceeds the Vertical Fenestration Area allowed, the target area of each vertical fenestration element shall be reduced in the base envelope design by the same percentage and the net area of each above-grade wall type increased proportionately by the same percentage so that the total vertical fenestration area is exactly equal to the Vertical Fenestration Area allowed.

If the proposed skylight area does not exceed the Allowable Skylight Area from Section C402.4.1, the target area shall equal the proposed area. If the proposed skylight area exceeds the Allowable Skylight Area from Section C402.4.1, the area of each skylight element shall be reduced in the base envelope design by the same percentage and the net area of each roof type increased proportionately by the same percentage so that the total skylight area is exactly equal to the allowed percentage per Section C402.3.1 of the gross roof area.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40215, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40215, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27A and 19.27 RCW. WSR 19-02-089, § 51-11C-40215, filed 1/2/19, effective 7/1/19. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-40215, filed 5/2/17, effective 6/2/17; WSR 16-24-070, § 51-11C-40215, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-40215, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40215, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40220 Section C402.2—Specific insulation require-

 ments.C402.2 Specific building thermal envelope insulation requirements. Insulation in building thermal envelope opaque assemblies shall comply with Sections C402.2.1 through (( (402.2.6)) C402.2.8 and Table C402.1.3.

Where this section refers to installing insulation levels as specified in Section C402.1.3, assemblies complying prescriptively with Section C402.1.4 and buildings complying with Section C402.1.5 are allowed to install alternate levels of insulation so long as the $U$-factor of the insulated assembly is less than or equal to the U-factor required by the respective path.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40220, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40220, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40220, filed

1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40220, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40221 Section C402.2.1-Roof assembly.

C402.2.1 Roof assembly. The minimum thermal resistance ( $R$-value) of the insulating material installed either between the roof framing or continuously on the roof assembly shall be as specified in Table C402.1.3, based on construction materials used in the roof assembly. ( (Continuous insulation board shall be installed in not less than $z$ layers and the edge joints between cach layer of insulation shall be staggered. Insulation installed on a suspended ceiling with removable eciling tiles shall not be considered part of the minimum thermal resistance of the roof insulation.) )

EXCEPTIONS: ((1.Continuously insulated roof assemblies where the thickness of insulation varies 1 inch ( 25 mm ) or less and where the area-weighted $\uplus$ factor is equivalent to the same assembly with the $R$-value specified in Table C402.1.3.))
$\left(\left(z_{-}\right)\right)$1. Where tapered insulation is used with insulation entirely above deck, those roof assemblies shall show compliance on a $U$-factor basis per Section C402.1.4. The effective $U$-factor shall be determined through the use of Tables A102.2.6(1), A102.2.6(2) and A102.2.6(3).
((3.)) 2. Two layers of insulation are not required where insulation tapers to the roof deck, such as at roof drains. At roof drains, the immediate 24 inch by 24 inch plan area around each roof drain has a minimum insulation requirement of $\mathrm{R}-13$, but otherwise is permitted to be excluded from the roof insulation area-weighted calculations.

C402.2.1.1 Minimum thickness, lowest point. The minimum thickness of above-deck roof insulation at its lowest point, gutter edge, roof drain or scupper, shall be not less than 1 inch ( 25 mm ).
C402.2.1.2 Suspended ceilings. Insulation installed on suspended ceilings having removable ceiling tiles shall not be considered part of the minimum thermal resistance ( $R$-value) of roof insulation in roof/ ceiling construction.

C402.2.1.3 Skylight curbs. Skylight curbs shall be insulated to the level of roofs with insulation entirely above deck or R-5, whichever is less.
EXCEPTION: Unit skylight curbs included as a component of a skylight listed and labeled in accordance with NFRC 100 shall not be required to be insulated.
C402.2.1.4 Rooftop HVAC equipment curbs. Structural curbs installed to support rooftop HVAC equipment are allowed to interrupt the above roof insulation. The area under the HVAC equipment inside of the equipment curb shall be insulated to a minimum of $\mathrm{R}-13$ in all locations where there are not roof openings for ductwork. The annular space between the roof opening and the ductwork shall be sealed to maintain the building air barrier. The plan-view area of the HVAC equipment curb shall be excluded from the prescriptive roof insulation requirements or the area-weighted component performance calculations.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40221, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40221, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40221, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-402211 ((Skylight eurbs-)) Reserved.

( (C402.2.1.1 Skylight curbs. Skylight curbs shall be insulated to the level of roofs with insulation entirely above deck or $R-5$, whichevex is less.
EXCEPTION: Unit skylight curbs included as a component of a skylight listed and labeled in accordance with NFRC 100 shall not be required to be instlated.
C402.2.1.2 Rooftop HVAC equipment eurbs. Structural curbs installed to support rooftop HVAC equipment are allowed to interrupt the above roof insulation. The area under the HVAC equipment inside of the equipment eurb shall be insulated to a minimum of $R-13$ in all locations where there are not roof openings for ductwork. The annular space between the roof opening and the ductwork shall be sealed to maintain the building air barrier. The plan-view area of the HVAC equipment curb shall be excluded from the prescriptive roof insulation requirements or the area-wighted component performance calculations.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-402211, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-402211, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-402211, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40222 ((Reserved.)) Section C402.2.2-Above-grade

walls.
C402.2.2 Above-grade walls. The minimum thermal resistance ( $R$-value) of materials installed in the wall cavity between the framing members and continuously on the walls shall be as specified in Table C402.1.3, based on framing type and construction materials used in the wall assembly. The $R$-value of integral insulation installed in concrete masonry units (CMU) shall not be used in determining compliance with Table C402.1.3 except as otherwise noted in the table. In determining compliance with Table C402.1.4, the use of the U-factor of concrete masonry units with integral insulation shall be permitted.
"Mass walls" where used as a component in the thermal envelope of a building shall comply with one of the following:

1. Weigh not less than $35 \mathrm{psf}\left(170 \mathrm{~kg} / \mathrm{m}^{2}\right)$ of wall surface area.
2. Weigh not less than $25 \mathrm{psf}\left(120 \mathrm{~kg} / \mathrm{m}^{2}\right)$ of wall surface area where the material weight is not more than 120 pounds per cubic foot (pcf) $\left(1,900 \mathrm{~kg} / \mathrm{m}^{3}\right)$.
3. Have a heat capacity exceeding $7 \mathrm{Btu} / \mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F}\left(144 \mathrm{~kJ} / \mathrm{m}^{2} \times \mathrm{K}\right)$.
4. Have a heat capacity exceeding $5 \mathrm{Btu} / \mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F}\left(103 \mathrm{~kJ} / \mathrm{m}^{2} \times \mathrm{K}\right)$ where the material weight is not more than $120 \mathrm{pcf}\left(1900 \mathrm{~kg} / \mathrm{m}^{3}\right)$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40222, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40222, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40222, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40223 Section C402.2.3-( (Above-grade-walls)) Floors.

 ( (C402.2.3 Above-grade walls. The minimum thermal resistance ( $R$-value) of materials installed in the wall cavity between the framing members and continuously on the walls shall be as specified in Table c402.1.3, based on framing type and construction materials used in the wall assembly. The R-value of integral insulation installed in concrete masonry units (CMU) shall not be used in determining compliance with Table C402.1.3 except as otherwise noted in the table. In determining eompliance with Table C402.1.4, the use of the U-factor of concrete masonry units with integral insulation shall be permitted."Mass walls" where used as a component in the thermal envelope of a building shall comply with one of the following:

1. Weigh not less than 35 psf $\left(170 \mathrm{~kg} / \mathrm{m}^{2}\right)$ of wall surface area.
z. Weigh not less than 25 psf $\left(120 \mathrm{~kg} / \mathrm{m}^{2}\right)$ of wall surface area
where the material wight is not more than 120 pounds per cubic foot (pef) (1,900 $\left.\mathrm{kg} / \mathrm{m}^{3}\right)$.
2. Have a heat capacity exeeding 7 Btu/ft ${ }^{2} \mathrm{X} \circ_{\mathrm{F}}\left(144 \mathrm{~kJ} / \mathrm{ml}^{2} \mathrm{~K} \mathrm{~K}\right)$.
3. Have a heat capacity exceeding $5 \mathrm{Btu} / \mathrm{ft}^{2} \mathrm{x} 0_{\mathrm{F}}\left(103 \mathrm{~kJ} / \mathrm{m}^{2} \mathrm{~K} \mathrm{~K}\right)$ where the material weight is not more than 120 pef ( $1900 \mathrm{~kg} / \mathrm{m}^{3}$ ) ) )
C402.2.3 Floors. The thermal properties (component $R$-values or assembly $U$ - or $F$-factors) of floor assemblies over outdoor air or unconditioned space shall be as specified in Table C402.1.3 or C402.1.4 based on the construction materials used in the floor assembly. Floor framing cavity insulation or structural slab insulation shall be installed to maintain permanent contact with the underside of the subfloor decking or structural slabs.
"Mass floors" where used as a component of the thermal envelope of a building shall provide one of the following weights:
4. Thirty-five pounds per square foot of floor surface area;
5. Twenty-five pounds per square foot of floor surface area where
the material weight is not more than 120 pounds per cubic foot.
EXCEPTIONS: $\quad$. The floor framing cavity insulation or structural slab insulation shall be permitted to be in contact with the top side of sheathing or continuous insulation installed on the bottom side of floor assemblies where combined with insulation that meets or exceeds the minimum $R$-value in Table C402.1.3 for "Metal framed" or "Wood framed and other" values for "Walls, Above Grade" and extends from the bottom to the top of all perimeter floor framing or floor assembly members.
6. Insulation applied to the underside of concrete floor slabs shall be permitted an air space of not more than 1 inch where it turns up and is in contact with the underside of the floor under walls associated with the building thermal envelope.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40223, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40223, filed 1/19/16, effective

7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40223, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40224 Section C402.2.4-((Below-gradewalls)) Slab-on-grade.

( (C402.2.4 Below-grade walls. The R-value of the insulating material installed in, or continuously on, the below-grade walls shall be in accordance with Table $C 402.1 .3$. The U-factor or $R$-value required shall extend to the level of the lowest floox of the conditioned space enelosed by the below-grade wall.)) C402.2.4 Slabs-on-grade. The minimum thermal resistance (R-value) of the insulation for unheated or heated slab-on-grade floors designed in accordance with the R-value method of Section C402.1.3 shall be as specified in Table C402.1.3.

C402.2.4.1 Insulation installation. Where installed, the perimeter insulation shall be placed on the outside of the foundation or on the inside of the foundation wall. The perimeter insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to not less than the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table. Insulation extending away from the building shall be protected by pavement or by a minimum of 10 inches ( 254 mm ) of soil. Where installed, full slab insulation shall be continuous under the entire area of the slab-on-grade floor, except at structural column locations and service penetrations. Insulation required at the heated slab perimeter shall not be required to extend below the bottom of the heated slab and shall be continuous with the full slab insulation.
EXCEPTION: Where the slab-on-grade floor is greater than 24 inches $(61 \mathrm{~mm})$ below the finished exterior grade, perimeter insulation is not required.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40224, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40224, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40224, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40225 Section C402.2.5-((Flooxs)) Below-grade walls.

( (C402.2.5 Floors. The thermal properties (component $R$-values or assembly U- or F-factors) of floor assemblics over outdoor air or unconditioned space shall be as specified in Tablec402.1.3 or c402.1.4 based on the construction materials used in the floor assembly. Floor framing cavity insulation or structural slab insulation shall be in-
stalled to maintain permanent contact with the underside of the subfloor decking or structural slabs.
"Mass floors" where used as a component of the thermal envelope of a building shall provide one of the following weights:

1. 35 pounds per square foot of floor surface area;
2. 25 pounds per square foot of floor surface area where the ma-
terial weight is not more than 120 pounds per eubic foot.
EXCEPTIONS: 1. The floor framing cavity insulation or structural slab insulation shall be permitted to be in contact with the top side of sheathing or continuous insulation installed on the bottom side of floor assemblies where combined with insulation that meets or exceeds the minimum $R$ - value in Table C402.1.3 for "Metal framed" or "Wood framed and other" values for "Walls, Above Grade" and extends frem the bottom to the top of all perimeter floor framing or floor assembly members.
3. Insulation applied to the underside of concrete floor slabs shall be permitted an air space of not more than 1 inch where it turns up and is in contact with the underside of the floor under walls associated with the building thermal envelope.))

C402.2.5 Below-grade walls. The $R$-value of the insulating material installed in, or continuously on, the below-grade walls shall be in accordance with Table C402.1.3. The U-factor or $R$-value required shall extend to the level of the lowest floor of the conditioned space enclosed by the below-grade wall.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40225, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40225, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40225, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40225, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

## WAC 51-11C-40226 Section C402.2.6-( (Slab-on-grade perimeter insulation) ) Insulation of radiant heating systems.

( (C402.2.6 Slabs-on-grade perimeter insulation. Where the slab-ongrade is in contact with the ground, the minimum thermal resistance (R-valuc) of the insulation around the perimeter of unheated or heated slab-on-grade floors designed in accordance with the R-value method of section C 402.1 .3 shall be as specified in Table C 402.1 .3 . The insula= tion shall be placed on the outside of the foundation or on the inside of the foundation wall. The insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to at least the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table. Insulation extending away from the building shall be protected by pavement or by a minimum of 10 inches ( 254 mm ) of soil. Insulation complying with Table c402.1.3 shall be provided under the entire area of heated slabs on grade.
EXCEPTION: Where the slab-on-grade floor is greater than 24 inches ( 61 mm ) below the finished exterior grade, perimeter insulation is not required.))
C402.2.6 Insulation of radiant heating systems. Radiant heating system panels, and their associated components that are installed in interior or exterior assemblies shall be insulated to an $R$-value of not less than $R-3.5$ on all surfaces not facing the space being heated. Radiant heating system panels that are installed in the building thermal enve-
lope shall be separated from the exterior of the building or unconditioned or exempt spaces by not less than the R-value of insulation installed in the opaque assembly in which they are installed or the assembly shall comply with Section C402.1.4.
EXCEPTION: Heated slabs on grade insulated in accordance with Section C402.2.4.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40226, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40226, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40227 Section C402.2.7-Airspaces.
C402.2.7 Airspaces. Where the ((therml propertics)) R-value of an airspace((s are)) is used ((to comply with this code)) for compliance in accordance with Section C401.2, ((such)) the airspace((s)) shall be enclosed in an unventilated cavity constructed to minimize airflow into and out of the enclosed airspace. Airflow shall be deemed minimized where the enclosed airspace is located on the interior side of the continuous air barrier and is bounded on all sides by building components.
EXCEPTION: The thermal resistance of airspaces located on the exterior side of the continuous air barrier and adjacent to and behind the exterior wall covering material shall be determined in accordance with ASTM C1363 modified with an airflow entering the bottom and exiting the top of the airspace at a minimum air movement rate of not less than $70 \mathrm{~mm} / \mathrm{sec}$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40227, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40227, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40227, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40228 Section C402.2.8-( (Insulation of radiant heating systems)) Above-grade exterior concrete slabs.

( (C402.2.8 Insulation of radiant heating systems. Radiant heating sys tem pancls, and their associated components that are installed in in= terior or cxtcrior assemblics shall be insulated to an $R$-value of not less than $R-3.5$ on all surfaces not facing the space being heated. Radiant heating system panels that are installed in the building thermal envelope shall be separated from the exterior of the building or uneonditioned or exempt spaces by not less than the R-value of insulation installed in the opaque assembly in which they are installed or the assembly shall comply with Section C402.1.4.
EXCEPTON: Heated stabs on grade insulated in aceordance with Section C402.2.6.))

C402.2.8 Above-grade exterior concrete slabs. Above-grade concrete slabs that penetrate the building thermal envelope including, but not limited to, decks and balconies, shall each include a minimum $\mathrm{R}-10$ thermal break, aligned with the primary insulating layer in the adjoining wall assemblies. Stainless steel (but not carbon steel) reinforcing bars are permitted to penetrate the thermal break. If the total building performance path or the component performance alternative in Section C 402.1 .5 is utilized and the thermal break required by this section is not provided where concrete slabs penetrate the building thermal envelope, the sectional area of the penetration shall be assigned the default U-factors from the "exposed concrete" row of Table A103.3.7.2.
EXCEPTION: Mass transfer deck slabs.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40228, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40228, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, s 51-11C-40228, filed 2/1/13, effective 7/1/13.]

## NEW SECTION

WAC 51-11C-40229 Section C402.2.9-Vertical fenestration intersection with opaque walls.

C402.2.9 Vertical fenestration intersection with opaque walls. Vertical fenestration shall comply with Items 1, 2, and 3, as applicable. 1. Where wall assemblies include continuous insulation, the exterior glazing layer of vertical fenestration and any required thermal break in the frame shall each be aligned within 2 inches laterally of either face of the continuous insulation layer.
2. Where wall assemblies do not include continuous insulation, the exterior glazing layer of vertical fenestration and any required thermal break in the frame shall each be aligned within the thickness of the wall insulation layer and not more than 2 inches laterally from the exterior face of the outermost insulation layer.
3. Where the exterior face of the vertical fenestration frame does not extend to the exterior face of the opaque wall rough opening, the exposed exterior portion of the rough opening shall be covered with either a material having an $R$-value not less than $R-3$, or with minimum 1.5-inch thickness wood.
[]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40230 Section C402.4-Fenestration.
C402.3 Reserved.

C402.4 Fenestration. Fenestration shall comply with Sections C402.4 through C402.4.4 and Table C402.4. Daylight responsive controls shall comply with this section and Section (( $\subset 405.2 .4 .1)$ ) C405.2.5.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40230, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40230, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40230, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-402300 Table C402.4—Building envelope requirementsFenestration.
Table C402.4
Building Envelope Fenestration Maxi-
mum $U$-factor and SHGC Requirements

| CLIMATE ZONE | 5 AND MARINE 4 |  |
| :---: | :---: | :---: |
| $U$-factor for Class AW windows rated in accordance with AAMA/CSA101/I.S.2/A440, vertical curtain walls and site-built fenestration products ${ }^{\text {a }}$ |  |  |
| Fixed $^{\text {b }} U$-factor | $\begin{gathered} ((\mathrm{U}-0.38)) \\ \mathrm{U}-0.34 \end{gathered}$ |  |
| Operable ${ }^{\text {c }} U$-factor | $\begin{gathered} ((\mathrm{U}-0.4 \theta)) \\ \mathrm{U}-0.36 \end{gathered}$ |  |
| Entrance doors ${ }^{\text {d }}$ |  |  |
| $U$-factor | U-0.60 |  |
| $\boldsymbol{U}$-factor for all other vertical fenestration |  |  |
| Fixed $U$-factor | $\begin{gathered} ((\mathrm{U}-0.30)) \\ \mathrm{U}-0.26 \end{gathered}$ |  |
| Operable or mulled windows with fixed and operable sections $U$-factor | U-0.28 |  |
| SHGC for all vertical fenestration |  |  |
| ((Orientation ${ }^{\text {e,f }}$ ) $)$ | ((SEW)) <br> Fixed | $\begin{gathered} ((\mathrm{N})) \\ \text { Operable } \end{gathered}$ |
| PF $<0.2$ | 0.38 | $\begin{gathered} ((0.51)) \\ \underline{0.33} \end{gathered}$ |
| $0.2 \leq \mathrm{PF}<0.5$ | 0.46 | $\begin{gathered} ((\theta .56)) \\ \underline{0.40} \end{gathered}$ |
| $\mathrm{PF} \geq 0.5$ | 0.61 | $\begin{gathered} ((0.61)) \\ \underline{0.53} \end{gathered}$ |
| Skylights |  |  |
| $\boldsymbol{U}$-factor | U-0.50 |  |
| SHGC | 0.35 |  |

a $U$-factor and SHGC shall be rated in accordance with NFRC 100.
b "Fixed" includes curtain wall, storefront, picture windows, and other fixed windows.
c "Operable" includes openable fenestration products other than "entrance doors."
d "Entrance door" includes glazed swinging entrance doors. Other doors which are not entrance doors, including sliding glass doors, are considered "operable."
e ( $(" \mathrm{~N}$ " indicates vertical fenestration oriented within 30 degrees of trut north. "SEW" indicates orientations other than "N.")) Reserved.
f Fenestration that is entirely within the conditioned space or is between conditioned and other enclosed space is exempt from solar heat gain coefficient requirements and not included in the SHGC calculation.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-402300, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-402300, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-402300, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40231 Section C402.4.1-Maximum area.

C402.4.1 Maximum area. The total building vertical fenestration area (not including opaque doors and opaque spandrel panels) shall not exceed 30 percent of the total building gross above-grade wall area. The skylight area shall not exceed 5 percent of the total building gross roof area (skylight-to-roof ratio).

For buildings with more than one space conditioning category, compliance with the maximum allowed window-to-wall ratio and skylight-to-roof ratio shall be demonstrated separately for each space conditioning category. Interior partition ceiling, wall, fenestration and floor areas that separate space conditioning areas shall not be applied to the window-to-wall ratio and skylight-to-roof ratio calculations.
C402.4.1.1 Vertical fenestration maximum area with high performance alternates. For buildings that comply with Section C402.4.1.1.1 or C402.4.1.1.2, the total building vertical fenestration area is permitted to exceed 30 percent but shall not exceed 40 percent of the gross above grade wall area for the purpose of prescriptive compliance with Section C402.1.4.

When determining compliance using the component performance alternative in accordance with Section C402.1.5, the total building vertical fenestration area allowed in Equation 4-2 is 40 percent of the above grade wall area for buildings that comply with the vertical fenestration alternates described in this section.

C402.4.1.1.1 Optimized daylighting. All of the following requirements shall be met:

1. Not less than 50 percent of the total conditioned floor area in the building is within a daylight zone that includes daylight responsive controls complying with Section (( ( 405.2 .4 .1$)$ ) c405.2.5.1.
2. Visible transmittance (VT) of all vertical fenestration in the building is greater than or equal to 1.1 times the required solar heat gain coefficient (SHGC) in accordance with Section C402.4, or 0.50, whichever is greater. It shall be permitted to demonstrate compliance
based on the area weighted average VT being greater than or equal to the area weighted average of the minimum VT requirements.
EXCEPTION: Fenestration that is outside the scope of NFRC 200 is not required to comply with Item 2.
C402.4.1.1.2 High-performance fenestration. All of the following requirements shall be met:
3. All vertical fenestration in the building shall comply with the following U-factors:
a. U-factor for Class AW windows rated in accordance with AAMA/ CSA101/I.S.2/A440, vertical curtain walls and site-built fenestration products (fixed) $=((0.34)) \underline{0.31}$
b. U-factor for Class AW windows rated in accordance with AAMA/ CSA101/I.S.2/A440, vertical curtain walls and site-built fenestration products (operable) $=0.36$
c. Entrance doors $=0.60$
d. U-factor for all other vertical fenestration, fixed $=((0.28))$ 0.23
e. U-factor for all other vertical fenestration, operable, or mulled windows with fixed and operable sections $=0.24$
4. The SHGC of the vertical fenestration shall be ((Iess than or equal to 0.35 , adjusted for projection factor in compliance with (402.4.3)) no more than 0.90 times the maximum SHGC values listed in Table C402.4.

An area-weighted average shall be permitted to satisfy the U-factor requirement for each fenestration product category listed in Item 1 of this section. Individual fenestration products from different fenestration product categories shall not be combined in calculating the area-weighted average $U$-factor, except that fenestration from lines a. and b. are permitted to be combined.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40231, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40231, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, and 19.27.074. WSR 13-23-096, § 51-11C-40231, filed 11/20/13, effective 4/1/14. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40231, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40232 Section C402.4.2-Minimum skylight fenestration
area.
C402.4.2 Minimum skylight fenestration area. ((For buildings with single stoxy) ) Skylights shall be provided in enclosed spaces that meet all the following criteria:

1. Floor area of enclosed spaces is greater than 2,500 square feet $\left(232 \mathrm{~m}^{2}\right)$ ( (in floor area that are)).
2. Space is located directly under a roof and have a ceiling height greater than 15 feet ( 4572 mm ) for no less than 75 percent of the ceiling area( (, these single-story spaces shall be provided with
skylights and daylight responsive controls in accordance with section (405.2.4)) .
3. Space type((s required to comply with this provision include)) is one of the following: Office, lobby, atrium, concourse, corridor, gymnasium/exercise center, convention center, automotive service, manufacturing, nonrefrigerated warehouse, retail store, distribution/ sorting area, transportation, and workshop.

Skylights in these spaces are required to provide a total toplit daylight zone area not less than 50 percent of the floor area and shall provide one of the following:

1. A minimum ratio of skylight area to toplit daylight zone area under skylights of not less than 3 percent where all skylights have a VT of at least 0.40 , or VTannual of not less than 0.26 , as determined in accordance with Section C303.1.3.
2. A minimum skylight effective aperture ( (of at least 1 per= eent)) $\_$determined in accordance with Equation 4-5, of:
2.1. Not less than 1 percent using a skylight's VT rating; or
2.2. Not less than 0.66 percent using a tubular daylight device's $\mathrm{VT}_{\text {annual }}$ rating.

Skylight Effective Aperture $=(0.85 \times$ Skylight Area x Skylight VT x WF)/ Toplit daylight zone
(Equation 4-5)
Where:

| Skylight area | $=$ Total fenestration area of skylights. |
| :---: | :---: |
| Skylight VT | $\begin{aligned} &= \text { Area weighted average visible } \\ & \text { transmittance of skylights. } \end{aligned}$ |
| WF | Area weighted average well factor, where well factor is 0.9 if light well depth is less than 2 feet ( 610 mm ), or 0.7 if light well depth is 2 feet ( 610 mm ) or greater, or 1.0 for tubular daylighting devices (TDD) with ((VT ammtal)) $V T_{\text {annual }}$ ratings measured in accordance with NFRC 203. |
| Light well depth | $=$ Measure vertically from the underside of the lowest point of the skylight glazing to the ceiling plane under the skylight. |

EXCEPTIONS: 1. Skylights above daylight zones of enclosed spaces are not required in:
1.1. ((Reserved.)) Spaces designed as storm shelters complying with ICC 500.
1.2. Spaces where the designed general lighting power densities are less than $0.5 \mathrm{~W} / \mathrm{ft}^{2}\left(5.4 \mathrm{~W} / \mathrm{m}^{2}\right)$ and at least 10 percent lower than the lighting power allowance in Section C405.4.2.
1.3. Areas where it is documented that existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed area for more than 1,500 daytime hours per year between 8 a.m. and 4 p.m.
1.4. Spaces where the daylight zone under rooftop monitors is greater than 50 percent of the enclosed space floor area.
1.5. Spaces where the total floor area minus the sidelit daylight zone area is less than 2,500 square feet ( $232 \mathrm{~m}^{2}$ ), and where the lighting in the daylight zone is controlled in accordance with Section C405.2.3.1.
2. The skylight effective aperture, calculated in accordance with Equation 4-5, is permitted to be 0.66 percent in lieu of 1 percent if the $((V T-a+t+t)) \underline{V T}_{\text {annual }}$ of the skylight or TDD, as measured by NFRC 203, is greater than 38 percent.

C402.4.2.1 Lighting controls in daylight zones under skylights. Daylight responsive controls ((eomplying with Section C405.2.4.1)) shall be provided to control all electric lights within toplit daylight zones.

C402.4.2.2 Haze factor. Skylights in office, storage, automotive service, manufacturing, nonrefrigerated warehouse, retail store, and distribution/sorting area spaces shall have a glazing material or diffuser with a haze factor greater than 90 percent when tested in accordance with ASTM D 1003.
EXCEPTION: Skylights and tubular daylighting devices designed and installed to exclude direct sunlight entering the occupied space by the use of fixed or automated baffles, or the geometry of skylight and light well.
C402.4.2.3 Daylight zones. Daylight zones referenced in Sections C402.4.1.1 through C402.4.2.2 shall comply with Sections ( ( 4.405 .2 .4 .2 and $(405.2 .4 .3))$ c405.2.5.2 and C 405.2 .5 .3 , as applicable. Daylight zones shall include toplit daylight zones and sidelit daylight zones.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40232, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40232, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40232, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40232, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40234 Section C402.4.4-Doors.

C402.4.4 Doors. Opaque ( (swinging)) doors shall ((eomply with Table 6402.1.4. Opaque nonswinging doors shall comply with mable c402.1.3. opaque doors shall) ) be considered part of the gross area of above= grade walls that are part of the building thermal envelope, including the frame. Opaque doors shall comply with Table C402.1.4. Other doors shall comply with the provisions of Section C402.4.3 for vertical fenestration ( (and the entire door area, including the frame, shall be eonsidered part of the fenestration area of the building thermal envelope) ).
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40234, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40234, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40234, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40234, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40241 Section C402.5.1—Air barriers.

C402.5.1 Air barriers. A continuous air barrier shall be provided throughout the building thermal envelope. The continuous air barriers shall be ((permitted to be)) located on the inside or outside of the building thermal envelope, located within the assemblies composing the building thermal envelope, or any combination thereof. The air barrier shall comply with Sections C402.5.1.1 and C402.5.1.2.
C402.5.1.1 Air barrier construction. The continuous air barrier shall be constructed to comply with the following:

1. The air barrier shall be continuous for all assemblies that are the thermal envelope of the building and across the joints and assemblies.
2. Air barrier joints and seams shall be sealed, including sealing transitions in places and changes in materials. The joints and seals shall be securely installed in or on the joint for its entire length so as not to dislodge, loosen or otherwise impair its ability to resist positive and negative pressure from wind, stack effect and mechanical ventilation.
3. Penetrations of the air barrier shall be caulked, gasketed or otherwise sealed in a manner compatible with the construction materials and location. Sealing shall allow for expansion, contraction and mechanical vibration. Joints and seams associated with penetrations shall be sealed in the same manner or taped. Sealing materials shall be securely installed around the penetration so as not to dislodge, loosen or otherwise impair the penetrations' ability to resist positive and negative pressure from wind, stack effect, and mechanical ventilation. Sealing of concealed fire sprinklers, where required, shall be in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.
4. Recessed lighting fixtures shall comply with Section C402.5.8. Where similar objects are installed which penetrate the air barrier, provisions shall be made to maintain the integrity of the air barrier.
5. Construction documents shall contain a diagram showing the building's pressure boundary in plan(s) and section(s) and a calculation of the area of the pressure boundary to be considered in the test.
C402.5.1.2 ((Building test. The completed building shall be tested and the air leakage rate of the building envelope shall not exeeed 0.25 efm/ft ${ }^{2}$ at a presure differential of 0.3 inches water gauge $(2.0 \mathrm{I} / \mathrm{s}$ - $m^{2}$ at 75 Pa at the upper 95 percent confidence interval in accord ance with ASTM $E 779$ or an equivalent method approved by the code of ficial. A report that includes the tested surface area, floor area, air by volume, stories above grade, and leakage rates shall be submitted to the building owner and the Code Official. If the tested rate eveeds that defined here by up to $0.15 \mathrm{efm} / \mathrm{ft}^{2}$, a visual inspection of the air barrier shall be conducted and any leaks noted shall be sealed to the extent practicable. An additional report identifying the eorrective actions taken to seal air leaks shall be submitted to the building owner and the code Official and any further requirement to meet the leakage air rate will be waived. If the tested rate exeeeds 0.40 efm/ft ${ }^{2}$, corrective actions must be made and the test completed again. A test above 0.40 efm/ft ${ }^{2}$ will not be accepted.
6. Test shall be accomplished using either (1) both pressurization and depressurization or (2) pressurization alone, but not depres-
surization alone. The test results shall be plotted against the corrected $P$ in accordance with Section 9.4 of ASTM $E 779$.
Z. The test pressure range shall be from 25 Pa to 80 Pa per section 8.10 of ASTM $E 779$, but the upper limit shall not be less than 50 Pa, and the difference between the upper and lower limit shall not be less than 25 Pa .
7. If the pressure exponent $n$ is less than 0.45 or greater than 0.85 per Section 9.6.4 of ASTM $F 779$, the test shall be rerun with ad= ditional readings over a longer time interval.
C402.5.1.2.1)) Air barrier compliance. A continuous air barrier for the opaque building envelope shall comply with the following:
8. Group $R$ dwelling units that are accessed directly from the outdoors shall meet the provisions of Section C402.5.2.
9. All other buildings or portions of buildings shall meet the provisions of Section C402.5.3.
C402.5.2 Enclosure testing for dwelling and sleeping unit accessed directly from the outdoors. For dwelling units accessed directly from outdoors, the building thermal envelope shall be tested in accordance with ASTM E779, ANSI/RESNET/ICC 380, ASTM E1827 or an equivalent method approved by the code official. The measured air leakage shall not exceed $0.25 \mathrm{cfm} / \mathrm{ft}^{2}\left(1.27 \mathrm{~L} / \mathrm{s} \mathrm{m}^{2}\right)$ of the testing unit enclosure area at a pressure differential of 0.2 inch water gauge ( 50 Pa ). Where multiple dwelling units or sleeping units or other occupiable conditioned spaces are contained within one building thermal envelope and are accessed directly from the outdoors, each unit shall be considered an individual testing unit, and the building air leakage shall be the weighted average of all testing unit results, weighted by each testing unit's enclosure area. Units shall be tested separately with an unguarded blower door test as follows:
10. Where buildings have fewer than eight testing units, each testing unit shall be tested.
11. For buildings with eight or more testing units, the greater of seven units or 20 percent of the testing units in the building shall be tested, including a top floor unit, a ground floor unit and a unit with the largest testing unit enclosure area. For each tested unit that exceeds the maximum air leakage rate, an additional two units shall be tested, including a mixture of testing unit types and locations.
12. Test shall be accomplished using either a) both pressurization and depressurization or b) pressurization alone, but not depressurization alone. The test results shall be plotted against the correct $P$ for pressurization in accordance with Section 9.4 of ASTM E779.

Where the measured air leakage rate exceeds $0.25 \mathrm{cfm} / \mathrm{ft}^{2} \quad(2.0 \mathrm{~L} / \mathrm{s}$ $\mathrm{x} \mathrm{m}^{2}$ ) corrective action shall be taken to seal leaks in the air barrier in all units exceeding the target value and all untested units. Post-corrective action testing and repeated corrective action measures will be taken until the required air leakage rating is achieved. Final passing air leakage test results shall be submitted to the code official.
C402.5.3 Building thermal envelope testing. The building thermal envelope shall be tested in accordance with ASTM E779, ANSI/RESNET/ICC 380, ASTM E3158 or ASTM E1827 or an equivalent method approved by the code official. The measured air leakage shall not exceed $0.25 \mathrm{cfm} / \mathrm{ft}^{2}$ $\left(1.27 \mathrm{~L} / \mathrm{s} \times \mathrm{m}^{2}\right)$ of the building thermal envelope area at a pressure
differential of 0.3 inch water gauge ( 75 Pa ). Alternatively, portions of the building shall be tested and the measured air leakages shall be area weighted by the surface areas of the building envelope in each portion. The weighted average test results shall not exceed the whole building leakage limit. In the alternative approach, the following portions of the building shall be tested:

1. The entire envelope area of all stories that have any spaces directly under a roof.
2. The entire envelope area of all stories that have a building entrance, exposed floor, or loading dock, or are below grade.
3. Representative above-grade sections of the building totaling at least 25 percent of the wall area enclosing the remaining conditioned space.
4. Test shall be accomplished using either a) both pressurization and depressurization or b) pressurization alone, but not depressurization alone. The test results shall be plotted against the correct $P$ for pressurization in accordance with Section 9.4 of ASTM E779. Where the measured air leakage rate exceeds $0.25 \mathrm{cfm} / \mathrm{ft}^{2} \quad(2.0 \mathrm{~L} / \mathrm{s}$ $\mathrm{x} \mathrm{m}^{2}$ ) corrective action shall be taken to seal leaks in the air barrier. Post-corrective action testing and repeated corrective action measures will be taken until the required air leakage rating is achieved. Final passing of the air leakage test results shall be submitted to the code official.
C402.5.4 Building test for mixed-use buildings. Where a building is three or fewer stories above grade plane and contains both commercial and residential uses, the air barrier of the $R-2$ and $R-3$ occupancy areas of the building is permitted to be separately tested according to Section R402.4.1.2. Alternatively, it is permissible to test the air barrier of the entire building according to Section (( 4402.5 .1 .2 )) C402.5.3, provided that the tested air leakage rate does not exceed the rate specified in Section (( $(402.5 .1 .2))$ C402.5.3.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40241, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40241, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40241, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40243 Section ((C402.5.3)) C402.5.5-Rooms containing fuel-burning appliances.
((C402.5.3)) C402.5.5 Rooms containing fuel-burning appliances. Where combustion air is supplied through openings in an exterior wall to a room or space containing a space conditioning fuel-burning appliance, one of the following shall apply:

1. The room or space containing the appliance shall be located outside of the building thermal envelope.
2. The room or space containing the appliance shall be enclosed and isolated from conditioned spaces inside the building thermal envelope. Such rooms shall comply with all of the following:
2.1. The walls, floor and ceiling that separate the enclosed room or space from the conditioned spaces shall be insulated to be at least equivalent to the insulation requirement of below grade walls as specified in Table C402.1.3 or C402.1.4.
2.2. The walls, floors and ceilings that separate the enclosed room or space from conditioned spaces be sealed in accordance with Section C402.5.1.1.
2.3. The doors into the enclosed room or space shall be fully gasketed.
2.4. Water lines and ducts in the enclosed room or space shall be insulated in accordance with Section C403.
2.5. Where the air duct supplying combustion air to the enclosed room or space passes through conditioned space, the duct shall be insulated to an $R$-value of not less than ( $(R-8)$ ) $R-16$.

EXCEPTION: Fireplaces and stoves complying with Sections 901 through 905 of the International Mechanical Code, and Section 2111.13 of the International Building Code.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40243, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40243, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40243, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40244 Section ((C402.5.4)) C402.5.6-Doors and access openings.
((C402.5.4)) C402.5.6 Doors and access openings to shafts, chutes, stairways, and elevator lobbies. Doors and access openings from conditioned space to shafts, chutes, stairways and elevator lobbies shall be gasketed, weatherstripped or sealed.
EXCEPTIONS: 1. Door openings required to comply with Section 716 of the International Building Code.
2. Doors and door openings required to comply with UL 1784 by the International Building Code.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40244, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40244, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40244, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40245 Section ((C402.5.5)) C402.5.7-Air intakes, exhaust openings, stairways and shafts.
((C402.5.5)) C402.5.7 Air intakes, exhaust openings, stairways and shafts. Stairway enclosures, elevator shaft vents and other outdoor air intakes and exhaust openings integral to the building envelope shall be provided with dampers in accordance with Section (( 6403.7 .9$)$ ) C403.7.8.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40245, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40245, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27.020, and 19.27.074. WSR 14-24-054, § 51-11C-40245, filed 11/25/14, effective 5/1/15. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40245, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40246 Section ((C402.5.6)) C402.5.8-Loading dock weatherseals.
((C402.5.6)) C402.5.8 Loading dock weatherseals. Cargo door openings and loading dock door openings shall be equipped with weatherseals that restrict infiltration and provide direct contact along the top and sides of vehicles that are parked in the doorway.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40246, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40246, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40246, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40247 Section ((C402.5.7)) C402.5.9—Vestibules.

((C402.5.7)) C402.5.9 Vestibules. All building entrances shall be protected with an enclosed vestibule, with all doors opening into and out of the vestibule equipped with self-closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior doors to open at the same time. The installation of one or more revolving doors in the building entrance shall not eliminate the requirement that a vestibule be provided on any doors adjacent to revolving doors. For the purposes of this sec-
tion, "building entrances" shall include exit-only doors in buildings where separate doors for entering and exiting are provided.

Interior and exterior doors shall have a minimum distance between
them of not less than 7 feet. The exterior envelope of conditioned vestibules shall comply with the requirements for a conditioned space. Either the interior or exterior envelope of unconditioned vestibules shall comply with the requirements for a conditioned space. The building lobby is not considered a vestibule.
EXCEPTION: Vestibules are not required for the following:

1. Doors not intended to be used as building entrances.
2. Unfinished ground-level space greater than 3,000 square feet $\left(298 \mathrm{~m}^{2}\right)$ if a note is included on the permit documents at each exterior entrance to the space stating "Vestibule required at time of tenant build-out if entrance serves a space greater than 3,000 square feet in area."
3. Doors opening directly from a sleeping unit or dwelling unit.
4. Doors between an enclosed space smaller than 3,000 square feet $\left(298 \mathrm{~m}^{2}\right)$ in area and the exterior of the building or the building entrance lobby, where those doors do not comprise one of the primary building entrance paths to the remainder of the building. The space must be enclosed and separated without transfer air paths from the primary building entrance paths. If there are doors between the space and the primary entrance path, then the doors shall be equipped with self-closing devices so the space acts as a vestibule for the primary building entrance.
5. Revolving doors.
6. Doors used primarily to facilitate vehicular movement or material handling and adjacent personnel doors.
7. In buildings less than 3 stories above grade or in spaces that do not directly connect with the building elevator lobby, doors that have an air curtain with a velocity of not less than 6.56 feet per second ( $2 \mathrm{~m} / \mathrm{s}$ ) at the floor that have been tested in accordance with ANSI/ AMCA 220 and installed in accordance with the manufacturer's instructions. Manual or automatic controls shall be provided that will operate the air curtain with the opening and closing of the door. Air curtains and their controls shall comply with Section C408.2.3.
8. Building entrances in buildings that are less than four stories above grade and less than $10,000 \mathrm{ft}^{2}$ in area.
9. Elevator doors in parking garages provided that the elevators have an enclosed lobby at each level of the garage.
10. Entrances to semi-heated spaces.
11. Doors that are used only to access outdoor seating areas that are separated from adjacent walking areas by a fence or other barrier.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40247, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40247, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40247, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

## WAC 51-11C-40248 Section ((C402.5.8)) C402.5.10—Recessed light-

ing.
((C402.5.8)) C402.5.10 Recessed lighting. Recessed luminaires instal-
led in the building thermal envelope shall be all of the following:

1. IC rated.
2. Labeled as having an air leakage rate of not more than 2.0 cfm $(0.944 \mathrm{~L} / \mathrm{s})$ when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential.
3. Sealed with a gasket or caulk between the housing and interior wall or ceiling covering.
C402.5.11 Operable openings interlocking. Where any operable openings to the outdoors are larger than 48 square feet ( $4.47 \mathrm{~m}^{2}$ ) in area, such openings shall be interlocked with the heating and cooling system as required by Section C403.4.1.6.
EXCEPTIONS: 1. Separately zoned areas associated with the preparation of food that contain appliances that contribute to the HVAC loads of a restaurant or similar type of occupancy.
$\frac{\text { 2. Warehouses that utilize overhead doors for the function of the occupancy, where approved by the code official. }}{\text { 2. }}$
4. The outer entrance doors where located in the exterior wall and are part of a vestibule system.
5. Alterations to existing buildings.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40248, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40248, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40310 Section C403.1-General.

C403.1 General. Mechanical systems and equipment serving heating, cooling, ventilating, and other needs shall comply with this section.
EXCEPTIONS: 1. Energy using equipment used by a manufacturing, industrial or commercial process other than for conditioning spaces or maintaining comfort and amenities for the occupants ((and not otherwise regulated by)) are exempt from all Section C403 subsections except for Section C403.3.2, Tables C403.3.2 (1) through (((12))) (16) inclusive, Sections C403.3.4.1, C403.3.4.2, C403.3.4.3, C403.7.7, C403.9.2.1, C403.10.3, C403.11.2, and C403.11.3, ((C404.2, Table C404.2, C405.8 and C410)) as applicable. Data center and computer room HVAC equipment is not covered by this exception.
2. Data center systems are exempt from Sections C403.4 and C403.5.

C403.1.1 HVAC total system performance ratio (HVAC TSPR). For systems serving office (including medical office), retail, library, and education occupancies and buildings, which are subject to the requirements of Section C403.3.5 without exceptions, and the dwelling units and residential common areas within Group $R-2$ multi-family buildings, the HVAC total system performance ratio (HVAC TSPR) of the proposed design HVAC system shall be ( (more)) greater than or equal to the HVAC TSPR of the standard reference design as calculated according to Appendix D, Calculation of HVAC Total System Performance Ratio.
EXCEPTIONS: 1. Buildings ((with conditioned fleor area less than 5,000 square feet)) where the sum of the conditioned floor area of office, retail, education, library and multifamily spaces is less than 5,000 square feet. Areas that are eligible for any of the exceptions below do not count towards the 5,000 square feet.
2. HVAC systems using district heating water, chilled water or steam.
3. HVAC systems connected to a low-carbon district energy exchange system.
4. HVAC systems not included in Table ((D601.11.1)) D601.10.1.
$\overline{((4 .))}$ 5. HVAC systems with chilled water supplied by absorption chillers, heat recovery chillers, water to water heat pumps, air to water
heat pumps, or a combination of air and water cooled chillers on the same chilled water loop.
6. HVAC systems included in Table D601.10.1 with parameters in Table D601.10.2 not identified as applicable to that HVAC system
type.
$\overline{(5 .))}$ 7. HVAC systems served by heating water plants that include air to water or water to water heat pumps.
((6.)) $\underline{8 .}$ Underfloor air distribution and displacement ventilation HVAC systems.
(7.)) 9. Space conditioning systems that do not include mechanical cooling.
$((8).) \underline{10}$. Alterations to existing buildings that do not substantially replace the entire HVAC system and are not serving initial build-out construction.
((9.)) 11. HVAC systems meeting all the requirements of the standard reference design HVAC system in Table D602.11, Standard
Reference Design HVAC Systems.
12. Buildings or areas of medical office buildings that comply fully with ASHRAE Standard 170 including, but not limited to, surgical centers, or that are required by other applicable codes or standards to provide $24 / 7$ air handling unit operation.
13 . HVAC systems serving the following areas and spaces:
13.1. Laundry rooms.
13.2. Elevator machine rooms.
13.3. Mechanical and electrical rooms.
13.4. Data centers and computer rooms.
13.5. Laboratories with fume hoods.
13.6. Locker rooms with more than two showers.
13.7. Natatoriums and rooms with saunas.
13.8. Restaurants and commercial kitchens with total cooking capacity greater than $100,000 \mathrm{Btu} / \mathrm{h}$.
13.9. Areas of buildings with commercial refrigeration equipment exceeding 100 kW of power input. 13.10. Cafeterias and dining rooms.

C403.1.2 Calculation of heating and cooling loads. Design loads associated with heating, ventilating and air conditioning of the building shall be determined in accordance with the procedures described in ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure, using the design parameters specified in Chapter 3. Heating and cooling loads shall be adjusted to account for load reductions that are achieved where energy recovery systems are utilized in the

HVAC system in accordance with the ASHRAE HVAC Systems and Equipment Handbook by an approved equivalent computational procedure.

```
C403.1.3 Data centers. Data center systems shall comply with Sections
6 \text { and 8 of ASHRAE Standard 90.4 ((with the following changes:}
```

    1. Replace design MIC in ASHRAF Standard 90.4 Table 6.2.1.1 "Max=
    imum Design Mechanical Load Component (Design MIC)" with the following
per the applicable climate zone:
Zone 4C Design MIC $=0.22$ Zone 5B Design MIC $=0.24$
Z. Replace annualized MIC values of Table 6.2.1.2 "Maximum An-
nualized Mechanical Load Component (Annualized MIC)" in ASHRAF Stand-
ard 90.4 with the following per applicable climate zone:
Zonc 4C Annual MIC -0.18 Zonc 5B Annual MLC -0.17 ) -
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27
RCW. WSR 20-21-080, § 51-11C-40310, filed 10/19/20, effective 2/1/21.
Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chap-
ter 19.27 RCW. WSR 19-24-040, S 51-11C-40310, filed 11/26/19, effec-
tive 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and
19.27.074. WSR 16-03-072, § 51-11C-40310, filed 1/19/16, effective
7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters
19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40310, filed 2/1/13, ef-
fective 7/1/13.]

NEW SECTION

## WAC 51-11C-40314 Section C403.1.4-HVAC heating equipment.

## C403.1.4 Use of electric resistance and fossil fuel-fired HVAC heating

 equipment. HVAC heating energy shall not be provided by electric resistance or fossil fuel combustion appliances. For the purposes of this section, electric resistance HVAC heating appliances include, but are not limited to, electric baseboard, electric resistance fan coil and VAV electric resistance terminal reheat units and electric resistance boilers. For the purposes of this section, fossil fuel combustion HVAC heating appliances include, but are not limited to, appliances burning natural gas, heating oil, propane, or other fossil fuels.EXCEPTIONS: 1. Low heating capacity. Buildings or areas of buildings, other than dwelling units or sleeping units, that meet the interior temperature requirements of Chapter 12 of the International Building Code with a total installed HVAC heating capacity no greater than 8.5 Btu/h ( 2.5 watts) per square foot of conditioned space are permitted to be heated using electric resistance appliances.
2. Dwelling and sleeping units. Dwelling or sleeping units are permitted to be heated using electric resistance appliances as long as the installed HVAC heating capacity in any separate space is not greater than:
2.1. Seven hundred fifty watts in Climate Zone 4, and 1000 watts in Climate Zone 5 in each habitable space with fenestration. 2.2. One thousand watts in Climate Zone 4, and 1300 watts in Climate Zone 5 for each habitable space that has two primary walls facing different cardinal directions, each with exterior fenestration. Bay windows and other minor offsets are not considered primary walls. 2.3. Two hundred fifty watts in spaces adjoining the building thermal envelope but without fenestration.

For the purposes of this section, habitable space is as defined in the International Building Code. For buildings in locations with exterior design conditions below $4^{\circ} \mathrm{F}\left(-16^{\circ} \mathrm{C}\right)$, an additional 250 watts above that allowed for Climate Zone 5 is permitted in each space with fenestration.
3. Small buildings. Buildings with less than 2,500 square feet ( $232 \mathrm{~m}^{2}$ ) of conditioned floor area are permitted to be heated using electric resistance appliances.
4. Defrost. Heat pumps are permitted to utilize electric resistance heating when a heat pump defrost cycle is required and is in operation.
5. Air-to-air heat pumps. Buildings are permitted to utilize internal electric resistance heaters to supplement heat pump heating for air-to-air heat pumps that meet all of the following conditions:
5.1. Internal electric resistance heaters have controls that prevent supplemental heater operation when the heating load can be met by the heat pump alone during both steady-state operation and setback recovery.
5.2. The heat pump controls are configured to use the compressor as the first stage of heating down to an outdoor air temperature of $17^{\circ} \mathrm{F}\left(-8^{\circ} \mathrm{C}\right)$ or lower except when in defrost.
5.3. The heat pump complies with one of the following:
5.3.1. Controlled by a digital or electronic thermostat designed for heat pump use that energizes the supplemental heat only when the heat pump has insufficient capacity to maintain set point or to warm up the space at a sufficient rate.
5.3.2. Controlled by a multistage space thermostat and an outdoor air thermostat wired to energize supplemental heat only on the last stage of the space thermostat and when outdoor air temperature is less than $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ except when in defrost.
5.3.3. The minimum efficiency of the heat pump is regulated by NAECA, its rating meets the requirements shown in Table C403.3.2(2), and its rating includes all usage of internal electric resistance heating.
5.4. The heat pump rated heating capacity is sized to meet the heating load at an outdoor air temperature of $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or lower and has a rated heating capacity at $47^{\circ} \mathrm{F}\left(8^{\circ} \mathrm{C}\right)$ no less than 2 times greater than supplemental internal electric resistance heating capacity in Climate Zone 4 and no less than the supplemental internal electric resistance heating capacity in Climate Zone 5, or utilizes the smallest available factory-available internal electric resistance heater.
6. Air-to-water heat pumps. Buildings are permitted to utilize electric resistance (for Climate Zone 4 or 5) or fossil fuel-fired (for Climate Zone 5) auxiliary heating to supplement heat pump heating for hydronic heating systems that meet all of the following conditions:
6.1. Controls for the auxiliary electric resistance or fossil fuel-fired heating are configured to lock out the supplemental heat when the outside air temperature is above $36^{\circ} \mathrm{F}\left(2^{\circ} \mathrm{C}\right)$, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes.
6.2. The heat pump controls are configured to use the compressor as the first stage of heating down to the lowest exterior design temperature for which the equipment is rated except during startup or defrost operation.
6.3. The heat pump rated heating capacity at $47^{\circ} \mathrm{F}\left(8^{\circ} \mathrm{C}\right)$ is no less than 75 percent of the design heating load at $29^{\circ} \mathrm{F}\left(-2^{\circ} \mathrm{C}\right)$.
7. Ground source heat pumps. Buildings are permitted to utilize electric resistance auxiliary heating to supplement heat pump heating for hydronic heating systems with ground source heat pump equipment that meets all of the following conditions:
7.1. Controls for the auxiliary resistance heating are configured to lock out the supplemental heat when the equipment source-side entering water temperature is above $42^{\circ} \mathrm{F}\left(6^{\circ} \mathrm{C}\right)$, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes.
7.2. The heat pump controls are configured to use the compressor as the first stage of heating.
7.3. The ground source heat exchanger shall be sized so that the heat pump annual heating output is no less than 70 percent of the total annual heating output in the final year of a 30 -year simulation using IGSHPA listed simulation software.
8. Small systems. Buildings in which electric resistance or fossil fuel appliances, including decorative appliances, either provide less than 5 percent of the total building HVAC system heating capacity or serve less than 5 percent of the conditioned floor area.
9. Specific conditions. Portions of buildings that require fossil fuel or electric resistance space heating for specific conditions approved by the code official for research, health care, process or other specific needs that cannot practicably be served by heat pump or other space heating systems. This does not constitute a blanket exception for any occupancy type.
10. Kitchen make-up air. Make-up air for commercial kitchen exhaust systems required to be tempered by Section 508.1.1 of the International Mechanical Code is permitted to be heated by using fossil fuel in Climate Zone 5 or electric resistance in Climate Zone 4 or 5 .
11. District energy. Steam or hot water district energy systems that utilize fossil fuels as their primary source of heat energy, that serve multiple buildings, and that were already in existence prior to the effective date of this code, including more energy-efficient upgrades to such existing systems, are permitted to serve as the primary heating energy source.
12. Heat tape. Heat tape is permitted where it protects water-filled equipment and piping located outside of the building thermal envelope, provided that it is configured and controlled to be automatically turned off when the outside air temperature is above $40^{\circ} \mathrm{F}$ $\left(4^{\circ} \mathrm{C}\right)$.
13. Temporary systems. Temporary electric resistance heating systems are permitted where serving future tenant spaces that are unfinished and unoccupied, provided that the heating equipment is sized and controlled to achieve interior space temperatures no higher than $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$.
14. Pasteurization. Electric resistance heat controls are permitted to reset the supply water temperature of hydronic heating systems that serve service water heating heat exchangers during pasteurization cycles of the service hot water storage volume. The hydronic heating system supply water temperature shall be configured to be $145^{\circ} \mathrm{F}\left(63^{\circ} \mathrm{C}\right)$ or lower during the pasteurization cycle.
15. Freeze protection. Heating systems sized for spaces with indoor design conditions of $45^{\circ} \mathrm{F}\left(7^{\circ} \mathrm{C}\right)$ and intended for freeze protection are permitted to use electric resistance. The building envelope of any such space shall be insulated in compliance with Section C402.1.
16. DOAS ERV auxiliary heat. Dedicated outdoor air systems with energy recovery ventilation are permitted to utilize fossil fuel for Climate Zone 5 or electric resistance in Climate Zone 4 or 5 for auxiliary heating to preheat outdoor air for defrost or as auxiliary supplemental heat to temper supply air to $55^{\circ} \mathrm{F}\left(13^{\circ} \mathrm{C}\right)$ or lower for buildings or portions of buildings that do not have hydronic heating systems.
17. Low-carbon district energy systems. Low-carbon district energy systems that meet the definitions of low-carbon district energy exchange system or low-carbon district heating and cooling or heating only systems.
18. Essential facilities. Groups I-2 and I-3 occupancies that by regulation are required to have in place redundant emergency backup systems.

## WAC 51-11C-40320 Section C403.2—System design.

C403.2 System design. Mechanical systems shall be designed to comply with Sections C403.2.1 and ((C403.2.2)) C403.2.4. Where elements of a building's mechanical systems are addressed in Sections C403.3 through C403.13, such elements shall comply with the applicable provisions of those sections.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40320, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40320, filed 1/19/16, effective

7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40320, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40321 Section C403.2.1—Zone isolation.

C403.2.1 Zone isolation required. HVAC systems, DOAS and exhaust systems serving ((zones)) areas that are intended to operate or be occupied nonsimultaneously shall be divided into separate isolation areas. Zones intended to be occupied simultaneously may be grouped into a single isolation area provided ((it)) the combined total area does not exceed 25,000 square feet ( $2323 \mathrm{~m}^{2}$ ) of conditioned floor area ( (nor)) and does not include more than one floor. Each isolation area shall be equipped with isolation devices and controls configured to automatically shut off the supply of conditioned air and outdoor air to and exhaust air from the isolation area. Each isolation area shall be controlled independently by a device meeting the requirements of Section C403.4.2.2. Central systems and plants shall be provided with controls and devices that will allow system and equipment operation for any length of time while serving only the smallest isolation area served by the system or plant.
EXCEPTIONS: 1. Exhaust air and outdoor air connections to isolation areas where the fan system to which they connect is not greater than $5,000 \mathrm{cfm}$ ( $2360 \mathrm{~L} / \mathrm{s}$ ).
2. Exhaust airflow from a single isolation area of less than 10 percent of the design airflow of the exhaust system to which it connects. 3. Isolation areas intended to operate continuously or intended to be inoperative only when all other isolation areas in a zone are inoperative.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40321, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40321, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40321, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40322 Section C403.2.2-Ventilation and exhaust.

## C403.2.2 Ventilation and exhaust.

C403.2.2.1 Ventilation. Ventilation, either natural or mechanical, shall be provided in accordance with Chapter 4 of the International Mechanical Code. Where mechanical ventilation is provided, the system shall be configured to provide no greater than 150 percent of the minimum outdoor air required by Chapter 4 of the International Mechanical Code or other applicable code or standard, whichever is greater.
EXCEPTIONS: 1. The mechanical system may supply outdoor air at rates higher than the limit above when it is used for particulate or VOC dilution, ((eemizer,)) economizing or night flushing, dehumidification, pressurization, exhaust make-up, or other process air delivery. Outdoor air shall be reduced to the minimum ventilation rates when not required for the preceding uses.
2. Air systems supplying dwelling or sleeping units within Group R-1, R-2 or I-2 occupancies.
3. Alterations that replace less than half of the total heating and cooling capacity of the system.
4. Systems with energy recovery complying with the requirements of Section C403.7.6.1 that utilize sensible only active chilled beams for space cooling without any additional zonal fan power. Active chilled beams shall be permitted to utilize the increased outdoor airflow to increase space sensible capacity and to maintain space latent cooling loads without additional controls to reduce the outdoor airflow to each zone.
5. Systems that include energy recovery ventilation with an 80 percent minimum sensible recovery effectiveness in accordance with Section C403.3.5.1 and with controls capable and configured to lock-out the use of supplemental heat may provide ventilation up to a maximum of 200 percent of the minimum outdoor air required.
C403.2.2.2 Exhaust. Exhaust shall be provided in accordance with Chapters 4 and 5 of the International Mechanical Code. Where exhaust is provided, the system shall be configured to provide no greater than 150 percent of the minimum exhaust air required by Chapters 4 and 5 of the International Mechanical Code or other applicable code or standard, whichever is greater.
EXCEPTIONS: 1. The mechanical system may exhaust air at rates higher than the limit above when it is used for particulate or VOC dilution, economizer, night flushing, dehumidification, pressure equalization, relief, or other process exhaust air requirements. Outdoor air and exhaust air shall be reduced to the minimum ventilation rates when not required for the preceding uses.
2. Domestic range hood exhaust in Group R occupancies.
3. Exhaust from Group I occupancies.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40322, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40322, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40322, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40323 Section C403.2.3-( (Variable flow eapacity)) Fault detection and diagnostics.

( (C403.2.3 Variable flow capacity. For fan and pump motors 7.5 hp and greater including motors in or serving custom and packaged air handlers serving variable air volume fan systems, constant volume fans, heating and cooling hydronic pumping systems, pool and service water pumping systems, domestic water pressure-booster systems, cooling tow er fan, and other pump or fan motors where variable flows are required, there shall be:

1. Variable speed drives; ox
Z. Other controls and devices that will result in fan and pump motor demand of no more than 30 percent of design wattage at 50 pereent of design air volume for fans when static pressure set point equals $1 / 3$ the total design static pressure, and 50 percent of design water flow for pumps, based on manufacturer's certified test data. Variable inlet vanes, throttling valves (dampers), scroll dampers of bypass circuits shall not be allowed.
EXCEPTION: Variable speed devices are not required for moters that serve:
2. Fans or pumps in packaged equipment where variable speed drives are not available as a factory option from the equipment manufacturer.
3. Fans or pumps that are required to operate only for emergency fire-life-safety events (e.g., stairwell pressurization fans, elevator pressurization fans, fire pumps, etc.).))

C403.2.3 Fault detection and diagnostics. New buildings with an HVAC system serving a gross conditioned floor area of 100,000 square feet $\left(9290 \mathrm{~m}^{2}\right)$ or larger shall include a fault detection and diagnostics (FDD) system to monitor the HVAC system's performance and automatically identify faults. The FDD system shall:

1. Include permanently installed sensors and devices to monitor the HVAC system's performance.
2. Sample the HVAC system's performance at least once every 15 minutes.
3. Automatically identify and report HVAC system faults.
4. Automatically notify authorized personnel of identified HVAC system faults.
5. Automatically provide prioritized recommendations for repair of identified faults based on analysis of data collected from the sampling of HVAC system performance.
6. Be capable of transmitting the prioritized fault repair recommendations to remotely located authorized personnel.
EXCEPTION: Group R-1 and R-2 occupancies.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40323, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40323, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40323, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40324 ((Reserved.)) Section C403.2.4-Variable flow capacity.

C403.2.4 Variable flow capacity. For fan and pump motors 5.0 hp and greater including motors in or serving custom and packaged air handlers serving variable air volume fan systems, constant volume fans, heating and cooling hydronic pumping systems, pool and service water pumping systems, domestic water pressure-booster systems, cooling tower fan, and other pump or fan motors where variable flows are required, there shall be:

1. Variable speed drives; or
2. Other controls and devices that will result in fan and pump motor demand of no more than 30 percent of design wattage at 50 percent of design air volume for fans when static pressure set point equals $1 / 3$ the total design static pressure, and 50 percent of design water flow for pumps, based on manufacturer's certified test data. Variable inlet vanes, throttling valves (dampers), scroll dampers or bypass circuits shall not be allowed.
EXCEPTION: Variable speed devices are not required for motors that serve:
3. Fans or pumps in packaged equipment where variable speed drives are not available as a factory option from the equipment manufacturer.
4. Fans or pumps that are required to operate only for emergency fire-life-safety events (e.g., stairwell pressurization fans, elevator pressurization fans, fire pumps, etc.).
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40324, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40324, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40324, filed $2 / 1 / 13$, effective 7/1/13.]

## WAC 51-11C-40332 Section C403.3.2-HVAC equipment performance requirements.

C403.3.2 HVAC equipment performance requirements. Equipment shall meet the minimum efficiency requirements of Tables C403.3.2(1) through C403.3.2(((12))) (16) when tested and rated in accordance with the applicable test procedure. Plate-type liquid-to-liquid heat exchangers shall meet the minimum requirements of ((fable C403.3.2(10)) ) AHRI 400. The efficiency shall be verified through certification and listed under an approved certification program or, if no certification program exists, the equipment efficiency ratings shall be supported by data furnished by the manufacturer. Where multiple rating conditions or performance requirements are provided, the equipment shall satisfy all stated requirements. Where components, such as indoor or outdoor coils, from different manufacturers are used, calculations and supporting data shall be furnished by the designer that demonstrates that the combined efficiency of the specified components meets the requirements herein.

C403.3.2.1 Gas-fired and oil-fired forced air furnaces. Forced air furnaces with input ratings $\geq 225,000 \mathrm{Btu} / \mathrm{h}$ ( 65 kW ) and all unit heaters shall also have an intermittent ignition or interrupted device (IID), and have either mechanical draft (including power venting) or a flue damper. A vent damper is an acceptable alternative to a flue damper for furnaces where combustion air is drawn from the conditioned space. All furnaces with input ratings $\geq 225,000$ Btu/h ( 65 kW ), including electric furnaces, that are not located within the conditioned space shall have jacket losses not exceeding 0.75 percent of the input rating.
((C403.3.2.1)) C403.3.2.2 Hydronic and multiple-zone HVAC system controls and equipment. Hydronic and multiple-zone HVAC system controls and equipment shall comply with this section.

For buildings with a total equipment cooling capacity of 300 tons and above, the equipment shall comply with one of the following:

1. No one unit shall have a cooling capacity of more than $2 / 3$ of the total installed cooling equipment capacity;
2. The equipment shall have a variable speed drive; or
3. The equipment shall have multiple compressors.

C403.3.2.3 Chillers. Chilled water plants and buildings with more than 500 tons total capacity shall not have more than 100 tons provided by air-cooled chillers.

EXCEPTIONS: 1. Where the designer demonstrates that the water quality at the building site fails to meet manufacturer's specifications for the use of water-cooled equipment.
2. Air-cooled chillers with minimum efficiencies at least 10 percent higher than those listed in Table ((C403.3.2(7))) C403.3.2(3). 3. Replacement of existing air-cooled chiller equipment.
4. Air-to-water heat pump units that are configured to provide both heating and cooling and that are rated in accordance with AHRI 550/590. ((Where the air-to water heat pumps are designed for a maximum supply leaving water temperature of less than $140^{\circ} \mathrm{F}$, the efficiency rating will be caleulated and reported at the maximum unit leaving water temperature for this test condition.))
((C403.3.2.2)) C403.3.2.4 Water-cooled centrifugal chilling packages. Equipment not designed for operation at AHRI Standard 550/590 test conditions of ( $\left.\left(44^{\circ} \mathrm{F}\left(7^{\circ} \mathrm{C}\right)\right)\right)^{44.00^{\circ} \mathrm{F}\left(6.67^{\circ} \mathrm{C}\right)}$ leaving and $54.00^{\circ} \mathrm{F}$ ( $12.22^{\circ} \mathrm{C}$ ) entering chilled-water temperatures and ( $(z .4 \mathrm{gpm} /$ ton cvapo $=$ rator fluid flow and $85^{\circ} \mathrm{F}\left(29^{\circ} \mathrm{C}\right)$ entering condenser water temperature with $3 \mathrm{gpm} / \mathrm{ton}(0.054 \mathrm{I} / \mathrm{s}$. -kW$)$ condenser water flow) ) with $85.00^{\circ} \mathrm{F}$ $\left(29.44^{\circ} \mathrm{C}\right)$ entering and $94.30^{\circ} \mathrm{F}\left(34.61^{\circ} \mathrm{C}\right)$ leaving condenser-fluid tem-
peratures, shall have maximum full-load kW/ton (FL) and part-load ratings adjusted using ((Equations 4-7 and 4-8)) the following equations.

$$
\mathrm{FL}_{\mathrm{adj}}=\mathrm{FL} / K_{a d j}
$$

(Equation 4-7)

$$
\mathrm{PLV}_{\mathrm{adj}}=\mathrm{IPLV} \underline{\underline{\mathrm{IP}} / K_{a d j}}
$$

(Equation 4-8)
Where:
$K_{\text {adj }}=\mathrm{A} \times \mathrm{B}$
$\mathrm{FL}=$ Full-load $\mathrm{kW} /$ ton values as specified in Table C403.3.2(7)
$\mathrm{FL}_{\mathrm{adj}}=$ Maximum full-load $\mathrm{kW} /$ ton rating, adjusted for nonstandard conditions
IPLV.IP $=$ Value as specified in Table C403.3.2(7)
$P_{\text {PV }}^{\text {adj }}$ = Maximum NPLV rating, adjusted for nonstandard conditions
$\mathrm{A}=0.00000014592 \times(\mathrm{LIFT})^{4}-$ $0.0000346496 \times(\text { LIFT })^{3}+0.00314196$ $\times(\text { LIFT })^{2}-0.147199 \times$ LIFT + ((3.9302)) 3.93073
$\mathrm{B}=0.0015 \times L_{\text {vg }}{ }^{\text {Evap }}\left({ }^{\circ} \mathrm{F}\right)+0.934$
LIFT $=L_{v g}{ }^{\text {Cond }}-L_{v g}{ }^{\text {Evap }}$
$L_{v g}$ Cond $=$ Full-load condenser leaving fluid temperature ( ${ }^{\circ} \mathrm{F}$ )
$L_{v g}{ }^{\text {Evap }}=$ Full-load evaporator leaving temperature ( ${ }^{\circ} \mathrm{F}$ )

The FLadj and PLVadj values are ((only)) applicable only for centrifugal chillers meeting all of the following full-load design ranges:
( (1. Minimum evaporator leaving temperature: $36^{\circ} \mathrm{F}$.
Z. Maximum condenser leaving temperature: $115^{\circ} \mathrm{F}$.
3. IIFT is not less than $20^{\circ} \mathrm{F}\left(11.1^{\circ} \mathrm{C}\right)$ and not greater than $80^{\circ} \mathrm{F}$ $\left.\left.\left(44.4^{\circ} \mathrm{C}\right)\right)\right) \quad-36.00^{\circ} \mathrm{F} \leq L_{\text {Vg }} E_{\text {Vap }} \leq 60.00^{\circ} \mathrm{F}$

- $L_{\text {vg }}$ Cond $\leq 115.00^{\circ} \mathrm{F}$
- $20.00^{\circ} \mathrm{F} \leq L I F T \leq 80.00^{\circ} \mathrm{F}$

Manufacturers shall calculate the $F L_{a d j}$ and $P L V_{a d j} b e f o r e ~ d e t e r m i n-~$ ing whether to label the chiller. Centrifugal chillers designed to operate outside of these ranges are not covered by this code.
((C403.3.2.3)) C403.3.2.5 Positive displacement (air- and watercooled) chilling packages. Equipment with a leaving fluid temperature higher than $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ and water-cooled positive displacement chilling packages with a condenser leaving fluid temperature below $115^{\circ} \mathrm{F}\left(46^{\circ} \mathrm{C}\right)$ shall meet the requirements ( ( f Table C403.3.2(7)) ) the tables in Section C403.3.2 when tested or certified with water at standard rating conditions, in accordance with the referenced test procedure.
((C403.3.2.4)) C403.3.2.6 Packaged and split system electric heating and cooling equipment. Packaged ((electric)) and split system equipment providing both electric heating and cooling, and cooling-only equipment with electric heat in the main supply duct before VAV boxes, in each case with a total cooling capacity greater than $6,000 \mathrm{Btu} / \mathrm{h}$
shall be a heat pump configured to operate in heat pump mode whenever the outdoor air temperature is above $25^{\circ} \mathrm{F}\left(-3.9^{\circ} \mathrm{C}\right)$ and the unit is not in defrost. The unit shall have reverse-cycle demand defrost.
EXCEPTION: Unstaffed equipment shelters or cabinets used solely for personal wireless service facilities.
((C403.3.2.5)) C403.3.2.7 Humidification. If an air economizer is required on a cooling system for which humidification equipment is to be provided to maintain minimum indoor humidity levels, then the humidifier shall be of the adiabatic type (direct evaporative media or fog atomization type).
EXCEPTIONS: 1. Health care facilities licensed by the state where chapter 246-320 or 246-330 WAC requires steam injection humidifiers in duct work downstream of final filters.
2. Systems with water economizer
3. 100 percent outside air systems with no provisions for air recirculation to the central supply fan.
4. Nonadiabatic humidifiers cumulatively serving no more than 10 percent of a building's air economizer capacity as measured in cfm.

This refers to the system cfm serving rooms with stand alone or duct mounted humidifiers.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40332, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40332, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, and 19.27.074. WSR 13-20-120, § 51-11C-40332, filed 10/1/13, effective 11/1/13. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40332, filed 2/1/13, effective 7/1/13.]

OTS-3534. 2

NEW SECTION

WAC 51-11C-403321 Table C403.3.2(1)—Electrically operated unitary air conditioners and condensing units.

Table C403.3.2(1)
Minimum Efficiency Requirements-Electrically Operated Unitary Air Conditioners and Condensing Units ${ }^{\text {c, }} \mathrm{d}$

Washington State Register, Issue 22-14
WSR 22-14-091

| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air conditioners, air cooled | $<65,000 \mathrm{Btu} / \mathrm{h}^{\text {b }}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 13.4 SEER2 | $\underset{201 / 240-2023}{\text { AHRI }}$ |
|  |  |  | Single package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 13.4 SEER2 |  |
| Space constrained, air cooled | $\leq 30,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 11.7 SEER2 |  |
|  |  |  | Single package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 11.7 SEER2 |  |
| Small duct high velocity, air cooled | $\leq 65,000 \mathrm{Btu} / \mathrm{h}^{\text {b }}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 12.1 SEER2 |  |
| Air conditioners, air cooled | $\begin{aligned} & \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <135,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{aligned} & \text { 11.2 EER } \\ & \text { 14.8 IEER } \end{aligned}$ | AHRI 340/360 |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 11.0 EER } \\ & \text { 14.6 IEER } \end{aligned}$ |  |
|  | $\begin{aligned} & \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ & \text { and } \\ & <240,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{aligned} & \text { 11.0 EER } \\ & \text { 14.2 IEER } \end{aligned}$ |  |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 10.8 EER } \\ & \text { 14.0 IEER } \end{aligned}$ |  |
|  | $\begin{aligned} & \geq 240,000 \mathrm{Btu} / \mathrm{h} \\ & \mathrm{and} \\ & <760,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{gathered} \text { 10.0 EER } \\ \text { 13.2 IEER } \end{gathered}$ |  |
|  |  | All other | Split System and Single Package | $\begin{gathered} \hline 9.8 \mathrm{EER} \\ \text { 13.0 IEER } \\ \hline \end{gathered}$ |  |
|  | $\geq 760,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{gathered} \text { 9.7 EER } \\ \text { 12.5 IEER } \end{gathered}$ |  |
|  |  | All other | Split System and Single Package | $\begin{gathered} \text { 9.5 EER } \\ \text { 12.3 IEER } \end{gathered}$ |  |


| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air conditioners, water cooled | $<65,000 \mathrm{Btu} / \mathrm{h}^{\text {b }}$ | All | Split System and Single Package | $\begin{aligned} & \text { 12.1 EER } \\ & \text { 12.3 IEER } \end{aligned}$ | AHRI 210/240 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or None) | Split System and Single Package | 12.1 EER <br> 13.9 IEER | AHRI 340/360 |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 11.9 EER } \\ & \text { 13.7 IEER } \end{aligned}$ |  |
|  | $\begin{aligned} & \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ & \text { and } \\ & <240,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | 12.5 EER <br> 13.9 IEER |  |
|  |  | All other | Split System and Single Package | $\begin{array}{r} \hline \text { 12.3 EER } \\ \text { 13.7 IEER } \\ \hline \end{array}$ |  |
|  | $\begin{aligned} & \geq 240,000 \mathrm{Btu} / \mathrm{h} \\ & \text { and } \\ & <760,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | 12.4 EER <br> 13.6 IEER |  |
|  |  | All other | Split System and Single Package | 12.2 EER 13.4 IEER |  |
|  | $\geq 760,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or None) | Split System and Single Package | 12.2 EER 13.5 IEER |  |
|  |  | All other | Split System and Single Package | $\begin{gathered} \hline \text { 12.0 EER } \\ \text { 13.3 IEER } \end{gathered}$ |  |
| Air conditioners, evaporatively cooled | $<65,000 \mathrm{Btu} / \mathrm{h}^{\text {b }}$ | All | Split System and Single Package | $\begin{gathered} \text { 12.1 EER } \\ \text { 12.3 IEER } \end{gathered}$ | AHRI 210/240 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or None) | Split System and Single Package | 12.1 EER <br> 12.3 IEER | AHRI 340/360 |
|  |  | All other | Split System and Single Package | $\begin{gathered} \text { 11.9 EER } \\ \text { 12.1 IEER } \end{gathered}$ |  |
|  | $\begin{aligned} & \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ & \text { and } \\ & <240,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{aligned} & \text { 12.0 EER } \\ & \text { 12.2 IEER } \end{aligned}$ |  |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 11.8 EER } \\ & \text { 12.0 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 240,000 \mathrm{Btu} / \mathrm{h} \\ \text { and } \\ <760,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or None) | Split System and Single Package | 11.9 EER 12.1 IEER |  |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 11.7 EER } \\ & \text { 11.9 IEER } \end{aligned}$ |  |
|  | $\geq 760,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or None) | Split System and Single Package | 11.7 EER |  |
|  |  | All other | Split System and Single Package | $\begin{aligned} & \text { 11.5 EER } \\ & \text { 11.7 EER } \end{aligned}$ |  |
| Condensing units, air cooled | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ |  |  | $\begin{aligned} & \text { 10.5 EER } \\ & \text { 11.8 IEER } \end{aligned}$ | AHRI 365 |
| Condensing units, water cooled | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ |  |  | $\begin{aligned} & \text { 13.5 EER } \\ & \text { 14.0 IEER } \end{aligned}$ |  |
| Condensing units, evaporatively cooled | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ |  |  | 13.5 EER 14.0 IEER |  |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W}$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b Single-phase, U.S. air-cooled air conditioners less than $65,000 \mathrm{Btu} / \mathrm{h}$ are regulated as consumer products by the U.S. Department of Energy Code of Federal Regulations DOE 10 C.F.R. 430. SEER and SEER2 values for single-phase products are set by the U.S. Department of Energy.
c DOE 10 C.F.R. 430 Subpart B Appendix MI includes the test procedure updates effective $1 / 1 / 2023$ that will be incorporated in AHRI 210/240-2023.
d This table is a replica of ASHRAE 90.1 Table 6.8.1-1 Electrically Operated Unitary Air Conditioners and Condensing Units-Minimum Efficiency Requirements.
[]

## NEW SECTION

WAC 51-11C-403322 Table C403.3.2(2)-Electrically operated aircooled unitary heat pumps-Minimum efficiency requirements.

Table C403.3.2(2)
Electrically Operated Air-Cooled Unitary Heat Pumps-Minimum Efficiency Requirements

| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air cooled (cooling mode) | $<65,000 \mathrm{Btu} / \mathrm{h}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 14.3 SEER2 | $\begin{gathered} \text { AHRI } \\ 201 / 240-2023 \end{gathered}$ |
|  |  |  | Single Package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 13.4 SEER2 |  |
| Space constrained, air cooled | $\leq 30,000 \mathrm{Btu} / \mathrm{h}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 11.7 SEER2 |  |
|  |  |  | Single Package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 11.7 SEER2 |  |
| Single duct high velocity, air cooled (cooling mode) | $\leq 65,000 \mathrm{Btu} / \mathrm{h}$ | All | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 12.0 SEER2 |  |
| Air cooled (cooling mode) | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{aligned} & \text { 11.0 EER } \\ & \text { 14.1 IEER } \end{aligned}$ | AHRI 340/360 |
|  |  | All other | Split System and Single Package | $\begin{gathered} \text { 10.8 EER } \\ \text { 13.9 IEER } \end{gathered}$ |  |
|  | $\begin{aligned} & \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ & \text { and } \end{aligned}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{aligned} & \text { 10.6 EER } \\ & \text { 13.5 IEER } \end{aligned}$ |  |
|  | < 240,000 Btu/h | All other | Split System and Single Package | $\begin{aligned} & \text { 10.4 EER } \\ & \text { 13.3 IEER } \end{aligned}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or None) | Split System and Single Package | $\begin{gathered} \text { 9.5 EER } \\ \text { 12.5 IEER } \end{gathered}$ |  |
|  |  | All other | Split System and Single Package | $\begin{gathered} \text { 9.3 EER } \\ \text { 12.3 IEER } \end{gathered}$ |  |


| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air cooled (heating mode) | $<65,000 \mathrm{Btu} / \mathrm{h}^{\text {b }}$ | - | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 7.5 HSPF | $\underset{201 / 240-2023}{\text { AHRI }}$ |
|  |  | - | Single Package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 6.7 HSPF |  |
| Space constrained, air cooled (heating mode) | $\leq 30,000 \mathrm{Btu} / \mathrm{h}$ | - | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 6.3 HSPF |  |
|  |  | - | Single Package, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 6.3 HSPF |  |
| Small-duct high velocity air cooled (heating mode) | < 65,000 Btu/h | - | Split System, three phase and applications outside U.S. single phase ${ }^{\text {b }}$ | 6.1 HSPF |  |
| Air cooled (heating mode) | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \text { Btu/h } \\ \text { (cooling capacity) } \end{gathered}$ | - | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F} \mathrm{wb}$ Outdoor Air | $3.40 \mathrm{COP}_{\mathrm{H}}$ | AHRI 340/360 |
|  |  |  | $17^{\circ} \mathrm{F} \mathrm{db} / 15^{\circ} \mathrm{F} \mathrm{wb}$ Outdoor Air | $2.25 \mathrm{COP}_{\mathrm{H}}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ | - | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F} \mathrm{wb}$ Outdoor Air | $3.30 \mathrm{COP}_{\mathrm{H}}$ |  |
|  |  |  | $\begin{gathered} 17^{\circ} \mathrm{F} \mathrm{db} / 15^{\circ} \mathrm{F} \mathrm{wb} \\ \text { Outdoor Air } \end{gathered}$ | $2.05 \mathrm{COP}_{\mathrm{H}}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F} \mathrm{wb}$ Outdoor Air | $3.20 \mathrm{COP}_{\mathrm{H}}$ |  |
|  |  |  | $17^{\circ} \mathrm{F} \mathrm{db} / 15^{\circ} \mathrm{F} \mathrm{wb}$ Outdoor Air | $2.05 \mathrm{COP}_{\mathrm{H}}$ |  |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b Single-phase, U.S. air-cooled heat pumps less than $65,000 \mathrm{Btu} / \mathrm{h}$ are regulated as consumer products by the U.S. Department of Energy Code of Federal Regulations DOE 10 C.F.R. 430. SEER, SEER2, and HSPF values for single-phase products are set by the U.S. Department of Energy.
c DOE 10 C.F.R. 430 Subpart B Appendix MI includes the test procedure updates effective $1 / 1 / 2023$ that will be incorporated into AHRI 210/240-2023.
d This table is a replica of ASHRAE 90.1 Table 6.8.1-2 Electrically Operated Air-Cooled Unitary Heat Pumps—Minimum Efficiency Requirements.

## []

NEW SECTION
WAC 51-11C-403323 Table C403.3.2(3)-Water chilling packagesMinimum efficiency requirements.

Table C403.3.2(3)
Water Chilling Packages-Minimum Efficiency Requirements ${ }^{\text {a,b,e,f }}$

| Equipment Type | Size Category | Units | Path A |  | Path B |  | Test Procedure ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FL | IPLV,IP | FL | IPLV,IP |  |
| Air-cooled chillers | $<150$ tons | EER(Btu/Wh) | $\geq 10.100$ | $\geq 13.700$ | $\geq 9.700$ | $\geq 15.800$ | AHRI 550/590 |
|  | $\geq 150$ tons | EER(Btu/Wh) | $\geq 10.100$ | $\geq 14.000$ | $\geq 9.700$ | $\geq 16.100$ |  |
| Air cooled without condenser, electrically operated | All capacities | EER(Btu/Wh) | Air-cooled chillers without condensers shall be rated with matching condensers and comply with the air-cooled chiller efficiency requirements |  |  |  |  |
| Water cooled, electrically operated, positive displacement | $<75$ tons | kW/ton | $\leq 0.750$ | $\leq 0.600$ | $\leq 0.780$ | $\leq 0.500$ |  |
|  | $\begin{aligned} & \geq 75 \text { tons and } \\ & <150 \text { tons } \end{aligned}$ | kW/ton | $\leq 0.720$ | $\leq 0.560$ | $\leq 0.750$ | $\leq 0.490$ |  |
|  | $\begin{gathered} \geq 150 \text { tons and } \\ <300 \text { tons } \end{gathered}$ | kW/ton | $\leq 0.660$ | $\leq 0.540$ | $\leq 0.680$ | $\leq 0.440$ |  |
|  | $\begin{gathered} \geq 300 \text { tons and } \\ <600 \text { tons } \end{gathered}$ | kW/ton | $\leq 0.610$ | $\leq 0.520$ | $\leq 0.625$ | $\leq 0.410$ |  |
|  | $\geq 600$ tons | kW/ton | $\leq 0.560$ | $\leq 0.500$ | $\leq 0.585$ | $\leq 0.380$ |  |
| Water cooled, electrically operated, centrifugal | $<150$ tons | kW/ton | $\leq 0.610$ | $\leq 0.550$ | $\leq 0.695$ | $\leq 0.440$ |  |
|  | $\begin{aligned} & \geq 150 \text { tons and } \\ & <300 \text { tons } \end{aligned}$ | kW/ton | $\leq 0.610$ | $\leq 0.550$ | $\leq 0.695$ | $\leq 0.400$ |  |
|  | $\begin{gathered} \geq 300 \text { tons and } \\ <400 \text { tons } \end{gathered}$ | kW/ton | $\leq 0.560$ | $\leq 0.520$ | $\leq 0.595$ | $\leq 0.390$ |  |
|  | $\begin{gathered} \geq 400 \text { tons and } \\ <600 \text { tons } \end{gathered}$ | kW/ton | $\leq 0.560$ | $\leq 0.500$ | $\leq 0.585$ | $\leq 0.380$ |  |
|  | $\geq 600$ tons | kW/ton | $\leq 0.560$ | $\leq 0.500$ | $\leq 0.585$ | $\leq 0.380$ |  |
| Air cooled absorption, single effect | All capacities | COP(W/W) | $\geq 0.600$ | NR | $\mathrm{NA}^{\text {d }}$ | $\mathrm{NA}^{\text {d }}$ | AHRI 560 |
| Water cooled absorption, single effect | All capacities | COP(W/W) | $\geq 0.700$ | NR | $\mathrm{NA}^{\text {d }}$ | NA ${ }^{\text {d }}$ |  |
| Absorption double effect, indirect fired | All capacities | COP(W/W) | $\geq 1.000$ | $\geq 1.050$ | $\mathrm{NA}^{\text {d }}$ | NA ${ }^{\text {d }}$ |  |
| Absorption double effect, direct fired | All capacities | COP(W/W) | $\geq 1.000$ | $\geq 1.000$ | $\mathrm{NA}^{\text {d }}$ | $\mathrm{NA}^{\text {d }}$ |  |

For SI: 1 ton $=3517 \mathrm{~W}$, 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
$\mathrm{NR}=$ No requirement.
a Chapter 6 contains a complete specification of the referenced standards, which includes test procedures, including the referenced year version of the test procedure.
b The requirements for centrifugal chiller shall be adjusted for nonstandard rating conditions per Section C403.3.2.4 and are applicable only for the range of conditions listed there. The requirements for air-cooled, water-cooled positive displacement and absorption chillers are at standard rating conditions defined in the referenced test procedure.
c Both the full load and IPLV.IP requirements must be met or exceeded to comply with this standard. When there is a Path B, compliance can be with either Path A or Path B for any application.
d NA means the requirements are not applicable for Path B and only Path A can be used for compliance.
e FL is the full-load performance requirements, and IPLV.IP is for the part-load performance requirements.
f This table is a replica of ASHRAE 90.1 Table 6.8.1-3 Water-Chilling Packages-Minimum Efficiency Requirements.
[]

WAC 51-11C-403324 Table C403.3.2(4)-Minimum efficiency require-ments-Electrically operated PTAC, PTHP, SPVAC, SPVHP, room air conditioners.

Table C403.3.2(4)

Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, SinglePackage Vertical Heat Pumps, Room Air Conditioners and Room Air-Conditioner Heat Pumps-Minimum Efficiency Requirements ${ }^{e}$

| Equipment Type | Size Category (Input) | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| PTAC (cooling mode) Standard size | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air ${ }^{\mathrm{c}}$ | 11.9 EER | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 14.0-(0.300 $\times \mathrm{Cap} / 1000) \mathrm{EER}^{\text {d }}$ |  |
|  | > 15,000 Btu/h |  | 9.5 EER |  |
| PTAC (cooling mode) Nonstandard size ${ }^{\text {a }}$ | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air ${ }^{\mathrm{c}}$ | 9.4 EER | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 10.9-(0.213 $\times \mathrm{Cap} / 1000) \mathrm{EER}^{\text {d }}$ |  |
|  | $>15,000 \mathrm{Btu} / \mathrm{h}$ |  | 7.7 EER |  |
| PTHP (cooling mode) Standard size | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air ${ }^{\mathrm{c}}$ | 11.9 EER | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | $14.0-(0.300 \times \mathrm{Cap} / 1000) \mathrm{EER}^{\text {d }}$ |  |
|  | > 15,000 Btu/h |  | 9.5 EER |  |
| PTHP (cooling mode) Nonstandard size ${ }^{\text {b }}$ | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F}$ wb outdoor air ${ }^{\mathrm{c}}$ | 9.3 EER | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | $10.8-(0.213 \times \mathrm{Cap} / 1000) \mathrm{EER}^{\text {d }}$ |  |
|  | > 15,000 Btu/h |  | 7.6 EER |  |
| PTHP (heating mode) Standard size | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F}$ wb outdoor air | $3.3 \mathrm{COP}_{\mathrm{H}}$ | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 3.7-(0.052 $\times \mathrm{Cap} / 1000) \mathrm{COP}_{\mathrm{H}}{ }^{\text {d }}$ |  |
|  | $>15,000 \mathrm{Btu} / \mathrm{h}$ |  | $2.90 \mathrm{COP}_{\mathrm{H}}$ |  |
| PTHP (heating mode) Nonstandard size ${ }^{\text {b }}$ | $<7,000 \mathrm{Btu} / \mathrm{h}$ | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F}$ wb outdoor air | $2.7 \mathrm{COP}_{\mathrm{H}}$ | AHRI 310/380 |
|  | $\begin{gathered} \geq 7,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \leq 15,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 2.9-(0.026 $\times \mathrm{Cap} / 1000) \mathrm{COP}_{\mathrm{H}}{ }^{\text {d }}$ |  |
|  | $>15,000 \mathrm{Btu} / \mathrm{h}$ |  | $2.5 \mathrm{COP}_{\mathrm{H}}$ |  |
| SPVAC (cooling mode) | <65,000 Btu/h | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air ${ }^{\mathrm{c}}$ | 11.0 EER | AHRI 390 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 10.0 EER |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 10.0 EER |  |
| SPVHP (cooling mode) | <65,000 Btu/h | $95^{\circ} \mathrm{F} \mathrm{db} / 75^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air ${ }^{\mathrm{C}}$ | 11.0 EER | AHRI 390 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 10.0 EER |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 10.0 EER |  |
| SPVHP (heating mode) | $<65,000 \mathrm{Btu} / \mathrm{h}$ | $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air | 3.3 COP | AHRI 390 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 3.0 COP |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ |  | 3.0 COP |  |


| Equipment Type | Size Category (Input) | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Room air conditioners without reverse cycle with louvered sides for applications outside U.S. | $<6,000 \mathrm{Btu} / \mathrm{h}$ | - | 11.0 CEER | ANSI/ <br> AHAMRAC-1 |
|  | $\begin{gathered} \geq 6,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <8,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 11.0 CEER |  |
|  | $\begin{gathered} \geq 8,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <14,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | - | 10.9 CEER |  |
|  | $\begin{gathered} \geq 14,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <20,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 10.7 CEER |  |
|  | $\begin{gathered} \geq 20,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <28,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 9.4 CEER |  |
|  | $\geq 28,000 \mathrm{Btu} / \mathrm{h}$ | - | 9.0 CEER |  |
| Room air conditioners without louvered sides | $<6,000 \mathrm{Btu} / \mathrm{h}$ | - | 10.0 CEER | ANSI/ <br> AHAMRAC-1 |
|  | $\begin{gathered} \geq 6,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <8,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 10.0 CEER |  |
|  | $\begin{aligned} & \geq 8,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <11,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | - | 9.6 CEER |  |
|  | $\begin{gathered} \geq 11,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <14,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 9.5 CEER |  |
|  | $\begin{gathered} \geq 14,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <20,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | - | 9.3 CEER |  |
|  | $\geq 20,000 \mathrm{Btu} / \mathrm{h}$ | - | 9.4 CEER |  |
| Room air conditioners with reverse cycle, with louvered sides for applications outside U.S. | <20,000 Btu/h | - | 9.8 CEER | $\begin{gathered} \text { ANSI/ } \\ \text { AHAMRAC-1 } \end{gathered}$ |
|  | $\geq 20,000 \mathrm{Btu} / \mathrm{h}$ | - | 9.3 CEER |  |
| Room air conditioners with reverse cycle without louvered sides for applications outside U.S. | < 14,000 Btu/h | - | 9.3 CEER | $\begin{gathered} \text { ANSI/ } \\ \text { AHAMRAC-1 } \end{gathered}$ |
|  | $\geq 14,000 \mathrm{Btu} / \mathrm{h}$ | - | 8.7 CEER |  |
| Room air conditioners, casement only for applications outside U.S. | All capacities | - | 9.5 CEER | ANSI/ <br> AHAMRAC-1 |
| Room air conditioners, casement-slider for application outside U.S. | All capacities | - | 10.4 CEER | $\begin{gathered} \text { ANSI/ } \\ \text { AHAMRAC-1 } \end{gathered}$ |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
"Cap" = The rated cooling capacity of the product in Btu/h. If the unit's capacity is less than $7,000 \mathrm{Btu} / \mathrm{h}$, use $7,000 \mathrm{Btu} / \mathrm{h}$ in the calculation. If the unit's capacity is greater than $15,000 \mathrm{Btu} / \mathrm{h}$, use $15,000 \mathrm{Btu} / \mathrm{h}$ in the calculations.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the referenced year version of the test procedure.
b Nonstandard size units must be factory labeled as follows: "MANUFACTURED FOR NONSTANDARD SIZE APPLICATIONS ONLY: NOT TO BE INSTALLED IN NEW STANDARD PROJECTS." Nonstandard size efficiencies apply only to units being installed in existing sleeves having an external wall opening of less than 16 inches ( 406 mm ) high or less than 42 inches ( 1067 mm ) wide and having a cross-sectional area less than 670 square inches $\left(0.43 \mathrm{~m}^{2}\right)$.
c The cooling-mode wet bulb temperature requirement only applies for units that reject condensate to the condenser coil.
d "Cap" in EER and COPH equations for PTACs and PTHPs means cooling capacity in Btu/h at $95^{\circ} \mathrm{F}$ outdoor dry-bulb temperature.
e This table is a replica of ASHRAE 90.1 Table 6.8.1-4 Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single-Package Vertical Heat Pumps, Room Air Conditioners, and Room Air-Conditioner Heat Pumps-Minimum Efficiency Requirements.

WAC 51-11C-403325 Table C403.3.2(5)-Minimum efficiency require-ments-Warm air furnaces and unit heaters.

Table C403.3.2(5)
Warm Air Furnaces and Combination Warm Air Furnaces/Air-Conditioning Units, Warm Air Duct Furnaces and Unit Heaters-Minimum Efficiency Requirements

| Equipment Type | Size Category <br> (Input) | Subcategory or <br> Rating Condition | Minimum Efficiency ${ }^{\text {d,c }}$ | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W}$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the referenced year version of the test procedure.
b Combination units (i.e., furnaces contained within the same cabinet as an air conditioner) not covered by DOE 10 C.F.R. 430 (i.e., 3-phase power or with cooling capacity greater than or equal to $65,000 \mathrm{Btu} / \mathrm{h}$ ) may comply with either rating. All other units greater than $225,000 \mathrm{Btu} / \mathrm{h}$ sold in the U.S. must meet the AFUE standards for consumer products and testing using U.S. DOE's AFUE test procedure at DOE 10 C.F.R. 430 Subpart B, Appendix N.
c Compliance of multiple firing rate units shall be at the maximum firing rate.
$\mathrm{d} E_{t}=$ Thermal efficiency. Units must also include an interrupted or intermittent ignition device (IID), have jacket losses not exceeding 0.75 percent of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.
e $E_{c}=$ Combustion efficiency ( $100 \%$ less flue losses). See test procedure for detailed discussion.
f Units must also include an interrupted or intermittent ignition device (IID) and have either power venting or an automatic flue damper.
g This table is a replica of ASHRAE 90.1 Table 6.8.1-5 Warm-Air Furnaces and Combination Warm-Air Furnaces/Air-Conditioning Units, Warm-Air Duct Furnaces, and Unit Heaters-Minimum Efficiency Requirements.
[ ]

## NEW SECTION

WAC 51-11C-403326 Table C403.3.2(6)-Minimum efficiency require-ments-Gas-fired and oil-fired boilers.

Gas- and Oil-Fired Boilers-Minimum Efficiency Requirements

| Equipment Type ${ }^{\text {a }}$ | Subcategory or Rating Condition | Size Category (Input) | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Boilers, hot water | Gas-fired | $<300,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{g}, \mathrm{h}}$ for applications outside the U.S. | 82\% AFUE | DOE 10 C.F.R. 430 Appendix N |
|  |  | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{e}} \end{aligned}$ | $84 \% E_{t}^{\text {d }}$ | DOE 10 C.F.R. 431.86 |
|  |  | $\begin{aligned} & >2,500,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}} \end{aligned}$ | $85 \% E_{t}^{\text {d }}$ |  |
|  |  | $>10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $82 \% E_{c}{ }^{\text {c }}$ |  |
|  | Oil-fired ${ }^{\text {f }}$ | $<300,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{g}, \mathrm{h}}$ | 84\% AFUE | $\begin{aligned} & \text { DOE } 10 \text { C.F.R. } 430 \\ & \text { Appendix N } \end{aligned}$ |
|  |  | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{e}} \end{aligned}$ | $87 \% E_{t}^{\text {d }}$ | DOE 10 C.F.R. 431.86 |
|  |  | $>2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $88 \% E_{c}{ }^{\text {c }}$ |  |
|  |  | $>10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $84 \% E_{c}{ }^{\text {d }}$ |  |
| Boilers, steam | Gas-fired | $<300,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{g}}$ | 81\% AFUE | DOE 10 C.F.R. 430 Appendix N |
|  | Gas-fired - all, except natural draft | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}} \end{aligned}$ | $82 \% E_{t}^{\text {d }}$ | DOE 10 C.F.R. 431.86 |
|  |  | $>2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{a}}$ | $79 \% E_{t}^{\text {d }}$ |  |
|  |  | $>10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $79 \% E_{t}^{\text {d }}$ |  |
|  | Gas-fired - natural draft | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}} \end{aligned}$ | $81 \% E_{t}^{\text {d }}$ |  |
|  |  | $>2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $82 \% E_{t}^{\text {d }}$ |  |
|  |  | $>10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $79 \% E_{t}^{\text {d }}$ |  |
|  | Oil-fired ${ }^{\text {f }}$ | $<300,000 \mathrm{Btu} / \mathrm{h}$ | 82\% AFUE | $\begin{aligned} & \text { DOE } 10 \text { C.F.R. } 430 \\ & \text { Appendix N } \end{aligned}$ |
|  |  | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & \leq 2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}} \end{aligned}$ | $84 \% E_{t}^{\text {d }}$ | DOE 10 C.F.R. 431.86 |
|  |  | $>2,500,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $85 \% E_{t}^{\text {d }}$ |  |
|  |  | $>10,000,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{b}}$ | $81 \% E_{t}^{\text {d }}$ |  |

For SI: 1 British thermal unit per hour $=0.2931$ W.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b These requirements apply to boilers with rated input of $8,000,000 \mathrm{Btu} / \mathrm{h}$ or less that are not packaged boilers and to all packaged boilers. Minimum efficiency requirements for boilers cover all capacities of packaged boilers.
c $E_{c}=$ Combustion efficiency ( 100 percent less flue losses).
d $E_{t}=$ Thermal efficiency.
e Maximum capacity - Minimum and maximum ratings as provided for and allowed by the unit's controls.
f Includes oil-fired (residual).
g Boilers shall not be equipped with a constant burning pilot light.
h A boiler not equipped with a tankless domestic water heating coil shall be equipped with an automatic means for adjusting the temperature of the water such that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of the water supplied.
i This table is a replica of ASHRAE 90.1 Table 6.8.1-6 Gas- and Oil-Fired Boilers-Minimum Efficiency Requirements.

WAC 51-11C-403327 Table C403.3.2(7)—Heat rejection equipmentMinimum efficiency requirements.

Table C403.3.2(7)
Heat Rejection Equipment-Minimum Efficiency Requirements ${ }^{\text {i }}$

| Equipment Type ${ }^{\text {a }}$ | Total System Heat Rejection Capacity at Rated Conditions | Subcategory or Rating Condition ${ }^{\text {h }}$ | Performance Required ${ }^{\text {b,c,d,f,g }}$ | Test Procedure ${ }^{\text {a,e }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Propeller or axial fan open-circuit cooling towers | All | $95^{\circ} \mathrm{F}$ Entering Water $85^{\circ} \mathrm{F}$ Leaving Water $75^{\circ} \mathrm{F}$ Entering wb | $\geq 40.2 \mathrm{gpm} / \mathrm{hp}$ | CTI ATC-105 and CTI STD-201 RS |
| Centrifugal fan open circuit cooling towers | All | $95^{\circ} \mathrm{F}$ Entering Water $85^{\circ} \mathrm{F}$ Leaving Water $75^{\circ} \mathrm{F}$ Entering wb | $\geq 20.0 \mathrm{gpm} / \mathrm{hp}$ | CTI ATC-105 and CTI STD-201 RS |
| Propeller or axial fan closed-circuit cooling towers | All | $102^{\circ} \mathrm{F}$ Entering Water $90^{\circ} \mathrm{F}$ Leaving Water $75^{\circ} \mathrm{F}$ Entering wb | $\geq 16.1 \mathrm{gpm} / \mathrm{hp}$ | $\begin{aligned} & \text { CTI ATC-105S } \\ & \text { and CTI STD-201 } \\ & \text { RS } \end{aligned}$ |
| Centrifugal closedcircuit cooling towers | All | $102^{\circ} \mathrm{F}$ Entering Water $90^{\circ} \mathrm{F}$ Leaving Water $75^{\circ} \mathrm{F}$ Entering wb | $\geq 7.0 \mathrm{gpm} / \mathrm{hp}$ | CTI ATC-105S and CTI STD-201 RS |
| Propeller or axial fan dry coolers (air-cooled fluid coolers) | All | $115^{\circ} \mathrm{F}$ Entering Water $105^{\circ} \mathrm{F}$ Leaving Water $95^{\circ} \mathrm{F}$ Entering wb | $\geq 4.5 \mathrm{gpm} / \mathrm{hp}$ | CTI ATC-106 |
| Propeller or axial fan evaporative condensers | All | R-448A Test Fluid $165^{\circ} \mathrm{F}$ Entering Gas Temperature $105^{\circ} \mathrm{F}$ Condensing Temperature $75^{\circ} \mathrm{F}$ Entering wb | $\begin{aligned} & \geq 160,000 \\ & \text { Btu } / \mathrm{h} \cdot \mathrm{hp} \end{aligned}$ | CTI ATC-106 |
| Propeller or axial fan evaporative condensers | All | Ammonia Test Fluid $140^{\circ} \mathrm{F}$ Entering Gas Temperature $96.3^{\circ} \mathrm{F}$ Condensing Temperature $75^{\circ} \mathrm{F}$ Entering wb | $\begin{aligned} & \geq 134,000 \\ & \text { Btu/h•hp } \end{aligned}$ | CTI ATC-106 |
| Centrifugal fan evaporative condensers | All | R-448A Test Fluid $165^{\circ} \mathrm{F}$ Entering Gas Temperature $105^{\circ} \mathrm{F}$ Condensing Temperature $75^{\circ} \mathrm{F}$ Entering wb | $\begin{aligned} & \geq 137,000 \\ & \text { Btu/h•hp } \end{aligned}$ | CTI ATC-106 |
| Centrifugal fan evaporative condensers | All | Ammonia Test Fluid $140^{\circ} \mathrm{F}$ Entering Gas <br> Temperature $96.3^{\circ} \mathrm{F}$ Condensing Temperature $75^{\circ} \mathrm{F}$ Entering wb | $\begin{aligned} & \geq 110,000 \\ & \text { Btu/h•hp } \end{aligned}$ | CTI ATC-106 |
| Air cooled condensers | All | $125^{\circ} \mathrm{F}$ Condensing Temperature R-22 Test Fluid $190^{\circ} \mathrm{F}$ Entering Gas Temperature $15^{\circ} \mathrm{F}$ Subcooling $95^{\circ} \mathrm{F}$ Entering db | $\begin{aligned} & \geq 176,000 \\ & \text { Btu/h•hp } \end{aligned}$ | AHRI 460 |

[^1]b For purposes of this table, open-circuit cooling tower performance is defined as the water-flow rating of the tower at the thermal rating condition listed in the table divided by the fan motor nameplate power.
c For purposes of this table, closed-circuit cooling tower performance is defined as the water-flow rating of the tower at the thermal rating condition divided by the sum of the fan motor nameplate power and the integral spray pump motor nameplate power.
d For purposes of this table, dry-cooler performance is defined as the process water-flow rating of the unit at the thermal rating condition listed in the table divided by the total fan motor nameplate power of the unit, and air-cooled condenser performance is defined as the heat rejected from the refrigerant divided by the total fan motor nameplate power of the unit.
e The efficiencies and test procedures for both open- and closed-circuit cooling towers are not applicable to hybrid cooling towers that contain a combination of separate wet and dry heat exchange sections. The certification requirements do not apply to field-erected cooling towers.
f All cooling towers shall comply with the minimum efficiency listed in the table for that specific type of tower with the capacity effect of any project-specific accessories and/or options included in the capacity of the cooling tower.
$g$ For purposes of this table, evaporative condenser performance is defined as the heat rejected at the specified rating condition in the table, divided by the sum of the fan motor nameplate power and the integral spray pump nameplate power.
h Requirements for evaporative condensers are listed with ammonia (R-717) and R-448A as test fluids in the table. Evaporative condensers intended for use with halocarbon refrigerants other than R-448A must meet the minimum efficiency requirements listed above with R-448A as the test fluid. For ammonia, the condensing temperature is defined as the saturation temperature corresponding to the refrigerant pressure at the condenser entrance. For R-448A, which is a zeotropic refrigerant, the condensing temperature is defined as the arithmetic average of the dew point and the bubble point temperatures corresponding to the refrigerant pressure at the condenser entrance.
i This table is a replica of ASHRAE 90.1 Table 6.8.1-7 Performance Requirements for Heat Rejection Equipment-Minimum Efficiency Requirements.

WAC 51-11C-403328 Table C403.3.2(8)-Electrically operated variable refrigerant flow air conditioners-Minimum efficiency requirements.

Table C403.3.2(8)
Electrically Operated Variable Refrigerant Flow Air Conditioners-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test <br> Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VRF Air <br> Conditioners, <br> Air Cooled | < 65,000 Btu/h | All | VRF Multi-Split System | 13.0 SEER | AHRI 1230 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{aligned} & \text { 11.2 EER } \\ & \text { 15.5 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{aligned} & \text { 11.0 EER } \\ & \text { 14.9 IEER } \end{aligned}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{aligned} & \text { 10.0 EER } \\ & \text { 13.9 IEER } \end{aligned}$ |  |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W}$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-8 Electrically Operated Variable-Refrigerant-Flow Air Conditioners-Minimum Efficiency Requirements.

```
[]
```

WAC 51-11C-403329 Tables C403.3.2(9)
through C403.3.2(16)—HVAC equipment minimum efficiency requirements.

Table C403.3.2(9)
Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VRF Air Cooled (cooling mode) | <65,000 Btu/h | All | VRF Multi-Split System | 13.0 SEER | AHRI 1230 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{aligned} & \text { 11.0 EER } \\ & \text { 14.6 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System with Heat Recovery | $\begin{aligned} & \text { 10.8 EER } \\ & \text { 14.4 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{aligned} & \text { 10.6 EER } \\ & \text { 13.9 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | Electric Resistance (or none) | VRF Multi-Split System with Heat Recovery | $\begin{aligned} & \text { 10.4 EER } \\ & \text { 13.7 IEER } \end{aligned}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or none) | VRF Multi-Split System | $\begin{gathered} \text { 9.5 EER } \\ \text { 12.7 IEER } \end{gathered}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | Electric Resistance (or none) | VRF Multi-Split System with Heat Recovery | $\begin{gathered} \text { 9.3 EER } \\ \text { 12.5 IEER } \end{gathered}$ |  |
| VRF Water Source (cooling mode) | $<65,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 12.0 EER } \\ & \text { 16.0 IEER } \end{aligned}$ | AHRI 1230 |
|  | < 65,000 Btu/h | All | VRF Multi-Split System with Heat Recovery $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 11.8 EER } \\ & \text { 15.8 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | VRF Multi-Split System $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 12.0 EER } \\ & \text { 16.0 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | VRF Multi-Split System with Heat Recovery $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 11.8 EER } \\ & \text { 15.8 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | VRF Multi-Split System $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 10.0 EER } \\ & \text { 14.0 IEER } \end{aligned}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | VRF Multi-Split System with Heat Recovery $86^{\circ} \mathrm{F}$ entering water | $\begin{gathered} \text { 9.8 EER } \\ \text { 13.8 IEER } \end{gathered}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $86^{\circ} \mathrm{F}$ entering water | $\begin{aligned} & \text { 10.0 EER } \\ & \text { 12.0 IEER } \end{aligned}$ |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System with Heat Recovery $86^{\circ} \mathrm{F}$ entering water | $\begin{gathered} \text { 9.8 EER } \\ \text { 11.8 IEER } \end{gathered}$ |  |
| VRF <br> Groundwater <br> Source (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $59^{\circ} \mathrm{F}$ entering water | 16.2 EER | AHRI 1230 |
|  | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System with Heat Recovery $59^{\circ} \mathrm{F}$ entering water | 16.0 EER |  |
|  | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $59^{\circ} \mathrm{F}$ entering water | 13.8 EER |  |
|  | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System with Heat Recovery $59^{\circ} \mathrm{F}$ entering water | 13.6 EER |  |
| VRF Ground Source (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $77^{\circ} \mathrm{F}$ entering water | 13.4 EER |  |
|  | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System with Heat Recovery $77^{\circ} \mathrm{F}$ entering water | 13.2 EER | AHRI 1230 |


| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | $\begin{gathered} \text { Test } \\ \text { Procedure } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System $77^{\circ} \mathrm{F}$ entering water | 11.0 EER |  |
|  | $\geq 135,000 \mathrm{Btu} / \mathrm{h}$ | All | VRF Multi-Split System with Heat Recovery $77^{\circ} \mathrm{F}$ entering water | 10.8 EER |  |
| VRF Air Cooled (heating mode) | $\begin{gathered} <65,000 \text { Btu/h } \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System | 7.7 HSPF | AHRI 1230 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F}$ wb outdoor air $17^{\circ} \mathrm{F} \mathrm{db} / 15^{\circ} \mathrm{F}$ wb outdoor air | $\begin{gathered} \text { 3.3 COP } \\ 2.25 \mathrm{COP} \end{gathered}$ |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $47^{\circ} \mathrm{F} \mathrm{db} / 43^{\circ} \mathrm{F}$ wb outdoor air $17^{\circ} \mathrm{F} \mathrm{db} / 15^{\circ} \mathrm{F} \mathrm{wb}$ outdoor air | $\begin{aligned} & \text { 3.2 COP } \\ & 2.05 \mathrm{COP} \end{aligned}$ |  |
| VRF Water Source (heating mode) | $\begin{gathered} <65,000 \text { Btu/h } \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $68^{\circ} \mathrm{F}$ entering water | 4.3 COP | AHRI 1230 |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $68^{\circ} \mathrm{F}$ entering water | 4.3 COP |  |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \\ \hline \end{gathered}$ |  | VRF Multi-Split System $68^{\circ} \mathrm{F}$ entering water | 4.0 COP |  |
|  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | VRF Multi-Split System $68^{\circ} \mathrm{F}$ entering water | 3.9 COP |  |
| VRFGroundwaterSource(heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ <br> (cooling capacity) |  | VRF Multi-Split System $50^{\circ} \mathrm{F}$ entering water | 3.6 COP | AHRI 1230 |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $50^{\circ} \mathrm{F}$ entering water | 3.3 COP |  |
| VRF Ground Source (heating mode) | $\begin{aligned} & <135,000 \text { Btu/h } \\ & \text { (cooling capacity) } \end{aligned}$ |  | VRF Multi-Split System $32^{\circ} \mathrm{F}$ entering water | 3.1 COP | AHRI 1230 |
|  | $\begin{gathered} \geq 135,000 \mathrm{Btu} / \mathrm{h} \\ \text { (cooling capacity) } \end{gathered}$ |  | VRF Multi-Split System $32^{\circ} \mathrm{F}$ entering water | 2.8 COP |  |

For SI: ${ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8,1$ British thermal unit per hour $=0.2931 \mathrm{~W}, \mathrm{db}=$ dry bulb temperature, wb $=$ wet bulb temperature.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-9 Electrically Operated Variable-Refrigerant-Flow and Applied Heat Pumps-Minimum Efficiency Requirements.

Table C403.3.2(10)
Floor-Mounted Air Conditioners and Condensing Units Serving Computer Rooms-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Standard Model | Net Sensible Cooling Capacity | Minimum Net Sensible COP | Rating Conditions Return Air (dry bulb/dew point) | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air cooled | Downflow | < 80,000 Btu/h | 2.70 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 2) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.58 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.36 |  |  |
|  | Upflow - Ducted | <80,000 Btu/h | 2.67 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.55 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.33 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.16 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.04 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 1.89 |  |  |
|  | Horizontal | > 65,000 Btu/h | 2.65 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.55 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.47 |  |  |
| Air cooled with fluid economizer | Downflow | < 80,000 Btu/h | 2.70 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.58 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.36 |  |  |
|  | Upflow - Ducted | <80,000 Btu/h | 2.67 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.55 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.33 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.09 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.99 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 1.81 |  |  |
|  | Horizontal | $>65,000 \mathrm{Btu} / \mathrm{h}$ | 2.65 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.55 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.47 |  |  |
| Water cooled | Downflow | <80,000 Btu/h | 2.82 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.73 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.67 |  |  |
|  | Upflow - Ducted | <80,000 Btu/h | 2.79 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.70 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.64 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.43 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.32 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.20 |  |  |
|  | Horizontal | $>65,000 \mathrm{Btu} / \mathrm{h}$ | 2.79 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.68 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.60 |  |  |


| Equipment Type | Standard Model | Net Sensible Cooling Capacity | Minimum Net Sensible COP | Rating Conditions Return Air (dry bulb/dew point) | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Water cooled with fluid economizer | Downflow | <80,000 Btu/h | 2.77 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{aligned} & \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <295,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 2.68 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.61 |  |  |
|  | Upflow - Ducted | < 80,000 Btu/h | 2.74 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.65 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.58 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.35 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{aligned} & \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <240,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 2.24 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.12 |  |  |
|  | Horizontal | > 65,000 Btu/h | 2.71 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.60 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.54 |  |  |
| Glycol cooled | Downflow | < 80,000 Btu/h | 2.56 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.24 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.21 |  |  |
|  | Upflow - Ducted | <80,000 Btu/h | 2.53 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.21 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.18 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.08 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.90 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 1.81 |  |  |
|  | Horizontal | > 65,000 Btu/h | 2.48 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.18 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.18 |  |  |
| Glycol cooled with fluid economizer | Downflow | $<80,000 \mathrm{Btu} / \mathrm{h}$ | 2.51 | $85^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.19 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.15 |  |  |
|  | Upflow - Ducted | <80,000 Btu/h | 2.48 |  |  |
|  |  | $\begin{gathered} \geq 80,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <295,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.16 |  |  |
|  |  | $\geq 295,000 \mathrm{Btu} / \mathrm{h}$ | 2.12 |  |  |
|  | Upflow - Nonducted | > 65,000 Btu/h | 2.00 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.82 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 1.73 |  |  |
|  | Horizontal | > 65,000 Btu/h | 2.44 | $95^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 3) |  |
|  |  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <240,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.10 |  |  |
|  |  | $\geq 240,000 \mathrm{Btu} / \mathrm{h}$ | 2.10 |  |  |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-10 Floor-Mounted Air Conditioners and Condensing Units Serving Computer RoomsMinimum Efficiency Requirements.

Table C403.3.2(11)
Vapor-Compression-Based Indoor Pool Dehumidifiers-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Subcategory or Rating <br> Condition | Minimum Efficiency | Test Procedure ${ }^{\text {E }}$ |
| :--- | :---: | :---: | :---: |
| Single package indoor (with <br> or without economizer) | Rating Conditions: A or C | 3.5 MRE |  |
| Single package indoor water <br> cooled (with or without <br> economizer) | Rating Conditions: A, B or C | 3.5 MRE |  |
| Single package indoor air <br> cooled (with or without <br> economizer) | Rating Conditions: A, B or C | AHRI 910 |  |
| Split system indoor air <br> cooled (with or without <br> economizer) | Rating Conditions: A, B or C | 3.5 MRE |  |

a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-11 Vapor-Compressor-Based Indoor Pool Dehumidifiers-Minimum Efficiency Requirements.
Table C403.3.2(12)
Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, Without Energy Recovery-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure $^{\mathbf{a}}$ |
| :---: | :---: | :---: | :---: |
| Air cooled <br> (dehumidification mode) |  | 4.0 ISMRE | AHRI 920 |
| Air source heat pumps <br> (dehumidification mode) |  | 4.0 ISMRE | AHRI 920 |
| Water cooled <br> (dehumidification mode) | Cooling tower condenser water | 4.9 ISMRE | AHRI 920 |
|  | Chilled water | 6.0 ISMRE |  |
| Air source heat pump <br> (heating mode) |  | 2.7 ISCOP | AHRI 920 |
| Water source heat pump <br> (dehumidification mode) | Ground source, closed loop | 4.8 ISMRE | AHRI 920 |
|  | Ground-water source | 5.0 ISMRE |  |
| Water source heat pump <br> (heating mode) | Water source | 4.0 ISMRE |  |
|  | Ground source, closed loop | 2round-water source | 3.2 ISCOP |
|  | Water source | AHRI 920 |  |

a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-13 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, without Energy Recovery-Minimum Efficiency Requirements.

Table C403.3.2(13)
Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, with Energy Recovery-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\mathbf{a}}$ |
| :---: | :---: | :---: | :---: |
| Air cooled <br> (dehumidification mode) |  | 5.2 ISMRE | AHRI 920 |


| Equipment Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: |
| Air source heat pumps (dehumidification mode) |  | 5.2 ISMRE | AHRI 920 |
| Water cooled (dehumidification mode) | Cooling tower condenser water | 5.3 ISMRE | AHRI 920 |
|  | Chilled water | 6.6 ISMRE |  |
| Air source heat pump (heating mode) |  | 3.3 ISCOP | AHRI 920 |
| Water source heat pump (dehumidification mode) | Ground source, closed loop | 5.2 ISMRE | AHRI 920 |
|  | Ground-water source | 5.8 ISMRE |  |
|  | Water source | 4.8 ISMRE |  |
| Water source heat pump (heating mode) | Ground source, closed loop | 3.8 ISCOP | AHRI 920 |
|  | Ground-water source | 4.0 ISCOP |  |
|  | Water source | 4.8 ISCOP |  |

a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b This table is a replica of ASHRAE 90.1 Table 6.8.1-14 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, with Energy Recovery-Minimum Efficiency Requirements.

Table C403.3.2(14)
Electrically Water Source Heat Pumps-Minimum Efficiency Requirements ${ }^{\text {c }}$

| Equipment Type | Size Category ${ }^{\text {b }}$ | Heating Section Type | Subcategory or Rating Condition | Minimum Efficiency | Test Procedure ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Water to air, water loop (cooling mode) | <17,000 Btu/h | All | $86^{\circ} \mathrm{F}$ entering water | 12.2 EER | ISO 13256-1 |
|  | $\begin{gathered} \geq 17,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | $86^{\circ} \mathrm{F}$ entering water | 13.0 EER |  |
|  | $\begin{gathered} \geq 65,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <135,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | All | $86^{\circ} \mathrm{F}$ entering water | 13.0 EER |  |
| Water to air, ground water (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | $59^{\circ} \mathrm{F}$ entering water | 18.0 EER |  |
| Brine to air, ground loop (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | $77^{\circ} \mathrm{F}$ entering water | 14.1 EER |  |
| Water to water, water loop (cooling mode) | < 135,000 Btu/h | All | $86^{\circ} \mathrm{F}$ entering water | 10.6 EER | ISO 13256-2 |
| Water to water, ground water (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | $59^{\circ} \mathrm{F}$ entering water | 16.3 EER |  |
| Brine to water, ground loop (cooling mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ | All | $77^{\circ} \mathrm{F}$ entering fluid | 12.1 EER |  |
| Water to air, water loop (heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | $68^{\circ} \mathrm{F}$ entering water | $4.3 \mathrm{COP}_{\mathrm{H}}$ | ISO 13256-1 |
| Water to air, ground water (heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | $50^{\circ} \mathrm{F}$ entering water | $3.7 \mathrm{COP}_{\mathrm{H}}$ |  |
| Brine to air, ground loop (heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | $32^{\circ} \mathrm{F}$ entering fluid | $3.2 \mathrm{COP}_{\mathrm{H}}$ |  |
| Water to water, water loop (heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ (cooling capacity) |  | $68^{\circ} \mathrm{F}$ entering water | $3.7 \mathrm{COP}_{\mathrm{H}}$ | ISO 13256-1 |

Washington State Register, Issue 22-14

| Equipment Type | Size Category ${ }^{\text {b }}$ | Heating <br> Section Type | Subcategory or <br> Rating Condition | Minimum <br> Efficiency | Test <br> Procedure $^{\mathbf{a}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Water to water, <br> ground water <br> (heating mode) | $<135,000$ Btu/h <br> (cooling capacity) |  | $50^{\circ} \mathrm{F}$ entering water | $3.1 \mathrm{COP}_{\mathrm{H}}$ | ISO $13256-2$ |
| Brine to water, <br> ground loop <br> (heating mode) | $<135,000 \mathrm{Btu} / \mathrm{h}$ <br> (cooling capacity) |  | $32^{\circ} \mathrm{F}$ entering fluid | $2.5 \mathrm{COP}_{\mathrm{H}}$ | ISO 13256-2 |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b Single-phase, U.S. air-cooled heat pumps less than 19 kW are regulated as consumer produces by DOE 10 C.F.R. 430. SCOPC, SCOP2C, SCOPH and SCOP2H values for single-phase products are set by the U.S. DOE
c This table is a replica of ASHRAE 90.1 Table 6.8.1-15 Electrically Operated Water-Source Heat Pumps-Minimum Efficiency Requirements.
Table C403.3.2(15)
Heat-Pump and Heat Recovery Chiller Packages-Minimum Efficiency Requirements ${ }^{\text {g }, h, i, j, k}$

| HEATING OPERATION |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equipment Type | $\begin{gathered} \text { Size } \\ \text { Category, } \\ \text { ton }_{\mathrm{R}}, \end{gathered}$ | Cooling-Only Operation Cooling Efficiency ${ }^{\text {c Air-Source EER }}$ (FLIPLV), Btu/W×h Water-Source Power Input per Capacity (FL/IPLV), kW/tonR |  | Heating Source Conditions (entering/leavin g water) or OAT (db/wb), ${ }^{\circ} \mathrm{F}$ | Heat-Pump Heating Full-Load Efficiency (COPH) ${ }^{\text {b }}$, W/W |  |  |  | Heat Recovery Chiller Full-Load Efficiency (COP ${ }^{\text {HR }}$ ) ${ }^{\text {c,d }}$, W/W Simultaneous Cooling and Heating Full-Load Efficiency (COPshc) ${ }^{\text {c }}$, W/W |  |  |  | Test Procedure ${ }^{\text {a }}$ |
|  |  |  |  | Leaving Heating Water Temperature | Leaving Heating Water Temperature |  |  |  |  |
|  |  |  |  | Low | Medium | High | Boost | Low | Medium | High | Boost |  |
|  |  | Path A | Path B |  | $105^{\circ} \mathrm{F}$ | $120^{\circ} \mathrm{F}$ | $140^{\circ} \mathrm{F}$ | $140^{\circ} \mathrm{F}$ | $105^{\circ} \mathrm{F}$ | $120^{\circ} \mathrm{F}$ | $140^{\circ} \mathrm{F}$ | $140^{\circ} \mathrm{F}$ |  |
| Air source | All sizes | $\begin{gathered} \geq 9.595 \mathrm{FL} \\ \geq 13.02 \text { IPLV.IP } \\ \hline \end{gathered}$ | $\begin{gathered} \quad \geq 9.215 \mathrm{FL} \\ \geq 15.01 \mathrm{PLLV} . \mathrm{IP} \\ \hline \end{gathered}$ |  | $\begin{gathered} 47 \mathrm{db} \\ 43 \mathrm{wb} \end{gathered}$ | $\geq 3.290$ | $\geq 2.770$ | $\geq 2.310$ | NA | NA | NA | NA | NA | AHRI |
|  |  | $\begin{gathered} \geq 9.595 \mathrm{FL} \\ \geq 13.30 \text { IPLV.IP } \end{gathered}$ | $\begin{gathered} \geq 9.215 \mathrm{FL} \\ \geq 15.30 \mathrm{IPLV} . \mathrm{IP} \\ \hline \end{gathered}$ |  | $\begin{gathered} 17 \mathrm{db} \\ 15 \mathrm{wb}^{\mathrm{e}} \\ \hline \end{gathered}$ | $\geq 2.230$ | $\geq 1.950$ | $\geq 1.630$ | NA | NA | NA | NA | NA |  |
| Water-source electrically operated positive displacement | $<75$ | $\geq 0.7885 \mathrm{FL}$$\geq 0.6316 \mathrm{IPLV} . \mathrm{IP}$ | $\begin{gathered} \geq 0.7875 \mathrm{FL} \\ \geq 0.5145 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | 54/44 ${ }^{\text {' }}$ | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | $\geq 8.330$ | $\geq 6.410$ | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.550$ | NA | NA | NA | $\geq 6.150$ |  |  |
|  | $\begin{gathered} \geq 75 \text { and } \\ <150 \end{gathered}$ | $\geq 0.7579 \mathrm{FL}$$\geq 0.5895 \mathrm{IPLV} . \mathrm{IP}$ | $\begin{gathered} \geq 0.7140 \mathrm{FL} \\ \geq 0.4620 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | 54/44 ${ }^{\text {f }}$ | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | $\geq 8.330$ | $\geq 6.410$ | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65 ${ }^{\text {f }}$ | NA | NA | NA | $\geq 3.550$ | NA | NA | NA | $\geq 6.150$ |  |  |
|  | $\begin{gathered} \geq 150 \text { and } \\ <300 \end{gathered}$ | $\begin{gathered} \geq 0.6947 \mathrm{FL} \\ \geq 0.5684 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | $\begin{aligned} & \geq 0.7140 \mathrm{FL} \\ & \geq 0.4620 \mathrm{IPLV} . \mathrm{IP} \end{aligned}$ | 54/44 | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | 28.330 | $\geq 6.410$ | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65 ${ }^{\text {f }}$ | NA | NA | NA | $\geq 3.550$ | NA | NA | NA | $\geq 6.150$ |  |  |
|  | $\begin{gathered} \geq 300 \text { and } \\ <600 \end{gathered}$ | $\begin{gathered} \geq 0.6421 \mathrm{FL} \\ \geq 0.5474 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | $\begin{gathered} \geq 0.6563 \mathrm{FL} \\ \geq 0.4305 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | 54/44 | $\geq 4.930$ | $\geq 3.960$ | $\geq 2.970$ | NA | $\geq 8.900$ | $\geq 6.980$ | $\geq 5.000$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.990$ | NA | NA | NA | $\geq 6.850$ |  |  |
|  | $\geq 600$ | $\begin{aligned} & \geq 0.5895 \mathrm{FL} \\ & \geq 0.5263 \mathrm{IPLV} . \mathrm{IP} \end{aligned}$ | $\begin{aligned} & \geq 0.6143 \mathrm{FL} \\ & \geq 0.3990 \mathrm{IPLV} . \mathrm{IP} \end{aligned}$ | 54/44 ${ }^{\text {f }}$ | $\geq 4.930$ | $\geq 3.960$ | $\geq 2.970$ | NA | $\geq 8.900$ | $\geq 6.980$ | $\geq 5.000$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.990$ | NA | NA | NA | $\geq 6.850$ |  |  |
| Water-source electrically operated centrifugal | $<75$ | $\begin{gathered} \geq 0.6421 \mathrm{FL} \\ \geq 0.5789 \text { IPLV.IP } \end{gathered}$ | $\begin{gathered} \geq 0.7316 \mathrm{FL} \\ \geq 0.4632 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | 54/44 ${ }^{\text {f }}$ | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | 28.330 | $\geq 6.410$ | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.550$ | NA | NA | NA | $\geq 6.150$ |  |  |
|  | $\begin{gathered} \geq 75 \text { and } \\ <150 \end{gathered}$ | $\begin{aligned} & \quad \geq 0.5895 \mathrm{FL} \\ & \geq 0.5474 \mathrm{IPLV} \text { IP } \end{aligned}$ | $\geq 0.6684 \mathrm{FL}$$\geq 0.4211 \mathrm{IPLV} . \mathrm{IP}$ | 54/44 | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | $\geq 8.330$ | $\geq 6.410$ | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65 ${ }^{\text {f }}$ | NA | NA | NA | 23.550 | NA | NA | NA | 26.150 |  |  |
|  | $\begin{gathered} \geq 150 \text { and } \\ <300 \end{gathered}$ | $\begin{gathered} \geq 0.5895 \mathrm{FL} \\ \geq 0.5263 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | $\begin{gathered} \geq 0.6263 \mathrm{FL} \\ \geq 0.4105 \text { IPLV.IP } \end{gathered}$ | 54/44 | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | 28.330 | 26.410 | $\geq 4.420$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.550$ | NA | NA | NA | $\geq 6.150$ |  |  |
|  | $\begin{gathered} \geq 300 \text { and } \\ <600 \end{gathered}$ | $\begin{aligned} & \geq 0.5895 \mathrm{FL} \\ & \geq 0.5263 \text { IPLV.IP } \end{aligned}$ | $\begin{aligned} & \geq 0.6158 \mathrm{FL} \\ & \geq 0.4000 \text { IPLV.IP } \end{aligned}$ | 54/44 ${ }^{\text {f }}$ | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | $\geq 8.900$ | $\geq 6.980$ | $\geq 5.000$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.990$ | NA | NA | NA | 26.850 |  |  |
|  | $\geq 600$ | $\begin{gathered} \geq 0.5895 \mathrm{FL} \\ \geq 0.5263 \mathrm{IPLV} . \mathrm{IP} \end{gathered}$ | $\geq 0.6158 \mathrm{FL}$$\geq 0.4000$ IPLV.IP | 54/44 | $\geq 4.640$ | $\geq 3.680$ | $\geq 2.680$ | NA | $\geq 8.900$ | $\geq 6.980$ | $\geq 5.000$ | NA |  |  |
|  |  |  |  | 75/65' | NA | NA | NA | $\geq 3.990$ | NA | NA | NA | $\geq 6.850$ |  |  |

For SI: ${ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.
b Cooling-only rating conditions are standard rating conditions defined in AHRI 550/590, Table 1.
c Heating full-load rating conditions are at rating conditions defined in AHRI 550/590, Table 1.
d For water-cooled heat recovery chillers that have capabilities for heat rejection to a heat recovery condenser and a tower condenser, the COPHR applies to operation at full load with 100 percent heat recovery (no tower rejection). Units that only have capabilities for partial heat recovery shall meet the requirements of Table C403.3.2(3).
e Outdoor air entering dry-bulb (db) temperature and wet-bulb (wb) temperature.
f Source-water entering and leaving water temperature.
g This table is a replica of ASHRAE 90.1 Table 6.8.1-16 Heat-Pump and Heat Recovery Chiller Packages—Minimum Efficiency Requirements.
h AHRI ratings are not required for equipment sizes larger than those covered by the test standard.
i Air-to-water heat pumps that are configured to operate only in heating and not in cooling only need to comply with the minimum heating efficiencies.
j Units that are both an air-to-water heat pump and a heat recovery chiller are required to comply with either the applicable air source efficiency requirements or the heat recovery chiller requirements but not both.
k Heat pumps and heat recovery chillers are only required to comply with one of the four leaving heating water temperature criteria. The leaving heater water temperature criteria that are closest to the design leaving water temperature shall be utilized.

Table C403.3.2(16)
Ceiling-Mounted Computer-Room Air Conditioners-Minimum Efficiency Requirements ${ }^{\text {b }}$

| Equipment Type | Standard Model | Net Sensible Cooling Capacity | Minimum Net Sensible COP | Rating Conditions Return Air (drybulb/dew point) | $\begin{gathered} \text { Test } \\ \text { Procedure } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Air cooled with free air discharge condenser | Ducted | <29,000 Btu/h | 2.05 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \quad<65,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | 2.02 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.92 |  |  |
|  | Nonducted | <29,000 Btu/h | 2.08 |  |  |
|  |  | $\begin{aligned} & \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <65,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 2.05 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.94 |  |  |
| Air cooled with free air discharge condenser with fluid economizer | Ducted | <29,000 Btu/h | 2.01 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ \quad<65,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | 1.97 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.87 |  |  |
|  | Nonducted | <29,000 Btu/h | 2.04 |  |  |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | 2.00 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.89 |  |  |
| Air cooled with ducted condenser | Ducted | <29,000 Btu/h | 1.86 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.83 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.73 |  |  |
|  | Nonducted | <29,000 Btu/h | 1.89 |  |  |
|  |  | $\begin{aligned} & \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <65,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 1.86 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.75 |  |  |
| Air cooled with fluid economizer and ducted condenser | Ducted | $<29,000 \mathrm{Btu} / \mathrm{h}$ | 1.82 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.78 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.68 |  |  |
|  | Nonducted | <29,000 Btu/h | 1.85 |  |  |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.81 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.70 |  |  |
| Water cooled | Ducted | $<29,000 \mathrm{Btu} / \mathrm{h}$ | 2.38 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.28 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 2.18 |  |  |
|  | Nonducted | <29,000 Btu/h | 2.41 |  |  |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.31 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 2.20 |  |  |

Washington State Register, Issue 22-14
WSR 22-14-091

| Equipment Type | Standard Model | Net Sensible Cooling Capacity | Minimum Net Sensible COP | Rating Conditions Return Air (drybulb/dew point) | $\begin{gathered} \text { Test } \\ \text { Procedure } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Water cooled with fluid economizer | Ducted | <29,000 Btu/h | 2.33 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 2.23 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 2.13 |  |  |
|  | Nonducted | <29,000 Btu/h | 2.36 |  |  |
|  |  | $\begin{aligned} & \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <65,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 2.26 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 2.16 |  |  |
| Glycol cooled | Ducted | <29,000 Btu/h | 1.97 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.93 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.78 |  |  |
|  | Nonducted | <29,000 Btu/h | 2.00 |  |  |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | 1.98 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.81 |  |  |
| Glycol cooled with fluid economizer | Ducted | <29,000 Btu/h | 1.92 | $75^{\circ} \mathrm{F} / 52^{\circ} \mathrm{F}$ (Class 1 ) | AHRI 1360 |
|  |  | $\begin{gathered} \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ <65,000 \mathrm{Btu} / \mathrm{h} \end{gathered}$ | 1.88 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.73 |  |  |
|  | Nonducted | <29,000 Btu/h | 1.95 |  |  |
|  |  | $\begin{aligned} & \geq 29,000 \mathrm{Btu} / \mathrm{h} \text { and } \\ & <65,000 \mathrm{Btu} / \mathrm{h} \end{aligned}$ | 1.93 |  |  |
|  |  | $\geq 65,000 \mathrm{Btu} / \mathrm{h}$ | 1.76 |  |  |

For SI: 1 British thermal unit per hour $=0.2931 \mathrm{~W},{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8, \mathrm{COP}=(\mathrm{Btu} / \mathrm{h} \times \mathrm{hp})(2,550.7)$.
a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of
the test procedure
b This table is a replica of ASHRAE 90.1 Table 6.8.1-17 Ceiling-Mounted Computer-Room Air Conditioners—Minimum Efficiency Requirements.
[]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40334 Section C403.3.4-Boilers ((turndown)).

C403.3.4 Boiler requirements. Boiler systems shall comply with the following:
C403.3.4.1 Combustion air positive shut-off. Combustion air positive shut-off shall be provided on all newly installed boiler systems as follows:

1. All boiler systems with an input capacity of $2,500,000 \mathrm{Btu} / \mathrm{h}$ and above, in which the boiler is designed to operate with a nonpositive vent static pressure.
2. All boiler systems where one stack serves two or more boilers with a total combined input capacity per stack of $2,500,000 \mathrm{Btu} / \mathrm{h}$.

C403.3.4.2 Boiler system oxygen concentration controls. Boiler system combustion air fans with motors 10 horsepower or larger shall meet one of the following for newly installed boilers:

1. The fan motor shall be variable speed; or
2. The fan motor shall include controls that limit the fan motor demand to no more than 30 percent of the total design wattage at 50 percent of design air volume.

C403.3.4.3 Boiler oxygen concentration controls. Newly installed boilers with an input capacity of $5,000,000 \mathrm{Btu} / \mathrm{h}$ and greater and a steady state full-load combustion efficiency less than 90 percent shall maintain stack-gas oxygen concentrations not greater than the values specified in Table C403.3.4.3. Combustion air volume shall be controlled with respect to measured flue gas oxygen concentration. The use of a common gas and combustion air control linkage or jack shaft is prohibited.
EXCEPTION: These concentration limits do not apply where 50 percent or more of the boiler system capacity serves Group R-2 occupancies.
Table C403.3.4.3
Boiler Stack-Gas Oxygen Concentrations

| Boiler System Type | Maximum Stack-Gas Oxygen Concentration ${ }^{\text {a }}$ |
| :---: | :---: |
| Less than $10 \%$ of the boiler system capacity is used for process applications at design conditions | 5\% |
| All others | 3\% |

a Concentration levels measured by volume on a dry basis over firing rates of 20 to 100 percent.

C403.3.4.4 Boiler turndown. Boiler systems with design input of greater than $1,000,000 \mathrm{Btu} / \mathrm{h}(293 \mathrm{~kW})$ shall comply with the turndown ratio specified in Table (( C 403.3 .4 )) C403.3.4.4.

The system turndown requirement shall be met through the use of multiple single input boilers, one or more modulating boilers or a combination of single input and modulating boilers.

## Table ((C403.3.4)) C403.3.4.4 <br> Boiler Turndown

| Boiler System Design Input (Btu/h) | Minimum <br> Turndown <br> Ratio |
| :---: | :---: |
| $\geq 1,000,000$ and less than or <br> equal to $5,000,000$ | 3 to 1 |
| $\geq 5,000,000$ and less than or <br> equal to $10,000,000$ | 4 to 1 |
| $\geq 10,000,000$ | 5 to 1 |

C403.3.4.5 Buildings with high-capacity space-heating gas boiler systems. New buildings with gas hot water boiler systems for space heating with a total system input of at least $1,000,000 \mathrm{Btu} / \mathrm{h}$ but not more than $10,000,000 \mathrm{Btu} / \mathrm{h}$ shall comply with this section.
EXCEPTIONS: 1. Where 25 percent of the annual space heating requirement is provided by site-recovered energy, or heat recovery chillers.
2. Space heating boilers installed in individual dwelling units.
3. Where 50 percent or more of the design heat load is served using perimeter convective heating, radiant ceiling panels, or both.
4. Individual gas boilers with input capacity less than $300,000 \mathrm{Btu} / \mathrm{h}$ shall not be included in the calculations of the total system input or total system efficiency.

C403.3.4.5.1 Boiler efficiency. Gas hot water boilers shall have a minimum thermal efficiency (Et) of 90 percent when rated in accordance with the test procedures in Table C403.3.2(6). Systems with multiple boilers are allowed to meet this requirement if the space-heating input provided by equipment with thermal efficiency (Et) above and below 90 percent provides an input capacity-weighted average thermal efficiency of at least 90 percent. For boilers rated only for combustion efficiency, the calculation for the input capacity-weighted average thermal efficiency shall use the combustion efficiency value.

C403.3.4.5.2 Hot water distribution system design. The hot water distribution system shall be designed to meet all of the following:

1. Coils and other heat exchangers shall be selected so that at design conditions the hot water return temperature entering the boilers is $120^{\circ} \mathrm{F}\left(48.9^{\circ} \mathrm{C}\right)$ or less.
2. Under all operating conditions, the water temperature entering the boiler is $120^{\circ} \mathrm{F}\left(48.9^{\circ} \mathrm{C}\right)$ or less, or the flow rate of supply hot water that recirculates directly into the return system, such as three-way valves or minimum flow bypass controls, shall be no greater than 20 percent of the design flow of the operating boilers.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40334, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40334, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40335 Section C403.3.5—Dedicated outdoor air sys-

 tems.C403.3.5 Dedicated outdoor air systems (DOAS). For buildings with occupancies as shown in Table C403.3.5, outdoor air shall be provided to each occupied space by a dedicated outdoor air system (DOAS) which delivers 100 percent outdoor air without requiring operation of the heating and cooling system fans for ventilation air delivery.
EXCEPTIONS: $\quad$. Occupied spaces that are not ventilated by a mechanical ventilation system and are only ventilated by a natural ventilation system in accordance with Section 402 of the International Mechanical Code.
2. High efficiency variable air volume (VAV) systems complying with Section C403.6.10 for occupancy classifications other than Groups A-1, A-2 and A-3 as specified in Table C403.3.5, and high efficiency VAV systems complying with Section C403.12 for occupancy classification Groups A-1, A-2 and A-3 as specified in Table C403.3.5. This exception shall not be used as a substitution for a DOAS per Section C406.6.

Table C403.3.5
Occupancy Classifications Requiring DOAS

| Occupancy <br> Classification | Inclusions | Exempted |
| :--- | :--- | :--- |
| A-1 | All occupancies not specifically exempted | Television and radio studios |
| A-2 | Casinos (gaming area) | All other A-2 occupancies |
| A-3 | Lecture halls, community halls, exhibition <br> halls gymnasiums, courtrooms, libraries, <br> places of religious worship | All other A-3 occupancies |


| Occupancy <br> Classification | Inclusions | Exempted |
| :--- | :--- | :--- |$|$| A－4，A－5 | All occupancies not specifically exempted | Food processing establishments including <br> commercial kitchens，restaurants，cafeterias； <br> laboratories for testing and research；data <br> processing facilities and telephone exchanges； <br> air traffic control towers；animal hospitals， <br> kennels，pounds；ambulatory care facilities |
| :--- | :--- | :--- |
| B |  | All occupancies excluded |
| F，H，I，R，S，U | All occupancies included |  |
| E，M |  |  |

a．Occupancy classification from the International Building Code Chapter 3.
C403．3．5．1 DOAS with energy recovery ventilation（（with DOAS））．The DOAS shall include energy recovery（（ventilation））．The energy recov－ ery ventilation system shall have a（ $(60)$ ） 68 percent minimum sensible recovery effectiveness of the energy recovery device as calculated in accordance with Equation $4-9$ or（ have 50））provide an enthalpy recov－ ery ratio of not less than 60 percent（（enthalpy recovery effective－ fess））at design conditions in accordance with Section C403．7．6．（（for DOAS having a total fan system motor nameplate hp less than 5 hp，to－ tal combined fan power shall not exceed $1 \mathrm{~W} / \mathrm{cfm}$ of outdoor air．For DOAS having a total fan system motor hp greater than or equal to 5 hp， refer to fan power limitations of section C403．8．1．This fan power re－ striction applics to each dedicated outdoor air unit in the permitted project，but does not include the fon power associated with the zonal heating／cooling equipment．The airflow rate thresholds for energy re－ eovery requirements in Tables $6403.7 .6(1)$ and $C 403.7 .6(2)$ do not ap＝ ply－））The airflow rate thresholds in Section C403．7．6 that define when the energy recovery requirements in that section do not apply， are not applicable to this section．The return／exhaust air stream tem－ perature for heat recovery device selection shall be $70^{\circ} \mathrm{F}$（ $21^{\circ} \mathrm{C}$ ）at 30 percent relative humidity，or as calculated by the registered design professional．

## （Equation 4－9）



Where：

| $\underline{\mathrm{T}_{08}}$ | 三 | Design outdoor air dry bulb temperature entering the energy recovery device． |
| :---: | :---: | :---: |
| $\underline{T_{S A}}$ | 三 | Supply air dry bulb temperature leaving the energy recovery device at design temperatures and airflow conditions，as selected for the proposed DOAS unit（s）． |
| $\mathrm{T}_{\text {RA }}$ | 三 | Design return air dry bulb temperature． |

EXCEPTIONS：1．（ （eeupied spaees with all of the following characteristies：Complying with Section C403．7．6，served by equipment less than 5000 efm，with an average oeetpant load greater than 25 people per 1000 square feet（ $93 \mathrm{~m}^{2}$ ）of floor area（as established in Table－403．3．1．4 of the International Mechanical Code）that include demand control ventilation configured to reduce outdoor air by at least 50 percent below design minimum ventilation rates when the actual occupancy of the space served by the system is less than the design oceupancy． Z．））Systems installed for the sole purpose of providing makeup air for systems exhausting toxic，flammable，paint，or corrosive fumes or dust，dryer exhaust，or commercial kitchen hoods used for collecting and removing grease vapors and smoke．
2．Heat recovery and energy recovery ventilators（H／ERV）that are rated and listed in accordance with HVI 920 can demonstrate compliance with the sensible recovery effectiveness requirement using the adjusted sensible recovery effectiveness（ASRE）rating of the equipment at $32^{\circ} \mathrm{F}$ test conditions．Applied flow rate for ASRE rating shall be no less than the design flow rate or the closest value interpolated between two listed flow rates．
3. The energy recovery systems for Group R-2 occupancies are permitted to provide 60 percent minimum sensible heat recovery effectiveness in lieu of 68 percent sensible recovery effectiveness in accordance with Section C403.7.6. The return/exhaust air stream temperature for heat recovery device selection shall be $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$ or as determined by an approved calculation procedure.
C403.3.5.2 DOAS fan power. For a DOAS that does not have at least one fan or fan array with fan electrical input power $\geq 1 \mathrm{~kW}$, the total combined fan power shall not exceed 1 watt per cfm of outdoor air as calculated in accordance with Equation $4-10$ using design maximum airflows and external static pressures. For a DOAS with at least one fan or fan array with fan electrical input power $\geq 1 \mathrm{~kW}$, the DOAS shall comply with the fan power limitations of Section C403.8.1. DOAS total combined fan power shall include all supply, exhaust and other fans utilized for the purpose of ventilation. This fan power restriction applies to each DOAS in the permitted project, but does not include the fan power associated with the zonal heating and cooling equipment.


Where:

| Fan bhp | = | Brake horsepower for eac |
| :---: | :---: | :---: |
|  |  | supply, exhaust and other fan in the system at design maximum airflow rate. |
| $\underline{1}$ | 三 | Fan motor efficiency including all motor, drive and other losses for each fan in the system. |
| $\mathrm{CFM}_{\text {supply }}$ | 三 | Design maximum airflow rate of outdoor (supply) air. |

C403.3.5.3 Heating ( $(t)$ ) and cooling system fan controls. Heating and cooling equipment fans, heating and cooling circulation pumps, and terminal unit fans shall cycle off and terminal unit primary cooling air shall be shut off when there is no call for heating or cooling in the zone.
EXCEPTION: Fans used for heating and cooling using less than 0.12 watts per cfm may operate when space temperatures are within the setpoint deadband (Section C403.4.1.2) to provide destratification and air mixing in the space.
((C403.3.5.3)) C403.3.5.4 Decoupled DOAS supply air. The DOAS supply air shall be delivered directly to the occupied space or downstream of the terminal heating and/or cooling coils.
EXCEPTIONS: 1. Active chilled beam systems.
2. Sensible only cooling terminal units with pressure independent variable airflow regulating devices limiting the DOAS supply air to the greater of latent load or minimum ventilation requirements.
3. Terminal heating and/or cooling units that comply with the low fan power allowance requirements in the exception of Section ((C403.3.5.2)) C403.3.5.3.

C403.3.5.5 Supplemental heating and cooling. Supply air stream heating in the DOAS system shall comply with Section C403.7.3. Cooling is permitted for dehumidification only. Cooling coil shall be sized to meet peak dehumidification requirement at design outdoor temperatures, and no larger. Cooling coil shall be controlled to maintain supply air relative humidity or zone relative humidity.
EXCEPTION: Heating permitted for defrost control shall be locked out when outside air temperatures are above $35^{\circ} \mathrm{F}$ ( $2^{\circ} \mathrm{C}$ ). Supplemental heating for defrost shall modulate to 10 percent of the peak capacity, and shall be sized to prevent frost/damage dame to the unit at design temperatures and provide supply air less than or equal to $55^{\circ} \mathrm{F}\left(13^{\circ} \mathrm{C}\right)$.
((C403.3.5.4)) C403.3.5.6 Impracticality. Where the code official determines that full compliance with ( (zll)) one or more of the requirements ( ( $\dagger \pm$ ) ) in Sections C403.3.5.1 ((and C403.3.5.2 would be))
through C403.3.5.5 is impractical, it is permissible to provide an ap-
proved alternate means of compliance that achieves a comparable level of energy efficiency as the requirement(s) deemed impractical. For the purposes of this section, impractical means that an HVAC system complying with all requirements in Section C403.3.5 cannot effectively be utilized due to an unusual use or configuration of the building.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40335, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40335, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40336 Section C403.3.6-Ventilation for Group R-2 occupancy.
C403.3.6 Ventilation for Group R-2 occupancy. For all Group R-2 dwelling and sleeping units, a balanced ventilation system with a heat recovery system ( (with minimum 60 percent sensible recovery effectiveness)) shall provide outdoor air directly to all habitable spaces. The heat recovery system shall have a 60 percent minimum sensible recovery effectiveness as calculated in accordance with Section c403.3.5.1. The ventilation system shall allow for the design flow rates to be tested and verified at each habitable space as part of the commissioning process in accordance with Section C408.2.2.
EXCEPTION: Heat recovery and energy recovery ventilators (H/ERV) that are rated and listed in accordance with HVI 920 can demonstrate compliance with the sensible recovery effectiveness requirement using the adjusted sensible recovery effectiveness (ASRE) rating of the equipment at $32^{\circ} \mathrm{F}$ test conditions. Applied flow rate for ASRE rating shall be no less than the design flow rate or the closest value interpolated between two listed flow rates.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40336, filed 11/26/19, effective 7/1/20.]

## NEW SECTION

## WAC 51-11C-40337 Section C403.3.7-Hydronic system flow rate.

C403.3.7 Hydronic system flow rate. Chilled water and condenser water piping shall be designed such that the design flow rate in each pipe segment shall not exceed the values listed in Table C403.3.7 for the appropriate total annual hours of operation. Pipe sizes for systems that operate under variable flow conditions (e.g., modulating 2-way control valves at coils) and that contain variable speed pump motors are permitted to be selected from the "Variable Flow/Variable Speed" columns. All others shall be selected from the "Other" columns.
EXCEPTION: Design flow rates exceeding the values in Table C403.3.7 are permitted in specific sections of pipe if the pipe is not in the critical circuit at design conditions and is not predicted to be in the critical circuit during more than 30 percent of operating hours.

Table C403.3.7
Piping System Design Maximum Flow Rate in GPM ${ }^{\text {a }}$

| Pipe Size | $\leq 2000$ hours/year |  | $>\mathbf{2 0 0 0}$ and $\leq \mathbf{4 4 0 0}$ hours/year |  | $>\mathbf{4 4 0 0}$ hours/year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in) | Other | Variable Flow/ <br> Variable Speed | Other | Variable Flow/ <br> Variable Speed | Other | Variable Flow/ <br> Variable Speed |
| $21 / 2$ | 120 | 180 | 85 | 130 | 68 | 110 |
| 3 | 180 | 270 | 140 | 210 | 110 | 170 |
| 4 | 350 | 530 | 260 | 400 | 210 | 320 |
| 5 | 410 | 620 | 310 | 470 | 250 | 370 |
| 6 | 740 | 1100 | 570 | 860 | 440 | 680 |
| 8 | 1200 | 1800 | 900 | 1400 | 700 | 1100 |
| 10 | 1800 | 2700 | 1300 | 2000 | 1000 | 1600 |
| 12 | 2500 | 3800 | 1900 | 2900 | 1500 | 2300 |
| Maximum <br> velocity for <br> pipes over 14 to <br> 24 in. in size | $8.5 \mathrm{ft} / \mathrm{s}$ | $13.0 \mathrm{ft} / \mathrm{s}$ | $6.5 \mathrm{ft} / \mathrm{s}$ | $9.5 \mathrm{ft} / \mathrm{s}$ | $5.0 \mathrm{ft} / \mathrm{s}$ | $7.5 \mathrm{ft} / \mathrm{s}$ |

a There are no requirements for pipe sizes smaller than the minimum size or larger than the maximum size shown in the table.

## []

NEW SECTION

## WAC 51-11C-40338 Section C403.3.8-Hydronic coils.

C403.3.8 Hydronic coil selection. Hydronic coils shall comply with Sections C403.3.8.1 and C403.3.8.2.
EXCEPTION: Replacement coils within existing equipment.
C403.3.8.1 Chilled-water coil selection. Chilled-water cooling coils shall be selected to provide a $15^{\circ} \mathrm{F}$ or higher temperature difference between leaving and entering water temperatures and a minimum of $57^{\circ} \mathrm{F}$ leaving water temperature at design conditions.

EXCEPTIONS: $\quad$. Chilled-water cooling coils that have an airside pressure drop exceeding 0.70 in. of water when rated at 500 fpm face velocity and dry conditions (no condensation).
2. Individual fan-cooling units with a design supply airflow rate $\leq 5000 \mathrm{cfm}$.
3. Constant-air-volume systems.
4. Coils selected at the maximum temperature difference allowed by the cooling plant equipment manufacturer's approved operating conditions.
5. Passive coils (no mechanically supplied airflow).
6. Coils with design entering chilled-water temperature $\geq 50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right)$.
7. Coils with design entering air dry-bulb temperature $\leq 65^{\circ} \mathrm{F}\left(18^{\circ} \mathrm{C}\right)$.

C403.3.8.2 Hot-water coil selection. Hot-water heating coils shall be selected to provide a maximum $20^{\circ}$ F temperature difference between leaving and entering water temperatures and a maximum of $118^{\circ} \mathrm{F}\left(48^{\circ} \mathrm{C}\right)$ entering water temperature at design conditions.

EXCEPTIONS: 1. Hot-water heating systems which utilize heat pumps as the primary source.
2. Individual terminal fan units with a design supply airflow rate $\leq 1500 \mathrm{cfm}$ are exempt from the $20^{\circ} \mathrm{F}$ maximum temperature
difference between leaving and entering water temperature requirement.
3. Passive coils (no mechanically supplied airflow)
4. Coils with design leaving air temperature $\geq 95^{\circ} \mathrm{F}\left(35^{\circ} \mathrm{C}\right)$.
[]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40340 Section C403.4—HVAC system controls.

C403.4 HVAC system controls. HVAC systems shall be provided with controls in accordance with Sections C403.4.1 through ( ( 6403.4 .11 ) ) C403.4.12 and shall be capable of and configured to implement all required control functions in this code.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40340, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40340, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40340, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40341 Section C403.4.1-Thermostatic controls.

C403.4.1 Thermostatic controls. The supply of heating and cooling energy to each zone shall be controlled by individual thermostatic controls capable of responding to temperature within the zone. Controls in the same zone or in neighboring zones connected by openings larger than 10 percent of the floor area of either zone shall not allow for simultaneous heating and cooling. At a minimum, each floor of a building shall be considered as a separate zone. Controls on systems required to have economizers and serving single zones shall have multiple cooling stage capability and activate the economizer when appropriate as the first stage of cooling. See Section c403.5 for further economizer requirements. Where humidification or dehumidification or both is provided, at least one humidity control device shall be provided for each humidity control system.
EXCEPTIONS: 1. Independent perimeter systems that are designed to offset only building envelope heat losses or gains or both serving one or more perimeter zones also served by an interior system provided:
1.1. The perimeter system includes at least one thermostatic control zone for each building exposure having exterior walls facing only one orientation (within $+/-45$ degrees) ( 0.8 rad ) for more than 50 contiguous feet $(15,240 \mathrm{~mm})$;
1.2. The perimeter system heating and cooling supply is controlled by a thermostat located within the zones served by the system; and 1.3. Controls are configured to prevent the perimeter system from operating in a different heating or cooling mode from the other equipment within the zones or from neighboring zones connected by openings larger than 10 percent of the floor area of either zone. 2. ((Any interior zone open to a perimeter zone-shall have setpoints and deadbands coordinated so that cooling in the interior zone-shall not operate while the perimeter zone is in heating until the interior zone temperature is $5^{\circ} \mathrm{F}\left(2.8^{\circ} \mathrm{C}\right)$ higher than the perimeter zone temperature, unless the interior and perimeter zones are separated by a partition whose permanent openings are smaller than 10 percent of the perimeter zone floor area.)) Where an interior zone and a perimeter zone are open to each other with permanent openings larger than 10 percent of the floor area of either zone, cooling in the interior zone is permitted to operate at times when the perimeter zone is in heating and the interior zone temperature is at least $5^{\circ} \mathrm{F}\left(2.8^{\circ} \mathrm{C}\right)$ higher than the perimeter zone temperature. For the purposes of this exception, a permanent opening is an opening without doors or other operable closures.
3. Dedicated outdoor air units that provide ventilation air, make-up air or replacement air for exhaust systems are permitted to be controlled based on supply air temperature. The supply air temperature shall be controlled to a maximum of $65^{\circ} \mathrm{F}\left(18.3^{\circ} \mathrm{C}\right)$ in heating and a minimum of $72^{\circ} \mathrm{F}\left(22^{\circ} \mathrm{C}\right)$ in cooling unless the supply air temperature is being reset based on the status of cooling or heating in the zones served or it being reset based on outdoor air temperature.
C403.4.1.1 Heat pump supplementary heat. Unitary air cooled heat pumps shall include microprocessor controls that minimize supplemental heat usage during start-up, set-up, and defrost conditions. These controls shall anticipate need for heat and use compression heating as the first stage of heat. Controls shall indicate when supplemental heating is being used through visual means (e.g., LED indicators). Heat pumps
equipped with supplementary heaters shall be installed with controls that prevent supplemental heater operation above $40^{\circ} \mathrm{F}\left(4.4^{\circ} \mathrm{C}\right)$.
EXCEPTION: Packaged terminal heat pumps (PTHPs) of less than 2 tons ( $24,000 \mathrm{Btu} / \mathrm{hr}$ ) cooling capacity ( $($ provided with controls that prevent suppleme here $40^{\circ} \mathrm{F}\left(4.4^{\circ} \mathrm{C}\right)$ ) that have reverse-cycle demand defrost and are configured to operate in heat pump mode whenever the outdoor air temperatures are above $25^{\circ} \mathrm{F}\left(-3.9^{\circ} \mathrm{C}\right)$ and the unit is not in defrost.
C403.4.1.2 Deadband. Where used to control both heating and cooling, zone thermostatic controls shall be configured to provide a temperature range or deadband of at least $5^{\circ} \mathrm{F}\left(2.8^{\circ} \mathrm{C}\right)$ within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.
EXCEPTIONS: 1. Thermostats requiring manual changeover between heating and cooling modes.
2. Occupancies or applications requiring precision in indoor temperature control as approved by the code official.

C403.4.1.3 Setpoint overlap restriction. Where a zone has a separate heating and a separate cooling thermostatic control located within the zone, a limit switch, mechanical stop or direct digital control system with software programming shall be configured to prevent the heating setpoint from exceeding the cooling setpoint and to maintain a deadband in accordance with Section C403.4.1.2.
C403.4.1.4 Heated or cooled vestibules and air curtains. The heating system for heated vestibules and air curtains with integral heating shall be provided with controls configured to shut off the source of heating when the outdoor air temperature is greater than $45^{\circ} \mathrm{F}$ ( $7^{\circ} \mathrm{C}$ ). Vestibule heating and cooling systems shall be controlled by a thermostat located in the vestibule configured to limit heating to a temperature not greater than $60^{\circ} \mathrm{F}\left(16^{\circ} \mathrm{C}\right)$ and cooling to a temperature not less than $85^{\circ} \mathrm{F}\left(29^{\circ} \mathrm{C}\right)$.
EXCEPTIONS: 1. Control of heating or cooling provided by transfer air that would otherwise be exhausted.
$2(()$,$) . Vestibule heating only systems are permitted to be controlled without an outdoor air temperature lockout when controlled by a$ thermostat located in the vestibule configured to limit heating to a temperature not greater than $45^{\circ} \mathrm{F}\left(7^{\circ} \mathrm{C}\right)$ where required for freeze protection of piping and sprinkler heads located in the vestibule.

C403.4.1.5 Hot water boiler outdoor temperature setback control. Hot water boilers that supply heat to the building through one- or twopipe heating systems shall have an outdoor setback control that lowers the boiler water temperature based on the outdoor temperature.
C403.4.1.6 ((Doox)) Operable opening switches for HVAC system thermostatic control. ((Doors)) Operable openings meeting the minimum size criteria of Section C402.5.11 and that open to the outdoors from a conditioned space must have controls configured to do the following once doors have been open for 5 minutes:

1. Disable the mechanical heating to the zone or reset the space heating temperature setpoint to $55^{\circ} \mathrm{F}$ or less within 5 minutes of the door open enable signal.
2. Disable the mechanical cooling to the zone or reset the space cooling temperature setpoint to $85^{\circ} \mathrm{F}$ or more within 5 minutes of the door open enable signal.
EXCEPTION((S)): ((1. Building entrances with vestibules.)) Hydronic radiant heating and cooling systems. ((2. Alterations to existing buildings.
3. Loading docks.))

C403.4.1.7 Demand responsive controls. Thermostatic controls for heating or cooling systems shall be provided with demand responsive controls capable of increasing the cooling setpoint and decreasing the heating setpoint by no less than $4^{\circ} \mathrm{F}\left(2.2^{\circ} \mathrm{C}\right)$. The thermostatic controls shall be capable of performing all other functions provided by the control when the demand responsive controls are not available. Systems with direct digital control of individual zones report to a central control panel shall be capable of remotely increasing the
cooling setpoint and decreasing the heating setpoint for each zone by no less than $4^{\circ} \mathrm{F}\left(2.2^{\circ} \mathrm{C}\right)$.
EXCEPTION: Health care and assisted living facilities.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40341, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40341, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27.020, and 19.27.074. WSR 14-24-122, S 51-11C-40341, filed 12/3/14, effective 1/3/15. Statutory Authority: RCW 19.27A.025, 19.27A.045, and 19.27.074. WSR 13-20-120, § 51-11C-40341, filed 10/1/13, effective 11/1/13. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, S 51-11C-40341, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40342 Section C403.4.2-Off-hour controls.

C403.4.2 Off-hour controls. For all occupancies other than Group R, each zone shall be provided with thermostatic setback controls that are controlled by either an automatic time clock or programmable control system.
EXCEPTIONS: 1. Zones that will be operated continuously.
2. Zones with a full HVAC load demand not exceeding $6,800 \mathrm{Btu} / \mathrm{h}(2 \mathrm{~kW})$ and having a manual shutoff switch located with ready access.
C403.4.2.1 Thermostatic setback. Thermostatic setback controls shall be configured to set back or temporarily operate the system to maintain zone temperatures down to $55^{\circ} \mathrm{F}\left(13^{\circ} \mathrm{C}\right)$ or up to $85^{\circ} \mathrm{F}\left(29^{\circ} \mathrm{C}\right)$.

C403.4.2.2 Automatic setback and shutdown. Automatic time clock or programmable controls shall be capable of starting and stopping the system for seven different daily schedules per week and retaining their programming and time setting during a loss of power for at least 10 hours. Additionally, the controls shall have a manual override that allows temporary operation of the system for up to 2 hours; a manually operated timer configured to operate the system for up to 2 hours; or an occupancy sensor.
C403.4.2.3 Automatic start and stop. Automatic start and stop controls shall be provided for each HVAC system. The automatic start controls shall be configured to automatically adjust the daily start time of the HVAC system in order to bring each space to the desired occupied temperature immediately prior to scheduled occupancy. Automatic stop controls shall be provided for each HVAC system with direct digital control of individual zones. The automatic stop controls shall be configured to reduce the HVAC system's heating temperature setpoint and increase the cooling temperature setpoint by at least $2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$ before scheduled unoccupied periods based upon the thermal lag and acceptable drift in space temperature that is within comfort limits. ( (At a minimum, the controls shall be a function of the space tempera= ture, occupied and unoceupied temperatures, and the amount of time prior to scheduled oceupancy.))

C403.4.2.4 Exhaust system off-hour controls. For all occupancies other than Group R, exhaust systems serving spaces within the conditioned envelope shall be controlled by either an automatic time clock, thermostatic controls or programmable control system to operate on the same schedule as the HVAC systems providing their make-up air.

EXCEPTIONS: 1. Exhaust systems requiring continuous operation.
2. Exhaust systems that are controlled by occupancy sensor control configured with automatic on and automatic shutoff within 15 minutes after occupants have left the space.
C403.4.2.5 Transfer and destratification fan system off-hour controls. For all occupancies other than Group $R$, transfer fan or mixing fan systems serving spaces within the conditioned envelope shall be controlled by either an automatic time clock, thermostatic controls or programmable control system to operate on the same schedule as the associated HVAC systems.
EXCEPTION: Transfer fan and destratification fan systems that are controlled by occupancy sensor control configured with manual on and automatic shutoff within 15 minutes after occupants have left the space.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40342, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40342, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40342, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40344 Section C403.4.4—Part load controls.

C403.4.4 Part load controls. Hydronic systems greater than or equal to $300,000 \mathrm{Btu} / \mathrm{h}(88 \mathrm{~kW})$ in design output capacity supplying heated or chilled water to comfort conditioning systems shall include controls that are configured to:

1. Automatically reset the supply-water temperatures in response to varying building heating and cooling demand using coil valve position, zone-return water temperature or outdoor air temperature. The temperature shall be reset by not less than 25 percent of the design supply-to-return water temperature difference.
EXCEPTIONS: $\quad$ 1. Hydronic systems serving hydronic heat pumps.
2. Hydronic systems with thermal energy storage where resetting the supply-water temperature would reduce the capacity of the storage.
3. Automatically vary fluid flow for hydronic systems with a combined pump motor capacity of 2 hp or larger with three or more control valves or other devices by reducing the system design flow rate by not less than 50 percent or the maximum reduction allowed by the equipment manufacturer for proper operation of equipment by valves that modulate or step open and close, or pumps that modulate or turn on and off as a function of load.
4. Automatically vary pump flow on heating water systems, chil-led-water systems and heat rejection loops serving water-cooled unitary air conditioners as follows:
3.1. Where pumps operate continuously or operate based on a time schedule, pumps with nominal output motor power of 2 hp or more shall have a variable speed drive.
3.2. Where pumps have automatic direct digital control configured to operate pumps only when zone heating or cooling is required, a variable speed drive shall be provided for pumps with motors having the same or greater nominal output power indicated in Table C403.4.4 based on the climate zone and system served.
5. Where variable speed drive is required by Item 3 of this section, pump motor power input shall be not more than 30 percent of design wattage at 50 percent of the design water flow. Pump flow shall be controlled to maintain one control valve nearly wide open or to satisfy the minimum differential pressure.
EXCEPTIONS: 1. Supply-water temperature reset is not required for chilled-water systems supplied by off-site district chilled water or chilled water from ice storage systems.
6. Variable pump flow is not required on dedicated coil circulation pumps where needed for freeze protection.
7. Variable pump flow is not required on dedicated equipment circulation pumps where configured in primary/secondary design to provide the minimum flow requirements of the equipment manufacturer for proper operation of equipment.
8. Variable speed drives are not required on heating water pumps where more than 50 percent of annual heat is generated by an electric boiler.

Table C403.4.4
Variable Speed Drive (VSD) Requirements for Demand-Controlled Pumps

| Climate Zones 4c, 5b | VSD Required for <br> Motors with Rated <br> Output of at Least |
| :--- | :---: |
| Heating water pumps | $\geq 7.5 \mathrm{hp}$ |
| Chilled water and heat <br> rejection loop pumps | $\geq 7.5 \mathrm{hp}$ |

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40344, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-40344, filed 5/2/17, effective 6/2/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40344, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40344, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40349 Sections C403.4.11((-DDC systems)) and

 C403.4.12.C403.4.11 Direct digital control systems. Direct digital control (DDC) shall be required as specified in Sections C403.4.11.1 through ((C403.4.11.3)) C403.4.11.4.
C403.4.11.1 DDC applications. DDC shall be provided in the applications and qualifications listed in Table C403.4.11.1 and for load management measures where installed to meet the requirements of Section C406.3.
C403.4.11.2 DDC controls. Where DDC is required by Section C403.4.11.1, the DDC system shall be ((eapable of)) configured to perform all of the following functions, as required to provide the system and zone control logic required in Sections C403.2, C403.5, C403.6.8 and C403.4.3:

1. ((Monitoring)) Monitor zone and system demand for fan pressure, pump pressure, heating and cooling.
2. ((Transferring)) Transfer zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers.
C403.4.11.3 DDC display. Where DDC is required by Section C403.4.11.1 for new buildings, the DDC system shall be ((eapable of)) configured to gather and provide trending data and graphically displaying input and output points.
C403.4.11.4 DDC demand response setpoint adjustment. Where DDC is required by Section c403.4.11.1 for new buildings and serve mechanical systems with a cooling capacity exceeding 780,000 Btu/h $(2,662 \mathrm{~kW})$, the DDC system shall be capable of demand response setpoint adjustment. The DDC system shall be configured with control logic to increase the cooling zone setpoints by at least $2^{\circ} \mathrm{F}\left(1^{\circ} \mathrm{C}\right)$ and reduce the heating zone setpoints by at least $2^{\circ} \mathrm{F}\left(1^{\circ} \mathrm{C}\right)$ when activated by a demand response signal. The demand response signal shall be a binary input to the control system or other interface approved by the serving electric utility.

Table C403.4.11.1
DDC Applications and Qualifications

| Building <br> Status | Application | Qualifications |
| :--- | :--- | :--- |
| New <br> building | ((Air-handling system and all zones <br> served by the system | All air-handling systems in buildings with building eooling <br> eapaity greater than 780,000 Btu/h)) |
|  | Air-handling system and all zones served <br> by the system | Individual systems supplying more than three zones and with <br> fan system bhp of 10 hp and larger |
|  | Chilled-water plant and all coils and <br> terminal units served by the system | Individual plants supplying more than three zones and with <br> design cooling capacity of 300,000 Btu/h and larger |
|  | Hot-water plant and all coils and terminal <br> units served by the system | Individual plants supplying more than three zones and with <br> design heating capacity of 300,000 Btu/h and larger |
| Alteration <br> or addition | Zone terminal unit such as VAV box | Where existing zones served by the same air-handling, chilled- <br> water, or hot-water system have DDC |
|  | Air-handling system or fan coil | Where existing air-handling system(s) and fan coil(s) served by <br> the same chilled- or hot-water plant have DDC |
|  | New air-handling system and all new <br> zones served by the system | Individual systems with fan system bhp of 10 hp and larger and <br> supplying more than three zones and more than 75 percent of <br> zones are new |
|  | New or upgraded chilled-water plant | Where all chillers are new and plant design cooling capacity is <br> 300,000 Btulh and larger |
|  | New or upgraded hot-water plant | Where all boilers aren en and plant design heating capacity is <br> 300,000 Btu/h and larger |

C403.4.12 Pressure independent control valves. Where design flow rate of heating water and chiller water coils is 5 gpm or higher, modulating pressure independent control valves shall be provided.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40349, filed 11/26/19, effective 7/1/20.]

## WAC 51-11C-40350 Section C403.5-Economizers.

C403.5 Economizers. Air economizers shall be provided on all new cooling systems including those serving computer server rooms, electronic equipment, radio equipment, and telephone switchgear. Economizers shall comply with Sections C403.5.1 through C403.5.5.
EXCEPTIONS: 1a. For other than Group R-2 occupancies, cooling system((s)) where the supply fan is not installed ((eutdoors)) outside the building thermal envelope nor in a mechanical room adjacent to outdoors, and is installed in conjunction with DOAS complying with Section C403.3.5 and serving only spaces with year-round cooling loads from lights and equipment of less than 5 watts per square foot. 1b. For Group R-2 occupancies, cooling system where the supply fan is not installed outside the building thermal envelope nor in a mechanical room adjacent to outdoors, and is installed in conjunction with DOAS complying with Section C403.3.5, where the ERV/HRV has a minimum 68 percent sensible recovery or 60 percent enthalpy recovery heating effectiveness (Exception 3 of Section C403.3.5.1 is not utilized), and serving only spaces with year-round cooling loads from lights and equipment of less than 5 watts per square foot.
2. Unitary or packaged systems serving one zone with dehumidification that affect other systems so as to increase the overall building energy consumption. New humidification equipment shall comply with Section $((\mathrm{C} 403.3 .2 .5))$ C403.3.2.7.
3. Unitary or packaged systems serving one zone where the cooling efficiency meets or exceeds the efficiency requirements in Table C403.5.
4. Equipment serving chilled beams and chilled ceiling space cooling systems only which are provided with a water economizer meeting the requirements of Section C403.5.4.
5. For Group R occupancies, cooling unit((s)) where the supply fan is not installed ((eutdoors)) outside the building thermal envelope or in a mechanical room adjacent to outdoors with a total cooling capacity less than $20,000 \mathrm{Btu} / \mathrm{h}$ and other cooling units with a total cooling capacity less than $54,000 \mathrm{Btu} / \mathrm{h}$ provided that these are high-efficiency cooling equipment with IEER, CEER, SEER, and EER values more than 15 percent higher than minimum efficiencies listed in ((Tables C403.3.2 (1) through (3))) Tables C403.3.2 (1), C403.3.2(2), C403.3.2(4), C403.3.2(8) and C403.3.2(9) or an IPLV kW/ton that is at least 15 percent lower than the minimum efficiencies listed in Table C403.3.2(3) or C403.3.2(15), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify for this exception. For split systems, compliance is based on the cooling capacity of individual fan coil units.
6. Equipment used to cool Controlled Plant Growth Environments provided these are high-efficiency cooling equipment with SEER, EER and IEER values a minimum of 20 percent greater than the values listed in Tables C403.3.2 (1), (3), (4), and (((7))) (15).
7. Equipment serving a space with year-round cooling loads from lights and equipment of 5 watts per square foot or greater complying with the following criteria:
7.1. Equipment serving the space utilizes chilled water as the cooling source; and
7.2. The chilled water plant includes a condenser heat recovery system that meets the requirements of Section C403.9.5 or the building and water-cooled system meets the following requirements:
7.2.1. A minimum of 90 percent (capacity-weighted) of the building space heat is provided by hydronic heating water. 7.2.2. Chilled water plant includes a heat recovery chiller or water-to-water heat pump capable of rejecting heat from the chilled water system to the hydronic heating equipment capacity.
7.2.3. Heat recovery chillers shall have a minimum COP of 7.0 when providing heating and cooling water simultaneously. 8. Water-cooled equipment served by systems meeting the requirements of Section C403.9.2.4 Condenser heat recovery.
9. Equipment used to cool any dedicated server room, electronic equipment room or telecom switch room provided the system complies with option $a, b$, or $c$ in the table below. The total cooling capacity of all fan systems without economizers shall not exceed 240,000 $\mathrm{Btu} / \mathrm{h}$ per building or 10 percent of its air economizer capacity, whichever is greater. This exception shall not be used for total building performance.
10. Dedicated outdoor air systems that include energy recovery as required by Section C 403.7 .6 but do not include mechanical cooling. 11. Dedicated outdoor air systems not required by Section C403.7.6 to include energy recovery that modulate the supply airflow to provide only the minimum outdoor air required by Section C403.2.2.1 for ventilation, exhaust air make-up, or other process air delivery.

|  | Equipment Type | Higher Equipment Efficiency | Part-Load Control | Economizer |
| :---: | :---: | :---: | :---: | :---: |
| Option a | $\begin{aligned} & \text { Tables C403.3.2(1), } \\ & \text { C403.3.2(2) and } \\ & \text { C403.3.2((12)) (14) }{ }^{\mathrm{a}} \end{aligned}$ | $+15 \%{ }^{\text {b }}$ | Required over $85,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{c}}$ | None Required |
| Option b | $\begin{aligned} & \text { Tables C403.3.2(1), } \\ & \underline{\text { C403.3.2(2) and }} \\ & \text { C403.3.2(((2))) (14) } \\ & \hline \end{aligned}$ | $+5 \%{ }^{\text {d }}$ | Required over $85,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{c}}$ | Waterside Economizer ${ }^{\mathrm{e}}$ |
| Option c | ASHRAE Standard $127^{\text {f }}$ | $+0 \%$ g | Required over $85,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{c}}$ | Waterside Economizer ${ }^{\mathrm{e}}$ |

Notes for Exception 9:
aFor a system where all of the cooling equipment is subject to the AHRI standards listed in Tables C403.3.2(1), C403.3.2(2), and C403.3.2(((2)))) (14), the system shall comply with all of the following (note that if the system contains any cooling equipment that exceeds the capacity limits in Table C403.3.2(1), C403.3.2(2), or C403.3.2(((2)))(14), or if the system contains any cooling equipment that is not included in Table C403.3.2(1), C403.3.2(2), or C403.3.2(( $(2))$ )(14), then the system is not allowed to use this option).
bThe cooling equipment shall have an EER value and an IPLV value that is a minimum of 15 percent greater than the value listed in Tables C403.3.2(1), C403.3.2(2), and C403.3.2(((2))) (14).
cFor units with a total cooling capacity over $85,000 \mathrm{Btu} / \mathrm{h}$, the system shall utilize part-load capacity control schemes that are able to modulate to a part-load capacity of 50 percent of the load or less that results in the compressor operating at the same or higher EER at part loads than at full load (e.g., minimum of two-stages of compressor unloading such as cylinder unloading, two-stage scrolls, dual tandem scrolls, but hot gas bypass is not credited as a compressor unloading system).
dThe cooling equipment shall have an EER value and an IPLV value that is a minimum of 5 percent greater than the value listed in Tables C403.3.2(1), C403.3.2(2), and C403.3.2(((2))) (14).
eThe system shall include a water economizer in lieu of air economizer. Water economizers shall meet the requirements of C403.5.1 and C403.5.2 and be capable of providing the total concurrent cooling load served by the connected terminal equipment lacking airside economizer, at outside air temperatures of $50^{\circ} \mathrm{F}$ dry-bulb $/ 45^{\circ} \mathrm{F}$ wet-bulb and below. For this calculation, all factors including solar and internal load shall be the same as those used for peak load calculations, except for the outside temperatures. The equipment shall be served by a dedicated condenser water system unless a nondedicated condenser water system exists that can provide appropriate water temperatures during hours when waterside economizer cooling is available.
fFor a system where all cooling equipment is subject to ASHRAE Standard 127.
gThe cooling equipment subject to the ASHRAE Standard 127 shall have an EER value and an IPLV value that is equal to or greater than the value listed in Tables C403.3.2(1), C403.3.2(2), and C403.3.2(((2))) (14) when determined in accordance with the rating conditions ASHRAE Standard 127 (i.e., not the rating conditions in AHRI Standard $210 / 240$ or $340 / 360$ ). This information shall be provided by an independent third party.

Table C403.5
Equipment Efficiency Performance Exception for Economizers

| Climate Zones | Efficiency Improvement $^{\text {a }}$ |
| :---: | :---: |
| 4 C | $64 \%$ |
| 5B | $59 \%$ |

a If a unit is rated with an IPLV, IEER or SEER then to eliminate the required air or water economizer, the minimum cooling efficiency of the HVAC unit must be increased by the percentage shown. If the HVAC unit is only rated with a full load metric like EER or COP cooling, then these must be increased by the percentage shown.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40350, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40350, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40350, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40355 Section C403.5.5-Economizer fault detection and diagnostics.
C403.5.5 Economizer fault detection and diagnostics (FDD). Air-cooled unitary direct-expansion units with a cooling capacity of 54,000 Btu/h or greater listed in ( (Tables C403.3.2(1) through C403.3.2(3)) ) the tables in Section C403.3.2 that are equipped with an economizer in accordance with Section C403.5 shall include a fault detection and diagnostics (FDD) system complying with the following:

1. The following temperature sensors shall be permanently installed to monitor system operation:
1.1. Outside air.
1.2. Supply air.
1.3. Return air.
2. Temperature sensors shall have an accuracy of $\pm 2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$ over the range of $40^{\circ} \mathrm{F}$ to $80^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right.$ to $\left.26.7^{\circ} \mathrm{C}\right)$.
3. Refrigerant pressure sensors, where used, shall have an accuracy of $\pm 3$ percent of full scale.
4. The unit controller shall be configured to provide system status by indicating the following:
4.1. Free cooling available.
4.2. Economizer enabled.
4.3. Compressor enabled.
4.4. Heating enabled.
4.5. Mixed air low limit cycle active.
4.6. The current value of each sensor.
5. The unit controller shall be capable of manually initiating each operating mode so that the operation of compressors, economizers, fans and the heating system can be independently tested and verified.
6. The unit shall be configured to report faults to a fault management application available for access by day-to-day operating or service personnel or annunciated locally on zone thermostats.
7. The FDD system shall be configured to detect the following faults:
7.1. Air temperature sensor failure/fault.
7.2. Not economizing when the unit should be economizing.
7.3. Economizing when the unit should not be economizing.
7.4. Damper not modulating.
7.5. Excess outdoor air.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40355, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-40360 Section C403.6-Requirements for mechanical systems serving multiple zones.
C403.6 Requirements for mechanical systems serving multiple zones. Sections C403.6.1 through C403.6.10 shall apply to mechanical systems serving multiple zones.
C403.6.1 Variable air volume (VAV) and multiple zone systems. Supply air systems serving multiple zones shall be VAV systems that have zone controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone to one of the following:

1. Twenty percent of the zone design peak supply for systems with direct digital control (DDC) and 30 percent of the maximum supply air for other systems.
2. Systems with DDC where items 2.1 through 2.3 apply.
2.1. The airflow rate in the deadband between heating and cooling does not exceed 20 percent of the zone design peak supply rate or higher allowed rates under Items 3, 4, or 5 of this section.
2.2. The first stage of heating modulates the zone supply air temperature setpoint up to a maximum setpoint while the airflow is maintained at the deadband flow rate.
2.3. The second stage of heating modulates the airflow rate from the deadband flow rate up to the heating maximum flow rate that is less than 50 percent of the zone design peak supply rate.
3. The outdoor airflow rate required to meet the minimum ventilation requirements of Chapter 4 of the International Mechanical Code.
4. Any higher rate that can be demonstrated to reduce overall system annual energy use by offsetting reheat/recool energy losses through a reduction in outdoor air intake for the system, as approved by the code official.
5. The airflow rates to comply with applicable codes or accreditation standards such as pressure relationships or minimum air change rates.

EXCEPTION: The following individual zones or entire air distribution systems are exempted from the requirement for VAV control:

1. Zones or supply air systems where not less than 75 percent of the energy for reheating or for providing warm air in mixing systems is provided from a site-recovered source, including condenser heat.
2. Systems that prevent reheating, recooling, mixing or simultaneous supply of air that has been previously cooled, either mechanically or through the use of economizer systems, and air that has been previously mechanically heated.
3. Ventilation systems complying with Section C403.3.5, DOAS, with ventilation rates comply with Section C403.2.2.

C403.6.2 Single duct variable air volume (VAV) systems, terminal devices. Single duct VAV systems shall use terminal devices capable of and configured to reduce the supply of primary supply air before reheating or recooling takes place.
C403.6.3 Dual duct and mixing VAV systems, terminal devices. Systems that have one warm air duct and one cool air duct shall use terminal devices which are capable of and configured to reduce the flow from one duct to a minimum before mixing of air from the other duct takes place.

C403.6.4 Supply-air temperature reset controls. Multiple zone HVAC systems shall include controls that are capable of and configured to automatically reset the supply-air temperature in response to representative building loads, or to outdoor air temperature. The controls shall be configured to reset the supply air temperature at least 25 percent of the difference between the design supply-air temperature and the design room air temperature. Controls that adjust the reset based on zone humidity are allowed. HVAC zones that are expected to experience relatively constant loads shall have maximum airflow designed to accommodate the fully reset supply air temperature.
EXCEPTIONS: 1. Systems that prevent reheating, recooling or mixing of heated and cooled supply air.
2. Seventy-five percent of the energy for reheating is from a site-recovered source.
(( 3 . Zones with peak stipply air quantities of $300 \mathrm{efm}(142 \mathrm{~L} / \mathrm{s}$ ) or less.) )
C403.6.5 Multiple-zone VAV system ventilation optimization control. Multiple-zone VAV systems with direct digital control of individual zone boxes reporting to a central control panel shall have automatic controls configured to reduce outdoor air intake flow below design rates in response to changes in system ventilation efficiency ( $E_{V}$ ) as defined by the International Mechanical Code.
EXCEPTIONS: 1. VAV systems with zonal transfer fans that recirculate air from other zones without directly mixing it with outdoor air, dual-duct dualfan VAV systems, and VAV systems with fan-powered terminal units.
2. Systems where total design exhaust airflow is more than 70 percent of total design outdoor air intake flow requirements.

C403.6.6 Parallel-flow fan-powered VAV air terminal control. Parallelflow fan-powered VAV air terminals shall have automatic controls configured to:

1. Turn off the terminal fan except when space heating is required or where required for ventilation.
2. Turn on the terminal fan as the first stage of heating before the heating coil is activated.
3. During heating for warmup or setback temperature control, either:
3.1. Operate the terminal fan and heating coil without primary air.
3.2. Reverse the terminal damper logic and provide heating from the central air handler by primary air.
( (C403.6.7 Hydronic and multiple-zone HVAC system controls and equipment. Hydronic and multiple-zone HVAC system controls and equipment shall comply with this section.

For buildings with a total equipment cooling capacity of 300 tons and above, the equipment shall comply with one of the following:

# 1. No one unit shall have a cooling capacity of more than $2 / 3$ of <br> the total installed cooling equipment capacity; <br> Z. The equipment shall have a variable speed drive; or <br> 3. The equipment shall have multiple compressors.)) 

## C403.6.7 Reserved.

C403.6.8 Set points for direct digital control. For systems with direct digital control of individual zones reporting to the central control panel, the static pressure setpoint shall be reset based on the zone requiring the most pressure. In such cases, the set point is reset lower until one zone damper is nearly wide open. The direct digital controls shall be capable of monitoring zone damper positions or shall have an alternative method of indicating the need for static pressure that is configured to provide all of the following:

1. Automatically detecting any zone that excessively drives the reset logic.
2. Generating an alarm to the system operational location.
3. Allowing an operator to readily remove one or more zones from the reset algorithm.
C403.6.9 Static pressure sensor location. Static pressure sensors used to control VAV fans shall be located such that the controller setpoint is no greater than 1.2 inches w.c. (299 Pa). Where this results in one or more sensors being located downstream of major duct splits, not less than one sensor shall be located on each major branch to ensure that static pressure can be maintained in each branch.
EXCEPTION: Systems complying with Section C403.6.8.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40360, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40360, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-40360, filed 5/2/17, effective 6/2/17; WSR 16-13-089, § 51-11C-40360, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40360, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40360, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-403610 Section C403.6.10—High efficiency VAV sys-

 tems.C403.6.10 High efficiency variable air volume (VAV) systems. For HVAC systems subject to the requirements of Section C403.3.5 but utilizing Exception 2 of that section, a high efficiency multiple-zone VAV system may be provided without a separate parallel DOAS when the system is designed, installed, and configured to comply with all of the following criteria (this exception shall not be used as a substitution for a DOAS per Section C406.6):

1. Each VAV system must serve a minimum of 3,000 square feet $\left(278.7 \mathrm{~m}^{2}\right)$ and have a minimum of five VAV zones.
2. The VAV systems are provided with airside economizer per Section C403.5 without exceptions.
3. A direct-digital control (DDC) system is provided to control the VAV air handling units and associated terminal units per Section C403.4.11 regardless of sizing thresholds of Table C403.4.11.1.
4. Multiple-zone VAV systems with a minimum outdoor air requirement of $2,500 \mathrm{cfm}(1180 \mathrm{~L} / \mathrm{s})$ or greater shall be equipped with a device capable of measuring outdoor airflow intake under all load conditions. The system shall be capable of increasing or reducing the outdoor airflow intake based on feedback from the VAV terminal units as required by Section C403.6.5, without exceptions, and Section C403.7.1 demand controlled ventilation.
5. Multiple-zone VAV systems with a minimum outdoor air requirement of $2,500 \mathrm{cfm}(1180 \mathrm{~L} / \mathrm{s})$ or greater shall be equipped with a device capable of measuring supply airflow to the VAV terminal units under all load conditions.
6. In addition to meeting the zone isolation requirements of C403.2.1 a single VAV air handling unit shall not serve more than 50,000 square feet ( $4645 \mathrm{~m}^{2}$ ) unless a single floor is greater than 50,000 square feet ( $4645 \mathrm{~m}^{2}$ ) in which case the air handler is permitted to serve the entire floor.
7. The primary maximum cooling air for the VAV terminal units serving interior cooling load driven zones shall be sized for a supply air temperature that is a minimum of $5^{\circ} \mathrm{F}$ greater than the supply air temperature for the exterior zones in cooling.
8. Air terminal units with a minimum primary airflow setpoint of 50 percent or greater of the maximum primary airflow setpoint shall be sized with an inlet velocity of no greater than 900 feet per minute.
9. Allowable fan ((motor horsepower)) power shall not exceed 90 percent of the allowable ((HVAC fan system bhp (Option 2)) fan power budget as defined by Section C403.8.1.1.
10. All fan powered VAV terminal units (series or parallel) shall be provided with electronically commutated motors. The DDC system shall be configured to vary the speed of the motor as a function of the heating and cooling load in the space. Minimum speed shall not be greater than 66 percent of design airflow required for the greater of heating or cooling operation. Minimum speed shall be used during periods of low heating and cooling operation and ventilation-only operation.
EXCEPTION: For series fan powered terminal units where the volume of primary air required to deliver the ventilation requirements at minimum speed exceeds the air that would be delivered at the speed defined above, the minimum speed setpoint shall be configured to exceed the value required to provide the required ventilation air.
11. Fan-powered VAV terminal units shall only be permitted at perimeter zones with an envelope heating load requirement. All other VAV terminal units shall be single duct terminal units.
EXCEPTION: Fan powered VAV terminal units are allowed at interior spaces with an occupant load greater than or equal to 25 people per 1000 square feet of floor area (as established in Table 403.3.1.1 of the International Mechanical Code) with demand control ventilation in accordance with Section C403.7.1.
12. When in occupied heating or in occupied deadband between heating and cooling all fan powered VAV terminal units shall be configured to reset the primary air supply setpoint, based on the VAV air handling unit outdoor air vent fraction, to the minimum ventilation airflow required per International Mechanical Code.
13. Spaces that are larger than 150 square feet ( $14 \mathrm{~m}^{2}$ ) and with an occupant load greater than or equal to 25 people per 1000 square feet ( $93 \mathrm{~m}^{2}$ ) of floor area (as established in Table 403.3.1.1 of the International Mechanical Code) shall be provided with all of the following features:
13.1. A dedicated VAV terminal unit capable of controlling the space temperature and minimum ventilation shall be provided.
13.2. Demand control ventilation (DCV) shall be provided that utilizes a carbon dioxide sensor to reset the ventilation setpoint of the VAV terminal unit from the design minimum to design maximum ventilation rate as required by Chapter 4 of the International Mechanical Code.
13.3. Occupancy sensors shall be provided that are configured to reduce the minimum ventilation rate to zero and setback room temperature setpoints by a minimum of $5^{\circ} \mathrm{F}$, for both cooling and heating, when the space is unoccupied.
14. Dedicated data centers, computer rooms, electronic equipment rooms, telecom rooms, or other similar spaces with cooling loads greater than 5 watts/sf shall be provided with separate cooling systems to allow the VAV air handlers to turn off during unoccupied hours in the office space and to allow the supply air temperature reset to occur.
EXCEPTION: The VAV air handing unit and VAV terminal units may be used for secondary backup cooling when there is a failure of the primary HVAC system.
Additionally, computer rooms, electronic equipment rooms, telecom rooms, or other similar spaces shall be provided with airside economizer in accordance with Section 403.5 without using the exceptions to Section C403.5.
EXCEPTION: Heat recovery per Exception 9 of Section C403.5 may be in lieu of airside economizer for the separate, independent HVAC system.
15. HVAC system central heating or cooling plant will include a minimum of one of the following options:
15.1. VAV terminal units with hydronic heating coils connected to systems with hot water generation equipment limited to the following types of equipment: Gas-fired hydronic boilers with a thermal efficiency, $E_{t}$, of not less than 92 percent, air-to-water heat pumps or heat recovery chillers. Hydronic heating coils shall be sized for a maximum entering hot water temperature of $120^{\circ} \mathrm{F}\left(48.9^{\circ} \mathrm{C}\right)$ for peak anticipated heating load conditions.
15.2. Chilled water VAV air handing units connected to systems with chilled water generation equipment with IPLV values more than 25 percent higher than the minimum part load efficiencies listed in Table (( (403.3.2(7)) ) C403.3.2(3), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify. The smallest chiller or compressor in the central plant shall not exceed 20 percent of the total central plant cooling capacity or the chilled water system shall include thermal storage sized for a minimum of 20 percent of the total central cooling plant capacity.
16. The DDC system shall include a fault detection and diagnostics (FDD) system complying with the following:
16.1. The following temperature sensors shall be permanently installed to monitor system operation:
16.1.1. Outside air.
16.1.2. Supply air.
16.1.3. Return air.
16.2. Temperature sensors shall have an accuracy of $\pm 2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$ over the range of $40^{\circ} \mathrm{F}$ to $80^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right.$ to $\left.26.7^{\circ} \mathrm{C}\right)$.
16.3. The VAV air handling unit controller shall be configured to provide system status by indicating the following:
16.3.1. Free cooling available.
16.3.2. Economizer enabled.
16.3.3. Compressor enabled.
16.3.4. Heating enabled.
16.3.5. Mixed air low limit cycle active.
16.3.6. The current value of each sensor.
16.4. The VAV air handling unit controller shall be capable of manually initiating each operating mode so that the operation of compressors, economizers, fans and the heating system can be independently tested and verified.
16.5. The VAV air handling unit shall be configured to report faults to a fault management application able to be accessed by day-to-day operating or service personnel or annunciated locally on zone thermostats.
16.6. The VAV terminal unit shall be configured to report if the VAV inlet valve has failed by performing the following diagnostic check at a maximum interval of once a month:
16.6.1. Command VAV terminal unit primary air inlet valve closed and verify that primary airflow goes to zero.
16.6.2. Command VAV terminal unit primary air inlet valve to design airflow and verify that unit is controlling to within 10 percent of design airflow.
16.7. The VAV terminal unit shall be configured to report and trend when the zone is driving the following VAV air handling unit reset sequences. The building operator shall have the capability to exclude zones used in the reset sequences from the DDC control system graphical user interface:
16.7.1. Supply air temperature setpoint reset to lowest supply air temperature setpoint for cooling operation.
16.7.2. Supply air duct static pressure setpoint reset for the highest duct static pressure setpoint allowable.
16.8. The FDD system shall be configured to detect the following faults:
16.8.1. Air temperature sensor failure/fault.
16.8.2. Not economizing when the unit should be economizing.
16.8.3. Economizing when the unit should not be economizing.
16.8.4. Outdoor air or return air damper not modulating.
16.8.5. Excess outdoor air.
16.8.6. VAV terminal unit primary air valve failure.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-403610, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-403610, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40371 Section C403.7.1-Demand control ventilation.

## C403.7.1 Demand control ventilation.

C403.7.1.1 Spaces requiring demand control ventilation. Demand control ventilation (DCV) shall be provided for ( (spaces larger than 500 square feet $\left(50 \mathrm{~m}^{2}\right)$ and) the following:

1. Spaces with ventilation provided by single-zone systems where an air economizer is provided to comply with Section c403.5.
2. Spaces with an occupant load greater than or equal to ((z5))

15 people per 1000 square feet ( $93 \mathrm{~m}^{2}$ ) of floor area (as established in Table 403.3.1.1 of the International Mechanical Code) ( (and served by systems with one or more of the following:

1. An air-side economizeri
2. Automatic modulating control of the outdoor air damper; or
3. A design outdoor airflow greater than 3,000 efm (1416 I/s).

EXCEPTION: Demand control ventilation is not required for systems and spaces as follows:
4 Systems with energy recovery complying with Section C403.7.6.1 or C 403.3 .5 .1 . This exception is not available for space typer tocated within the "inclusions" column of Groups A-1 and A-3 oceupancy classifications of Table C403.3.5.
2. Multiple-zone systems without direct digital control of individual zones communieating with a central control panel.
3. System with a design outdoor airflow less than $750 \mathrm{cfm}(354 \mathrm{~L} / \mathrm{s})$.
4. Spaces where the supply airflow rate minus any makeup or outgoing transfer air requirement is less than $1,200 \mathrm{efm}(566 \mathrm{~L} / \mathrm{s})$. 5. Ventilation provided for process loads only.
6. Spaces with one of the following oceupancy categories (as defined by the International Mechanical Code): Correctional cells, daycare sickrooms, science labs, barbers, beauty and nail salons, and bowling alley seating.))
or with an occupant outdoor airflow rate greater than or equal to 15 cfm/person, as established in Table 403.3.1.1 of the International Mechanical Code.
EXCEPTIONS: 1. Spaces including, but not limited to, dining areas, where more than 75 percent of the space design outdoor airflow is transfer air required for makeup air supplying an adjacent commercial kitchen.
2. Spaces with one of the following occupancy classifications as defined in Table 403.3.1.1 of the International Mechanical Code:

Correctional cells, educational laboratories, barbers, beauty and nail salons, and bowling alley seating.
3. Dormitory sleeping areas with fewer than five occupants per space.
4. Spaces with ventilation not provided by a single-zone system where the design occupant component outdoor airflow is less than 100
$\mathrm{cfm}(23.6 \mathrm{~L} / \mathrm{s})$, or $200 \mathrm{cfm}(47.2 \mathrm{~L} / \mathrm{s})$ with system having energy recovery with minimum 60 percent sensible effectiveness. Design
occupant component outdoor airflow shall be calculated as the product of the design number of occupants in the space and the people outdoor airflow rate per occupant $\left(R_{p}\right)$ as established in Table 403.3.1.1 of the International Mechanical Code.
5. Spaces with ventilation not provided by a single-zone system where the total system design outdoor airflow is less than 750 cfm ( 354 $\mathrm{L} / \mathrm{s}$ ), or $1500 \mathrm{cfm}(708 \mathrm{~L} / \mathrm{s}$ ) with system having energy recovery with minimum 60 percent sensible effectiveness.

C403.7.1.2 Demand control ventilation design. Each space required to have demand control ventilation shall have equipment and controls capable of and configured to automatically change the quantity of outdoor air supplied to the space based upon the output of a $\mathrm{CO}_{2}$ sensor. System outdoor air intake shall be adjusted from peak design levels in response to changes in outdoor air required in the spaces served by the system. This adjustment shall be accomplished by variable speed fan control.
EXCEPTION: These system types may use other means of adjusting outdoor air:

1. Single zone systems designed to recirculate return air.
2. Systems with total supply air less than $1500 \mathrm{cfm}(708 \mathrm{~L} / \mathrm{s})$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40371, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40373 Section C403.7.3-Ventilation air heating control.

C403.7.3 Ventilation air heating control. ( (Units that provide ventilation air to multiple zones and) ) For ventilation air units with supplemental heating capacity that operate in conjunction with zone heating and cooling systems ( (shall not use heating or heat recovery to warm supply air to a temperature greater than $60^{\circ} \mathrm{F}\left(16^{\circ} \mathrm{C}\right)$ when representative building loads or outdoor air temperature indicate that the majority of zones require cooling)), supplemental heating shall not warm ventilation supply air to a temperature greater than $55^{\circ} \mathrm{F}$ (13$\left.{ }^{\circ} \mathrm{C}\right)$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40373, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40374 Section C403.7.4—HVAC serving guestrooms.

C403.7.4 Automatic control of HVAC systems serving guestrooms. In Group R-1 buildings containing more than 50 guestrooms, each guestroom shall be provided with controls complying with the provisions of Sections C403.7.4.1 and C403.7.4.2. Card key controls comply with these requirements.
C403.7.4.1 Temperature setpoint controls. Controls shall be provided on each HVAC system that are capable of and configured ((もө)) with three modes of temperature control.

1. When the guestroom is rented but unoccupied, the controls shall automatically raise the cooling setpoint and lower the heating setpoint by not less than $4^{\circ} \mathrm{F}\left(2^{\circ} \mathrm{C}\right)$ from the occupant setpoint within 30 minutes after the occupants have left the guestroom.
2. When the guestroom is unrented and unoccupied, the controls shall ( (be capable of and configured to)) automatically raise the cooling setpoint to not lower than $80^{\circ} \mathrm{F}\left(27^{\circ} \mathrm{C}\right)$ and lower the heating setpoint to not higher than $60^{\circ} \mathrm{F}\left(16^{\circ} \mathrm{C}\right)$ ( (when the guestroom is unrented or has been continuously unoceupied for over 16 hours or)). Unrented and unoccupied guestroom mode shall be initiated within 16 hours of the guestroom being continuously occupied or where a networked guestroom control system indicates that the guestroom is unrented and the guestroom is unoccupied for more than ((30)) 20 minutes. A networked guestroom control system that is capable of returning the thermostat setpoints to default occupied setpoints 60 minutes prior to the time a guestroom is scheduled to be occupied is not precluded by this section. Cooling that is capable of limiting relative humidity with a setpoint not lower than 65 percent relative humidity during unoccupied periods is not precluded by this section.
3. When the questroom is occupied, HVAC set points shall return to their occupied set point once occupancy is sensed.
C403.7.4.2 Ventilation controls. Controls shall be provided on each HVAC system that are capable of and configured to automatically turn off the ventilation and exhaust fans within ((30)) 20 minutes of the occupants leaving the guestroom or isolation devices shall be provided to each guestroom that are capable of automatically shutting off the supply of outdoor air to and exhaust air from the guestroom.

EXCEPTION: Guestroom ventilation systems are not precluded from having an automatic daily preoccupancy purge cycle that provides daily outdoor air ventilation during unrented periods at the design ventilation rate for 60 minutes, or at a rate and duration equivalent to one air change.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40374, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40374, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40375 Section C403.7.5-Loading dock and ((parking)) garage ventilation system controls.
C403.7.5 ((Enclosed)) Loading dock, motor vehicle repair garage, and parking garage ((exhaust)) ventilation system controls. Mechanical ventilation systems for ((enclosed)) loading docks, motor vehicle repair garages, and parking garages shall be designed to exhaust the airflow rates (maximum and minimum) determined in accordance with the International Mechanical Code.

Ventilation systems shall be equipped with a control device that operates the system automatically by means of carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors. Controllers shall be configured to shut off fans or modulate fan speed to ((50)) 20 percent or less of design capacity, or intermittently operate fans less than 20 percent of the occupied time or as required to maintain acceptable contaminant levels in accordance with the International Mechanical Code provisions.

Ventilation systems with total ventilation system motor nameplate horsepower exceeding $5 \mathrm{hp}(3.7 \mathrm{~kW})$ at fan system design conditions and those with heating and/or cooling shall have controls and devices that modulate fan speed and result in fan motor demand of no more than 30 percent of design wattage at 50 percent of the design airflow.

Gas sensor controllers used to activate the exhaust ventilation system shall stage or modulate fan speed upon detection of specified gas levels. All equipment used in sensor controlled systems shall be designed for the specific use and installed in accordance with the manufacturer's recommendations. The system shall be arranged to operate automatically by means of carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors. Parking garages, repair garages, and loading docks shall be equipped with a controller and a full array of carbon monoxide (CO) sensors set to maintain levels of carbon monoxide below 35 parts per million (ppm). Additionally, a full array of nitrogen dioxide detectors shall be connected to the controller set to maintain the nitrogen dioxide level below the OSHA standard for eight hour exposure.

Spacing and location of the sensors shall be installed in accordance with manufacturer recommendations.
C403.7.5.1 System activation devices for ((enelosed)) loading docks. Ventilation systems for enclosed loading docks shall operate continuously during unoccupied hours at 50 percent or less of design capacity and shall be activated to the full required ventilation rate by one of the following:

1. Gas sensors installed in accordance with the International Mechanical Code; or
2. Occupant detection sensors used to activate the system that detects entry into the loading area along both the vehicle and pedestrian pathways.
C403.7.5.2 System activation devices for ((enelosed)) parking garages. Ventilation systems for enclosed parking garages shall be activated by gas sensors.
((EXCEPTION: A parking garage ventilation system having a total design capacity under 8,000 efm may use oecupant sensors.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40375, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40376 Section C403.7.6-Energy recovery ventilation systems.
C403.7.6 Energy recovery ventilation systems. Energy recovery ventilation systems shall be provided as specified in Sections c403.7.6.1 and C403.7.6.2.
C403.7.6.1 Ventilation for Group R-2 occupancy. For all Group R-2 dwelling and sleeping units, a balanced ventilation system with heat recovery system with minimum 60 percent sensible recovery effectiveness shall provide outdoor air directly to each habitable space in accordance with the International Mechanical Code. The ventilation system shall allow for the design flow rates to be tested and verified at each habitable space as part of the commissioning process in accordance with Section C408.2.2. The return/exhaust air stream temperature for heat recovery device selection shall be $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$, or as calculated by the registered design professional.
C403.7.6.2 Spaces other than Group R-2 dwelling units. Any system serving a space other than a Group R-2 dwelling or sleeping unit with minimum outside air requirements at design conditions greater than $5,000 \mathrm{cfm}$ or any system where the system's supply airflow rate exceeds the value listed in Tables C403.7.6(1) and C403.7.6(2), based on the climate zone and percentage of outdoor airflow rate at design conditions, shall include an energy recovery system. Table C403.7.6(1) shall be used for all ventilation systems that operate less than 8,000 hours per year, and Table C403.7.6(2) shall be used for all ventilation systems that operate 8,000 hours or more per year. The energy recovery system shall ( (have the capability to provide a change in the enthalpy of the outdoor air supply of not less than 50 pereent of the difference between the outdoor air and return air enthalpies, ) provide a 68 percent minimum sensible recovery effectiveness or have an enthalpy recovery ratio of not less than 60 percent at design conditions. Where an air economizer is required, the energy recovery system shall include a bypass of the energy recovery media for both the outdoor air and exhaust air or return air dampers and controls which permit operation of the air economizer as required by Section c403.5. Where a single room or space is supplied by multiple units, the aggre-
gate ventilation (cfm) of those units shall be used in applying this requirement. The return/exhaust air stream temperature for heat recovery device selection shall be $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$ at 30 percent relative humidity, or as calculated by the registered design professional.
EXCEPTION: An energy recovery ventilation system shall not be required in any of the following conditions:

1. Where energy recovery systems are restricted per Section 514 of the International Mechanical Code to sensible energy, recovery shall comply with one of the following:
1.1. Kitchen exhaust systems where they comply with Section C403.7.7.1.
1.2. Laboratory fume hood systems where they comply with Exception 2 of Section C403.7.6.
1.3. Other sensible energy recovery systems with the capability to provide a change in dry-bulb temperature of the outdoor air supply of not less than 50 percent of the difference between the outdoor air and the return air dry-bulb temperatures, at design conditions
2. Laboratory fume hood systems that include at least one of the following features and also comply with Section C403.7.7.2:
2.1. Variable-air-volume hood exhaust and room supply systems configured to reduce exhaust and makeup air volume to 50 percent or less of design values.
2.2. Direct makeup (auxiliary) air supply equal to at least 75 percent of the exhaust rate, heated no warmer than $2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$ above room setpoint, cooled to no cooler than $3^{\circ} \mathrm{F}\left(1.7^{\circ} \mathrm{C}\right)$ below room setpoint, no humidification added, and no simultaneous heating and cooling used for dehumidification control.
3. Systems serving spaces that are heated to less than $60^{\circ} \mathrm{F}\left(15.5^{\circ} \mathrm{C}\right)$ and are not cooled.
4. Where more than 60 percent of the outdoor air heating energy is provided from site-recovered energy.
5. Systems exhausting toxic, flammable, paint or corrosive fumes or dust.
6. Cooling energy recovery.
7. Systems requiring dehumidification that employ energy recovery in series with the cooling coil.
8. Multiple-zone systems where the supply airflow rate is less than the values specified in Tables C403.7.6 (1) and (2), for the corresponding percent of outdoor air. Where a value of NR is listed, energy recovery shall not be required.
9. Equipment which meets the requirements of Section C403.9.2.4.
10. Systems serving Group R-1 ((and R-3)) dwelling or sleeping units where the largest source of air exhausted at a single location at the building exterior is less than 25 percent of the design outdoor air flow rate.

Table C403.7.6(1)
Energy Recovery Requirement
(Ventilation systems operating less than 8,000 hours per year)

| Percent (\%) Outdoor Air at Full Design Airflow Rate |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Climate } \\ & \text { zone } \end{aligned}$ | $\begin{aligned} & \geq 10 \% \text { and } \\ & <20 \% \end{aligned}$ | $\begin{gathered} \geq 20 \% \text { and } \\ <30 \% \end{gathered}$ | $\begin{aligned} & \geq 30 \% \text { and } \\ & <40 \% \end{aligned}$ | $\begin{gathered} \geq 40 \% \text { and } \\ <50 \% \end{gathered}$ | $\begin{aligned} & \geq 50 \% \text { and } \\ & <60 \% \end{aligned}$ | $\begin{gathered} \geq 60 \% \text { and } \\ <70 \% \end{gathered}$ | $\begin{gathered} \geq 70 \% \text { and } \\ <80 \% \end{gathered}$ | $\geq 80 \%$ |
| Design Supply Fan Airflow Rate (cfm) |  |  |  |  |  |  |  |  |
| 4C, 5B | NR | NR | NR | NR | NR | NR | $\geq 5000$ | $\geq 5000$ |

$\mathrm{NR}=$ Not required.
Table C403.7.6(2)
Energy Recovery Requirement
(Ventilation systems operating not less than 8,000 hours per year)

| Percent (\%) Outdoor Air at Full Design Airflow Rate |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Climate <br> zone | $\geq 10 \%$ and <br> $<20 \%$ | $\geq 20 \%$ and <br> $<30 \%$ | $\geq 30 \%$ and <br> $<40 \%$ | $\geq 40 \%$ and <br> $<50 \%$ | $\geq 50 \%$ and <br> $<60 \%$ | $\geq 60 \%$ and <br> $<70 \%$ | $\geq 70 \%$ and <br> $<80 \%$ | $\geq 80 \%$ |  |
| Design Supply Fan Airflow Rate (cfm) |  |  |  |  |  |  |  |  |  |
| 4C | NR | $\geq 19500$ | $\geq 9000$ | $\geq 5000$ | $\geq 4000$ | $\geq 3000$ | $\geq 1500$ | $\geq 120$ |  |
| 5B | $\geq 2500$ | $\geq 2000$ | $\geq 1000$ | $\geq 500$ | $\geq 140$ | $\geq 120$ | $\geq 100$ | $\geq 80$ |  |

$\mathrm{NR}=$ Not required.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40376, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40377 Section C403.7.7-Exhaust systems.

## C403.7.7 Exhaust systems.

C403.7.7.1 Kitchen exhaust systems.

C403.7.7.1.1 Replacement air. Replacement air introduced directly into the exhaust hood cavity shall not be greater than 10 percent of the hood exhaust airflow rate.
C403.7.7.1.2 Kitchen exhaust hood certification and maximum airflow. Where a kitchen or kitchen/dining facility has a total kitchen hood exhaust airflow rate that is greater than $2,000 \mathrm{cfm}$, each hood shall be a factory built commercial exhaust hood listed by a nationally recognized testing laboratory in compliance with UL 710 and each hood shall have a maximum exhaust rate as specified in Table c403.7.7.1.2. Where a single hood, or hood section, is installed over appliances with different duty ratings, the maximum allowable flow rate for the hood or hood section shall be based on the requirements for the highest appliance duty rating under the hood or hood section.
EXCEPTION: Type II dishwasher exhaust hoods that have an exhaust airflow of 1000 cfm or less.
Table C403.7.7.1.2
Maximum Net Exhaust Flow Rate, CFM Per Linear Foot of Hood Length

| Type of Hood | Light-duty <br> Equipment | Medium-duty <br> Equipment | Heavy-duty <br> Equipment | Extra-heavy-duty <br> Equipment |
| :--- | :---: | :---: | :---: | :---: |
| Wall-mounted canopy | 140 | 210 | 280 | 385 |
| Single island | 280 | 350 | 420 | 490 |
| Double island (per side) | 175 | 210 | 280 | 385 |
| Eyebrow | 175 | 175 | NA | NA |
| Backshelf/pass-over | 210 | 210 | 280 | NA |

For SI: $1 \mathrm{cfm}=0.4719 \mathrm{~L} / \mathrm{s} ; 1$ foot $=305 \mathrm{~mm}$
NA = Not allowed
C403.7.7.1.3 Kitchen exhaust hood system. Kitchen exhaust hood systems serving Type I exhaust hoods shall be provided with demand control kitchen ventilation (DCKV) controls where a kitchen or kitchen/dining facility has a total kitchen hood exhaust airflow rate greater than $2000 \mathrm{cfm}\left({ }^{( }\right.$, it shall comply with one of the following:

1. Not less than 50 percent of all replacement air shall be transfer air that would otherwise be exhausted.
Z. Demand ventilation systems on not less than 75 percent of the total exhaust hood airflow that are configured to provide not less than a 50 percent reduction in exhaust and replacement air system airflow rates, including controls necessary to modulate airflow in response to appliance operation and to maintain full capture and containment of smoke, effluent and combustion products during cooking and idle.
2. Listed energy recovery devices with a sensible heat recovery effectiveness of not less than 40 percent on not less than 50 percent of the total exhaust hood airflow)). DCKV systems shall be configured to provide a minimum of 50 percent reduction in exhaust and replacement air system airflows in response to appliance operation and to maintain full capture and containment of smoke, effluent and combustion products during cooking and idle operation.
EXCEPTIONS:
[^2]C403.7.7.2 Laboratory exhaust systems. Buildings with laboratory exhaust systems having a total exhaust rate greater than 5,000 cfm (2360 L/s) shall include heat recovery systems to precondition replacement air from laboratory exhaust. The heat recovery system shall be capable of increasing the outside air supply temperature at design heating conditions by $25^{\circ} \mathrm{F}\left(13.9^{\circ} \mathrm{C}\right)$. A provision shall be made to bypass or control the heat recovery system to permit air economizer operation as required by Section C403.5.
EXCEPTIONS: 1. Variable air volume laboratory exhaust and room supply systems configured to reduce exhaust and makeup air volume to 50 percent or less of design values; or
2. Direct makeup (auxiliary) air supply equal to at least 75 percent of the exhaust rate, heated no warmer than $2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$ below room setpoint, cooled to no cooler than $3^{\circ} \mathrm{F}\left(1.7^{\circ} \mathrm{C}\right)$ above room setpoint, no humidification added, and no simultaneous heating and cooling used for dehumidification control; or
3. Combined energy reduction method: VAV exhaust and room supply system configured to reduce exhaust and makeup air volumes and a heat recovery system to precondition makeup air from laboratory exhaust that when combined will produce the same energy reduction as achieved by a heat recovery system with a 50 percent sensible recovery effectiveness as required above. For calculation purposes, the heat recovery component can be assumed to include the maximum design supply airflow rate at design conditions. The combined energy reduction (QER) shall meet the following:

$$
\begin{aligned}
\mathrm{Q}_{E R} & \geq \mathrm{Q}_{\text {MIN }} \\
\mathrm{Q}_{\mathrm{MIN}} & =\mathrm{CFM}_{\mathrm{S}} \cdot\left(\mathrm{~T}_{\mathrm{R}}-\mathrm{T}_{\mathrm{O}}\right) \cdot 1.1 \cdot 0.6 \\
\mathrm{Q}_{\mathrm{ER}} & =\mathrm{CFM}_{\mathrm{S}} \cdot\left(\mathrm{~T}_{\mathrm{R}}-\mathrm{T}_{\mathrm{O}}\right) \cdot 1.1(\mathrm{~A}+\mathrm{B}) / 100 \\
\text { Where: } & =\begin{array}{l}
\text { Energy recovery at } 60 \text { percent } \\
\text { sensible effectiveness }(\mathrm{Btu} / \mathrm{h})
\end{array} \\
\mathrm{Q}_{\mathrm{MIN}} & \left.=\begin{array}{l}
\text { Combined energy reduction (Btu/h) } \\
\mathrm{Q}_{\mathrm{ER}}
\end{array}\right)=\begin{array}{l}
\text { The maximum design supply airflow } \\
\mathrm{CFM}_{\mathrm{S}}
\end{array}=\begin{array}{l}
\text { rate to conditioned spaces served by } \\
\text { the system in cubic feet per minute }
\end{array} \\
\mathrm{T}_{\mathrm{R}} & =\begin{array}{l}
\text { Space return air dry-bulb at winter } \\
\text { design conditions }
\end{array} \\
\mathrm{T}_{\mathrm{O}} & =\begin{array}{l}
\text { Outdoor air dry-bulb at winter design } \\
\text { conditions }
\end{array} \\
\mathrm{A} & =\begin{array}{l}
\text { Percentage that the exhaust and } \\
\text { makeup air volumes can be reduced } \\
\text { from design conditions }
\end{array} \\
\mathrm{B} & =\begin{array}{l}
\text { Percentage sensible heat recovery } \\
\text { effectiveness }
\end{array}
\end{aligned}
$$

C403.7.7.3 Transfer air. Conditioned supply air delivered to any space with mechanical exhaust shall not exceed the greater of:

1. The supply flow required to meet the space heating or cooling load;
2. The ventilation rate required by the authority having jurisdiction, the facility environmental health and safety department, or Section C403.2.2; or
3. The mechanical exhaust flow minus the available transfer air from conditioned spaces or return air plenums that at their closest point are within 15 feet of each other on the same floor that are not in different smoke or fire compartments. Available transfer air is that portion of outdoor ventilation air that:
3.1. Is not required to satisfy other exhaust needs;
3.2. Is not required to maintain pressurization of other spaces; and
3.3. Is transferable according to applicable codes and standards and per the International Mechanical Code.
EXCEPTIONS: 1. Laboratories classified as biosafety level 3 or higher.
4. Vivarium spaces.
5. Spaces that are required by applicable codes and standards to be maintained at positive pressure relative to adjacent spaces. For spaces taking this exception, any transferable air that is not directly transferred shall be made available to the associated air-handling unit and shall be used whenever economizer or other options do not save more energy.
6. Spaces where the demand for transfer air may exceed the available transfer airflow rate and where the spaces have a required negative pressure relationship. For spaces taking this exception, any transferable air that is not directly transferred shall be made available to the associated air-handling unit and shall be used whenever economizer or other options do not save more energy.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40377, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40378 Section C403.7.8-Shutoff dampers.

## C403.7.8 Shutoff dampers. Mechanical openings shall be provided with shutoff dampers in accordance with Sections C403.7.8.1 through C403.7.8.4.

C403.7.8.1 Shutoff dampers for building isolation. Outdoor air supply, exhaust openings and relief outlets and stairway and elevator hoistway shaft vents shall be provided with Class I motorized dampers. See Sections C403.10.1 and C403.10.2 for ductwork insulation requirements upstream and downstream of the shutoff damper.
EXCEPTIONS: 1. Gravity (nonmotorized) dampers shall be permitted in lieu of motorized dampers as follows:
1.1. Relief dampers serving systems less than $5,000 \mathrm{cfm}$ total supply shall be permitted in buildings less than three stories in height.
1.2. Gravity (nonmotorized) dampers where the design outdoor air intake or exhaust capacity does not exceed ((400)) $300 \mathrm{cfm}(142 \mathrm{~L} / \mathrm{s})$.
1.3. Systems serving areas which require continuous operation for $24 / 7$ occupancy schedules.
2. Shutoff dampers are not required in:
2.1. Combustion air intakes.
2.2. Systems serving areas which require continuous operation in animal hospitals, kennels and pounds, laboratories, and Group H, I and R occupancies.
2.3. Subduct exhaust systems or other systems that are required to operate continuously by the International Mechanical Code.
2.4. Type I grease exhaust systems or other systems where dampers are prohibited by the International Mechanical Code to be in the airstream.
2.5. Unconditioned stairwells or unconditioned elevator hoistway shafts that are only connected to unconditioned spaces.

C403.7.8.2 Shutoff dampers for return air. Return air openings used for airside economizer operation shall be equipped with Class I motorized dampers.
C403.7.8.3 Damper leakage rating. Class 1 dampers shall have a maximum leakage rate of $4 \mathrm{cfm} / \mathrm{ft}^{2}\left(20.3 \mathrm{~L} / \mathrm{s} \mathrm{x} \mathrm{m}{ }^{2}\right)$ at 1.0 inch water gauge (w.g.) (249 Pa) when tested in accordance with AMCA 500D and shall be labeled by an approved agency for such purpose. Gravity (nonmotorized) dampers shall have an air leakage rate not greater than $20 \mathrm{cfm} / \mathrm{ft}^{2}$ where not less than 24 inches ( 610 mm ) in either dimension and 40 $\mathrm{cfm} / \mathrm{ft}^{2}$ where less than 24 inches in either dimension. The rate of air leakage shall be determined at 1.0 inch w.g. ( 249 Pa ) when tested in accordance with AMCA 500D for such purpose. The dampers shall be labeled by an approved agency. Gravity dampers for ventilation air intakes shall be protected from direct exposure to wind.
EXCEPTIONS: 1. Gravity (nonmotorized) dampers are not required to be tested to verify the air leakage rating when installed in exhaust systems where the exhaust capacity does not exceed 400 cfm and the gravity damper is provided with a gasketed seal.
2. Motorized dampers on return air openings in unitary packaged equipment that have the minimum leakage rate available from the manufacturer.

C403.7.8.4 Damper actuation. Outdoor air intake, relief and exhaust shutoff dampers shall be installed with automatic controls configured to close when the systems or spaces served are not in use or during unoccupied period warm-up and setback operation, unless the systems
served require outdoor or exhaust air in accordance with the International Mechanical Code or the dampers are opened to provide intentional economizer cooling. Stairway and elevator hoistway shaft vent dampers shall be installed with automatic controls configured to open upon the activation of any fire alarm initiating device of the building's fire alarm system or the interruption of power to the damper.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40378, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-4038 Section C403.8-Fan and fan controls.

C403.8 Fan and fan controls. Fans in HVAC systems shall comply with Sections C403.8.1 through C403.8.5.1.

The airflow requirements of Section C403.8.5.1 shall apply to all fan motors. ((Group R occupancy exhaust)) Low capacity ventilation fans shall also comply with Section C403.8.4.

C403.8.1 (Allowable fan motor horsepower. Fach HVAC system having a total fan system motor nameplate horsepower exceeding 5 hp (3.7 liw) at fan system design conditions shall not exceed the allowable fan system motor nameplate hp (Option 1) or fan systembhp (Option 2) as shown in Table $C 403.8 .1(1)$. This includes supply fans, exhaust fans, return/ relicf fans, and fan-powered VAV air terminal units associated with systems providing heating or cooling capability. Single zone variable-aix-volume systems shall comply with the constant volume fan powex limitation. Zone heating and/or cooling terminal units installed in conjunction with a dedicated outdoor air system (DOAS) shall be evalu= ated as separate HVAC systems for allowable fan motor horsepower.
EXCEPTIONS: 1. Hespital, vivarium and laboratory systems that utilize flow control devices on exhaust or return to maintain space pressure relationships necessary for occupant health and safety or environmental control shall be permitted to use variable volume fan power timitation.
2. Individual exhatust fans with metor nameplate horsepower of 1 hp or less are exempt from allowable fan motor horsepower requirements.

Table C403.8.1(1)
Fan Power Iimitation

|  | Limit | Constant <br> Volume | Variable <br> Volume |
| :--- | :---: | :---: | :---: |
| Option 1: Fan <br> system motor <br> nameplate hp | Allowable <br> nameplate <br> motor hp | $\mathrm{hp}_{\mathrm{h}} \leq \mathrm{CFM}_{\mathrm{S}^{\star}}$ | $\mathrm{hp} \leq \mathrm{CFM}_{\mathrm{S}} \times$ |
| Option 2: Fan <br> system bhp | Allowable <br> fan system <br> bhp | bhp $\leq \mathrm{CFM}_{\mathrm{S}^{-}}$ <br> $0.00094+A$ | bhp $\leq \mathrm{CFM}_{\mathrm{S}} \times$ <br> $0.0013+A$ |


| For SI: |  | $\begin{aligned} & 1 \mathrm{efm}=0.471 \mathrm{~L} / \mathrm{s} .1 \mathrm{bhp}=735.5 \mathrm{~W}, 1 \mathrm{hp}= \\ & 745.5 \mathrm{~W} . \end{aligned}$ |
| :---: | :---: | :---: |
| Where: |  |  |
| $\mathrm{CFM}_{\text {S }}$ | $=$ | The maximum design supply airflow rate to conditioned spaces served by the system in eubie feet per mintute. |
| hp | $=$ | The maximum combined motor nameplate horsepower. |
| bhp | $=$ | The maximum combined fan brake horsepower. |
| 4 | = | Stmof $\left[P D \times \mathrm{CFM}_{\mathrm{D}} / 4131\right]$ |
| Where: |  |  |


| $P P$ | $=\quad$Each applieable pressure drop adjustment from <br> Table C403.8.1(2) in. w.e. |
| :--- | :--- |
| CFM $_{\mathrm{D}} \quad=\quad$The design airflow through each applicable <br> deviee from Table C403.8.1(2) in eubie feet per <br> minte- |  |

Table C403.8.1(2)
Fan Power Limitation Pressure Drop Adjustment

| Bevice | Adjustment |
| :---: | :---: |
| Credits |  |
| Return air or exhatst system required by code or acereditation standards to be fully dueted, or systems required to maintain air pressure differentials between adjacent rooms | 0.5 inch w.e. (2.15 inches w.e. for laboratory and vivarium systems) |
| Return and/or exhaust air flow control devices | 0.5 inch w.e. |
| Exhaust filters, serubbers, or other exhaust treatment | The pressure drep of device calculated at fan system design condition |
| Particulate filtration credit: MERV 9-12 | 0.5 inch w.e. |
| Particulate filtration credit: MERV 13-15 | 0.9 inch w.c. |
| Particulate filtration credit: MERV 16 and greater and electronically enhanced filters | Pressure drop calculated at $2 x$ clean filter pressure drop at fan system design eondition |
| Carben and other gasphase air cleaners | Clean filter pressture drop at fan system design condition |
| Biosafety cabinet | Presstre drop of device at fan system design eondition |
| Energy recovery device, other than coil runaround foop | For each airstream (2.2 energy recovery effectiveness 0.5) ineh w.e. |
| Coil runaround loop | 0.6 ineh w.e. for each airstream |
| Evaporative humidifiert evoler in series with another cooling coil | Presstre drop of deviee at fan system design eonditions |
| Sound attentation section (fans serving spaces with design background noise goals below NC35) | $\theta .15$ inch w.e. |
| Exhaust system serving fume hoods | 0.35 inch w.e. |
| Laberatory and vivarium exhatust systems in highrise buildings | 0.25 inch w.e. $/ 100$ feet of vertieal duet exceeding 75 feet |
| Deductions |  |
| Systems without centrat cooling device | -0.6 inch w.e |

Washington State Register, Issue 22-14
WSR 22-14-091

| Device | Adjustment |
| :--- | :--- |
| Systems witheut central <br> heating device | -0.3 ineh w.e. |
| Systems with central <br> electric resistance heat | -0.2 ineh w.e. |

For SI: 1 ineh w.e. $-249 \mathrm{~Pa}, 1$ ineh -25.4 mm .
w.e. = water column.))

Fan System. Each fan system that includes at least one fan or fan array with fan electrical input power $\geq 1 \mathrm{~kW}$, moving air into, out of, or between conditioned spaces or circulating air for the purpose of conditioning air within a space shall comply with Sections c403.8.1.1 through C403.8.1.2.
C403.8.1.1 Determining fan power budget. For each fan system, the fan system electrical input power (Fan kWdesign, system) determined in accordance with Section C403.8.1.2 at the fan system airflow shall not exceed Fan kWhudget. Calculate fan power budget (Fan kWhudget) for each fan system as follows:

1. Determine the fan system airflow and choose the appropriate table(s) for fan power allowance.
1.1. For single-cabinet fan systems, use the fan system airflow and the power allowances in both Table C403.8.1.1(1) and Table c403.8.1.1(2).
1.2. For supply-only fan systems, use the fan system airflow and power allowances in Table C403.8.1.1(1).
1.3. For relief fan systems, use the design relief airflow and the power allowances in Table C403.8.1.1(2).
1.4. For exhaust, return and transfer fan systems, use the fan system airflow and the power allowances in Table c403.8.1.1(2).
1.5. For complex and DOAS with energy recovery fan systems, separately calculate the fan power allowance for the supply and return/ exhaust systems and sum them. For the supply airflow, use supply airflow at the fan system design conditions, and the power allowances in Table c403.8.1.1(1). For the return/exhaust airflow, use return/ exhaust airflow at the fan system design conditions, and the power allowances in Table C403.8.1.1(2).
2. For each fan system, determine the components included in the fan system and sum the fan power allowances of those components. All fan systems shall include the system base allowance. If, for a given component, only a portion of the fan system airflow passes through the component, calculate the fan power allowance for that component in accordance with Equation 4-11:

|  | (Equation 4-11) |
| :--- | :--- |
| FPA $_{\text {adj }}$ | $\equiv \quad\left(Q_{\text {comp }} / Q_{\text {sys }}\right) \times$ FPA $_{\text {comp }}$ |

Where:

| $\mathrm{FPA}_{\text {adj }}$ | 三 | The corrected fan power allowance for the component in $\mathrm{W} / \mathrm{cfm}$. |
| :---: | :---: | :---: |
| $\mathrm{Q}_{\text {comp }}$ | = | The airflow through component in cfm. |
| $\mathrm{Q}_{\text {sys }}$ | = | The fan system airflow in cfm. |

Washington State Register, Issue 22-14
$\stackrel{\mathrm{FPA}_{\text {comp }}}{=\quad \frac{\text { The fan power allowance of the }}{\frac{\text { component from Table }}{\text { C403.8.1.1(1) or Table }}}} \underset{\underline{\underline{\mathrm{C} 403.8 .1 .1(2) .}}}{ }$
3. Multiply the fan system airflow by the sum of the fan power allowances for the fan system.
4. Divide by 1,000 to convert to Fan kWhurget.
5. For building sites at elevations greater than 3,000 feet, multiply Fan kW budget by 0.896 .

Table C403.8.1.1(1)
Supply Fan Power Allowances (W/CFM)

| Airflow | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \text { VAV Systems } \end{array} \\ \leq 5,000 \mathrm{cfm} \end{gathered}$ | Multi-Zone <br> VAV Systems <br>  <br> $>5,000 \mathrm{and}$ <br> $\leqq 10,000 \mathrm{cfm}$. | $\begin{gathered} \frac{\text { Multi-Zone }}{} \\ \frac{\text { VAV Systems }}{}{ }^{\text {EAV }} \\ \geq 10,000 \mathrm{cfm} \end{gathered}$ | $\begin{aligned} & \frac{\text { All Other }}{} \\ & \frac{\text { Fan Systems }}{\leqq 5,000 \mathrm{cfm}} \end{aligned}$ | $\begin{aligned} & \quad \text { All Other } \\ & \begin{array}{l} \text { Fan Systems } \\ >5,000 \mathrm{and} \\ \leq 10,000 \mathrm{cfm} \end{array} \end{aligned}$ | $\begin{aligned} & \quad \begin{array}{l} \text { All Other } \\ \text { Fan Systems } \end{array} \\ & >10,000 \mathrm{cfm} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Supply system base allowance for AHU serving spaces $\leq 6$ floors away | $\underline{0.395}$ | $\underline{0.453}$ | $\underline{0.413}$ | $\underline{0.232}$ | $\underline{0.256}$ | $\underline{0.236}$ |
| Supply system base allowance for AHU serving spaces $>6$ floors away | $\underline{0.508}$ | $\underline{0.548}$ | $\underline{0.501}$ | $\underline{0.349}$ | $\underline{0.356}$ | $\underline{0.325}$ |
| MERV 13 to MERV 16 Filter upstream of thermal conditioning equipment (twotimes the clean filter pressure drop) ${ }^{\text {b }}$ | $\underline{0.136}$ | $\underline{0.114}$ | $\underline{0.105}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ |
| MERV 13 to <br> MERV 16 Final <br> filter <br> downstream of thermal <br> conditioning equipment (twotimes the clean filter pressure drop) ${ }^{\text {b }}$ | $\underline{0.225}$ | $\underline{0.188}$ | $\underline{0.176}$ | $\underline{0.231}$ | $\underline{0.197}$ | $\underline{0.177}$ |
| Filtration <br> allowance for $>$ <br> MERV 16 or HEPA Filter (two-times the clean filter pressure drop) ${ }^{\text {b }}$ | $\underline{0.335}$ | $\underline{0.280}$ | $\underline{0.265}$ | $\underline{0.342}$ | $\underline{0.292}$ | $\underline{0.264}$ |
| Central hydronic heating coil allowance | $\underline{0.046}$ | $\underline{0.048}$ | $\underline{0.052}$ | $\underline{0.046}$ | $\underline{0.050}$ | $\underline{0.054}$ |
| Electric heat allowance | $\underline{0.046}$ | $\underline{0.038}$ | $\underline{0.035}$ | $\underline{0.046}$ | $\underline{0.040}$ | $\underline{0.036}$ |
| Gas heat allowance | $\underline{0.069}$ | $\underline{0.057}$ | $\underline{0.070}$ | $\underline{0.058}$ | $\underline{0.060}$ | $\underline{0.072}$ |


| Airflow | $\begin{aligned} & \frac{\text { Multi-Zone }}{} \\ & \frac{\text { VAV Systems }}{}{ }^{\text {VAV }} \\ & \leqq 5,000 \mathrm{cfm} \end{aligned}$ | Multi-Zone <br> VAV Systems <br> a <br> $>5,000 \mathrm{and}$ <br> $\leq 10,000 \mathrm{cfm}$ | $\left.\begin{array}{c}\text { Multi-Zone } \\ \text { VAV Systems } \\ \\ \geq 10,000 \mathrm{cfm}\end{array}\right]$ | $\begin{aligned} & \text { All Other } \\ & \text { Fan Systems } \\ & \leqq 5,000 \mathrm{cfm} \end{aligned}$ |  | $\begin{aligned} & \text { All Other } \\ & \begin{array}{l} \text { Fan Systems } \end{array} \\ & \geq 10,000 \mathrm{cfm} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hydronic/DX cooling coil or heat pump coil (wet) allowance ${ }^{\text {c }}$ | $\underline{0.135}$ | $\underline{0.114}$ | $\underline{0.105}$ | $\underline{0.139}$ | $\underline{0.120}$ | 0.107 |
| Solid or liquid desiccant system allowance | $\underline{0.157}$ | $\underline{0.132}$ | $\underline{0.123}$ | $\underline{0.163}$ | $\underline{0.139}$ | $\underline{0.124}$ |
| Reheat coil for dehumidification allowance | $\underline{0.045}$ | 0.038 | $\underline{0.035}$ | $\underline{0.046}$ | $\underline{0.040}$ | $\underline{0.036}$ |
| Allowance for evaporative humidifier/ cooler in series with a cooling coil. Value shown is allowed W/cfm per 1.0 inches of water gauge (in.w.g.). Determine pressure loss (in.w.g.) at 400 fpm or maximum <br> velocity allowed by the <br> manufacturer, whichever is less ${ }^{\text {d }}$ | 0.224 | $\underline{0.188}$ | $\underline{0.176}$ | $\underline{0.231}$ | $\underline{0.197}$ | 0.177 |
| Allowance for 100\% Outdoor air system ${ }^{\text {e }}$ | $\underline{0.000}$ | $\underline{0.000}$ | $\underline{0.000}$ | $\underline{0.070}$ | $\underline{0.100}$ | 0.107 |
| Energy recovery allowance for $0.50 \leq$ ERR $\leq 0.55^{\mathrm{f}}$ | $\underline{0.135}$ | $\underline{0.114}$ | $\underline{0.105}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ |
| Energy recovery allowance for 0.55 —ERR $\leq 0.60^{\mathrm{f}}$ | $\underline{0.160}$ | $\underline{0.134}$ | $\underline{0.124}$ | $\underline{0.165}$ | $\underline{0.141}$ | $\underline{0.126}$ |
| $\begin{aligned} & \hline \begin{array}{l} \text { Energy recovery } \\ \text { allowance for } \\ \hline 0.60 \leq \mathrm{ERR} \\ \leq 0.6 \mathrm{f}^{\mathrm{f}} \end{array} \\ & \hline \end{aligned}$ | $\underline{0.184}$ | $\underline{0.155}$ | $\underline{0.144}$ | $\underline{0.190}$ | $\underline{0.163}$ | $\underline{0.146}$ |
| Energy recovery allowance for $0.65 \leq$ ERR $\leq 0.70^{\mathrm{f}}$ | 0.208 | $\underline{0.175}$ | $\underline{0.163}$ | $\underline{0.215}$ | 0.184 | $\underline{0.165}$ |
| Energy recovery allowance for $0.70 \leq$ ERR $\leq 0.75^{\mathrm{f}}$ | 0.232 | 0.196 | 0.183 | 0.240 | 0.205 | 0.184 |
| Energy recovery allowance for 0.75 <ERR $\leq 0.80^{\mathrm{f}}$ | 0.257 | $\underline{0.216}$ | $\underline{0.202}$ | 0.264 | $\underline{0.226}$ | $\underline{0.203}$ |


| Airflow | $\begin{gathered} \frac{\text { Multi-Zone }}{} \\ \frac{\text { VAV Systems }}{}{ }^{\text {NAV }} \\ \leqq 5,000 \mathrm{cfm} \end{gathered}$ | $\underline{\text { Multi-Zone }}$ $\frac{\text { VAV Systems }}{}{ }^{\text {a }}$ $>5,000 \mathrm{and}$ $\leqq 10,000 \mathrm{cfm}$ | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \text { VAV Systems } \\ \geq 10,000 \mathrm{cfm} \end{array} \end{gathered}$ | All Other <br> Fan Systems <br> $\leq 5,000 \mathrm{cfm}$ | $\begin{aligned} & \frac{\text { All Other }}{\text { Fan Systems }} \\ & >5,000 \mathrm{and} \\ & \leqq 10,000 \mathrm{cfm} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Energy recovery allowance for $\mathrm{ERR} \geq 0.80^{\mathrm{f}}$ | $\underline{0.281}$ | $\underline{0.236}$ | $\underline{0.222}$ | $\underline{0.289}$ | $\underline{0.247}$ | $\underline{0.222}$ |
| Coil runaround loop | $\underline{0.135}$ | $\underline{0.114}$ | $\underline{0.105}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ |
| Allowance for <br> Gas phase <br> filtration <br> required by code or accredited standard. Value shown is allowed W/cfm per 1.0 <br> in. wg air pressure drop ${ }^{\text {d }}$ | $\underline{0.224}$ | $\underline{0.188}$ | $\underline{0.176}$ | $\underline{0.231}$ | $\underline{0.197}$ | $\underline{0.177}$ |
| Economizer damper return | $\underline{0.045}$ | $\underline{0.038}$ | $\underline{0.035}$ | $\underline{0.046}$ | $\underline{0.040}$ | $\underline{0.036}$ |
| Air blender allowance | $\underline{0.045}$ | $\underline{0.038}$ | $\underline{0.035}$ | $\underline{0.046}$ | $\underline{0.040}$ | $\underline{0.036}$ |
| Sound attenuation section [fans serving spaces with design background noise goals below NC35] | $\underline{0.034}$ | $\underline{0.029}$ | $\underline{0.026}$ | $\underline{0.035}$ | $\underline{0.030}$ | $\underline{0.027}$ |
| Deduction for systems that feed a terminal unit with a fan with electrical input power $<1 \mathrm{~kW}$ | $\underline{-0.100}$ | $\underline{-0.100}$ | $\underline{-0.100}$ | $\underline{-0.100}$ | $\underline{-0.100}$ | $\underline{-0.100}$ |
| Low-turndown single-zone VAV fan systems ${ }^{\text {g }}$ | $\underline{0.000}$ | $\underline{0.000}$ | $\underline{0.000}$ | $\underline{0.070}$ | $\underline{0.100}$ | $\underline{0.089}$ |

a See definition of FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV).
$\overline{\mathrm{b}}$ Filter fan power allowance can only be counted once per fan system, except fan systems in health care facilities, which can claim one of the MERV 13 to 16 filter allowances and the HEPA filter allowance if both are included in the fan system.
c Health care facilities can claim this fan power allowance twice per fan system where coil design leaving air temperature is less than $44^{\circ} \mathrm{F}$.
$\overline{\mathrm{d}}$ Power allowance requires further calculation by multiplying the actual inches of water gauge (in.w.g.) of the device/component by the w/cfm in Table

- C403.8.1(1).
e The $100 \%$ outdoor air system must serve 3 or more HVAC zones and airflow during noneconomizer operating periods must comply with Section
- C403.2.2.1.
f Enthalpy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
g A low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

Table C403.8.1.1(2)
Exhaust, Return, Relief, Transfer Fan Power Allowances (W/CFM)

| Airflow | Multi-Zone <br> VAV Systems <br>  <br> $\leq 5,000 \mathrm{cfm}$ |  | Multi-Zone <br> VAV Systems <br>  <br> $>10,000 \mathrm{cfm}$ | $\begin{aligned} & \text { All Other } \\ & \begin{array}{l} \text { Fan Systems } \\ \leq 5,000 \mathrm{cfm} \end{array} \end{aligned}$ | $\begin{aligned} & \frac{\text { All Other }}{} \begin{array}{l} \text { Fan Systems } \\ >5,000 \mathrm{and} \\ \leq 10,000 \mathrm{cfm} \\ \hline \end{array} \end{aligned}$ | $\begin{aligned} & \quad \begin{array}{l} \text { All Other } \\ \text { Fan Systems } \end{array} \\ & \geq 10,000 \mathrm{cfm} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exhaust system base allowance | $\underline{0.221}$ | $\underline{0.246}$ | $\underline{0.236}$ | $\underline{0.186}$ | $\underline{0.184}$ | $\underline{0.190}$ |
| Filter (any <br> MERV value) ${ }^{\text {b }}$ | $\underline{0.046}$ | $\underline{0.041}$ | $\underline{0.036}$ | $\underline{0.046}$ | $\underline{0.041}$ | $\underline{0.035}$ |


| Airflow | $\begin{aligned} & \frac{\text { Multi-Zone }}{} \\ & \frac{\text { VAV Systems }}{}{ }^{\text {VAV }} \\ & \leqq 5,000 \mathrm{cfm} \end{aligned}$ | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \text { VAV Systems } \end{array} \\ \frac{>5,000 \mathrm{and}}{>10,000 \mathrm{cfm}} \end{gathered}$ | Multi-Zone <br> VAV Systems <br>  <br> $>10,000 \mathrm{cfm}$ | $\begin{aligned} & \text { All Other } \\ & \text { Fan Systems } \\ & \leqq 5,000 \mathrm{cfm} \end{aligned}$ | $\begin{gathered} \text { All Other } \\ \begin{array}{l} \text { Fan Systems } \\ >5,000 \mathrm{and} \\ \leq 10,000 \mathrm{cfm} \end{array} \end{gathered}$ | $\begin{gathered} \text { All Other } \\ \begin{array}{l} \text { Fan Systems } \\ \geq 10,000 \mathrm{cfm} \end{array} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Energy recovery } \\ & \hline \text { allowance for } \\ & \hline 0.50 \leq \mathrm{ERR} \\ & \hline 0.55^{\mathrm{C}} \\ & \hline \end{aligned}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ | $\underline{0.139}$ | $\underline{0.123}$ | $\underline{0.109}$ |
| $\begin{aligned} & \hline \frac{\text { Energy recovery }}{\text { allowance for }} \\ & 0.55 \leq \mathrm{ERR} \\ & \leq 0.60^{\mathrm{c}} \\ & \hline \end{aligned}$ | $\underline{0.165}$ | $\underline{0.142}$ | $\underline{0.126}$ | $\underline{0.165}$ | $\underline{0.144}$ | $\underline{0.128}$ |
| $\begin{aligned} & \frac{\text { Energy recovery }}{\text { allowance for }} \\ & \hline 0.60 \leq \mathrm{ERR} \\ & \hline 0.65^{\mathrm{c}} \\ & \hline \end{aligned}$ | $\underline{0.190}$ | $\underline{0.163}$ | $\underline{0.146}$ | $\underline{0.191}$ | $\underline{0.166}$ | $\underline{0.148}$ |
| Energy recovery allowance for $0.65 \leq$ ERR $\leq 0.70^{\mathrm{c}}$ | 0.215 | 0.184 | 0.165 | 0.216 | 0.188 | 0.167 |
| Energy recovery <br> allowance for <br> $0.70 \leq$ ERR <br> $\leq 0.75^{\mathrm{C}}$ | $\underline{0.240}$ | $\underline{0.206}$ | $\underline{0.184}$ | $\underline{0.241}$ | $\underline{0.209}$ | $\underline{0.186}$ |
| $\begin{aligned} & \frac{\text { Energy recovery }}{\text { allowance for }} \\ & \hline 0.75 \leq \text { ERR } \\ & \leq 0.80^{\mathrm{c}} \\ & \hline \end{aligned}$ | $\underline{0.265}$ | $\underline{0.227}$ | $\underline{0.203}$ | $\underline{0.266}$ | $\underline{0.231}$ | $\underline{0.205}$ |
| Energy recovery allowance for $\mathrm{ERR} \geq 0.80^{\mathrm{c}}$ | $\underline{0.289}$ | $\underline{0.248}$ | 0.222 | $\underline{0.291}$ | $\underline{0.252}$ | $\underline{0.225}$ |
| $\begin{aligned} & \text { Coil runaround } \\ & \text { loop } \end{aligned}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ | $\underline{0.139}$ | $\underline{0.123}$ | $\underline{0.109}$ |
| Return or exhaust systems required by code or accreditation standards to be fully ducted, or systems required to maintain air pressure differentials between adjacent rooms | $\underline{0.116}$ | $\underline{0.100}$ | $\underline{0.089}$ | $\underline{0.116}$ | $\underline{0.102}$ | $\underline{0.091}$ |
| Return and/or exhaust airflow control devices | 0.116 | $\underline{0.100}$ | 0.089 | 0.116 | 0.102 | 0.091 |
| Laboratory and vivarium exhaust systems in highrise buildings for vertical duct exceeding 75 ft . Value shown is allowed W/cfm per 0.25 in . wg for each 100 feet exceeding 75 feet $^{\text {d }}$ | 0.058 | 0.051 | 0.045 | 0.058 | 0.052 | $\underline{0.046}$ |


| Airflow | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \text { VAV Systems } \\ \leqq 5,000 \mathrm{cfm} \end{array} \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \frac{\text { VAV Systems }^{\mathrm{a}}}{} \\ >5,000 \mathrm{and} \\ \leqq 10,000 \mathrm{cfm} \end{array} \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { Multi-Zone } \\ \text { VAV Systems }^{\text {a }} \\ \geq 10,000 \mathrm{cfm} \end{array} \end{gathered}$ | $\begin{aligned} & \frac{\text { All Other }}{} \\ & \frac{\text { Fan Systems }}{\leq 5,000 \mathrm{cfm}} \end{aligned}$ | $\begin{aligned} & \frac{\text { All Other }}{\text { Fan Systems }} \\ & >5,000 \mathrm{and} \\ & \leqq 10,000 \mathrm{cfm} \end{aligned}$ | $\begin{aligned} & \quad \begin{array}{l} \text { All Other } \\ \begin{array}{l} \text { Fan Systems } \end{array} \\ >10,000 \mathrm{cfm} \end{array} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biosafety cabinet. Value shown is allowed W/cfm per 1.0 in. wg air pressure drop ${ }^{\text {d }}$ | $\underline{0.231}$ | $\underline{0.198}$ | $\underline{0.177}$ | $\underline{0.232}$ | $\underline{0.202}$ | $\underline{0.179}$ |
| Exhaust filters, scrubbers, or other exhaust treatment required by code or standard. Value shown is allowed W/cfm per 1.0 in. wg air pressure drop ${ }^{\text {d }}$ | $\underline{0.231}$ | $\underline{0.198}$ | $\underline{0.177}$ | $\underline{0.232}$ | $\underline{0.202}$ | $\underline{0.179}$ |
| Health care facility allowance ${ }^{\text {e }}$ | $\underline{0.231}$ | $\underline{0.198}$ | $\underline{0.177}$ | $\underline{0.232}$ | $\underline{0.202}$ | $\underline{0.179}$ |
| Sound attenuation section [Fans serving spaces with design background noise goals below NC35.] | $\underline{0.035}$ | $\underline{0.030}$ | $\underline{0.027}$ | $\underline{0.035}$ | $\underline{0.031}$ | $\underline{0.028}$ |

${ }^{\text {a }}$ See definition of FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) to be classified as a Multi-Zone VAV System.
$\overline{\mathrm{b}}$ Filter pressure loss can only be counted once per fan system.
c Enthalpy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
d $-\frac{\text { Power allowance requires further calculation, multiplying the actual pressure drop (in. } \mathrm{wg} \text { ) of the device/component by the W/cfm in the Table }}{}$
C403.8.1(2).
e This allowance can only be taken for health care facilities.

## C403.8.1.2 Determining Fan System Electrical Input Power (Fan kW ${ }_{\text {de- }}$

sign, system). Fan $k W_{\text {design, system }}$ is the sum of Fan $k W_{\text {design }}$ for each fan or fan array included in the fan system. If variable speed drives are used, their efficiency losses shall be included. Fan input power shall be calculated with two-times the clean filter pressure drop. The Fan
 following methods. There is no requirement to use the same method for all fans in a fan system:

1. Use the default Fan $k W_{\text {design }}$ in Table C403.8.1.2 for one or more of the fans. This method cannot be used for complex fan systems.
2. Use the Fan $k W_{\text {design }}$ at fan system design conditions provided by the manufacturer of the fan, fan array, or equipment that includes the fan or fan array calculated per a test procedure included in 10 C.F.R. Part 430, 10 C.F.R. Part 431, ANSI/AMCA 208, ANSI/AMCA S210, AHRI 430, AHRI 440, or ISO 5801.
3. Use the Fan $k W_{\text {design }}$ provided by the manufacturer, calculated at fan system design conditions per one of the methods listed in Section 5.3 of ANSI/AMCA 208.
4. Determine the Fan $k W_{\text {design }}$ by using the maximum electrical input power provided on the motor nameplate.

Table C403.8.1.2

Default Values for Fan kW ${ }_{\text {design }}$ Based on Motor Nameplate HPa,b

| Motor Nameplate HP | Default Fan $k W_{\text {design }}$ with variable speed drive (Fan $\mathrm{kW}_{\text {design }}$ ) | Default Fan $k W_{\text {design }}$ without variable speed drive (Fan $\mathrm{kW}_{\text {design }}$ ) |
| :---: | :---: | :---: |
| $\leq 1$ | 0.96 | 0.89 |
| $\geq 1$ and $<1.5$ | 1.38 | 1.29 |
| $\geq 1.5$ and $<2$ | 1.84 | $\underline{1.72}$ |
| $\geq 2$ and $<3$ | 2.73 | 2.57 |
| $\geq 3$ and $<5$ | 4.38 | 4.17 |
| $\geq 5$ and $<7.5$ | $\underline{6.43}$ | 6.15 |
| $\geq 7.5$ and $<10$ | $\underline{8.46}$ | $\underline{8.13}$ |
| $\geq 10$ and $<15$ | 12.4 | 12.0 |
| $\geq 15$ and $<20$ | $\underline{16.5}$ | 16.0 |
| $\geq 20$ and $<25$ | 20.5 | 19.9 |
| $\geq 25$ and $<30$ | 24.5 | 23.7 |
| $\geq 30$ and $<40$ | 32.7 | 31.7 |
| $\geq 40$ and $<50$ | 40.7 | 39.4 |
| $\geq 50$ and $<60$ | 48.5 | $\underline{47.1}$ |
| $\geq 60$ and $<75$ | 60.4 | 58.8 |
| $\geq 75$ and $\leq 100$ | 80.4 | 78.1 |

${ }^{\text {a }}$ This table cannot be used for motor nameplate horsepower values greater than 100 .
$\overline{\mathrm{b}}$ This table is to be used only with motors with a service factor $\leq 1.15$. If the service factor is not provided, this table may not be used.
C403.8.2 Motor nameplate horsepower. For each fan, the selected fan motor shall be no larger than the first available motor size greater than the brake horsepower (bhp). The fan brake horsepower (bhp) shall be indicated on the design documents to allow for compliance verification by the code official.
EXCEPTIONS: 1. For fans less than $6 \mathrm{bhp}(((4413)) 4476 \mathrm{~W})$, where the first available motor larger than the brake horsepower has a nameplate rating within 50 percent of the bhp, selection of the next larger nameplate motor size is allowed.
2. For fans $6 \mathrm{bhp}(((4413)) 4476 \mathrm{~W})$ and larger, where the first available motor larger than the bhp has a nameplate rating within 30 percent of the bhp, selection of the next larger nameplate motor size is allowed.
3. For fans used only in approved life safety applications such as smoke evacuation.
4. Fans with motor nameplate horsepower less than 1 hp ((are exempt frem this seetion)) or fans with a fan motor nameplate electrical input power of less than 0.89 kW .
5. Fans equipped with electronic speed control devices to vary the fan airflow as a function of load.

C403.8.3 Fan efficiency. ( (Fans shall have a fan efficiency grade (FFG) of 67 or higher based on manufacturers' certified data, as de= fined by AMCA 205. The total efficiency of the fan at the design point of operation shall be within 15 percentage points of the maximum total efficiency of the fan.) ) Each fan and fan array shall have a fan energy index (FEI) of not less than 1.00 at the design point of operation, as determined in accordance with AMCA 208 by an approved, independent testing laboratory and labeled by the manufacturer. Each fan and fan array used for a variable-air volume system shall have an FEI of not less than 0.95 at the design point of operation as determined in accordance with AMCA 208 by an approved, independent testing laboratory and labeled by the manufacturer. The FEI for fan arrays shall be calculated in accordance with AMCA 208 Annex C.
EXCEPTION: The following fans are not required to have a fan ((efficiency grade)) energy index:

1. ((Individual fans with a motor nameplate horsepower of $5 \mathrm{hp}(3.7 \mathrm{~kW})$ or less that are not part of a group operated as the functional equivalent of a single fan.)) Fans that are not embedded pans with motor nameplate horsepower of less than $1.0 \mathrm{hp}(0.75 \mathrm{~kW}$ ) or with a nameplate electrical input power of less than 0.89 kW .
2. Embedded fans that have a motor nameplate horsepower of $5 \mathrm{hp}(3.7 \mathrm{~kW})$ or less or with a fan system electrical input power of 4.1 kW or less.
3. Multiple fans operated in series or parallel as the functional equivalent of a single fan that have a combined motor nameplate horsepower of $5 \mathrm{hp}(3.7 \mathrm{~kW})$ or less (( and are operated as the funetional equivalent of a single fant)) or with a fan system electrical input power of 4.1 kW or less.
((3.)) 4. Fans that are part of equipment covered under Section C403.3.2.
((4.)) $\underline{\text {. F Fans included in an equipment package certified by an approved agency for air or energy performance. }}$
((5. Pored willoof 6 . Ceiling fans.
( ( 6 . Fans outside the seope of AMCA 205.)) 7. Fans used for moving gases at temperatures above $425^{\circ} \mathrm{F}\left(250^{\circ} \mathrm{C}\right)$.
( 7 . Fans that are intended to operate only during emergeney conditions.)) 8 . Fans used for operation in explosive atmospheres.
4. Reversible fans used for tunnel ventilation.
5. Fans that are intended to operate only during emergency conditions.
6. Fans outside the scope of AMCA 208.


#### Abstract

C403.8.4 ( (Group R occupancy exhaust fan efficacy. The Group R oceu= pancies of the building shall be provided with ventilation that meets the requirements of the International Mechanical Code, as applicable, or with other approved means of ventilation. Mechanical ventilation system fans with 400 efm or less) ) Low-capacity ventilation fans. Mechanical ventilation system fans with motors less than $1 / 12 \mathrm{hp}$ ( 0.062 kW) in capacity shall meet the efficacy requirements of Table C403.8.4 at one or more rating points. EXCEPTIONS: 1. ((Group R heat recovery ventilator and energy recovery ventilator fans that are less than 400 cfm .) ) Where ventilation fans are a component of a listed heating or cooling appliance. 2. ((Where whole house ventilation fans are integrated with foreed-air systems that are tested and listed HVAC equipment, provided they are pewered by an electronieally commtatad motor where required by Section C405.8.)) Dryer exhaust duct power ventilators and domestic range booster fans that operate intermittently. ((3. Domestic clothes dryer booster fans, domestic range hood exhaust fans, and domestic range booster fans that operate intermittently.))


Table C403.8.4<br>((Gxoup R Exhaust Fan Efficacy))<br>Low-Capacity Ventilation Fan Efficacy ${ }^{\text {a }}$

| ((Fan Location | $\begin{gathered} \text { Air Flow } \\ \text { Rate } \\ \text { Minimum } \\ \text { (efm) } \end{gathered}$ | Minimum Effiealy (efm/watt) | $\begin{gathered} \text { Air Flow } \\ \text { Rate } \\ \text { Maximum } \\ \text { (efm) } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Exhaust fan: Bathreom, tilility room, whole house | 10 | 2.8 | $<90$ |
| Exhaust fan: Bathroom, utility room, whole house | 90 | 3.5 | Any |
| In- line (single-pert and multi-port) fans | Any | 3.8 | Any) |


| Fan Location | Airflow Rate Minimum (cfm) | Minimum Efficacy (cfm/watt) | Airflow Rate Maximum (cfm) |
| :---: | :---: | :---: | :---: |
| HRV or ERV | Any | $1.2 \mathrm{cfm} / \mathrm{watt}$ | Any |
| Range hood | Any | $2.8 \mathrm{cfm} / \mathrm{watt}$ | Any |
| In-line fan | Any | $3.8 \mathrm{cfm} / \mathrm{watt}$ | Any |
| Bathroom, utility room | 10 | $2.8 \mathrm{cfm} /$ watt | $\leq 90$ |
| Bathroom, utility room | $\underline{90}$ | $3.5 \mathrm{cfm} / \mathrm{watt}$ | Any |

For SI: $1 \mathrm{cfm} / \mathrm{ft}=47.82 \mathrm{~W}$.
a Airflow shall be tested in accordance with HVI 916 and listed. Efficacy shall be listed or shall be derived from listed power and airflow. Fan efficacy for fully ducted HRV, ERV, balanced and in-line fans shall be determined at a static pressure not less than 0.2 inch w.c. Fan efficacy for ducted range hoods, bathroom, and utility room fans shall be determined at a static pressure not less than 0.1 inch w.c.

C403.8.5 Fan controls. Controls shall be provided for fans in accordance with Section C403.8.5.1 and as required for specific systems provided in Section C403.

C403.8.5.1 Fan airflow control. Each cooling system listed in Table C403.8.5.1 shall be designed to vary the indoor fan airflow as a function of load and shall comply with the following requirements:

1. Direct expansion (DX) and chilled water cooling units that control the capacity of the mechanical cooling directly based on space temperature shall have not fewer than two stages of fan control. Low
or minimum speed shall not be greater than 66 percent of full speed. At low or minimum speed, the fan system shall draw not more than 40 percent of the fan power at full fan speed. Low or minimum speed shall be used during periods of low cooling load and ventilation-only operation.
2. Other units including DX cooling units and chilled water units that control the space temperature by modulating the airflow to the space shall have modulating fan control. Minimum speed shall be not greater than 50 percent of full speed. At minimum speed, the fan system shall draw no more than 30 percent of the power at full fan speed. Low or minimum speed shall be used during periods of low cooling load and ventilation-only operation.
3. Units that include an airside economizer in accordance with Section C403.5 shall have not fewer than two speeds of fan control during economizer operation.
EXCEPTIONS: $\quad$. Modulating fan control is not required for chilled water and evaporative cooling units with fan motors of less than $1 \mathrm{hp}(0.746 \mathrm{~kW})$ where the units are not used to provide ventilation air and the indoor fan cycles with the load. 2. Where the volume of outdoor air required to comply with the ventilation requirements of the International Mechanical Code at low speed exceeds the air that would be delivered at the minimum speed defined in Section C403.8.5, the minimum speed shall be selected to provide the required ventilation air.

## Table C403.8.5.1 <br> Fan Control

| Cooling System <br> Type | Fan Motor Size | Mechanical <br> Cooling <br> Capacity |
| :---: | :---: | :---: |
| DX cooling | Any | $\geq 42,000$ Btu/h |
| Chilled water <br> and evaporative <br> cooling | $\geq 1 / 4 \mathrm{hp}$ | Any |

C403.8.6 Large-diameter ceiling fans. Where provided, large-diameter ceiling fans shall be tested and labeled in accordance with AMCA 230.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-4038, filed 11/26/19, effective 7/1/20.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-4039 Section C403.9-Heat rejection and heat recovery equipment.

## C403.9 Heat rejection and heat recovery equipment.

C403.9.1 Heat rejection equipment. Heat rejection equipment, including air-cooled condensers, dry coolers, open-circuit cooling towers, closed-circuit cooling towers and evaporative condensers, shall comply with this section.
EXCEPTION: Heat rejection devices where energy usage is included in the equipment efficiency ratings listed in Tables ((E403.3.2(1)A,
$\mathrm{C} 403.3 .2(1) \mathrm{B}, \mathrm{C} 403.3 .2(1) \mathrm{C}, \mathrm{C} 403.3 .2(2), \mathrm{C} 403.3 .2(3), \mathrm{C} 403.3 .2(7)$ and $\mathrm{C} 403.3 .2(9)) \mathrm{C} 403.3 .2(1), \mathrm{C} 403.3 .2(2), \mathrm{C} 403.3 .2(3)$, C403.3.2(4), C403.3.2(8), C403.3.2(9), C403.3.2(10) and C403.3.2(16).
Heat rejection equipment shall have a minimum efficiency performance not less than values specified in Table C403.3.2((f) (8) (7).

C403.9.1.1 Fan speed control. Each fan powered by an individual motor or array of motors with a connected power, including the motor service factor, totaling $5 \mathrm{hp}(3.7 \mathrm{~kW})$ or more shall have controls and devices configured to automatically modulate the fan speed to control the leaving fluid temperature or condensing temperature and pressure of the heat rejection device. Fan motor power input shall be not more than 30 percent of design wattage at 50 percent of the design airflow.
EXCEPTIONS: 1. Fans serving multiple refrigerant or fluid cooling circuits.
2. Condenser fans serving flooded condensers.

C403.9.1.2 Multiple-cell heat rejection equipment. Multiple-cell heat rejection equipment with variable speed fan drives shall be controlled to operate the maximum number of fans allowed that comply with the manufacturer's requirements for all system components and so that all fans can operate at the same fan speed required for the instantaneous cooling duty, as opposed to staged (on/off) operation. The minimum fan speed shall be the minimum allowable speed of the fan drive system in accordance with the manufacturer's recommendations.
C403.9.1.3 Limitation on centrifugal fan open-circuit cooling towers. Centrifugal fan open-circuit cooling towers with a combined rated capacity of $1,100 \mathrm{gpm}(4164 \mathrm{~L} / \mathrm{m})$ or greater at $95^{\circ} \mathrm{F}\left(35^{\circ} \mathrm{C}\right)$ condenser water return, $85^{\circ} \mathrm{F}\left(29^{\circ} \mathrm{C}\right)$ condenser water supply, and $75^{\circ} \mathrm{F}\left(24^{\circ} \mathrm{C}\right)$ outdoor air wet-bulb temperature shall meet the energy efficiency requirement for axial fan open-circuit cooling towers listed in Table C403.3.2((f))) (7).
C403.9.1.4 Tower flow turndown. Open-circuit cooling towers used on water-cooled chiller systems that are configured with multiple- or variable-speed condenser water pumps shall be designed so that all open circuit cooling tower cells can be run in parallel with the larger of the flow that is produced by the smallest pump at its minimum expected flow rate or at 50 percent of the design flow for the cell.

## C403.9.2 Heat recovery.

C403.9.2.1 Condenser heat recovery for service water heating. Condenser heat recovery shall be installed for heating or reheating of service hot water provided the facility operates 24 hours a day, the total installed heat capacity of water cooled systems exceeds 1,500,000 Btu/hr of heat rejection, and the design service water heating load exceeds 250,000 Btu/hr.

The required heat recovery system shall have the capacity to provide the smaller of:

1. Sixty percent of the peak heat rejection load at design conditions; or
2. The preheating required to raise the peak service hot water draw to $85^{\circ} \mathrm{F}\left(29^{\circ} \mathrm{C}\right)$.
EXCEPTIONS: 1. Facilities that employ condenser heat recovery for space heating or reheat purposes with a heat recovery design exceeding 30 percent of the peak water-cooled condenser load at design conditions.
3. Facilities that provide 60 percent of their service water heating from site recovered energy.

C403.9.2.2 Steam condensate systems. On-site steam heating systems shall have condensate water heat recovery. On-site includes a system that is located within or adjacent to one or more buildings within the boundary of a contiguous area or campus under one ownership and which serves one or more of those buildings.

Buildings using ((steam genexated)) off-site ((with steam heating systems which do not have condensate water recovery shall have)) gen-
erated steam where the condensate is not returned to the source, shall have an on-site condensate water heat recovery system.
C403.9.2.3 Refrigeration condenser heat recovery. Facilities having food service, meat or deli departments and having 500,000 Btu/h or greater of remote refrigeration condensers shall have condenser waste heat recovery from freezers and coolers and shall use the waste heat for service water heating, space heating or for dehumidification reheat. Facilities having a gross conditioned floor area of $40,000 \mathrm{ft}^{2}$ or greater and 1,000,000 Btu/h or greater of remote refrigeration shall have condenser waste heat recovery from freezers and coolers and shall use the waste heat for service water heating, and either for space heating or for dehumidification reheat for maintaining low space humidity.
C403.9.2.4 Condenser heat recovery for space heating. A water-source condenser heat recovery system meeting the requirements of Sections C403.9.2.4.1 through C403.9.2.4.4 shall be installed to serve space and ventilation heating systems in new buildings and additions meeting the following criteria:

1. The facility operates greater than 70 hours per week.
2. The sum of all heat rejection equipment capacity serving the new building or addition exceeds $1,500,000 \mathrm{Btu} / \mathrm{hr}$.
3. The sum of zone minimum airflows in all zones with zone reheat coils divided by the conditioned floor area served by those systems is at least 0.45 cfm per square foot.
EXCEPTION: Systems complying with Section C403.3.5, Dedicated outdoor air systems.
C403.9.2.4.1 Water-to-water heat recovery. Ninety percent (90\%) of the total building space and ventilation heating system design load shall be served by systems that include heat recovery chiller or water-towater heat pump equipment capable of rejecting heat from the cooling loop to the space and ventilation heating loop as the first stage of heating.
C403.9.2.4.2 Exhaust heat recovery. Heat shall be recovered by the heat recovery system from 90 percent of the total building exhaust airflow. The maximum leaving air temperature of exhaust air after heat recovery shall be $55^{\circ} \mathrm{F}$ dry-bulb when operating at full capacity in heat recovery mode.
EXCEPTIONS: 1. Where energy recovery systems are restricted by Section 514 of the International Mechanical Code to sensible energy, those systems shall not be included in the calculation of total building exhaust airflow.
4. Exhaust air systems handling contaminated airstreams that are regulated by applicable codes or accreditation standards and pose a health risk to maintenance personnel to maintain heat recovery devices, those systems shall not be included in the calculation of total building exhaust airflow.

C403.9.2.4.3 Process heat recovery. Spaces with year-round cooling loads from lights and equipment of 5 watts and greater per square foot shall be served by water-cooled equipment. Cooling loops serving the water-cooled equipment shall be served by water source heat recovery systems meeting the requirements of Section C403.9.2.4.1. If such spaces are provided with an air or water economizer, the economizer controls shall be configured with an override signal from the building automation system to disable economizer operation during heat recovery mode.
C403.9.2.4.4 Water-to-water heat recovery sizing. The minimum total combined capacity of heat recovery chillers or water-to-water heat pumps shall match the total combined capacity of installed equipment
sized to meet the requirements of Sections C403.9.2.4.2 and C403.9.2.4.3.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-4039, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-4039, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-40391 Section C403.10-Construction of HVAC system elements.
C403.10 Construction of HVAC system elements. Ducts, plenums, piping and other elements that are part of an HVAC system shall be constructed and insulated in accordance with Sections C403.10.1 through C403.10.3.1.

## C403.10.1 Duct and plenum insulation and sealing.

C403.10.1.1 Ducts, shafts, and plenums conveying outdoor air. ((Ducts,)) Shafts and plenums conveying outdoor air from the exterior of the building to the mechanical system shall meet all air leakage and building envelope insulation requirements of Section C402, plus building envelope vapor control requirements from the International Building Code((, extending)).

Ducts conveying outdoor air shall be insulated continuously from the building exterior to an automatic shutoff damper or heating or cooling equipment. ((For the purposes of building envelope insulation requirements, ) Duct surfaces shall be insulated with the minimum insulation values in Table C403.10.1.1. Duct surfaces included as part of the building envelope shall not be used in the calculation of maximum glazing area as described in Section C402.4.1.
EXCEPTION((S)): ((4)) Outdoor air ducts serving individual supply air units with less than 2,800 cfm of total supply air capacity, provided these are insulated to the minimum insulation values in Table C403.10.1.1.
$((z$. Unheated equipment rooms with combustion air louvers, provided they are isolated from conditioned space at sides, top and bottom of the room with R-11 nominal insulation.))

Table C403.10.1.1
Outdoor Air Ductwork Insulation

| Duct system | Duct Location <br> and Use | Climate Zone | Airflow | Minimum <br> Installed <br> Duct Insulation <br> $\boldsymbol{R}$-value |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Outdoor Air | Inside conditioned <br> space and upstream <br> of automatic shutoff <br> damper | 4 C and 5B | $\geq 2800$ CFM | R-16 | Notes |
| Outdoor Air | Inside conditioned Section <br> C403.10.1.1 for <br> additional <br> requirements |  |  |  |  |
|  | space and <br> downstream of <br> automatic shutoff <br> damper to HVAC <br> unit or room | 4 C | $\geq 2800$ CFM | R-8 |  |


| Duct system | Duct Location <br> and Use | Climate Zone | Airflow | Minimum <br> Installed <br> Duct Insulation <br> $\boldsymbol{R}$-value ${ }^{\text {a,b }}$ | Notes |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Outdoor Air | Inside conditioned <br> space and <br> downstream of <br> automatic shutoff <br> damper to HVAC <br> unit or room | $5 B$ | $\geq 2800$ CFM | R-12 |  |
| Outdoor Air | Inside conditioned <br> space | 4 C and 5B | $\leq 2800$ CFM | R-7 | See Exception 1 <br> to Section <br> C403.10.1.1 for <br> additional details |

${ }^{\text {a }}$ Insulation $R$-values, measured in $\mathrm{h} \cdot \mathrm{ft}^{2}{ }^{\circ} \mathrm{F} / \mathrm{Btu}$, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of $75^{\circ} \mathrm{F}$ at the installed thickness.
b See International Mechanical Code Sections 603.12 and 604 for further details on duct insulation requirements.
C403.10.1.2 Other supply and return ducts. All other supply and return air ducts and plenums shall be insulated with a minimum of $R-6$ insulation where located in unconditioned spaces, and where located outside the building with a minimum of $R-8$ insulation in Climate Zone 4 and R-12 insulation in Climate Zone 5. Ducts located underground beneath buildings shall be insulated as required in this section or have an equivalent thermal distribution efficiency. Underground ducts utilizing the thermal distribution efficiency method shall be listed and labeled to indicate the $R$-value equivalency. Where located within a building envelope assembly, the duct or plenum shall be separated from the building exterior or unconditioned or exempt spaces by minimum insulation value as required for exterior walls by Section C402.1.3.
EXCEPTIONS: 1. Where located within equipment.
2. Supply and return ductwork located in unconditioned spaces where the design temperature difference between the interior and exterior of the duct or plenum does not exceed $15^{\circ} \mathrm{F}\left(8^{\circ} \mathrm{C}\right)$ and are insulated in accordance with Table C403.10.1.2.
Where located within conditioned space, supply ducts which convey supply air at temperatures less than $55^{\circ} \mathrm{F}$ or greater than $105^{\circ} \mathrm{F}$ shall be insulated with a minimum insulation $R$-value in accordance with Table C403.10.1.2.

EXCEPTION: Ductwork exposed to view within a zone that serves that zone is not required to be insulated.
Where located within conditioned space, return or exhaust air ducts that convey return or exhaust air downstream of an energy recovery media shall be insulated with a minimum insulation $R$-value in accordance with Table C403.10.1.2.

All ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with Section 603.9 of the International Mechanical Code.

Table C403.10.1.2
Supply, Return, Exhaust and Relief Air Ductwork Insulation

| Duct System | Duct Location <br> and Use | Climate Zone | Minimum Installed <br> DuctInsulation <br> $\boldsymbol{R}$-valuea,b | Notes |
| :--- | :--- | :---: | :---: | :--- |
| Supply air or <br> return air | Outside the building <br> (outdoors and exposed to <br> weather) | 4C | R-8 | See Section C403.10.1.2 <br> for details |
| Supply air or <br> return air | Outside the building <br> (outdoors and exposed to <br> weather) | 5B | R-12 | See Section C403.10.1.2 <br> for details |


| Duct System | Duct Location and Use | Climate Zone | Minimum Installed Duct Insulation $R$-value ${ }^{\text {a,b }}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Supply air or return air | Unconditioned space (enclosed but not in the building conditioned envelope) | 4 C and 5B | R-6 | See Section C403.10.1.2 for details |
| Supply air or return air | Unconditioned space where the duct conveys air that is within $15^{\circ} \mathrm{F}$ of the air temperature of the surrounding unconditioned space | 4 C and 5B | R-3.3 | See IMC Section 603.12 for additional requirements for condensation control at ductwork |
| Supply air or return air | Where located in a building envelope assembly | 4 C and 5B | R-16 | Duct or plenum is separated from building envelope assembly with the minimum insulation value |
| Supply air | Within conditioned space where the supply duct conveys air that is less than $55^{\circ} \mathrm{F}$ or greater than $105^{\circ} \mathrm{F}$ | 4 C and 5B | R-3.3 | See Section C403.10.1.2 for details |
| Supply air | Within conditioned space that the duct directly serves where the supply duct conveys air that is less than $55^{\circ} \mathrm{F}$ or greater than $105^{\circ} \mathrm{F}$ | 4 C and 5B | None | See Section C403.10.1.2 for details |
| Supply air | Within conditioned space where the supply duct conveys air that is $55^{\circ} \mathrm{F}$ or greater and $105^{\circ} \mathrm{F}$ or less | 4 C and 5B | None |  |
| Return or exhaust air | Within conditioned space, downstream of an energy recovery media, upstream of an automatic shutoff damper | 4C | R-8 |  |
| Return or exhaust air | Within conditioned space, downstream of an energy recovery media, upstream of an automatic shutoff damper | 5B | R-12 |  |
| Relief or exhaust air | Conditioned space and downstream of an automatic shutoff damper | 4 C and 5B | R-16 |  |

${ }^{\text {a }}$ Insulation $R$-values, measured in $\mathrm{h} \cdot \mathrm{ft}^{2} \cdot{ }^{\circ} \mathrm{F} / \mathrm{Btu}$, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of $75^{\circ} \mathrm{F}$ at the installed thickness.
b See International Mechanical Code Sections 603.12 and 604 for further details on duct insulation requirements.
c Includes attics above insulated ceilings, parking garages and crawl spaces.
C403.10.2 Duct construction. Ductwork shall be constructed and erected in accordance with the International Mechanical Code. For the purposes of this section, longitudinal seams are joints oriented in the direction of airflow. Transverse joints are connections of two duct sections oriented perpendicular to airflow. Duct wall penetrations are openings made by any screw, fastener, pipe, rod, or wire. All other connections are considered transverse joints including, but not limited to, spin-ins, taps, and other branch connections, access door frames and jambs, and duct connections to equipment.

C403.10.2.1 Low-pressure duct systems. Longitudinal and transverse joints, seams and connections of supply and return ducts operating at a static pressure less than or equal to 2 inches water gauge (w.g.) ( 500 Pa ) shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus embedded-fabric systems or tapes installed in accordance with the manufacturer's installation instructions. Pressure classifications specific to the duct system shall be clearly indicated on the construction documents in accordance with the International Mechanical Code.
EXCEPTION: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches water gauge (w.g.) ( 500 Pa ) pressure classification.

C403.10.2.2 Medium-pressure duct systems. Ducts and plenums designed to operate at a static pressure greater than 2 inches water gauge (w.g.) ( 500 Pa ) but less than 3 inches w.g. ( 750 Pa ) shall be insulated and sealed in accordance with Section C403.10.1. Pressure classifications specific to the duct system shall be clearly indicated on the construction documents in accordance with the International Mechanical Code.

C403.10.2.3 High-pressure duct systems. Ducts designed to operate at static pressures equal to or greater than 3 inches water gauge (w.g.) (750 Pa) shall be insulated and sealed in accordance with Section C403.10.1. In addition, ducts and plenums shall be leak-tested in accordance with the SMACNA HVAC Air Duct Leakage Test Manual and shown to have a rate of air leakage (CL) less than or equal to 4.0 as determined in accordance with Equation ((4-9)) 4-12.
(Equation ((4-9)) 4-12)

## $C L \quad F / P^{0.65}$

Where:
$F \quad$ The measured leakage rate in cfm per 100 square feet of duct surface.
$P \quad$ The static pressure of the test.
Documentation shall be furnished ((by the designex)) demonstrating that representative sections totaling at least 25 percent of the duct area have been tested and that all tested sections meet the requirements of this section.
C403.10.3 Piping insulation. All piping, other than field installed HVAC system refrigerant piping, serving as part of a heating or cooling system shall be thermally insulated in accordance with Table C403.10.3.

EXCEPTIONS: 1. Factory-installed piping within HVAC equipment tested and rated in accordance with a test procedure referenced by this code. 2. Factory-installed piping within room fan-coils and unit ventilators tested and rated according to AHRI 440 (except that the sampling and variation provisions of Section 6.5 shall not apply) and 840 , respectively.
3. Piping that conveys fluids that have a design operating temperature range between $60^{\circ} \mathrm{F}\left(15^{\circ} \mathrm{C}\right)$ and $105^{\circ} \mathrm{F}\left(41^{\circ} \mathrm{C}\right)$.
4. Piping that conveys fluids that have not been heated or cooled through the use of fossil fuels or electric power.
5. Strainers, control valves, and balancing valves associated with piping 1 inch ( 25 mm ) or less in diameter.
6. Direct buried piping that conveys fluids at or below $60^{\circ} \mathrm{F}\left(15^{\circ} \mathrm{C}\right)$.
7. In radiant heating systems, sections of piping intended by design to radiate heat.

Table C403.10.3
Minimum Pipe Insulation Thickness (thickness in inches)a

| Fluid Operating Temperature Range and Usage ( ${ }^{\circ}$ F) | Insulation Conductivity |  | Nominal Pipe or Tube Size (inches) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Conductivity Btu•in. /(h• ft ${ }^{\mathbf{2}}$ $\left.-{ }^{\circ} \mathbf{F}\right)^{b}$ | $\begin{gathered} \text { Mean } \\ \text { Rating } \\ \text { Temperature, }{ }^{\circ} \text { F } \end{gathered}$ | < 1 | 1 to $<1-1 / 2$ | 1-1/2 to $<4$ | 4 to $<8$ | $\geq 8$ |
| > 350 | 0.32-0.34 | 250 | 4.5 | 5.0 | 5.0 | 5.0 | 5.0 |


| Fluid Operating Temperature Range and Usage ( ${ }^{\circ}$ F) | Insulation Conductivity |  | Nominal Pipe or Tube Size (inches) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Conductivity Btu•in. /(h•ft ${ }^{\mathbf{2}}$ - $\left.{ }^{\circ} \mathrm{F}\right)^{\mathbf{b}}$ | Mean Rating Temperature, ${ }^{\circ}{ }^{\circ} \mathbf{F}$ | <1 | 1 to $<1-1 / 2$ | 1-1/2 to $<4$ | 4 to $<8$ | $\geq 8$ |
| 251-350 | 0.29-0.32 | 200 | 3.0 | 4.0 | 4.5 | 4.5 | 4.5 |
| 201-250 | 0.27-0.30 | 150 | 2.5 | 2.5 | 2.5 | 3.0 | 3.0 |
| 141-200 | 0.25-0.29 | 125 | 1.5 | 1.5 | 2.0 | 2.0 | 2.0 |
| 105-140 | 0.21-0.28 | 100 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 |
| 40-60 | 0.21-0.27 | 75 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 |
| $<40$ | 0.20-0.26 | 75 | 0.5 | 1.0 | 1.0 | 1.0 | 1.5 |

a For piping smaller than $1-1 / 2$ inch $(38 \mathrm{~mm})$ and located in partitions within conditioned spaces, reduction of these thicknesses by 1 inch ( 25 mm ) shall be permitted (before thickness adjustment required in footnote b) but not to a thickness less than 1 inch ( 25 mm ).
b For insulation outside the stated conductivity range, the minimum thickness ( $T$ ) shall be determined as follows:

$$
T \quad r\left\{(1+t / r)^{K / k}-1\right\}
$$

Where:
$T=$ Minimum insulation thickness.
$r=$ Actual outside radius of pipe.
$t=$ Insulation thickness listed in the table for applicable fluid temperature and pipe size.
$K=$ Conductivity of alternate material at mean rating temperature indicated for the applicable fluid temperature ( $\mathrm{Btu} \times$ in $/ \mathrm{h} \times \mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F}$ ).
$k=$ The upper value of the conductivity range listed in the table for the applicable fluid temperature.
c For direct-buried heating and hot water system piping, reduction of these thicknesses by $1-1 / 2$ inches ( 38 mm ) shall be permitted (before thickness adjustment required in footnote $b$ but not to thicknesses less than 1 inch ( 25 mm ).

C403.10.3.1 Protection of piping insulation. Piping insulation exposed to weather shall be protected from damage, including that due to sunlight, moisture, ((equipment maintenance)) physical damage and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Protection shall be removable for no less than six feet from the equipment for maintenance. Adhesive((s)) tape shall not be permitted.
C403.10.4 Insulation of HVAC system refrigerant piping. Field installed HVAC refrigerant piping, other than piping factory installed in HVAC equipment, shall have insulation as listed below, at a conductivity rating of 0.21 to 0.26 Btu $\times$ in/ ( $h \times \mathrm{ft}^{2} \times{ }^{\circ} \mathrm{F}$ ) with a mean temperature rating of $75^{\circ} \mathrm{F}$. Piping insulation exposed to weather shall be protected from damage, including that due to sunlight, moisture, physical damage and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted. Manufacturer's required minimum pipe insulation shall be maintained.

1. For lines that convey hot gas for space heating:
1.1. Minimum 1-inch insulation on the portions outside the building thermal envelope.
1.2. Minimum $1 / 2$-inch insulation on the portions within the building thermal envelope.
2. Minimum 1/2-inch insulation on the liquid line for mini-split systems and other systems for which insulation is required by the manufacturer, or where the metering device is located in the outdoor unit.
3. No insulation is required on the liquid line for other heat pump types or for cooling-only units where insulation is not required by the manufacturer.
[Statutory Authority: RCW 19.27A.025, 19.27A. 045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40391, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chap-
ter 19.27 RCW. WSR 19-24-040, § 51-11C-40391, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40393 Section C403.12-High efficiency single zone VAV systems.

C403.12 High efficiency single-zone variable air volume (VAV) systems. For HVAC systems subject to the requirements of Section C403.3.5 but utilizing Exception 2 of that section, a high efficiency single-zone VAV system may be provided without a separate parallel DOAS when the system is designed, installed, and configured to comply with all of the following criteria (this exception shall not be used as a substitution for a DOAS per Section C406.6 or as a modification to the requirements for the Standard Reference Design in accordance with Section C407):

1. The single-zone VAV system is provided with airside economizer in accordance with Section C403.3 without exceptions.
2. A direct-digital control (DDC) system is provided to control the system as a single zone in accordance with Section C403.4.11 regardless of sizing thresholds of Table C403.4.11.1.
3. Single-zone VAV systems with a minimum outdoor air requirement of $1,000 \mathrm{cfm}(472 \mathrm{~L} / \mathrm{s})$ or greater shall be equipped with a device capable of measuring outdoor airflow intake under all load conditions. The system shall be capable of increasing or reducing the outdoor airflow intake based on Section C403.7.1, Demand controlled ventilation.
4. Allowable fan ((motor horsepower)) power shall not exceed 90 percent of the allowable ((HVAC fan system bhp (Option 2)) ) fan power budget as defined by Section c403.8.1.1.
5. Each single-zone VAV system shall be designed to vary the supply fan airflow as a function of heating and cooling load and minimum fan speed shall not be more than the greater of:
5.1. 30 percent of peak design airflow; or
5.2. The required ventilation flow assuming no occupants.
6. Spaces that are larger than 150 square feet ( $14 \mathrm{~m}^{2}$ ) and with an occupant load greater than or equal to 25 people per 1000 square feet ( $93 \mathrm{~m}^{2}$ ) of floor area (as established in Table 403.3.1.1 of the International Mechanical Code) shall be provided with all of the following features:
6.1. Demand control ventilation (DCV) shall be provided that utilizes a carbon dioxide sensor to reset the ventilation setpoint of the single-zone VAV system from the design minimum to design maximum ventilation rate as required by Chapter 4 of the International Mechanical Code.
6.2. Occupancy sensors shall be provided that are configured to reduce the minimum ventilation rate to zero and setback room temperature setpoints by a minimum of $5^{\circ} \mathrm{F}$, for both cooling and heating, when the space is unoccupied.
7. Single-zone VAV systems shall comply with one of the following options:
7.1. Single-zone VAV air handling units with a hydronic heating coil connected to systems with hot water generation equipment limited to the following types of equipment: Gas-fired hydronic boilers with a
thermal efficiency, $E_{t}$, of not less than 92 percent, air-to-water heat pumps or heat recovery chillers. Hydronic heating coils shall be sized for a maximum entering hot water temperature of $120^{\circ} \mathrm{F}$ for peak anticipated heating load conditions.
7.2. Single-zone VAV air handing units with a chilled water coil connected to systems with chilled water generation equipment with IPLV values more than 25 percent higher than the minimum part load efficiencies listed in Table C403.3.2((4))) (3), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify. The smallest chiller or compressor in the central plant shall not exceed 20 percent of the total central plant cooling capacity or the chilled water system shall include thermal storage sized for a minimum of 20 percent of the total central cooling plant capacity.
7.3. Single-zone VAV air handling units with DX cooling, heat pump heating or gas-fired furnace shall comply with the following requirements as applicable:
7.3.1. Have a DX cooling coil with cooling part load efficiency that is a minimum of 15 percent higher than the minimum SEER or IEER listed in Tables C403.3.2(1), C403.3.2(2), and C403.3.2((12)) (14).
7.3.2. Have a gas-fired furnace with a thermal efficiency, $\mathrm{E}_{\mathrm{t}}$, of not less than 90 percent or heat pump with a minimum heating HSPF or COP efficiency that are a minimum of 10 percent higher than the minimum heating efficiency in Tables C403.3.2(1), C403.3.2(2), and C403.3.2(( $(2)$ ) (14).
7.3.3. Heating coils or burner output shall be modulating or have a minimum of 2 stages with the first stage being less than 50 percent of total heating capacity. Cooling coils shall be modulating or have a minimum of 2 stages with the first stage being less than 50 percent of the total cooling capacity.
8. The DDC system shall include a fault detection and diagnostics (FDD) system complying with the following:
8.1. The following temperature sensors shall be permanently installed to monitor system operation:
8.1.1. Outside air.
8.1.2. Supply air.
8.1.3. Return air.
8.2. Temperature sensors shall have an accuracy of $\pm 2^{\circ} \mathrm{F}\left(1.1^{\circ} \mathrm{C}\right)$
over the range of $40^{\circ} \mathrm{F}$ to $80^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right.$ to $\left.26.7^{\circ} \mathrm{C}\right)$.
8.3. The single-zone VAV air handling unit controller shall be configured to provide system status by indicating the following:
8.3.1. Free cooling available.
8.3.2. Economizer enabled.
8.3.3. Compressor enabled.
8.3.4. Heating enabled.
8.3.5. Mixed air low limit cycle active.
8.3.6. The current value of each sensor.
8.4. The single-zone VAV air handling unit controller shall be capable of manually initiating each operating mode so that the operation of compressors, economizers, fans and the heating system can be independently tested and verified.
8.5. The single-zone VAV air handling unit shall be configured to report faults to a fault management application able to be accessed by day-to-day operating or service personnel or annunciated locally on zone thermostats.
8.6. The FDD system shall be configured to detect the following faults:
8.6.1. Air temperature sensor failure/fault.
8.6.2. Not economizing when the unit should be economizing.
8.6.3. Economizing when the unit should not be economizing.
8.6.4. Outdoor air or return air damper not modulating.
8.6.5. Excess outdoor air.
((C403.13 Commissioning. Mechanical systems shall be commissioned in accordance with Section C408.))
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40393, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40393, filed 11/26/19, effective 7/1/20.]

NEW SECTION
WAC 51-11C-40394 Section C403.13-Dehumidification for plant growth.
C403.13 Dehumidification in spaces for plant growth and maintenance. Equipment that dehumidifies building spaces used for plant growth and maintenance shall be one of the following:

1. Stand-alone dehumidifiers that meet the following minimum integrated energy factors as measured by the test conditions in Appendix X1 to Subpart B of 10 C.F.R. Part 430:
1.1. Minimum integrated energy factor of $1.77 \mathrm{~L} / \mathrm{kWh}$ for product case volumes of 8.0 cubic feet or less;
1.2. Minimum integrated energy factor of $2.41 \mathrm{~L} / \mathrm{kWh}$ for product case volumes greater than 8.0 cubic feet;
2. Integrated HVAC system including, but not limited to, heat pump technology, with on-site heat recovery designed to fulfill at least 75 percent of the annual energy for dehumidification reheat;
3. Chilled water system including, but not limited to, heat pump technology, with on-site heat recovery designed to fulfill at least 75 percent of the annual energy for dehumidification reheat; or
4. Solid or liquid desiccant dehumidification system for system designs that require dewpoint of $50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right)$ or less.
C403.14 Commissioning. Mechanical systems shall be commissioned in accordance with Section C408.
[]

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

## WAC 51-11C-40401 Section C404.1-General.

C404.1 General. This section covers the minimum efficiency of, and controls for, service water-heating equipment and insulation of service hot water piping.
[Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40401, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-40402 Section C404.2—Service water-heating equipment performance efficiency.

C404.2 Service water-heating equipment performance efficiency. Waterheating equipment and hot water storage tanks shall meet the requirements of Table C404.2. The efficiency shall be verified through certification and listed under an approved certification program, or if no certification program exists, the equipment efficiency ratings shall be supported by data furnished by the manufacturer. Water-heating equipment intended to be used to provide space heating shall meet the applicable provisions of Table c404.2.
( (C404.2.1 High input-rated service water heating systems for other than Group $R-1$ and $R-2$ oceupancies. In new buildings where the combined input rating of the watex-heating equipment installed in a building is equal to or greater than 1,000,000 Btu/h (293 kW), the eombined input-capacity-weighted-average efficiency of water-heating equipment shall be no less than the following for each water heating fuel source:

1. Electric: A rated COP of not less than 2.0. For air-source heat pump equipment, the COP rating will be reported at the design leaving heat pump water temperature with an entering air temperature Qf $60^{\circ} \mathrm{F}\left(15.6^{\circ} \mathrm{C}\right)$ or less.
Z. Fossil Fuel: A rated $E_{t}$ of not less than 90 percent as deter-
mined by the applicable test procedure in Table c404.2.
EXCEPTIONS: 1. Where not less than 25 pereent of the anntal service water-heating requirement is provided frem any of the following sourees: 1.1. Renewable energy generated on-site that is not being used to satisfy another requirement of this code; or 1.2. Site-recovered energy that is not being used to satisfy other requirements of this code. 2. Redundant equipment intended to only operate during equipment failure or periods of extended maintenance. 3. Electric resistance heated systems installed as part of an alteration where the water heating equipment is installed at the grade level in a building with a height of four stories or greater.
2. Hot water heat exchangers used to provide service water heating from a district utility (steam, heating hot water). 5. Water heaters provided as an integral part of equipment intended to only heat or boost the heat of water used by that equipment. 6. For electric heat systems, supplemental water heaters not meeting this eriteria that function as auxiliary heating only when the outdoer temperature is below $32^{\circ} \mathrm{F}\left(\theta^{\circ} \mathrm{C}\right)$ or when a defrest eyele is required are not required to have a rated COP of 2.0 . Sueh systems shall be sized and configured to lock out electric resistance or fossil fuel heating from operation when the outdoor temperature is above $32^{\circ} \mathrm{F}$ $\left(\theta^{\circ} \mathrm{C}\right)$ unless the system is in defrost operation.

C404.2.2 High input-xated service water heating system for Group R-1 and R-2 occupancies. In new buildings with over $1,000,000 \mathrm{Btu} / \mathrm{h}$ in $=$ stalled service water heating capacity serving Group $R=1$ and $R=2$ occu $=$ pancies, at least 25 pereent of annual water heating energy shall be provided from any combination of the following water heating sources:

1. Renewable energy generated on-site that is not being used to satisfy other requirements of this code; or
Z. Site-recovered energy that is not being used to satisfy other requirements of this code.
EXCEPTION: Compliance with this section is not required if the combined input-capacity-weighted average equipment rating for each service water heating fuel source type is not less than the following:
2. Electric Resistance: An electric resistance water heater with a rating of 105 percent of the rated efficiency of Table C404.2.
3. Electric Heat Pump (10 C.F.R. Part 430): A heat pump water heater rated in aceordance with 10 C.F.R. Paft 430 with a rating of 105 percent of the rated efficiency of Table C404.2.
4. Electric Heat Pump (not listed in accordance with 10 C.F.R. Part 430): A heat pump water heater not rated in accordance with 10 C.F.R. Part 430 shall have a COP of not less than 2.0 . For air-source heat pump equipment the COP rating will be reported at the design leaving heat pump water temperature with an entering air temperature of $60^{\circ} \mathrm{F}\left(15.6^{\circ} \mathrm{C}\right)$ or less. Supplemental water heaters not meeting the above criteria that function as aturiliaty heating only when the outdoor temperature is below $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or when a defrost cyele is required are not required to have a rated COP of 2.0 . Such systems shall be sized and configured to lock out electric resistance or fossil fuel heating from operation when the outdoor temperature is above $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ unless the system is in defrost operation.
5. Fossil Ftuls: A rated $\mathrm{E}_{\mathrm{f}}$ of not less than 90 pereent as determined by the applieable test procedtres in Table C404.2.
6. Hot water heat exchangers used to provide service water heating from a district utility (steam, heating hot water).))


#### Abstract

C404.2.1 Service water heating system type. Service hot water shall be provided by an electric air-source heat pump water heating (HPWH) system meeting the requirements of this section. Supplemental service water heating equipment is permitted to use electric resistance or fossil fuel in compliance with Section C404.2.1.4. EXCEPTIONS: $\quad 1.24 \mathrm{~kW}$ plus 0.1 watts per square foot of building area of electric resistance service water heating capacity is allowed per building. 2. Solar thermal, wastewater heat recovery, other approved waste heat recovery, ground source heat pumps, water-source heat pump systems utilizing waste heat, and combinations thereof, are permitted to offset all or any portion of the required HPWH capacity where such systems comply with this code and the Uniform Plumbing Code. 3. Systems that comply with the Northwest Energy Efficiency Alliance (NEEA) Commercial Electric Advanced Water Heating Specification. 4. Service hot water systems served by a district energy system that serves multiple buildings and that was in service before the effective date of this code. 5. Commercial dishwashers, commercial food service equipment, and other approved process equipment are permitted to utilize electric booster heaters for supply water temperatures $120^{\circ} \mathrm{F}\left(49^{\circ} \mathrm{C}\right)$ or higher. 6. Systems connected to a low-carbon district energy exchange system or a low-carbon district heating and cooling or heating only system. 7. Essential facilities. Groups I-2 and I-3 occupancies that by regulation are required to have in place redundant emergency backup systems.


C404.2.1.1 Primary heat pump system sizing. The system shall include a primary service output of 50 percent load at $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ dry bulb or wet bulb outdoor air temperature for air-source heat pumps, or $44^{\circ} \mathrm{F}$ ( $\left.7{ }^{\circ} \mathrm{C}\right)$ ground temperature for ground-source heat pumps that provides sufficient hot water as calculated using the equipment manufacturer's selection criteria or another approved methodology. Electric air source heat pumps shall be sized to deliver no less than 25 percent of the calculated demand for hot water production during the peak demand period when entering dry bulb or wet bulb outdoor air temperature of $24^{\circ} \mathrm{F}\left(-4^{\circ} \mathrm{C}\right)$. The remaining primary service output may be met by fossil fuel, electric resistance, or heat pump water heating systems.
EXCEPTION: Twenty-five percent sizing at entering dry bulb or wet bulb air temperature of $24^{\circ} \mathrm{F}\left(-4^{\circ} \mathrm{C}\right)$ is not required for air-source heat pumps located in a below-grade enclosed parking structure or other ventilated and unconditioned space that is not anticipated to fall below $40^{\circ} \mathrm{F}$ $\left(4^{\circ} \mathrm{C}\right)$ at any time.

C404.2.1.2 Primary hot water storage sizing. The system shall provide sufficient hot water to satisfy peak demand period requirements.

C404.2.1.3 System design. The service water heating system shall be configured to conform to one of the following provisions:

1. For single-pass heat pump water heaters, temperature maintenance heating provided for reheating return water from the building's heated water circulation system shall be physically decoupled from the primary service water heating system storage tank(s) in a manner that prevents destratification of the primary system storage tanks. Temperature maintenance heating is permitted to be provided by electric resistance, fossil fuel, or a separate dedicated heat pump system.
2. For multi-pass heat pump water heaters, recirculated temperature maintenance water is permitted to be returned to the primary water storage tanks for reheating.
3. For unitary heat pump water heaters, located in conditioned space, are permitted, where they are sized to meet all calculated service water heating demand using the heat pump compressor, and not supplementary heat.

C404.2.1.3.1 Mixing valve. A thermostatic mixing valve capable of supplying hot water to the building at the user temperature setpoint shall be provided, in compliance with requirements of the Uniform Plumbing Code and the HPWH manufacturer's installation guidelines. The mixing valve shall be sized and rated to deliver tempered water in a range from the minimum flow of the temperature maintenance recirculation system up to the maximum demand for the fixtures served.

C404.2.1.4 Supplemental water heating. Total supplemental water heating equipment shall not have an output capacity greater than the primary water heating equipment at $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ entering dry bulb or wet bulb outdoor air temperature for air-source heat pumps or $44^{\circ} \mathrm{F} \quad\left(7^{\circ} \mathrm{C}\right)$ ground temperature for ground-source heat pumps. Supplemental heating is permitted for the following uses:

1. Temperature maintenance of heated-water circulation systems, physically separate from the primary service water heating system. Temperature maintenance heating capacity shall be no greater than the primary water heating capacity at $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ dry bulb or wet bulb outdoor air temperature for air-source heat pumps or $44^{\circ} \mathrm{F}\left(7^{\circ} \mathrm{C}\right)$ ground temperature for ground-source heat pumps.
2. Defrost of compressor coils.
3. Heat tracing of piping for freeze protection or for temperature maintenance in lieu of recirculation of hot water.
4. Backup or low ambient temperature conditions, where all of the following are true:
4.1. The supplemental heating capacity is no greater than the primary service water heating capacity at $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ dry bulb or wet bulb outdoor air temperature for air-source heat pumps or $44^{\circ} \mathrm{F}$ ( $7^{\circ} \mathrm{C}$ ) ground temperature for ground-source heat pumps.
4.2. During normal operations, the supplemental heating is controlled to operate only when the entering air temperature at the airsource HPWH is below $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$, and the primary HPWH compressor continues to operate together with the supplemental heating.
4.3. The primary water heating equipment cannot satisfy the system load due to equipment failure or entering air temperature below $40^{\circ} \mathrm{F} \quad\left(4^{\circ} \mathrm{C}\right)$.

C404.2.1.5 System fault detection. The control system shall be capable of and configured to send automatic error alarms to building or maintenance personnel upon detection of equipment faults, low leaving water temperature from primary storage tanks, or low hot water supply delivery temperature to building distribution system.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40402, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40402, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40402, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, s 51-11C-40402, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-404021 Table C404.2-Minimum performance of waterheating equipment.

Table C404.2
Minimum Performance of Water-Heating Equipment

| ((Equipment Type | Size Category (imput) | Subeategory or Rating Gondition | Performance Required ${ }^{\text {a, b }}$ | Test Procedtre |
| :---: | :---: | :---: | :---: | :---: |
| Storage water heaters, electric | $\leq 12 \mathrm{~kW}^{\text {d }}$ | $\begin{gathered} \text { Tabletop }^{e} \geq 20 \text { gal and } \geq 120 \\ \text { gat } \end{gathered}$ | 0.93-0.00132V, EF | DOE 10 C.F.R. Part 430 |
|  |  | $\begin{aligned} & \text { Resistance } \geq 20 \text { gal and } \leq 55 \\ & \text { gal } \end{aligned}$ | 0.960-0.0003V, EF |  |
|  |  | Grid-enabledf $>75$ gal and $\leq$ 120 gal | 1.06-0.00168V, EF |  |
|  | > 12 kWd | Resistance | $(0.3+27) / V_{\mathrm{m}}, \% / \mathrm{hfg}$ | Section G. 2 of ANSI Z21.10.3 |
|  | $\leq 24 \mathrm{amps} \text { and } \leq 250$ | Heat pump | 2.057-0.00113V, EF | DOE 10C.F.R. Part 430 |
| Instantaneous water heaters, electrie | AH | Resistance | 0.93-0.00132V, EF | POE 10 C.F.R. Part 430 |
| Storage water heaters, gas | $\leq 75,000 \mathrm{Bta} / \mathrm{h}$ | $\geq 20$ gal and $\leq 55 \mathrm{gal}$ | 0.675-0.0015V, EF | POE 10C.F.R. Patt 430 |
|  |  | $>55 \mathrm{gal}$ and $\leq 100 \mathrm{gal}$ | 0.8012-0.00078V, EF |  |
|  | > 75,000 Bta/h | $44,000 \mathrm{Btt} / \mathrm{h} / \mathrm{gal}$ | $\begin{gathered} 80 \% E_{1}(\mathrm{Q} / 800+110 \sqrt{ } \mathrm{H}) \\ \text { SL, Btt/h } \end{gathered}$ | Section G. 1 and G. 2 of ANSI Z21.10.3 |
| Instantaneous water heaters, gas | $\begin{aligned} & >50,000 \text { Btu/h and } \\ & <200,000 \text { Btu/h } \end{aligned}$ | $\geq 4,000(\mathrm{Bta} / \mathrm{h}) / \mathrm{gal}$ and $<2 \mathrm{gal}$ | 0.82-0.0019V, EF | DOE 10 C.F.R. Part 430 |
|  | $\geq 200,000 \mathrm{Btt} / \mathrm{h}^{\mathrm{c}}$ | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $<10 \mathrm{gal}$ | $80 \% E_{7}$ | Section G. 1 and G. 2 of ANSI Z21.10.3 |
|  | $\geq 200,000$ Bta/h | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $\geq 10 \mathrm{gal}$ | $80 \% E_{t}(\mathrm{Q} / 800+110 \sqrt{ } \mathrm{~V})$ <br> SL, Btu/h |  |
| Storage water heaters, oil | $\leq 105,000 \mathrm{Bta} / \mathrm{h}$ | $\geq 20 \mathrm{gal}$ | 0.68-0.0019V, EF | DOE 10 C.F.R. Part 430 |
|  | $>105,000 \mathrm{Btt} / \mathrm{h}$ | $44,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ | $\begin{gathered} 80 \% E_{\mathrm{T}}(\mathrm{Q} / 800+110 \sqrt{ }) \\ \text { SL, Bta/h } \end{gathered}$ | Section G. 1 and G. 2 of ANSI Z21.10.3 |
| Instantaneous water heaters, oil | $\leq 210,000$ Bta/h | $\geq 4,000 \mathrm{Btu} / \mathrm{h} / \mathrm{gal}$ and $<2 \mathrm{gal}$ | 0.59-0.0019V, EF | DOE 10 C.F.R. Part 430 |
|  | >210,000 Bt/ | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $<10 \mathrm{gat}$ | $80 \% E_{l}$ | Section G. 1 and G. 2 of ANSI Z21.10.3 |
|  | $>210,000$ Bta/h | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $\geq 10 \mathrm{gal}$ | $\begin{gathered} 78 \% E_{\mathrm{t}}(\mathrm{Q} / 800+110 \sqrt{ }) \\ \text { SL, Btu/h } \end{gathered}$ |  |
| Hot water supply beilers, gas and oit | $\geq 300,000 \mathrm{Btt} / \mathrm{h}$ and $<12,500,000 \mathrm{Btz} / \mathrm{h}$ | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $<10 \mathrm{gal}$ | $80 \% E_{7}$ | Section G. 1 and G. 2 of ANSI Z21.10.3 |
| Hot water stupply boilers, gas | $\begin{aligned} & \geq 300,000 \mathrm{Bta} / \mathrm{h} \text { and } \\ & <12,500,000 \mathrm{Bta} / \mathrm{h} \end{aligned}$ | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $\geq 10 \mathrm{gal}$ | $\begin{gathered} 80 \% E_{\mathrm{t}}(\mathrm{Q} / 800+110 \sqrt{ }) \\ \text { SL, Btu/h } \end{gathered}$ |  |
| Hot water stupply boilers, eil | $\begin{aligned} & \geq 300,000 \mathrm{Bta} / \mathrm{h} \text { and } \\ & <12,500,000 \mathrm{Bta} / \mathrm{h} \end{aligned}$ | $\geq 4,000 \mathrm{Bta} / \mathrm{h} / \mathrm{gal}$ and $>10 \mathrm{gal}$ | $\begin{gathered} 78 \% E_{1}(\mathrm{Q} / 800+110 \sqrt{\mathrm{H}}) \\ \text { SL, Btt/h } \end{gathered}$ |  |
| Pool heaters, gas and oil | All | - | $82 \% E_{l}$ | ASHRAE 146 |
| Heat pump pool heaters | All | - | 4.0 COP | AHPL 146 |
| Unfired storage tanks | All | - | Minimum insulation requirement $\mathrm{R}-12.5\left(\mathrm{~h} \cdot \mathrm{ft}^{2}\right.$ $\left.{ }^{\circ} \mathrm{F}\right) / \mathrm{Btt}$ | (none) |

For SI: $\quad{ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] 1.8,1$ British thermal unit per hour $=0.2931 \mathrm{~W}, 1$ gallon $=3.785 \mathrm{~L}, 1$ British thermal unit per hour per gallon $=0.078 \mathrm{~W} / \mathrm{L}$. aEnergy factor (EF) and thermal efficieney $\left(E_{t}\right)$ are minimmm requirements. In the EF equation, $V$ is the rated volume in gallens.
bStandby loss (SL) is the maximtm Btt/h based on a nominal $70^{\circ} \mathrm{F}$ temperattre difference between stored water and ambient requirements. In the SL equation, $Q$ is the nameplate input rate in $B t u / h$. In the SL equation for electric water heaters, $V$ is the rated volume in gallons and $V_{m}$ is the meastred volume in gallons. In the SL equation for oil and gas water heaters and boilers, $V$ is the rated volume in gallens.
cInstantaneous water heaters with input rates below $200,000 \mathrm{Btu} / \mathrm{h}$ shall comply with these requirements if the water heater is designed to heat water
to temperatures $180^{\circ} \mathrm{F}$ or higher.
dElectric water heaters with an input rating of $12 \mathrm{~kW}(40,950 \mathrm{Btu} / \mathrm{h})$ or less that are designed to heat water to temperatures of $180^{\circ} \mathrm{F}$ or greater shall
comply with the requirements for electric water heaters that have an input rating greater than $12 \mathrm{~kW}(40,950 \mathrm{Btu} / \mathrm{h})$.
eA tabletop water heater is a water heater that is enclosed in a rectangular cabinet with a flat top surface not more than three feet $(0.91 \mathrm{~m})$ in height.
fA grid-enabled water heater is an electric resistance water heater that meets all of the following:

1. Has a rated storage tank volume of mere than 75 gallens.
2. Is manufactured on or after April 16, 2015 .
3. Is equipped at the point of manufacture with an activation lock.
[^3]| $\frac{\text { Equipment }}{\text { Type }}$ | $\frac{\text { Size Category }}{\text { (input) }}$ | Subcategory or Rating Condition | Draw Pattern | Performance Required ${ }^{\text {a,j }}$, | Test <br> Procedure ${ }^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { Electric table- }}{\frac{\text { top water }}{\text { heaters }}{ }^{\text {k }}}$ | $\leqq 12 \mathrm{~kW}^{\text {c }}$ | $\begin{aligned} & \geq 20 \mathrm{gal} \\ & \leqq 120 \mathrm{gal} \end{aligned}$ | $\frac{\text { Very small }}{\text { Low }}$ Medium High | UEF $\geq 0.6323-(0.0058 \times \mathrm{Vr})$ <br> $\overline{\text { UEF }} \geq 0.9188-(0.0031 \times \mathrm{Vr})$ <br> UEF $\geq 0.9577-(0.0023 \times \mathrm{Vr})$ <br> UEF $\geq 0.9884-(0.0016 \times \mathrm{Vr})$ | DOE 10 C.F.R. Part 430 App. E |
| Electric$\frac{\text { storage water }}{\text { heaters } \mathrm{i}} \mathrm{i}$$\frac{\text { resistance and }}{\text { heat pump }}$ | $\leq 12 \mathrm{~kW}$ | $\begin{aligned} & \geq 20 \mathrm{gal} \\ & \leq 55 \mathrm{gal} \end{aligned}$ |  | UEF $\geq 0.8808-(0.0008 \times \mathrm{Vr})$ <br> $\overline{\text { UEF }} \geq 0.9254-(0.0003 \times \mathrm{Vr})$ <br> UEF $\geq 0.9307-(0.0002 \times \mathrm{Vr})$ <br> UEF $\geq 0.9349-(0.0001 \times \mathrm{Vr})$ | $\begin{aligned} & \text { DOE 10 } \\ & \text { C.F.R. Part } \\ & \hline \text { C30 App. E } \end{aligned}$ |
|  | $\leq 12 \mathrm{~kW}$ | $\begin{aligned} & >55 \mathrm{gal} \\ & \leq 120 \mathrm{gal} \end{aligned}$ | Very small <br> Low Medium High | $\mathrm{UEF} \geq 1.9236-(0.0011 \times \mathrm{Vr})$ <br> $\overline{\text { UEF }} \geq 2.0440-(0.0011 \times \mathrm{Vr})$ <br> $\overline{\mathrm{UEF}} \geq 2.1171-(0.0011 \times \mathrm{Vr})$ <br> $\underline{\text { UEF }} \geq 2.2418-(0.0011 \times \mathrm{Vr})$ | $\begin{aligned} & \text { DOE 10 } \\ & \text { C.F.R. Part } \\ & \hline \text { C30 App. E } \end{aligned}$ |
| Electric <br> storage water$\underline{\text { heaters } \mathrm{g}}$ | $\geq 12 \mathrm{~kW}$ |  |  | $(0.3+27 / \mathrm{Vm}), \% \mathrm{~h}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. }} \\ & \frac{431.106 \mathrm{App}}{\underline{\text { B. }}} \end{aligned}$ |
| $\begin{gathered} \frac{\text { Grid-enabled }}{\frac{\text { water }}{}} \\ \text { heaterg }{ }^{\text {hel }} \end{gathered}$ |  | $\geq 75 \mathrm{gal}$ | Very small Low $\frac{\text { Medium }}{\text { High }}$ Hig | UEF $\geq 1.0136-(0.0028 \times \mathrm{Vr})$ UEF $\geq 0.9984-(0.0014 \times \mathrm{Vr})$ UEF $\geq 0.9853-(0.0010 \times \mathrm{Vr})$ UEF $\geq 0.9720-(0.0007 \times \mathrm{Vr})$ | $\begin{aligned} & \frac{10 \text { C.F.R. }}{\frac{430}{20}} \\ & \text { Appendix E } \end{aligned}$ |
| Electric <br> instantaneous <br> water heater | $\leq 12 \mathrm{~kW}$ | $\leq 2 \mathrm{gal}$ | Very small Medium High | UEF $\geq 0.91$ <br> $\overline{U E F} \geq 0.91$ <br> UEF $\geq 0.91$ <br> $\underline{U E F} \geq 0.92$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. Part }} \\ & \frac{430}{\text { C.E }} \end{aligned}$ |
|  | $\begin{aligned} & >12 \mathrm{~kW} \mathrm{\&} \\ & \leqq 58.6 \mathrm{~kW}^{\mathrm{c}} \end{aligned}$ | $\begin{aligned} & \leq 2 \mathrm{gal} \\ & \leqq 180^{\circ} \mathrm{F} \\ & \hline \end{aligned}$ | All | $\underline{\mathrm{UEF}} \geq 0.80$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. Part }} \\ & \frac{430}{43} \end{aligned}$ |
| $\underline{\text { Gas storage }}$water heaters g | $\leq 75,000 \mathrm{Btu} / \mathrm{h}$ | $\begin{aligned} & \geq 20 \mathrm{gal} \& \\ & \leq 55 \mathrm{gal}^{\mathrm{f}} \end{aligned}$ | $\frac{\text { Very small }}{\text { Low }}$ $\frac{\text { Medium }}{\text { High }}$ | UEF $\geq 0.3456-(0.0020 \times \mathrm{Vr})$ <br> UEF $\geq 0.5982-(0.0019 \times \mathrm{Vr})$ <br> UEF $\geq 0.6483-(0.0017 \times \mathrm{Vr})$ <br> UEF $\geq 0.6920-(0.0013 \times \mathrm{Vr})$ | $\begin{gathered} \frac{\text { DOE } 10}{\text { C.F.R. Part }} \\ \hline \text { C. } 430 \text { App. E } \end{gathered}$ |
|  | $\leq 75,000 \mathrm{Btu} / \mathrm{h}$ | $\begin{aligned} & >55 \mathrm{gal} \& \\ & \leqq 100 \mathrm{gal}^{\mathrm{f}} \end{aligned}$ | $\begin{aligned} & \text { Very small } \\ & \frac{\text { Low }}{\text { Medium }} \\ & \underline{\text { High }} \end{aligned}$ | UEF $\geq 0.6470-(0.0006 \times \mathrm{Vr})$ UEF $\geq 0.7689-(0.0005 \times \mathrm{Vr})$ UEF $\geq 0.7897-(0.0004 \times \mathrm{Vr})$ UEF $\geq 0.8072-(0.0003 \times \mathrm{Vr})$ | $\begin{aligned} & \text { DOE } 10 \\ & \text { C.F.R. Part } \\ & \text { C30 App. E } \end{aligned}$ |
|  | $\begin{aligned} & \geq 75,000 \mathrm{Btu} / \mathrm{h} \\ & \leq 105,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{d}} \end{aligned}$ | $\begin{aligned} & \leqq 120 \mathrm{gal} \\ & \leqq 180^{\circ} \mathrm{F} \end{aligned}$ | Very small <br> Low <br> Medium <br> High | UEF $\geq 0.2674-0.0009 \mathrm{x} \mathrm{Vr}$ $\overline{\text { UEF }} \geq 0.5362-0.0012 \mathrm{x} \mathrm{Vr}$ UEF $\geq 0.60027-0.00111 \mathrm{Vr}$ UEF $\geq 0.6597-0.0009 \mathrm{x} \mathrm{Vr}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. Part }} \\ & \text { C30 App. E } \end{aligned}$ |
|  | $\geq 105,000 \mathrm{Btu} / \mathrm{h}^{\text {d,f }}$ |  |  | $\begin{gathered} \frac{80 \% E_{t}}{S L} \leq(\mathrm{Q} / 800+110 \mathrm{~V}), \mathrm{Btu} / \mathrm{h} \end{gathered}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. }} \\ & \text { 431.106 } \\ & \hline \end{aligned}$ |
| $\quad$Gas <br> instantaneous <br> water heater | $\begin{aligned} & \geq 50,000 \mathrm{Btu} / \mathrm{h} \\ & \leq 200,000 \mathrm{and} \\ & \text { Btu/h } \end{aligned}$ | $\leq 2 \mathrm{gal}$ | $\frac{\text { Very small }}{\text { Low }}$ $\frac{\text { Medium }}{\text { High }}$ | $\overline{U E F} \geq 0.80$ <br> $\overline{U E F} \geq 0.81$ <br> $\mathrm{UEF} \geq 0.81$ <br> $\underline{U E F} \geq 0.81$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. Part }} \\ & \text { 430 App. E } \end{aligned}$ |
|  | $\geq 200,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{d}, \mathrm{f}}$ | $\leq 10 \mathrm{gal}$ |  | 80\% $E_{t}$ |  |
|  | $\geq 200,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{f}}$ | $\geq 10 \mathrm{gal}$ |  | $\left.\frac{80 \% E_{t}}{} \underline{\mathrm{SL} \leq(\mathrm{Q} / 800+110} \mathrm{V}\right), \mathrm{Btu} / \mathrm{h}$ | $\frac{\text { C.F.R. }}{431.106}$ |


| $\begin{gathered} \frac{\text { Equipment }}{\text { Type }} \\ \hline \end{gathered}$ | $\frac{\text { Size Category }}{(\text { input })}$ | Subcategory or Rating Condition | Draw Pattern | Performance Required ${ }^{\text {a,j }}$ | $\begin{gathered} \text { Test } \\ \text { Procedure }^{\text {b }} \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \frac{\text { Oil storage }}{} \\ \text { water heaters } g \end{gathered}$ | $\leqq 105,000 \mathrm{Btu} / \mathrm{h}$ | $\leq 50 \mathrm{gal}$ | Very small <br> Low <br> Medium <br> High | UEF $=0.2509-(0.0012 \times \mathrm{Vr})$ <br> UEF $=0.5330-(0.0016 \times \mathrm{Vr})$ <br> UEF $=0.6078-(0.0016 \times \mathrm{Vr})$ <br> UEF $=0.6815-(0.0014 \times \mathrm{Vr})$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. Part }} \\ & \underline{430} \end{aligned}$ |
|  | $\begin{aligned} & \geq 105,000 \mathrm{Btu} / \mathrm{h} \\ & \leq 140,000 \mathrm{Btu} / \mathrm{h}^{\mathrm{e}} \end{aligned}$ | $\begin{aligned} & \leq 120 \mathrm{gal} \\ & \leq 180^{\circ} \mathrm{F} \end{aligned}$ | Very small Low Medium High | UEF $\geq 0.2932-0.0015 \times \mathrm{xr}$ <br> UEF $\geq 0.5596-0.0018 \times \mathrm{Vr}$ <br> UEF $\geq 0.6194-0.0016 \times \mathrm{Vr}$ <br> UEF $\geq 0.6740-0.0013 \times \mathrm{Vr}$ | $\begin{aligned} & \text { DOE } 10 \\ & \text { C.F.R. Part } \\ & \text { C30 App. E } \end{aligned}$ |
|  | $\geq 140,000 \mathrm{Btu} / \mathrm{h}$ |  |  | $\begin{gathered} \underline{80 \% E_{t}} \\ \mathrm{SL} \leq(\mathrm{Q} / 800+110 \mathrm{~V}), \mathrm{Btu} / \mathrm{h} \end{gathered}$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. }} \\ & \hline \text { 431.106 } \end{aligned}$ |
| $\begin{gathered} \underline{\text { Oil }} \\ \text { instantaneous } \\ \text { water heater } \end{gathered}$ | $\leq 210,000$ Btu/h | $\leq 2 \mathrm{gal}$ |  | $\begin{gathered} \underline{80 \% E_{t}} \\ \mathrm{EF} \geq 0.59-0.0005 \mathrm{xV} \end{gathered}$ | $\begin{aligned} & \text { DOE } 10 \\ & \text { C.F.R. Part } \\ & \hline \end{aligned}$ |
|  | $\geq 210,000 \mathrm{Btu} / \mathrm{h}$ | $\leq 10 \mathrm{gal}$ |  | $\underline{80 \% E_{t}}$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. }} \\ & \underline{431.106} \end{aligned}$ |
|  | $\geq 210,000 \mathrm{Btu} / \mathrm{h}$ | $\geq 10 \mathrm{gal}$ |  | $\begin{gathered} \frac{78 \% E_{t}}{} \mathrm{SL} \leq(\mathrm{Q} / 800+110 \sqrt{ }), \mathrm{Btu} / \mathrm{h} \end{gathered}$ | $\begin{aligned} & \frac{\text { DOE 10 }}{\text { C.F.R. }} \\ & \text { 431.106 } \end{aligned}$ |
| Hot water supply boilers, gas and oil ${ }^{\text {h }}$ | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \\ & \frac{\leq 12,500,000}{\mathrm{Btu} / \mathrm{h}} \end{aligned}$ | $\leq 10 \mathrm{gal}$ |  | $\underline{80 \% E_{t}}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. }} \\ & \frac{431.106}{4} \end{aligned}$ |
| $\begin{aligned} & \frac{\text { Hot water }}{\text { supply boilers, }} \\ & \text { gas }^{\mathrm{h}} \end{aligned}$ | $\begin{aligned} & \geq 300,000 \mathrm{Btu} / \mathrm{h} \\ & \frac{\text { and }}{\text { and }, 500,000} \\ & \underline{B t u / h} \end{aligned}$ | $\geq 10 \mathrm{gal}$ |  | $\begin{gathered} \frac{80 \% E_{t}}{\mathrm{SL}} \leq(\mathrm{Q} / 800+110 \vee \mathrm{~V}), \mathrm{Btu} / \mathrm{h} \end{gathered}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. }} \\ & \underline{431.106} \end{aligned}$ |
| $\begin{aligned} & \frac{\text { Hot water }}{\text { supply boilers, }} \\ & \underline{\text { oil }} \text {, } \end{aligned}$ |  | $\geq 10 \mathrm{gal}$ |  | $\begin{gathered} \left.\frac{78 \% E_{t}}{\mathrm{SL} \leq(\mathrm{Q} / 800+110} \downarrow \mathrm{V}\right), \mathrm{Btu} / \mathrm{h} \\ \hline \end{gathered}$ | $\begin{aligned} & \frac{\text { DOE } 10}{\text { C.F.R. }} \\ & \text { 431.106 } \end{aligned}$ |
| $\frac{\text { Pool heaters, }}{\text { gas }}$ | All |  |  | $\underline{82 \%} E_{t}$ | $\begin{aligned} & \text { DOE } 10 \\ & \text { C.F.R. Part } \\ & \hline \end{aligned}$ |
| Heat pump pool heaters | All | $\begin{aligned} & \begin{array}{l} \frac{50^{\circ} \mathrm{F} \mathrm{db}}{44.2^{\circ} \mathrm{F} \mathrm{~b}} \\ \underbrace{}_{\text {Outdoor air }} \\ \text { entering water } \\ \hline \end{array} \\ & \hline \end{aligned}$ |  | 4.0 COP | $\frac{\text { DOE } 10}{\text { C.F.R. Part }}$ |
| Unfired storage tanks | All |  |  | Minimum insulation requirement $\mathrm{R}-12.5$ (h-ftt ${ }^{2}-\mathrm{F}$ )/Btu | (none) |

[^4]${ }^{\mathrm{k}}$ A tabletop water heater is a storage water heater that is enclosed in a rectangular cabinet with a flat top surface not more than three feet ( 0.91 m ) in height and have a ratio of input capacity (Btu/h) to tank volume (gal) $<4000$.
1 A grid-enabled water heater is an electric resistance water heater that meets all of the following:

1. Has a rated storage tank volume of more than 75 gallons.
2. Is manufactured on or after April 16, 2015.
3. Is equipped at the point of manufacture with an activation lock.
4. Bears a permanent label applied by the manufacturer that complies with all of the following: 4.1 Is made of material not adversely affected by water. 4.2 Is attached by means of nonwater soluble adhesive.
4.3 Advises purchasers and end-users of the intended and appropriate use of the product with the following notice printed in 16.5 point Arial Narrow Bold font: "IMPORTANT INFORMATION: This water heater is intended only for use as a part of an electric thermal storage or demand response program. It will not provide adequate hot water unless enrolled in such a program and activated by your utility company or another program operator. Confirm the availability of a program in your local area before purchasing or installing this product."
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-404021, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-404021, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-404021, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-404021, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-404021, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

WAC 51-11C-40403 Section C404.3-Efficient heated water supply piping.
C404.3 Efficient heated water supply piping. Heated water supply piping shall be in accordance with Section C404.3.1 or C404.3.2. The flow rate through $1 / 4$-inch ( 6.4 mm ) piping shall be not greater than 0.5 gpm (1.9 L/m). The flow rate through $5 / 16$-inch ( 7.9 mm ) piping shall be not greater than $1 \mathrm{gpm}(3.8 \mathrm{~L} / \mathrm{m})$. The flow rate through $3 / 8$-inch ( 9.5 mm ) piping shall be not greater than $1.5 \mathrm{gpm}(5.7 \mathrm{~L} / \mathrm{m})$. Water heaters, circulating water systems and heat trace temperature maintenance systems shall be considered sources of heated water.
C404.3.1 Maximum allowable pipe length method. The maximum allowable piping length from the nearest source of heater water to the termination of the fixture supply pipe shall be in accordance with the following. Where the piping contains more than one size of pipe, the largest size of pipe within the piping shall be used for determining the maximum allowable length of the piping in Table C404.3.1.

1. For a public lavatory faucet, use the "Public lavatory faucets" column in Table C404.3.1.
2. For all other plumbing fixtures and plumbing appliances, use the "Other fixtures and appliances" column in Table c404.3.1.

Table C404.3.1
Piping Volume and Maximum Piping Lengths

| $\begin{array}{c}\text { Nominal Pipe Size } \\ \text { (inches) }\end{array}$ | $\begin{array}{c}\text { Volume } \\ \text { (liquid ounces per foot } \\ \text { length) }\end{array}$ | $\begin{array}{c}\text { Maximum Piping Length } \\ \text { (feet) }\end{array}$ |  |
| :---: | :---: | :---: | :---: |
|  |  | Public lavatory faucets |  | \(\left.\begin{array}{c}Other fixtures and <br>

appliances\end{array}\right]\)

C404.3.2 Maximum allowable pipe volume method. The water volume in the piping shall be calculated in accordance with Section C404.3.2.1.

The volume from the nearest source of heated water to the termination of the fixture supply pipe shall be as follows:

1. For a public lavatory faucet: Not more than 2 ounces (0.06 L).
2. For other plumbing fixtures or plumbing appliances; not more
than 0.5 gallon (1.89 L) .
C404.3.2.1 Water volume determination. The volume shall be the sum of the internal volumes of pipe, fittings, valves, meters and manifolds between the nearest source of heated water and the termination of the fixture supply pipe. The volume in the piping shall be determined from the "Volume" column in Table C404.3.1 or from Table C404.3.2.1. The volume contained within fixture shutoff valves, within flexible water supply connectors to a fixture fitting and within a fixture fitting shall not be included in the water volume determination. Where heated water is supplied by a recirculating system or heat-traced piping, the volume shall include the portion of the fitting on the branch pipe that supplies water to the fixture.

Table C404.3.2.1
Internal Volume of Various Water Distribution Tubing

| Ounces of Water per Foot of Tube |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{\text { Nomal }}{\text { Size }} \\ & \text { (inches) } \\ & \hline \text { (ine } \end{aligned}$ | $\begin{aligned} & \text { Copper } \\ & \text { Type } \mathbf{M} \end{aligned}$ | Copper Type L | $\begin{aligned} & \text { Copper } \\ & \text { Type K } \end{aligned}$ | $\begin{aligned} & \frac{\text { CPVC }}{\text { CTTS }} \\ & \text { SDR 11 } \end{aligned}$ | $\begin{aligned} & \text { CPVC } \\ & \text { SCH } 40 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CPVC } \\ & \text { SCH } 80 \\ & \hline \end{aligned}$ | $\frac{\text { PE-RT }}{\underline{\text { SDR }}}$ | $\frac{\text { Composite }}{\frac{\text { ASTM }}{\underline{\text { F1281 }}}}$ | $\begin{aligned} & \frac{\text { PEXX }}{} \\ & \text { SDR } \end{aligned}$ |
| 3/8 | 1.06 | $\underline{0.97}$ | $\underline{0.84}$ | N/A | 1.17 | $=$ | 0.64 | $\underline{0.63}$ | $\underline{0.64}$ |
| $\underline{1 / 2}$ | $\underline{1.69}$ | $\underline{1.55}$ | $\underline{1.45}$ | $\underline{1.25}$ | $\underline{1.89}$ | $\underline{1.46}$ | $\underline{1.18}$ | $\underline{1.31}$ | $\underline{1.18}$ |
| 3/4 | $\underline{3.43}$ | $\underline{3.22}$ | $\underline{2.90}$ | $\underline{2.67}$ | $\underline{3.38}$ | $\underline{2.74}$ | $\underline{2.35}$ | $\underline{3.39}$ | $\underline{2.35}$ |
| 1 | 5.81 | 5.49 | 5.17 | 4.43 | 5.53 | 4.57 | 3.91 | 5.56 | 3.91 |
| $\underline{11 / 4}$ | $\underline{8.70}$ | $\underline{8.36}$ | $\underline{8.09}$ | 6.61 | $\underline{9.66}$ | $\underline{8.24}$ | $\underline{5.81}$ | $\underline{8.49}$ | 5.81 |
| $\underline{11 / 2}$ | $\underline{12.18}$ | $\underline{11.83}$ | $\underline{11.45}$ | $\underline{9.22}$ | $\underline{13.20}$ | $\underline{11.38}$ | $\underline{8.09}$ | 13.88 | $\underline{8.09}$ |
| $\underline{2}$ | $\underline{21.08}$ | $\underline{20.58}$ | $\underline{20.04}$ | 15.79 | $\underline{21.88}$ | 19.11 | 13.86 | 21.48 | 13.86 |

[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40403, filed 1/19/16, effective 7/1/16. Statutory

Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40403, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40404 Section C404.4-Heat traps.

C404.4 Heat traps for hot water storage tanks. Storage tank-type water heaters and hot water storage tanks that have vertical water pipes connecting to the inlet and outlet of the tank shall be provided with integral heat traps at ((those)) the vertical inlets and outlets or shall have pipe-configured heat traps in the piping connected to those inlets and outlets. Tank inlets and outlets associated with solar water heating system circulation loops shall not be required to have heat traps.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40404, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40404, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40406 Section C404.6-Pipe insulation.

C404.6 Insulation of piping. Piping from a water heater to the termination of the heated water fixture supply pipe shall be insulated in accordance with Table C403.10.3. On both the inlet and outlet piping of a storage water heater or heated water storage tank, the piping to a heat trap or the first 8 feet ( 2438 mm ) of piping, whichever is less, shall be insulated. Piping that is heat traced shall be insulated in accordance with Table C403.10.3 or the heat trace manufacturer's instructions. Tubular pipe insulation shall be installed in accordance with the insulation manufacturer's instructions. Pipe insulation shall be continuous, including through hangers and supports, such that thermal bridging is prevented, except where the piping passes through a framing member. The minimum insulation thickness requirements of this section shall not supersede any greater insulation thickness requirements necessary for the protection of piping from freezing temperatures or the protection of personnel against external surface temperatures on the insulation.

EXCEPTION: Tubular pipe insulation shall not be required on the following:

1. The tubing from the connection at the termination of the fixture supply piping to a plumbing fixture or plumbing appliance. 2. Valves, pumps, strainers and threaded unions in piping that is 1 inch ( 25 mm ) or less in nominal diameter. 3. Piping from user-controlled shower and bath mixing valves to the water outlets.
2. Cold-water piping of a demand recirculation water system.
3. Tubing from a hot drinking-water heating unit to the water outlet.
4. Piping at locations where a vertical support of the piping is installed
5. Piping surrounded by building insulation with a thermal resistance ( $R$-value) of not less than R-3.
6. Hot water piping that is part of the final pipe run to the plumbing fixture and is not part of the heated-water circulation system circulation path is not required to meet the minimum insulation requirements of Section C404.6.

C404.6.1 Storage tank insulation. Unfired storage tanks used to store service hot water at temperatures above $130^{\circ} \mathrm{F}$ ( $54^{\circ} \mathrm{C}$ ) shall be wrapped
with an insulating product, installed in accordance with the insulation manufacturer's instructions and providing a minimum of $\mathrm{R}-2$ additional insulation for every $10^{\circ} \mathrm{F}\left(5^{\circ} \mathrm{C}\right)$ increase in stored water temperature above $130^{\circ} \mathrm{F}\left(54^{\circ} \mathrm{C}\right)$. Such additional insulation is also permitted to be integral to the tank. The insulation is permitted to be discontinuous at structural supports.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40406, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40406, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27A and 19.27 RCW. WSR 19-02-089, S 51-11C-40406, filed 1/2/19, effective 7/1/19. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40406, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40406, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40407 Section C404.7-Heated-water circulating and temperature maintenance systems.

C404.7 Heated-water circulating and heat trace temperature maintenance systems. Heated-water circulation systems for temperature maintenance shall be in accordance with Section c404.7.1. Electric resistance heat trace ((temperature maintenance)) systems for temperature maintenance shall be in accordance with Section c404.7.2. Controls for hot water storage shall be in accordance with Section c404.7.3. Automatic controls, temperature sensors and pumps shall be in a location with access. Manual controls shall be in a location with ready access.

C404.7.1 Circulation systems. Heated-water circulation systems shall be provided with a circulation pump. The pump shall have an electronically commutated motor with a means of adjusting motor speed for system balancing. The system return pipe shall be a dedicated return pipe. Gravity and thermo-syphon circulation systems ((shall be)) are prohibited. Controls shall start the circulation pump based on the identification of a demand for hot water within the occupancy.
C404.7.1.1 Single riser systems. Where the circulation system serves only a single domestic hot water riser or zone, the following controls shall be provided:

1. Controls shall be configured to automatically turn off the pump when the water in the circulation loop is at the design supply temperature and shall not turn the pump back on until the temperature is a minimum of $10^{\circ} \mathrm{F}\left(5^{\circ} \mathrm{C}\right)$ lower than the design supply temperature ( (or have controls equipped with automatic time switches or other controls that can be set to switch off the pump during unoceupied hours when hot water is not required)).
2. Controls shall be equipped with a manual switch or other control((s)) method that can be used to turn off the circulating pump during extended periods when hot water is not required.

C404.7.1.2 Multiple riser systems. Where the circulation system serves multiple domestic hot water risers or piping zones, the following controls shall be provided ( (such that they can be set to switch off the)):

1. Controls shall be configured to automatically turn off the circulation pump during extended periods when hot water is not required.
2. System shall include means for balancing the flow rate through each individual hot water supply riser or piping zone.
3. For circulation systems that use a variable flow circulation pump, each riser and piping zone shall have a self-actuating thermostatic balancing valve.
C404.7.1.3 Electronic thermostatic mixing valve (TMV). Where a heated water circulation system utilizes an electronic TMV to control the temperature of hot water supplied to the building, the TMV shall be configured so that it either reverts closed (fully COLD) or maintains its current valve position upon power failure or cessation of circulation flow.
C404.7.2 Heat trace systems. Electric heat trace systems shall comply with IEEE 515.1. Controls for such systems shall be able to automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy. Heat trace shall be arranged to be turned off automatically when there is no hot water demand.

C404.7.3 Controls for hot water storage. The controls on pumps that circulate water between a water heater and a heated-water storage tank shall limit operation of the pump from heating cycle startup to not greater than 5 minutes after the end of the cycle.
C404.7.3.1 Pipe insulation. For heated water circulation systems, both supply and return pipe insulation shall be at minimum 1.0 inch thicker than that required by Table C403.10.3.
EXCEPTION: Where piping is centered within a wall, ceiling or floor framing cavity with a depth at least 4 inches greater than the diameter of the pipe and that is completely filled with batt or blown-in insulation, additional pipe insulation is not required.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40407, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40407, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40407, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40410 Section C404.11-Pools and spas.

C404.11 Energy consumption of pools and permanent spas. The energy consumption of pools and permanent spas shall be controlled by the requirements in Sections C404.11.1 through C404.11.4.

C404.11.1 Heaters. Pool water heaters using electric resistance heating as the primary source of heat are prohibited for pools over 2,000 gallons. Heat pump pool heaters shall have a minimum COP of 4.0 at $50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right) \mathrm{db}, 44.2^{\circ} \mathrm{F}\left(6.8^{\circ} \mathrm{C}\right) \mathrm{wb}$ outdoor air and $80^{\circ} \mathrm{F}\left(27^{\circ} \mathrm{C}\right)$ entering water, determined in accordance with ((ASHRAF Standard 146)) AHRI 1160. Other pool heating equipment shall comply with the applicable efficiencies in Section C404.2.

The electric power to all heaters shall be controlled by an onoff switch that is an integral part of the heater, mounted on the exterior of the heater, or external to and within 3 feet of the heater in a location with ready access. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with constant burning pilot lights.
C404.11.2 Time switches. Time switches or other control method that can automatically turn off and on heaters and pump motors according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.
EXCEPTIONS: 1 . Where public health standards require 24 -hour pump operation.
2. Pumps that operate solar- and waste-heat-recovery pool heating systems.

C404.11.3 Covers. Heated pools and permanent spas shall be provided with a vapor-retardant cover on or at the water surface. Pools heated to more than $90^{\circ} \mathrm{F}$ shall have a pool cover with a minimum insulation value of $R-12$, and the sides and bottom of the pool shall also have a minimum insulation value of $R-12$.

C404.11.4 Heat recovery. Heated indoor swimming pools, spas or hot tubs with water surface area greater than 200 square feet shall provide for energy conservation by an exhaust air heat recovery system that heats ventilation air, pool water or domestic hot water. The heat recovery system shall be configured to decrease the exhaust air temperature at design heating conditions ( $80^{\circ} \mathrm{F}$ indoor) by $36^{\circ} \mathrm{F}$ ( $10^{\circ} \mathrm{C}$ ).
EXCEPTION: Pools, spas or hot tubs that include system(s) that provide equivalent recovered energy on an annual basis through one of the following methods:

1. Solar water heating systems not claimed in Section C406.5 or C407;
2. Dehumidification heat recovery;
3. Waste heat recovery; or
4. A combination of these system sources capable of and configured to provide at least 70 percent of the heating energy required over an operating season.
C404.12 ((Energy consumption of)) Portable spas. The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP 14.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-40410, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40410, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40410, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40413 Section C404.13-Service water pressure-booster systems.
C404.13 Service water pressure-booster systems. Service water pres-sure-booster systems shall be designed and configured such that the following apply:

1. One or more pressure sensors shall be used to vary pump speed and/or start and stop pumps. The sensors shall either be located near the critical fixtures that determine the pressure required, or logic shall be employed that adjusts the setpoint to simulate operations of remote sensors.
2. No devices shall be installed for the purpose of reducing the pressure of all of the water supplied by any booster system pump or booster system, except for safety devices.
3. Booster system pumps shall not operate when there is no service water flow except to refill hydro-pneumatic tanks.
4. System pump motors ((7.5)) 5.0 hp and greater shall be provided with variable flow capacity in accordance with Section ( ( -403.2 .3 ) ) C403.2.4.
((C404.14 Commissioning. Service water heating systems shall be com= missioned in accordance with Scetion C408.) )
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40413, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40413, filed 1/19/16, effective 7/1/16.]

NEW SECTION
WAC 51-11C-40414 Section C404.14-Demand responsive water heating.

C404.14 Demand responsive water heating. Electric storage water heaters with rated water storage volume between 40 and 120 gallons and a nameplate input rating equal to or less than 12 kW shall be provided with demand responsive controls that comply with ANSI/CTA-2045-B Level 2 or another equivalent approved demand responsive control.
EXCEPTIONS: 1. Water heaters that provide a hot water delivery temperature of $180^{\circ} \mathrm{F}\left(82^{\circ} \mathrm{C}\right)$ or greater.
2. Water heaters that comply with Section IV, Part HLW or Section X of the ASME Boiler and Pressure Vessel Code.
3. Water heaters that use three-phase electric power.
4. Storage water heaters with demand responsive controls that comply with ANSI/CTA 2045-A or ANSI/CTA 2045-B Level 1, that are also capable of initiating water heating to meet the temperature setpoint in response to a demand response signal.
[]

NEW SECTION
WAC 51-11C-40415 Section C404.15-Service water heating commissioning.

C404.15 Commissioning. Service water heating systems shall be commissioned in accordance with Section C408.
[]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40501 Section C405.1-General.

C405.1 General. ( (This section covers) ) Lighting system controls, the maximum lighting power for interior and exterior applications, electrical energy consumption, vertical and horizontal transportation systems, and minimum efficiencies for motors and transformers shall comply with this section.
( (Dwelling units within multifamily buildings shall comply with sections $C 405.1 .1$ and $C 405.7$. All other dwelling units in dormitory, hotel and other residential occupancies that are not classified as multifamily residential oceupancies shall comply with section c405.2.5 and Section C 405.1 .1 or section C 405.4 ) ) Sleeping units shall comply with Section ((6405.2.5)) C405.2.6, item 2 and Section C405.1.1 or Section C405.4.

General lighting shall consist of all lighting included when calculating the total connected interior lighting power in accordance with Section C 405.4 .1 and which does not require specific application controls in accordance with Section c405.2.5.

Lighting installed in walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with the lighting requirements of Section C410.2.

Transformers, uninterruptable power supplies, motors and electrical power processing equipment in data center systems shall comply with Section 8 of ASHRAE Standard 90.4 in addition to this code.
EXCEPTION: Energy using equipment used by a manufacturing, industrial or commercial process other than maintaining comfort and amenities for the occupants are exempt from all Section C405 subsections except Section C405.8. Data center and computer room HVAC equipment is not covered by this exemption.

C405.1.1 ((Dwelling and sleeping unit lighting efficacy)) Lighting for dwelling and sleeping units. No less than 90 percent of the ((łamps)) permanently installed lighting serving dwelling units or sleeping units, excluding kitchen appliance lighting, shall be provided by ( (light emitting diodes (IFD), T-8 or smallex diameter linear fluoreseent lamps, or othex)) lamps with a minimum efficacy of 65 lumens per watt or luminaires with an efficacy of not less than 45 lumens per watt.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40501, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40501, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40501, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40502 Section C405.2-Electrical power and lighting systems.

C405.2 Lighting controls. Lighting systems shall be provided with controls that comply with one of the following:

1. Lighting controls as specified in Sections C405.2.1 through $((\subset 405.2 .7)) \quad$ C405.2.10.
2. ((Iuminaire level)) Luminaire-level lighting controls (LLLC) ( (and lighting controls as specified in sections C405.2.1, C405.2.3 and $C 405.2 .5$. The $L I L C$ luminaire shall be independently configured to:
Z.1. Monitor oceupant activity to brighten or dim lighting when occupied or unoccupied, respectively.
Z.2. Monitor ambient light, both elcetric and daylight, and brighten or dim artificial light to maintain desired light level.
2.3. For each control strategy, configuration and reconfiguration of performance parameters including: Bright and dim setpoints, timeouts, dimming fade rates, sensor sensitivity adjustments, and wireless zoning configuration)) as specified in Section C405.2.8.1.
EXCEPTION: Except for specific application controls required by Section ( ( C 405.2 .5$)$ ) C405.2.6, lighting controls are not required for the following: 1. Areas designated as security or emergency areas that are required to be continuously lighted.
3. Means of egress illumination serving the exit access that does not exceed $((\theta .02)) \underline{0.01}$ watts per square foot of building area. 3. Emergency egress lighting that is normally off.
4. Industrial or manufacturing process areas, as may be required for production and safety.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40502, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40502, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40502, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40502, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-405021 Section C405.2.1-Occupant sensor controls.

C405.2.1 Occupant sensor controls. Occupant sensor controls shall be installed to control ((lights)) luminaires in the ((following)) space types ( $(\div$

1. Classrooms/lecture/training rooms.
Z. Conference/mecting/multipurpose rooms.
2. Copy/print rooms.
3. Lounges/breakrooms.
4. Enclosed offices.
5. Open plan office areas.
6. Restrooms.
7. Storage rooms.
8. Locker rooms.
9. Other spaces 300 square feet ( $20 \mathrm{~m}^{2}$ ) or less that are en
elosed by floor-to-coiling height partitions.
10. Warchouse storage areas.
11. Enclosed fire rated stairways.
12. Service corridors.
13. Covered parking areas.
occupant sensor controls in warehouse storage areas, corridors, and library stacks, shall comply with section 4405.2 .1 .2 . Occupant sensor controls in fire rated stairways shall comply with section 6405.2.1.5. Occupant sensor controls in open plan office arcas shall comply with section 6405.2 .1 .3 . Occupant sensor controls in covered parking areas shall comply with section C405.2.1.4.
oceupant scnsor controls for all other spaces shall comply with Section C405.2.1.1.)) listed in Table C405.2.1, and shall comply with the requirements listed in the table.
EXCEPTIONS: 1 . Corridors in manufacturing facilities.
14. General lighting and task lighting in shop and laboratory classrooms.
15. ((Bigital timer switeh controls may be provided in lieu of oceupant sensor controls in the following space types if under 300 square feet: Copy/print rooms, storage rooms, and janitorial closets. Digital timer switehes shall eomply with the following:)) Luminaires that are required to have specific application controls in accordance with Section C 405.2 .6 unless specifically required to comply with this section by Section C405.2.6.
(3.1. Turn lights on or off with operation of a button, switeh or other manual means.
3.2. Automatieally turn lights off within 15 minutes of the lights being turned on. The means for setting the time delay shall not be visible on the front of the switeh.
3.3. The switeh shall provide both audible and visual indication of impending time-out of the switeh. Audible and visual indication shall be given at least once within 5 minutes of time-out of the switch. Vistal indication shall consist of turning the lights momentarily off, and then back on.))

Table C405.4.2(1)
Interior Lighting Power Allowances-Building Area Method

| Space Type | Comply with Section |
| :--- | :---: |
| Classrooms/lecture/training rooms | $\underline{\text { C405.2.1.1 }}$ |
| Conference/meeting/multipurpose rooms | $\underline{\text { C405.2.1.1 }}$ |
| Copy/print rooms | $\underline{\text { C405.2.1.1 }}$ |
| Lounge/breakrooms | $\underline{\text { C405.2.1.1 }}$ |
| Enclosed offices | $\underline{\text { C405.2.1.1 }}$ |
| Open plan office areas | $\underline{\text { C405.2.1.3 }}$ |
| Restrooms | $\underline{\text { C405.2.1.1 }}$ |
| Storage rooms | $\underline{\text { C405.2.1.1 }}$ |
| Locker rooms | $\underline{\text { C405.2.1.1 }}$ |
| Other spaces 300 square feet $\left(28 \mathrm{~m}^{2}\right)$ or less that are enclosed by | $\underline{\text { C405.2.1.1 }}$ |
| floor-to-ceiling height partitions | $\underline{\text { C405.2.1.2 }}$ |
| $\underline{\text { Warehouse storage areas }}$ | $\underline{\text { C405.2.1.2 }}$ |
| Library stacks | $\underline{\text { C405.2.1.5 }}$ |
| Enclosed fire rated stairways | $\underline{\text { C405.2.1.6 }}$ |
| Corridors |  |

C405.2.1.1 Occupant sensor control function. Occupant sensor controls for the space types listed in Section C405.2.1 shall comply with all of the following:

1. They shall be configured to automatically turn off lights within 20 minutes of all occupants leaving the space.
2. They shall be manual on or configured to automatically turn the lighting on to not more than 50 percent power.
((EXCEPTION: Full automatic-on controls shall be permitted to control lighting in public corridors, stairways, restrooms, primary building entrances areas and lobbies, and areas where mantat-on operation wouldendanger the safety or seetrity of the room or building oectpants.))
3. They shall incorporate a manual control to allow occupants to turn lights off.
EXCEPTION: Full automatic-on controls with no manual control shall be permitted in corridors, interior parking areas, stairways, restrooms, locker rooms, library stacks, lobbies, and areas where manual operation would endanger occupant safety or security.
4. They shall incorporate a manual control to allow occupants to turn lights off.
C405.2.1.2 Occupant sensor control function in warehouse ( $\left(s_{-}\right)$) storage areas and ((service corridors. Occupant sensor controls shall be configured to comply with all of the following:)) library stacks. Lighting in library stacks and warehouse storage areas shall be controlled as follows.
5. ((Automatically reduce lighting power by not less than 50 per= eent within 20 minutes of all occupants leaving the area.
$z$. Control lighting in each aisleway and corridor independently, and shall not control lighting beyond the aisleway or corridor being controlled by the sensor.)) Lighting in each aisleway shall be controlled independently of lighting in all other aisleways and open areas.
6. Occupant sensors shall automatically reduce lighting power within each controlled area to an unoccupied setpoint of not more than 50 percent within 20 minutes after all occupants have left the controlled area.
7. ((Automatically)) Lights which are not turned off by occupant sensors shall be turned off by time schedule sweep to turn lighting off within 20 minutes of all occupants leaving the space, or comply with Section C405.2.2 to turn lighting off when the building is vacant.
8. Restore lighting to full power or target light level when occupants enter the space.
9. A manual control shall be provided to allow occupants to turn off lights in the space.
C405.2.1.3 Occupant sensor control function in open plan office areas. Occupant sensor controls in open plan office spaces less than 300 square feet ( $28 \mathrm{~m}^{2}$ ) in area shall comply with Section c405.2.1.1. Occupant sensor controls in all other open plan office spaces shall be configured to comply with all of the following:
10. General lighting is controlled separately in control zones with floor areas not greater than 600 square feet ( $55 \mathrm{~m}^{2}$ ) within the open plan office space.
11. General lighting in each control zone shall be permitted to automatically turn on upon occupancy within the control zone. General lighting in other unoccupied zones within the open plan office space shall be permitted to turn on to not more than 20 percent of full power or remain unaffected.
12. Automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the open plan office space.
((3)) 4. General lighting ((() is reduced by not less than 80 percent of the full zone general lighting power within 20 minutes of all occupants leaving that control zone. Control functions that switch control zone lights completely off when the zone is unoceupied meet this requirement.
13. Daylight responsive controls activate open plan office space gencral lighting or control zone general lighting only when oceupaney for the same area is detected.
C405.2.1.4 Oceupant sensor control function in parking garages. Oceupant sensor controls shall be configured to comply with all of the following:
14. Lighting power of each Iuminaire shall be automatically reduced by a minimum of 30 percent when there is no vehicle or pedestrian activity detected within a lighting zone for 20 minutes. Lighting zones for this requirement shall be no larger than 3,600 square fect.

## Fxceptions:

1.1. Lighting in daylight transition zones and ramps without parking.
1.2. Covered parking garages with a total lighting power less than 0.07 watts per square foot.
2. Where time switch controls in accordance with section c405.2.2 are not installed, the oceupant sensor shall automatically turn all the lighting off within 20 minutes of all occupants leaving the space and restore lighting to full power when oceupants enter the space.
C405.2.1.5)) shall turn off or uniformly reduce lighting power to an unoccupied setpoint of not more than 20 percent of full power within 20 minutes after all occupants have left the control zone.
5. Lighting controls in open plan office areas larger than 5,000 square feet must also comply with Section C405.2.8.

C405.2.1.4 Occupant sensor control function in enclosed fire rated stairways. Occupant sensor controls shall be configured to automatically reduce lighting power by not less than 50 percent when no occupants have been detected in the stairway for a period not exceeding 20 minutes and restore lighting to full power when occupants enter the stairway. All portions of stairways shall remain illuminated to meet the requirements of Section 1009 of the International Building Code when the lighting power is reduced.
C405.2.1.5 Occupant sensor control function in corridors. Occupant sensor controls in corridors shall uniformly reduce lighting power to an unoccupied setpoint of not more than 50 percent of full power within 20 minutes after all occupants have left the space.
EXCEPTION: Corridors provided with less than two foot-candles of illumination on the floor at the darkest point with all lights on.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405021, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405021, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405021, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, S 51-11C-405021, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405022 Section C405.2.2-Time switch controls.

C405.2.2 Time switch controls. Each area of the building that is not provided with occupant sensor controls (or digital timer switch controls) ) complying with Section (( 4405.2 .1 ) ) C405.2.1.1 shall be provided with time switch controls complying with Section C405.2.2.1.
((2.)) 3. Spaces where an automatic shutoff would endanger occupant safety or security.
((3)) 4. Lighting intended for continuous operation.
((4.)) 5. Shop and laboratory classrooms.
C405.2.2.1 Time switch control function. Time switch controls shall comply with the following:

1. Have a minimum 7 day clock.
2. Be capable of being set for 7 different day types per week.
3. Incorporate an automatic holiday "shut-off" feature, which turns off all controlled lighting loads for at least 24 hours and then resumes normally scheduled operations.
4. Have program back-up capabilities, which prevent the loss of program and time settings for at least 10 hours, if power is interrupted.
5. Include an override switching device that complies with the following:
5.1. The override switch shall be a manual control.
5.2. The override switch, when initiated, shall permit the controlled lighting to remain on for not more than 2 hours.
5.3. Any individual override switch shall control the lighting for an area not larger than 5,000 square feet ( $465 \mathrm{~m}^{2}$ ).
6. Time switch controls are allowed to automatically turn on lighting to full power in corridors, lobbies, restrooms, storage rooms less than 50 square feet, and medical areas of health care facilities. In all other spaces, time switch controls are allowed to automatically turn on the lighting to not more than 50 percent power.
EXCEPTION((S)): ((1.)) Within mall concourses, auditoriums, sales areas, manufacturing facilities, pools, gymnasiums, skating rinks, and sports arenas: $((1.1)) \underline{1}$. The time limit shall be permitted to be greater than 2 hours provided the switch is a captive key device. $((1.2).) \underline{2}$. The area controlled by the override switch shall not be limited to 5,000 square feet $\left(465 \mathrm{~m}^{2}\right)$, provided that such area is less than 20,000 square feet $\left(1860 \mathrm{~m}^{2}\right)$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405022, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405022, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405022, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405023 Section C405.2.3-Manual controls.

C405.2.3 Manual controls. All lighting shall have manual controls complying with the following:

1. They shall be in a location with ready access to occupants.
2. They shall be located where the controlled lights are visible, or shall identify the area served by the lights and indicate their status.
3. Each control device shall control an area no larger than a single room, or 2,500 square feet, whichever is less, if the room area is less than or equal to 10,000 square feet, or one-quarter of the
room area or 10,000 square feet, whichever is less, if the room area is greater than 10,000 square feet.
EXCEPTIONS: 1. A manual control may be installed in a remote location for the purpose of safety or security provided each remote control device has an indicator pilot light as part of or next to the control device and the light is clearly labeled to identify the controlled lighting.
4. Restrooms.
( (C405.2.3.1 Light reduction controls. Manual controls shall be con= figured to provide light reduction control that allows the occupant to reduce the connected lighting load between 30 and 70 percent. Lighting reductions shall be achicved by one of the following approved methods:
5. Controlling all lamps or luminaires.
6. Dual switching of alternate rows of luminaires, alternate lu= minaires or alternate lamps.
7. Switching the middle lamp luminaires independently of the outer lamps.
8. Switching each luminaire or each lamp.

EXCEPTIONS: $\quad$. Light reduction controls are not required in daylight zones with daylight responsive eontrols complying with Seetion C405.2.4. 2. Where provided with mantal control, the following areas are not required to have light reduction control:
2.1. Spaces that have only one luminaire with a rated power of less than 100 watts.
2.2. Spaees that use less than 0.6 watts per square foot $\left(6.5 \mathrm{~W} / \mathrm{m}^{2}\right)$.
2.3. Lighting in corridors, lobbies, electrieal rooms, restrooms, storage rooms, airport coneourse baggage areas, dwelling and sleeping rooms, and mechanical rooms.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405023, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405023, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405023, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405024 Section C405.2.4-((Daylight responsive)) Light-reduction controls.

((C405.2.4 Daylight responsive controls. Daylight responsive con= trols complying with section $C 405.2 .4 .1$ shall be provided to control the lighting within daylight zones in the following spaces:

1. Sidelit zones as defined in section C405.2.4.2 with more than two gencral lighting fixtures within the combined primary and secon= dary sidelit zones.
2. Toplit zones as defined in Section c405.2.4.3 with more than two gencral lighting fixtures within the daylight zone.

EXCEPTION: Baylight responsive controls are not required for the following:

1. Spaces in health care facilities where patient eare is directly provided.
2. Lighting that is required to have specific application control in accordance with Section C405.2.4.
3. Sidelit zones on the first floor above grade in Group A-2 and Group M oceupancies.
4. Daylight zones where the totat proposed lighting power density is less than 35 pereent of the lighting power allowance per Seetion 6405.4.2.

C405.2.4.1 Daylight responsive controls function. Where required, daylight responsive controls shall be provided within each space for control of lights in that space and shall comply with all of the following:

1. Lights in primary sidelit zones shall be controlled independently of lights in secondary sidelit zones in accordance with section 6405.2.4.2.

EXCEPTION: Spaces enelosed by walls or ceiling height partitions with ne more than three general lighting fixtures may have combined daylight zone eontrol of primary and secondary daylight zones provided uniform illumination can be achieved.
z. Lights in toplit zones in accordance with section c405.2.4.3 shall be controlled independently of lights in sidelit zones in aceordance with Section C405.2.4.2.
3. Daylight responsive controls within cach space shall be configured so that they can be calibrated from within that space by authorized personnel.
4. Calibration mechanisms shall be in a location with ready aceoss.
5. Daylight responsive controls shall be configured to completely shut off all controlled lights in that zone.
6. Lights in sidelit zones in accordance with section c405.2.4.2 facing different cardinal orientations (i.c., within 45 degrees of due north, east, south, west) shall be controlled independently of each ether.
EXCEPTION: Up to two light fixtures in each space are permitted to be controlled together with lighting in a daylight zone facing a different cardinal orientation.
7. Incorporate time-delay circuits to prevent cycling of light level changes of less than three minutes.
8. The maximum area a single daylight responsive control device serves shall not exeed 2,500 square feet $\left(232 \mathrm{~m}^{2}\right)$.
9. Occupant override capability of daylight dimming controls is not permitted, other than a reduction of light output from the level established by the daylighting controls.
C405.2.4.1.1 Dimming. Daylight responsive controls shall be configured to automatically reduee the power of general lighting in the daylight zone in response to available daylight, while maintaining uniform ilIumination in the space through one of the following methods:

1. Continuous dimming using dimming ballasts/dimming drivers and daylight-sensing controls. The system shall reduce lighting power continuously to less than 15 percent of rated power at maximum light output.
Z. Stepped dimming using multi-level switching and daylight-sensing controls. The system shall provide a minimum of two steps of uni= form illumination between 0 pereent and 100 pereent of rated power at maximum light output. Each step shall be in equal increments of power, plus or minus 10 percent.

Genexal lighting within daylight zones in offices, elassooms, laboratories and library reading rooms shall use the continuous dimming method. Stepped dimming is not allowed as a method of daylight zone control in these spaes.
C405.2.4.2 Sidelit zone. The sidelit zone is the floor area adjacent to vertical fenestration which complies with the following:

1. Where the fenestration is located in a wall, the sidelit zone includes the primary and secondary daylight zones. The primary day light zone shall extend laterally to the nearest full height wall, of up to 1.0 times the height from the floor to the top of the fenestration, and longitudinally from the edge of the fenestration to the nearest full height wall, or up to 2 fect ( 610 mm ), whichever is less, as indicated in Figure c405.2.4.2(1). The secondary daylight zone begins at the edge of the primary daylight zone and extends laterally to the nearest full height wall, or up to 2.0 times the height from the floor to the top of the fenestration, whichever is less, as indicated in Figure C405.2.4.2(1).
2. Where clerestory fenestration is located in a wall, the sideIit zone includes a lateral area twice the depth of the clerestory fencstration height, projected upon the floor at a 45 degree angle from the center of the clerestory fenestration. The longitudinal width of the sidelit zone is calculated the same as for fenestration located in a wall. Where the 45 degree angle is interrupted by an obstruction greater than 0.7 times the ceiling height, the sidelit zone shall remain the same lateral area but be located between the clerestory and the obstruction, as indicated in Figure C405.2.4.2(2).
3. If the rough opening area of a vertical fenestration assembly is less than 10 percent of the calculated primary sidelit zone area for this fencstration, it does not qualify as a sidelit zone.
4. The visible transmittance of the fenestration is no less than 0.20.
5. In parking garages with floor area adjacent to perimeter wall openings, the sidelit zone shall include the area within 20 feet of any portion of a perimeter wall that has a net opening to wall ratio $\theta f$ at least 40 percent.

Figure C405.2.4.2(1)
Sidelit Zone Adjacent to Fenestration in a Wall


(b) Section view with obstruction


C405.2.4.3 Toplit zone. The toplit zone is the floor area underneath a roof fenestration assembly which complies with the following:

1. The toplit zone shall extend laterally and longitudinally beyond the edge of the roof fenestration assembly to the nearest obstruction that is tallex than 0.7 times the ceiling height, ox up to 0.7 times the ceiling height, whichever is less, as indicated in Fig= wre c405.2.4.3(1).
2. Where the fenestration is located in a rooftop monitor, the toplit zone shall extend laterally to the nearest obstruction that is taller than 0.7 times the ceiling height, or up to 1.0 times the height from the floor to the bottom of the fenestration, whichever is less, and longitudinally from the edge of the fenestration to the nearest obstruction that is taller than 0.7 times the ceiling height, or up to 0.25 times the height from the floor to the bottom of the fenestration, whichever is less, as indicated in Figures C405.2.4.3(2) and C405.2.4.3(3).
3. Where toplit zones overlap with sidelit zones, lights within the overlapping area shall be assigned to the toplit zone.
4. The product of the visible transmittance of the roof fenestration assembly and the area of the rough opening of the roof fenestration assembly, divided by the area of the toplit zone is no less than 0.008.
5. Where located under atrium fenestration, the toplit zone shall include the bottom floor area directly beneath the atrium fenestration, and the top floor directly under the atrium fenestration, as in= dicated in Figure c405.2.4.3(4). The toplit zone area at the top floor is calculated the same as for a toplit zone. Intermediate levels below the top floor that are not directly beneath the atrium are not inclu= ded.

Figure C405.2.4.3(1)
Toplit Zone Under a Rooftop Fenestration Assembly


Figure C405.2.4.3(2)
Toplit Zone Under a Rooftop Monitor


Figure C405.2.4.3(3)
Toplit Zone Under a Sloped Rooftop Monitor


# Washington State Register, Issue 22-14 <br> Figure C405.2.4.3(4) <br> Toplit Zone Under Atrium Fenestration 

WSR 22-14-091

))

C405.2.4 Light-reduction controls. Where not provided with occupant sensor controls complying with Section C405.2.1.1, general lighting shall be provided with light-reduction controls complying with Section C405.2.4.1.

EXCEPTIONS: $\quad$ 1. Luminaires controlled by daylight responsive controls complying with Section C405.2.5.
2. Luminaires controlled by special application controls complying with Section C405.2.6.
3. Where provided with manual control, the following areas are not required to have light reduction control:
3.1. Spaces that have only one luminaire with a rated power of less than 60 watts.
3.2. Spaces that use less than 0.45 watts per square foot $\left(4.9 \mathrm{~W} / \mathrm{m}^{2}\right)$.
3.3. Corridors, lobbies, electrical rooms and/or mechanical rooms.

C405.2.4.1 Light reduction control function. Manual controls shall be configured to provide light reduction control that allows the occupant to reduce the connected lighting load by not less than 50 percent in a reasonable uniform illumination pattern with an intermediate step in addition to full on or off, or with continuous dimming control, by using one of the following or another approved method:

1. Continuous dimming of all luminaires from full output to less than 20 percent of full power.
2. Switching all luminaires to a reduced output of not less than 30 percent and not more than 70 percent of full power.
3. Switching alternate rows of luminaires or alternate luminaires to achieve a reduced output of not less than 30 percent and not more than 70 percent of full power.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405024, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405024, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405024, filed 2/1/13, effective 7/1/13.]

$$
\text { [ } 459 \text { ] WSR Issue 22-14 - Permanent }
$$

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-405025 Section C405.2.5-((Additional lighting)) Daylight responsive controls.

( (C405.2.5 Additional lighting controls. Specific application lighting shall be provided with controls, in addition to controls required by other sections, for the following:

1. The following lighting shall be controlled by an oceupant sensor complying with Section 6405.2 .1 .1 or a time switch control comply= ing with section c405.2.2.1. In addition, a manual control shall be provided to control such lighting separately from the general lighting in the space:
1.1. Display and accent.
1.2. Lighting in display cases.
1.3. Supplemental task lighting, including permanently installed under-shelf or under-cabinet lighting.
1.4. Lighting equipment that is for sale or demonstration in lighting education.
Z. Slecping units shall have control device(s) or systems configured to automatically switch off all permanently installed luminaires and switched receptacles within 20 minutes after all occupants have left the unit.
EXCEPTIONS: $\quad$ 1. Lighting and switehed receptacles controlled by eard key controls. 2. Space where patient eare is directly provided.
2. Permanently installed luminaires within dwelling units shall be provided with controls complying with either section c405.2.1.1 ox C405.2.3.1.
3. Lighting for nonvisual applications, such as plant growth and food warming, shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space. Fach control zone shall be no greater than the area served by a single Iuminaire or 4,000 square feet, whichever is larger.
4. Luminaires serving the exit access and providing means of egress illumination required by Section 1008.2 of the International Building code, including luminaires that function as both normal and emergency means of cgress illumination shall be controlled by a combi= nation of listed emergency relay and oceupancy schsors, or signal from another building control system, that automatically shuts off the lighting when the areas served by that illumination are unoceupied.
EXCEPTION: Means of egress illumination serving the exit aecess that does not exceed 0.02 watts per square foot of building area is exempt from this requirement.))

C405.2.5 Daylight responsive controls. Daylight responsive controls complying with section C405.2.5.1 shall be provided to control the general lighting within daylight zones in the following spaces:

1. Spaces with a total of more than 75 watts of general lighting within primary sidelit daylight zones complying with Section C405.2.5.2.
2. Spaces with a total of more than 150 watts of general lighting within the combined primary and secondary daylight zones complying with Section C405.2.5.2.
3. Spaces with a total of more than 75 watts of general lighting within toplit daylight zones complying with Section C405.2.5.3.
EXCEPTION: Daylight responsive controls are not required for the following:
4. Spaces in health care facilities where patient care is directly provided.
5. Sidelit daylight zones on the first floor above grade in Group A-2 and Group M occupancies where the fenestration adjoins a sidewalk or other outdoor pedestrian area, provided that the light fixtures are controlled separately from the general area lighting.

C405.2.5.1 Daylight responsive controls function. Where required, daylight responsive controls shall be provided within each space for control of lights in that space and shall comply with all of the following:

1. Lights in primary sidelit daylight zones shall be controlled independently of lights in secondary sidelit daylight zones in accordance with Section C405.2.5.2.
2. Lights in toplit daylight zones in accordance with Section C405.2.5.3 shall be controlled independently of lights in sidelit daylight zones in accordance with Section C405.2.5.2.
3. Daylight responsive controls within each space shall be configured so that they can be calibrated from within that space by authorized personnel.
4. Calibration mechanisms shall be in a location with ready access.
5. Daylight responsive controls shall dim lights continuously from full light output to 15 percent of full light output or lower.
6. Daylight responsive controls shall be configured to completely shut off all controlled lights in that zone.
7. When occupant sensor controls have reduced the lighting power to an unoccupied setpoint in accordance with Sections c405.2.1.2 through C405.2.1.4, daylight responsive controls shall continue to adjust electric light levels in response to available daylight but shall be configured to not increase the lighting power above the specified unoccupied setpoint.
8. Lights in sidelit daylight zones in accordance with Section C405.2.5.2 facing different cardinal orientations (i.e., within 45 degrees of due north, east, south, west) shall be controlled independently of each other.
EXCEPTION: Up to 75 watts of general lighting are permitted to be controlled together with lighting in a daylight zone facing a different cardinal orientation.
9. Incorporate time-delay circuits to prevent cycling of light level changes of less than three minutes.
10. The maximum area a single daylight responsive control device serves shall not exceed 2,500 square feet ( $232 \mathrm{~m}^{2}$ ).
11. Occupant override capability of daylight dimming controls is not permitted, other than a reduction of light output from the level established by the daylighting controls.
C405.2.5.2 Sidelit daylight zone. The sidelit daylight zone is the floor area adjacent to vertical fenestration which complies with the following:
12. Where the fenestration is located in a wall, the primary sidelit daylight zone shall extend laterally to the nearest full height wall, or up to 1.0 times the height from the floor to the top of the fenestration, and longitudinally from the edge of the fenestration to the nearest full height wall, or up to 0.5 times the height from the floor to the top of the fenestration, whichever is less, as indicated in Figure C405.2.5.2(1).
13. The secondary sidelit daylight zone is directly adjacent to the primary daylight zone and shall extend laterally to 2.0 times the height from the floor to the top of the fenestration or to the nearest full height wall, whichever is less, and longitudinally from the edge of the fenestration to the nearest full height wall or up to 2 feet, whichever is less, as indicated in Figure C405.2.5.2(1).
14. Where clerestory fenestration is located in a wall, the sidelit daylight zone includes a lateral area twice the depth of the clerestory fenestration height, projected upon the floor at a 45 degree angle from the center of the clerestory fenestration. The longitudinal width of the sidelit daylight zone is calculated the same as for fenestration located in a wall. Where the 45 degree angle is interrupted by an obstruction greater than 0.7 times the ceiling height, the sidelit daylight zone shall remain the same lateral area but be located between the clerestory and the obstruction, as indicated in Figure C405.2.5.2(2).
15. Where the fenestration is located in a rooftop monitor, the sidelit daylight zone shall extend laterally to the nearest obstruction that is taller than 0.7 times the ceiling height, or up to 1.0 times the height from the floor to the bottom of the fenestration, whichever is less, and longitudinally from the edge of the fenestration to the nearest obstruction that is taller than 0.7 times the ceiling height, or up to 0.25 times the height from the floor to the bottom of the fenestration, whichever is less, as indicated in Figures c405.2.5.2(3) and C405.2.5.2(4).
16. If the rough opening area of a vertical fenestration assembly is less than 10 percent of the calculated primary sidelit daylight zone area for this fenestration, it does not qualify as a sidelit daylight zone.
17. The visible transmittance of the fenestration is no less than 0.20 .
18. The projection factor (determined in accordance with Equation 4-5) for any overhanging projection which is shading the fenestration is not greater than 1.0 for fenestration oriented 45 degrees or less from true north, and not greater than 1.5 for all other orientations.

Figure C405.2.5.2(1) Sidelit Daylight zone Adjacent to Fenestration in a Wall


Figure C405.2.5.2(2)
Sidelit Daylight Zone Adjacent to Clerestory Fenestration in a Wall


Figure C405.2.5.2(3)
Sidelit Daylight Zone Under a Sloped Rooftop Monitor


C405.2.5.3 Toplit daylight zone. The toplit daylight zone is the floor area underneath a roof fenestration assembly which complies with the following:

1. The toplit daylight zone shall extend laterally and longitudinally beyond the edge of the roof fenestration assembly to the nearest obstruction that is taller than 0.7 times the ceiling height, or up to 0.7 times the ceiling height, whichever is less, as indicated in Figure C405.2.5.3(1).
2. Where toplit daylight zones overlap with sidelit daylight zones, lights within the overlapping area shall be assigned to the toplit daylight zone.
3. The product of the visible transmittance of the roof fenestration assembly and the area of the rough opening of the roof fenestration assembly, divided by the area of the toplit daylight zone is no less than 0.008.
4. Where located under atrium fenestration, the toplit daylight zone shall include the bottom floor area directly beneath the atrium
fenestration, and the top floor directly under the atrium fenestration, as indicated in Figure C405.2.5.3(4). The toplit daylight zone area at the top floor is calculated the same as for a toplit daylight zone. Intermediate levels below the top floor that are not directly beneath the atrium are not included.

Figure C405.2.5.3(1)
Toplit Daylight Zone Under a Rooftop Fenestration Assembly


Figure C405.2.5.3(2)
Toplit Daylight Zone Under a Rooftop Monitor


Figure C405.2.5.4
Toplit Daylight Zone Under Atrium Fenestration


C405.2.5.4 Atriums. Daylight zones at atrium spaces shall be established at the top floor surrounding the atrium and at the floor of the atrium space, and not on intermediate floors, as indicated in Figure c405.2.5.4.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405025, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405025, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405025, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters

```
[ 465 ] WSR Issue 22-14 - Permanent
```

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-405026 Section C405.2.6-((Exteriox)) Additional lighting controls. ( (C405.2.6 Exterior lighting controls. Exterior lighting systems shall be provided with controls that comply with Sections C405.2.6.1 through c405.2.6.4. Decorative lighting systems shall eomply with sections c405.2.6.1, c405.2.6.2, and C405.2.6.4.
EXCEPTIONS: 1.Lighting for covered vehicle entrances or exits from buildings or parking structures where required for safety, security or eye adaption.
2. Lighting eomtrolled from within dwelling units.

C405.2.6.1 Daylight shutoff. Lights shall be configured to automatieally turn off when daylight is present and satisfies the lighting needs.
C405.2.6.2 Façade and landscape lighting shutoff. Building façade and landscaping lighting shall be configured to automatically shutoff for a minimum of 6 hours per night or from not later than 1 hour aftex business closing to not carlicx than 1 hour before business opening, whichever is less.
EXCEPTION: Areas where an automatic shuteff would endanger safety or seecrity.
C405.2.6.3 Lighting setback. Lighting that is not controlled in aceordance with section C 405.2 .6 .2 shall be controlled so that the total wattage of such lighting is automatically reduced by not less than 30 percent by selectively switching off or dimming luminaires at one of the following times:

1. From not later than 12 midnight to 6 a.m.
Z. From not later than 1 hour after business closing to not earliex than 1 hour before business opening.
2. During any period when no activity has been detected for 15 minutes or more.
C405.2.6.4 Exterior time-switch control functions. Time-switch controls for extcrior lighting shall comply with the following:
3. They shall have a clock capable of being programmed for not fower than 7 days.
Z. They shall be capable of being set for 7 different day types per week.
4. They shall incorporate an automatic holiday setback feature.
5. They shall have program backup capabilities that prevent the loss of program and time settings for a period of at least 10 hours in the event that power is interrupted.))
C405.2.6 Additional lighting controls. Specific application lighting shall be provided with controls, in addition to controls required by other sections, for the following:
6. The following lighting shall be controlled by an occupant sensor complying with Section C405.2.1.1 or a time switch control complying with Section c405.2.2.1. In addition, a manual control shall be provided to control such lighting separately from the general lighting in the space:
1.1. Luminaires for which additional lighting power is claimed in accordance with Section C405.4.2.2.1.
1.2. Display and accent.
1.3. Lighting in display cases.
1.4. Supplemental task lighting, including permanently installed under-shelf or under-cabinet lighting.
1.5. Lighting equipment that is for sale or demonstration in lighting education.
1.6. Display lighting for exhibits in galleries, museums and monuments that is in addition to general lighting.
7. Sleeping units shall have control device(s) or systems configured to automatically switch off all permanently installed luminaires and switched receptacles within 20 minutes after all occupants have left the unit.
EXCEPTIONS: $\quad$ 1. Lighting and switched receptacles controlled by card key controls.
8. Lighting for life support of nonhuman life forms and food warming, shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space. Each control zone shall be no greater than the area served by a single luminaire or 4,000 square feet ( $372 \mathrm{~m}^{2}$ ), whichever is larger.
9. Task lighting for medical and dental purposes that is in addition to general lighting shall be provided with a manual control.
10. Luminaires serving the exit access and providing means of egress illumination required by Section 1008.2 of the International Building Code, including luminaires that function as both normal and emergency means of egress illumination shall be controlled by a combination of listed emergency relay and occupancy sensors, or signal from another building control system, that automatically shuts off the lighting when the areas served by that illumination are unoccupied. EXCEPTION: Means of egress illumination serving the exit access that does not exceed 0.01 watts per square foot ( $0.108 \mathrm{~W} / \mathrm{m}^{2}$ ) of building area is exempt from this requirement.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405026, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405026, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405027 ((Reserved.)) Section C405.2.7-Area controls.

C405.2.7 Area controls. The maximum lighting power that may be controlled from a single switch or automatic control device shall not exceed that which is provided by a 20 ampere circuit loaded to not more than 80 percent. A master control may be installed provided the individual switches retain their capability to function independently. Circuit breakers may not be used as the sole means of switching. EXCEPTION: Areas less than 5 percent of the building footprint for footprints over $100,000 \mathrm{ft}^{2}$.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405027, filed 11/26/19, effec-
tive 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405027, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-405028 Section ((C405.2.7-Area)) C405.2.8—Advanced lighting controls.
( (C405.2.7 Area controls. The maximum lighting power that may be controlled from a single switch or automatic control device shall not exeeed that which is provided by a 20 ampere circuit loaded to not more than 80 percent. A master control may be installed provided the individual switches retain their capability to function independently. Circuit breakers may not be used as the sole means of switching. EXCEPTION: Areas less than 5 pereent of the building footprint for footprints over $100,000 \mathrm{ft}^{2}$.))

C405.2.8 Advanced lighting controls. Any contiguous open office area larger than 5,000 square feet shall have its general lighting controlled by either:

1. Luminaire-level lighting controls (LLLC) conforming to the requirements of Section C405.2.8.1.
2. Networked lighting control (NLC) conforming to the requirements of Section C405.2.8.2.
C405.2.8.1 Luminaire-level lighting controls. Where luminaire-level lighting controls are required, they shall be configured to provide the controls or equivalent control function specified in Sections C405.2.1, C 405.2 .3 , and C 405.2 .5 . In addition, each LLLC luminaire shall be independently configured to:
3. Provide for continuous full range dimming.
4. Monitor occupant activity to brighten or dim lights when occupied or unoccupied, respectively.
5. Monitor ambient lighting, both electric and daylight, and brighten or dim artificial light to maintain desired light level. A maximum of 8 fixtures are permitted to be controlled together to maintain uniform light levels within a single daylight zone.
6. Allow configuration and reconfiguration of performance parameters for each control strategy including: High trim and low trim setpoints, timeouts, dimming fade rates, and sensor sensitivity adjustment.
7. Construction documents shall include a submittal of a sequence of operations including a specification outlining each of the functions required by this section.
8. Luminaires shall be configured with high end trim in accordance with Section C405.2.8.3.
C405.2.8.2 Networked lighting control (NLC). Where NLC are required, they shall be configured to provide controls and minimum function as specified in Section C405.2. In addition, each NLC luminaire shall be independently configured to:
9. Provide for continuous full range dimming.
10. Each luminaire shall be individually addressed. EXCEPTIONS TO ITEM 2:
11. Multiple luminaires mounted on no more than 12 linear feet of a single lighting track and addressed as a single luminaire.
12. Multiple linear luminaires that are ganged together to create the appearance of a single longer fixture and addressed as a single luminaire, where the total length of the combined luminaires is not more than 12 feet.
13. Monitor occupant activity to brighten or dim lighting when occupied or unoccupied, respectively.
14. Monitor ambient lighting, both electric and daylight, and brighten or dim artificial light to maintain desired light level. A maximum of 8 fixtures are permitted to be controlled together to maintain uniform light levels within a single daylight zone.
15. Allow configuration and reconfiguration of performance parameters for each control strategy including: High trim and low trim setpoints, timeouts, dimming fade rates, and sensor sensitivity adjustment.
16. Allow for demand response load shed.
17. Construction documents shall include a submittal of a sequence of operations including a specification outlining each of the functions required by this section.
18. Luminaires shall be configured with high end trim in accordance with Section C405.2.8.3.
C405.2.8.3 High end trim. Luminaires subject to high end trim shall be initially configured with the following:
19. Programmed to limit the initial maximum lumen output or maximum lighting power to 85 percent or less of full light output or full power or to meet the target light level documented in project sequence of operations using the least amount of power.
20. High end trim power levels are allowed to automatically reset to accommodate lumen maintenance.
21. High end trim controls shall be accessible only to authorized personnel.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, S 51-11C-405028, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405028, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405028, filed 1/19/16, effective 7/1/16.]

## NEW SECTION

## WAC 51-11C-405029 Section C405.2.9-Exterior lighting controls.

C405.2.9 Exterior lighting controls. Exterior lighting systems shall be provided with controls that comply with Sections C405.2.9.1 through C405.2.9.4.
EXCEPTIONS: 1. Lighting for covered vehicle entrances or exits from buildings or parking structures where required for safety, security or eye adaption.
2. Lighting controlled from within dwelling units.

C405.2.9.1 Daylight shutoff. Lights shall be configured to automatically turn off when daylight is present and satisfies the lighting needs.
C405.2.9.2 Building façade and landscape lighting. Building façade and landscaping lighting shall be configured to automatically shutoff for a minimum of 6 hours per night or from not later than 1 hour after
business closing to not earlier than 1 hour before business opening, whichever is less.
EXCEPTION: Areas where an automatic shutoff would endanger safety or security.
C405.2.9.3 Lighting setback. Lighting that is not controlled in accordance with Section C405.2.9.2 shall comply with the following:

1. Luminaires serving outdoor parking areas and having a rated input wattage of greater than 40 watts and a mounting height of 24 feet ( 7315 mm ) or less above the ground shall also be controlled so that the total wattage of such lighting is automatically reduced by not less than 50 percent during any time where activity has not been detected for 15 minutes or more. Not more than 1,500 watts of lighting power shall be controlled together.
2. All other lighting shall be controlled so that the total wattage of such lighting is automatically reduced by not less than 50 percent by selectively switching off or dimming luminaires at one of the following times:
2.1. From not later than 12 midnight to 6 a.m.
2.2. From not later than 1 hour after business closing to not earlier than 1 hour before business opening.
2.3. During any period when no activity has been detected for 15 minutes or more.
C405.2.9.4 Exterior time-switch control functions. Time-switch controls for exterior lighting shall comply with the following:
3. They shall have a clock capable of being programmed for not fewer than 7 days.
4. They shall be capable of being set for 7 different day types per week.
5. They shall incorporate an automatic holiday setback feature.
6. They shall have program backup capabilities that prevent the loss of program and time settings for a period of at least 10 hours in the event that power is interrupted.
[]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

WAC 51-11C-40503 ((Reserved.)) Section C405.2.10-Parking garage lighting control.
C405.2.10 Parking garage lighting control. Parking garage lighting shall be controlled by an occupant sensor complying with Section C405.2.1.1 or a time-switch control complying with Section C405.2.2.1. Additional lighting controls shall be provided as follows:

1. Lighting power of each luminaire shall be automatically reduced by not less than 30 percent when there is no activity detected within a lighting zone for 20 minutes. Lighting zones for this requirement shall be not larger than 3,600 square feet ( $334.5 \mathrm{~m}^{2}$ ).
2. Where lighting for eye adaptation is provided at covered vehicle entrances and exits from buildings and parking structures, such lighting shall be separately controlled by a device that automatically reduces lighting power by at least 50 percent from sunset to sunrise.
3. The power to luminaires within 20 feet ( 6096 mm ) of perimeter wall openings shall automatically reduce in response to daylight by at least 50 percent.
EXCEPTIONS TO ITEM 3:
4. Daylight transition lighting for covered vehicle entrances and exits from buildings and parking structures; each transition zone shall not exceed a depth of 66 feet inside the structure and a width of 50 feet.
5. Where permanent screens or architectural elements obstruct more than 50 percent of the opening.
6. Where the top of any existing adjacent structure or natural object is at least twice as high above the openings as its horizontal distance from the opening.
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40503, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40503, filed 2/1/13, effective 7/1/13.]

## NEW SECTION

## WAC 51-11C-405030 Section C405.3-Lighting for plant growth and maintenance.

C405.3 Lighting for plant growth and maintenance. All permanently installed luminaires used for plant growth and maintenance shall have a photosynthetic photon efficacy measured at the lamp for luminaires with serviceable or removable lamps or at the luminaire for integrated, nonserviceable luminaires of not less than 1.7 mol/J for greenhouses and not less than $1.9 \mu \mathrm{~mol} / \mathrm{J}$ for all other indoor growing spaces as defined in accordance with ANSI/ASABE S640.
EXCEPTION: Buildings with no more than 10 kW of aggregate horticultural lighting load.

## [ ]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-405051 Section C405.4.1-Total connected interior lighting power.

C405.4.1 Total connected interior lighting power. The total connected interior lighting power shall be determined in accordance with Equation $((4-10))$ 4-13.

```
TCLP \(=[L V L+B L L+\) TRK + POE + Other \(]\)
    (Equation ((4-10)) 4-13)
```

Where:
TCLP $=$ Total connected lighting power (watts).
$\mathrm{LVL}=$ For luminaires with lamps connected directly to building power, such as line voltage lamps, the rated wattage of the lamp, which must be minimum 60 lumens/watt.

BLL $=$ For luminaires incorporating a ballast or transformer, the rated input wattage of the ballast or transformer when operating the lamp.

TRK = For lighting track, cable conductor, rail conductor and plug-in busway systems that allow the addition and relocation of luminaires without rewiring, the wattage shall be one of the following:

1. The specified wattage of the luminaires, but not less than 16 W/lin. ft. (52 W/lin. m).
2. The wattage limit of the permanent current limiting devices protecting the system.
3. The wattage limit of the transformer supplying the system.

POE = For other modular lighting systems served with power supplied by a driver, power supply for transformer including, but not limited to, low-voltage lighting systems, the wattage of the system shall be the maximum rated input wattage of the driver, power supply or transformed published in the manufacturer's catalogs, as specified by UL 2108 or 8750 . For power-over-Ethernet lighting systems, power provided to installed nonlighting devices may be subtracted from the total power rating of the power-over-Ethernet systems.

Other = The wattage of all other luminaires and lighting, sources not covered above and associated with interior lighting verified by data supplied by the manufacturer or other approved sources.

The connected power associated with the following lighting equipment is not included in calculating total connected lighting power.

1. Television broadcast lighting for playing areas in sports arenas.
2. Emergency lighting automatically off during normal building operation.
3. Lighting in spaces specifically designed for use by occupants with special lighting needs including those with visual impairment and other medical and age-related issues.
4. Casino gaming areas.
5. General area lighting power in industrial and manufacturing occupancies dedicated to the inspection or quality control of goods and products.
6. Mirror lighting in dressing rooms.
7. Task lighting for medical and dental purposes that is in addition to general lighting ( (and controlled by an independent control device)).
8. Display lighting for exhibits in galleries, museums and monuments that is in addition to general lighting ((and controlled by an independent control device)).
9. Lighting for theatrical purposes, including performance, stage, film production and video production.
10. Lighting for photographic processes.
11. Lighting integral to equipment or instrumentation and installed by the manufacturer.
12. Task lighting for plant growth or maintenance where the lamp efficacy is not less than 90 lumens per watt.
13. Advertising signage or directional signage.
14. Lighting for food warming.
15. Lighting equipment that is for sale.
16. Lighting demonstration equipment in lighting education facilities.
17. Lighting approved because of safety considerations.
18. Lighting in retail display windows, provided the display area is enclosed by ceiling-height partitions.
19. Furniture mounted supplemental task lighting that is controlled by automatic shutoff.
20. Exit signs.
21. Lighting used for aircraft painting.
22. Antimicrobial lighting used for the sole purpose of disin-
fecting a space.
[Statutory Authority: RCW 19.27A.025, 19.27A. 045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405051, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405051, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405051, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405051, filed $2 / 1 / 13$, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405052 Section C405.4.2—Interior lighting power requirements.

C405.4.2 Interior lighting power allowance. The total interior lighting power allowance (watts) ((is)) for an entire building shall be determined according to Table c405.4.2(1) using the Building Area Method, or Table C405.4.2(2) using the Space-by-Space Method( (, for all areas of the building covered in this permit)). The interior lighting power allowance for projects that involve only portions of a building shall be determined according to Table C405.4.2(2) using the Space-bySpace Method. Buildings with unfinished spaces shall use the Space-bySpace Method.
C405.4.2.1 Building area method. For the Building Area Method, the interior lighting power allowance is ((the floor area)) calculated as follows:

1. For each building area type ((Iisted in Table C405.4.2(1) times the value from Table c405.4.2(1) for)) inside the building, determine the applicable building area type and the allowed lighting power density for that type from Table C405.4.2(1). For building area types not listed, select the building area type that most closely represents the use of that area. For the purposes of this method, an "area" shall be defined as all contiguous spaces that accommodate or are associated with a single building area type ((as)).
2. Determine the floor area for each building area type listed in Table C405.4.2(1) and multiply this area by the applicable value from Table C405.4.2(1) to determine the lighting power (watts) for each building area type. ((Where this method is used to calculate))
3. The total interior lighting power allowance (watts) for ((an)) the entire building ( $(\boldsymbol{r})$ ) is the sum of the lighting power from each building area type ((shall be treated as a separate area)).
C405.4.2.2 Space-by-Space Method. ((for the Space-by-Space Method, the interior lighting power allowance is determined by multiplying the floor axea of each space times the value for the space type in Table 6405.4.2(2) that most closely represents the proposed use of the space, and then summing the lighting power allowances for all spaces. Tradeoffs ameng spaces are permitted.) ( Where a building has a space designated as unfinished, neither the area nor the lighting power in the space shall be calculated as part of the LPA. For the Space-by-

Space Method, the interior lighting power allowance is calculated as follows:

1. For each area enclosed by partitions that are not less than 80 percent of the ceiling height ( (or taller shall be considered a separate space and assigned the appropriate space type from Table E405.4.2(2). If a space has multiple functions where more than one space type is applicable, that space shall be broken up into smallex subspaces, each using their own space type. Any of these subspaces that are smaller in floor area than 20 percent of the enclosed space and less than 1,000 square feet need not be broken out separately)) determine the applicable space type from Table C405.4.2(2). For space types not listed, select the space type that most closely represents the proposed use of the space. Where a space has multiple functions, that space shall be broken up into smaller subspaces, each using their own space type. If an entire space has multiple functions that necessitate a higher lighting power allowance in order to serve one of the primary functions, the higher allowance is permitted to be used.
2. Determine the total floor area of all of the spaces of each space type and multiply by the value for the space type in Table C405.4.2(2) to determine the lighting power (watts) for each space type.
3. The total interior lighting power allowance (watts) shall be the sum of the lighting power allowances for all space types.
C405.4.2.2.1 Additional interior lighting power. Where using the Space-by-Space Method, an increase in the interior lighting power allowance is permitted for specific lighting functions. Additional power shall be permitted only where the specified lighting is installed in addition to and automatically controlled separately from ((the)) general lighting, ((to be turned off during nonbusiness hours)) in accordance with Section C405.2.6. This additional power shall be used only for the specified luminaires and shall not be used for any other purpose.

An increase in the interior lighting power allowance is permitted for lighting equipment to be installed in sales areas specifically to highlight merchandise. The additional lighting power shall be determined in accordance with Equation ((4-11)) 4-14.

## (Equation ((4-11)) 4-14)

Additional Interior Lighting Power Allowance $=500$ watts + (Retail
Area $\left.1 \times 0.45 \mathrm{~W} / \mathrm{ft}^{2}\right)+\left(\right.$ Retail Area $\left.2 \times 0.45 \mathrm{~W} / \mathrm{ft}^{2}\right)+($ Retail Area $\left.3 \times 1.05 \mathrm{~W} / \mathrm{ft}^{2}\right)+\left(\right.$ Retail Area $\left.4 \times 1.87 \mathrm{~W} / \mathrm{ft}^{2}\right)$.
Where:
Retail Area 1 = The floor area for all products not listed in Retail Area 2, 3 or 4.

Retail Area 2 = The floor area used for the sale of vehicles, sporting goods and small electronics.

Retail Area 3 = The floor area used for the sale of furniture, clothing, cosmetics and artwork.

Retail Area $4=$ The floor area used for the sale of jewelry, crystal and china.
EXCEPTION: Other merchandise categories are permitted to be included in Retail Areas 2 through 4, provided that justification documenting the need for additional lighting power based on visual inspection, contrast, or other critical display requirement is approved by the code official.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405052, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and

Washington State Register, Issue 22-14
19.27.074. WSR 16-03-072, § 51-11C-405052, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405052, filed $2 / 1 / 13$, effective 7/1/13.]

OTS-3535. 2

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-405053 Table C405.4.2(1)—Interior lighting power al-lowances-Building area method.

Table C405.4.2(1)
Interior Lighting Power Allowances-Building Area Method

| Building Area Type | LPD (w/ <br> $\left.\mathbf{f t}^{2}\right)$ |
| :--- | :---: |
| Automotive facility | 0.64 |
| Convention center | 0.64 |
| Court house | 0.79 |
| Dining: Bar lounge/leisure | 0.79 |
| Dining: Cafeteria/fast food | 0.72 |
| Dining: Family | 0.71 |
| Dormitory((a,b)) | 0.46 |
| Exercise center | 0.67 |
| Fire station((a))) | 0.54 |
| Gymnasium | 0.75 |
| Health care clinic | 0.70 |
| Hospital((a)) | 0.84 |
| Hotel/motel((a,b)) | 0.56 |
| Library | 0.83 |
| Manufacturing facility | 0.82 |
| Motion picture theater | 0.44 |
| $(($ Multififamily $\mathbf{c})$ ) | 0.41 |
| Multiple family |  |
| Museum | 0.55 |
| Office | 0.64 |
| Parking garage | 0.14 |
| Penitentiary | 0.65 |
| Performing arts theater | 0.84 |
| Police station | 0.66 |
| Post office | 0.65 |
| Religious building | 0.67 |
| Retail | 0.84 |
| School/university | 0.70 |
| Sports arena | 0.62 |
|  |  |


| Building Area Type | LPD (w/ <br> $\mathbf{f t}^{\mathbf{2}} \mathbf{)}$ |
| :--- | :---: |
| Town hall | 0.69 |
| Transportation | 0.50 |
| Warehouse | 0.40 |
| Workshop | 0.91 |

( ${ }^{\text {a }}$ Where sleeping units are exeluded frem lighting power caleulations by application of Section R404.1, neither the area of the sleeping units nor the wattage of lighting in the sleeping units is counted.
b Where dwelling units are excluded from lighting power caleulations by applieation of Section R404.1, neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.
c Dwelling units are excluded. Neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405053, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405053, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405053, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-405054 Table C405.4.2(2)—Interior lighting power al-lowances-Space-by-space method.

Table C405.4.2(2)
Interior Lighting Power Allowances-Space-by-Space Method

| Common Space-by-Space Types $^{\mathbf{a}}$ | LPD (w/ft ${ }^{\mathbf{2}}$ ) |
| :--- | :---: |
| Atrium - Less than 20 feet in height | 0.39 |
| Atrium - 20 to 40 feet in height | 0.48 |
| Atrium - Above 40 feet in height | 0.60 |
| Audience/seating area - Permanent ${ }^{\mathrm{i}}$ |  |
| In an auditorium | 0.61 |
| In a gymnasium | 0.23 |
| In a motion picture theater | 0.27 |
| In a penitentiary | 0.67 |
| In a performing arts theater | 1.16 |
| In a religious building | 0.72 |
| In a sports arena | 0.33 |
| Otherwise | 0.23 |
| Banking activity area((n)) i | 0.61 |
| Breakroom (see lounge/breakroom) |  |
| Classroom/lecture hall/training |  |
| room |  |
| In a penitentiary | 0.89 |
| Otherwise | $0.71\left(\left({ }^{\mathrm{m}}\right)\right)$ |
| Computer room, data center | 0.94 |


| Common Space-by-Space Types ${ }^{\text {a }}$ | LPD ( $\mathbf{w} / \mathrm{ft}^{2}$ ) |
| :---: | :---: |
| Conference/meeting/multipurpose | 0.97 |
| Confinement cell | 0.70 |
| Copy/print room | 0.31 |
| Corridor |  |
| In a facility for the visually impaired (and not used primarily by the staff) ${ }^{\text {b }}$ In a hospital In a manufacturing facility Otherwise ${ }^{\text {c }}$, | $\begin{aligned} & 0.71 \\ & 0.71 \\ & 0.41 \\ & 0.41 \end{aligned}$ |
| Courtroom ${ }^{\text {c }}$ | 1.20 |
| Dining area |  |
| In a penitentiary | 0.42 |
| In a facility for the visually impaired (and not used primarily by the staff) ${ }^{\text {b }}$ | 1.27 |
| In a bar/lounge or leisure dining ${ }^{((\mathbf{n}))}$ i | 0.86 |
| In cafeteria or fast food dining | 0.40 |
|  | 0.60 |
| Otherwise | 0.43 |
| Electrical/mechanical | 0.43 |
| Emergency vehicle garage | 0.52 |
| Food preparation | 1.09 |
| Guest room ${ }^{\text {a,b }}$ | 0.41 |
| Laboratory |  |
| In or as a classroom | 1.11 |
| Otherwise | 1.33 |
| Laundry/washing area | 0.53 |
| Loading dock, interior | 0.88 |
| Lobby ${ }^{\text {c }}$ |  |
| In a facility for the visually impaired (and not used primarily by the staff) ${ }^{\text {b }}$ | 1.69 |
| For an elevator | 0.65 |
| In a hotel | 0.51 |
| In a motion picture theater | 0.23 |
| In a performing arts theater | 1.25 |
| Otherwise | 0.84 |
| Locker room | 0.52 |
| Lounge/breakroom ${ }^{(\mathrm{n}) \text { ) } \text { - }^{\text {- }} \text { - }{ }^{\text {a }} \text {, }}$ |  |
| In a health care facility ${ }^{(\text {(n) }) ~ c, i}$ | 0.42 |
| Otherwise ${ }^{((\mathrm{n})}$ ) $\mathrm{-}_{-}$ | 0.59 |
| Office $\begin{aligned} & \text { Enclosed } \leq 250 \\ & \text { Enclosed }>250\end{aligned}$ |  |
|  | 0.74 |
|  | 0.66 |


| Common Space-by-Space Types ${ }^{\text {a }}$ | LPD (w/ft ${ }^{\mathbf{2}}$ ) |
| :---: | :---: |
| Open plan | 0.61 |
| Parking area, interior | 0.15 |
| Pharmacy area | 1.66 |
| Restroom |  |
| In a facility for the visually impaired (and not used primarily by the staff) ${ }^{\text {b }}$ | 1.26 |
| Otherwise ${ }^{((\mathrm{n})}$ ) i | 0.63 |
| Sales area | 1.05 |
| Seating area, general | 0.23 |
| Stairway (see space containing stairway) |  |
| Stairwell ${ }^{(\mathrm{n})}$ ) c,i | 0.49 |
| Storage room |  |
| $<50 \mathrm{ft}^{2}$ | 0.51 |
| $50-100 \mathrm{ft}^{2}$ | 0.38 |
| All other storage | 0.38 |
| Vehicular maintenance | 0.60 |
| Workshop | 1.26 |


| Building Specific Space-by-Space Types ${ }^{\text {a }}$ | LPD (w/ft ${ }^{\mathbf{2}}$ ) |
| :---: | :---: |
| Automotive (see vehicular maintenance) |  |
| Convention center - Exhibit space_ | 0.61 |
| Dormitory living quarters ${ }^{\text {a,b }}$ | 0.50 |
| Facility for the visually impaired ${ }^{\text {b }}$ In a chapel (and not used primarily by the staff) ${ }^{\text {b }}$ <br> In a recreation room (and not used primarily by the staff) ${ }^{\text {b }}$ | $\begin{array}{r} 0.70 \\ 1.77 \\ \hline \end{array}$ |
| Fire stations $\left(\left(\mathrm{g}_{\mathrm{g}}\right)\right)$ Sleeping quarters | 0.23 |
| Gymnasium/fitness center <br> In an exercise area <br> In a playing area | $\begin{aligned} & 0.90 \\ & 0.85 \\ & \hline \end{aligned}$ |
| Health care facility, ${ }^{\mathrm{c}, \mathrm{i}}$ <br> In an exam/treatment room <br> In an imaging room <br> In a medical supply room <br> In a nursery <br> In a nurse's station <br> In an operating room <br> In a patient room( $\left.\left(^{( }\right)\right)$ <br> In a physical therapy room <br> In a recovery room | $\begin{aligned} & 1.40 \\ & 0.94 \\ & 0.62 \\ & 0.92 \\ & 1.17 \\ & 2.26 \\ & 0.68 \\ & 0.91 \\ & 1.25 \end{aligned}$ |
| Library |  |


| Building Specific Space-by-Space Types ${ }^{\text {a }}$ | LPD (w/ft ${ }^{\mathbf{2}}$ ) |
| :---: | :---: |
| In a reading area ${ }^{((\mathrm{n}))}$ ) | ((0.34)) $\underline{0.96}$ |
| In the stacks | 1.10 |
| Manufacturing facility |  |
| In a detailed manufacturing area | 0.80 |
| In an equipment room | 0.76 |
| In an extra high bay area (greater than 50-foot floor-to-ceiling height) | 1.42 |
| In a high bay area (25-50foot floor-to-ceiling height) | 1.24 |
| In a low bay ( $<25$-foot floor-to-ceiling height) | 0.86 |
| Museum |  |
| In a general exhibition area ${ }_{\text {- }}{ }^{\text {i }}$ | 0.31 |
| In a restoration room | 1.10 |
| Performing arts theater dressing/ fitting room | 0.41 |
| Post office - Sorting area | 0.76 |
| Religious buildings |  |
| In a fellowship hall ${ }^{((\mathrm{n}))}$ i | 0.54 |
| In a worship/pulpit/choir area ${ }^{(n))}$ i | 0.85 |
| Retail facilities |  |
| In a dressing/fitting room | 0.51 |
| In a mall concourse | 0.82 |
| Sports arena - Playing area |  |
| For a Class 1 facility ${ }^{(\mathrm{i}) \text { ) } \mathrm{d}}$ | 2.94 |
| For a Class 2 facility ${ }^{(j)) \text { e }}$ - | 2.01 |
| For a Class 3 facility $(\mathrm{k})$ ) f | 1.30 |
| For a Class 4 facility ${ }^{((1))} \underline{\text { g }}$ | 0.86 |
| Transportation |  |
| In a baggage/carousel area | 0.39 |
| In an airport concourse | 0.25 |
| At a terminal ticket counter ${ }^{((n))}$ i | 0.51 |
| Warehouse - Storage area |  |
| For medium to bulky palletized items | 0.33 |
| For smaller, hand-carried items | 0.69 |

For SI: 1 foot $=304.8 \mathrm{~mm}$, 1 watt per square foot $=((14)) 10.76 \mathrm{~W} / \mathrm{m}^{2}$.
a In cases where both a common space type and a building area specific space type are listed, the building area specific space type shall apply.
b A facility for the visually impaired is a facility that is licensed or will be licensed by local or state authorities for senior long-term care, adult daycare, senior support or people with special visual needs.
c ((For spaces in which lighting is specified to be installed in addition to, and controlled separately from, the general lighting for the purpose of highlighting art or exhibits, provided that the additional lighting power shall not exeeed $0.5 \mathrm{~W} / \mathrm{ft}^{2}$ of sueh spaces.)) Additional lighting power allowance of 0.2 watts per square foot for the purpose of highlighting art or exhibits. This additional power shall be permitted only where the specified lighting is installed in addition to and controlled separately from general lighting in accordance with Section C405.2.6. This additional power shall be used only for the specified luminaires and shall not be used for any other purpose and it shall not be added to any other space or the interior power allowance.
((d) Reserved.
e Reserved.
$f$ Reserved.
g Where sleeping units are excluded from lighting power ealeulations by applieation of Section R404.1, neither the area of the sleeping units nor the wattage of lighting in the sleeping units is counted.
h Where dwelling units are excluded from lighting power ealeulations by applieation of Section R404.1, neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.
i) Class I facilities consist of professional facilities; and semiprofessional, collegiate or club facilities with seating for 5,000 or more spectators.
$\left.\left({ }^{( }\right)\right)$Class II facilities consist of collegiate and semiprofessional facilities with seating for fewer than 5,000 spectators; club facilities with seating between 2,000 and 5,000 spectators; and amateur league and high school facilities with seating for more than 2,000 spectators.
$\left.\left({ }^{(\mathrm{k}}\right)\right)$ Class III facilities consist of club, amateur league and high school facilities with seating for 2,000 or fewer spectators.
((1)) Class IV facilities consist of elementary school and recreational
$\underline{g}$ facilities; and amateur league and high school facilities without provisions for spectators
$((\mathrm{m}))$ For classrooms, additional lighting power allowance of 4.50 W
$\mathrm{h} \quad$ lineal foot of white or chalk boards for directional lighting dedicated to white or chalk boards.
((1)) Additional lighting power allowance of $((\theta .3 \theta)) \underline{0.15} \mathrm{~W} / \mathrm{ft}^{2}$ for
$i$ ornamental lighting. Qualifying ornamental lighting includes luminaires ((such as chandeliers, seonces, lanterns, neon and cold eathode, light emitting diodes, theatrieal projectors, moving lights and light color panels when any of those lights are)) that are specifically used in a decorative manner ((that does not serve as)). This additional power shall be permitted only where the specified lighting is installed in addition to and controlled separately from display ((lighting)) or general lighting in accordance with Section C405.2.6. This additional power shall be used only for the specified luminaires and it shall not be added to any other space or the interior power allowance.
j Where a space is designated as unfinished, neither the area nor the lighting power in the space shall be calculated as part of the LPA.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405054, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405054, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405054, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405054, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405061 lighting

C405.5.1 Exterior building grounds lighting. All exterior building grounds luminaires that operate at greater than ((50)) 25 watts shall have a minimum efficacy of 100 lumens per watt ((unless the luminaire is controlled by a motion sensor or qualifies for one of the exceptions under Section C405.5.2)).

EXCEPTIONS: 1. ((Solar-powered lamps not connected to any electrieal sotrree.
Z.)) Luminaires controlled by a motion sensor.
((3.)) 2. Luminaires that qualify for one of the exceptions under Section C405.5.2.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405061, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405061, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405061, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-405062 Section C405.5.2-Exterior building lighting

 power.C405.5.2 Total connected exterior building lighting power. The total exterior connected lighting power shall be the total maximum rated wattage of all exterior lighting that is powered through the energy service for the building.
EXCEPTION: Lighting used for the following applications shall not be included:

1. Lighting approved because of safety considerations;
2. Emergency lighting automatically off during normal business operation;
3. Exit signs;
4. Specialized signal, directional and marker lighting associated with transportation;
5. Advertising signage or directional signage;
6. Integral to equipment or instrumentation and is installed by its manufacturer;
7. Theatrical purposes, including performance, stage, film production and video production;
8. Athletic playing areas;
9. Temporary lighting;
10. Industrial production, material handling, transportation sites and associated storage areas;
11. Theme elements in theme/amusement parks;
12. Lighting integrated within or used to highlight features of art, public monuments and the national flag;
13. Lighting for water features and swimming pools; and
14. Lighting that is controlled from within dwelling units, where the lighting complies with Section R404.1.

C405.5.3 Exterior lighting power allowance. ( (The total exteriox lighting power allowance is the sum of the base site allowance plus the individual allowances for areas that are to be illuminated by lighting that is powered through the energy service for the building. Iighting power allowances are as specified in Table C405.5.3(2). The lighting zone for the building exterior is determined in accordance with Table C405.5.3(1) unless otherwise specified by the code offieial.)) The exterior lighting power allowance (watts) is calculated as follows:

1. Determine the Lighting Zone (LZ) for the building according to Table c405.5.3(1), unless otherwise specified by the code official.
2. For each exterior area that is to be illuminated by lighting that is powered through the energy service for the building, determine the applicable area type from Table C405.5.3(2). For area types not listed, select the area type that most closely represents the proposed use of the area. Covered parking garage lighting is not considered exterior lighting for the purposes of this calculation.
3. Determine the total area or length of each area type and multiply by the value for the area type in Table C405.5.3(2) to determine the lighting power (watts) allowed for each area type.
4. The total exterior lighting power allowance (watts) is the sum of the base site allowance determined according to Table C405.5.3(2), plus the watts from each area type.

C405.5.3.1 Additional exterior lighting power. ((Any increase in the)) Additional exterior lighting power allowances ((is limited to)) are available for the specific lighting applications ((indicated)) listed in Table C405.5.3(3). ((The)) These additional power allowances shall be used only for the luminaires ((that are)) serving these applications and shall not be used ((for any other purpose)) to increase any other lighting power allowance.
C405.5.4 Gas lighting. Gas-fired lighting appliances shall not be equipped with continuously burning pilot ignition systems.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405062, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405062, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405062, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-405064 Table C405.5.3(2)—Individual lighting power allowances for building exteriors.

Table C405.5.3(2)
Lighting Power Allowances for Building Exteriors

|  | Lighting Zones |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Base Site | ((350)) | ((400)) | ((500)) | ((900)) |
| Allowance | 160 W | $\underline{280}$ W | 400 W | 560 W |
| Uncovered Parking Areas |  |  |  |  |
| Parking areas | ((0.03)) | ((0.04)) | ((0.06)) | ((0.08)) |
| and drives | $\underline{0.015}$ | $\underline{0.026}$ | $\underline{0.037}$ | $\underline{0.052}$ |
|  | W/ft ${ }^{2}$ | W/ft ${ }^{2}$ | W/ft ${ }^{2}$ | W/ft ${ }^{2}$ |
| Building Grounds |  |  |  |  |
| Walkways and ramps less than 10 feet wide | $\begin{gathered} ((0.5 \mathrm{~W} / \\ \text { linear } \\ \text { feot })) \\ 0.04 \mathrm{~W} / \mathrm{ft}^{2} \\ \hline \end{gathered}$ | ( $0.5 \mathrm{~W}+$ <br> linear <br> foot) <br> 0.07 <br> W/ft ${ }^{2}$ | ( $0.6 \mathrm{~W}+$ <br> linear <br> foot)) <br> $\underline{0.10}$ <br> $\mathrm{W} / \mathrm{ft}^{2}$ | ( 0.7 W + <br> linear <br> (fot)) <br> 0.14 <br> W/ft ${ }^{2}$ |
| Walkways and ramps 10 feet wide or greater, plaza areas, special feature areas | $\begin{gathered} ((\theta .1 \theta)) \\ \underline{0.04} \mathrm{~W} / \mathrm{ft}^{2} \end{gathered}$ | $\begin{gathered} ((\theta .1 \theta)) \\ \frac{0.07}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{gathered} ((\theta .14)) \\ \frac{0.10}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{gathered} 0.14 \\ \mathrm{~W} / \mathrm{ft}^{2} \end{gathered}$ |
| Dining areas | $\begin{aligned} & ((0.65)) \\ & \frac{0.156}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{aligned} & ((0.65)) \\ & \underline{0.273} \\ & \mathrm{~W} / \mathrm{ft}^{2} \end{aligned}$ | $\begin{gathered} ((0.75)) \\ \frac{0.390}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{gathered} ((0.95)) \\ \frac{0.546}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ |


|  | Lighting Zones |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Stairways | $\begin{gathered} ((0.6 \mathrm{~W}+ \\ \left.\left.\mathrm{ft}^{2}\right)\right) \\ \text { Exempt } \end{gathered}$ | $\begin{gathered} ((0.7 \mathrm{~W}+ \\ \left.\left.\mathrm{ft}^{2}\right)\right) \\ \text { Exempt } \end{gathered}$ | $\begin{gathered} ((0.7 \mathrm{~W}+ \\ \left.\left.\mathrm{ft}^{2}\right)\right) \\ \text { Exempt } \end{gathered}$ | ( $0.7 \mathrm{~W}+$ $\mathrm{ft}^{2}$ )) <br> Exempt |
| Pedestrian tunnels | $\begin{aligned} & ((\theta .12)) \\ & \underline{0.063} \\ & \mathrm{~W} / \mathrm{ft}^{2} \end{aligned}$ | $\begin{aligned} & ((\theta .12)) \\ & \underline{0.110} \\ & \mathrm{~W} / \mathrm{ft}^{2} \end{aligned}$ | $\begin{aligned} & ((\theta .14)) \\ & \frac{0.157}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{gathered} ((0.21)) \\ \frac{0.220}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ |
| Landscaping | $\begin{aligned} & ((0.03)) \\ & \frac{0.014}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{aligned} & ((0.04)) \\ & \frac{0.025}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{aligned} & ((0.04)) \\ & \frac{0.036}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{gathered} ((0.04)) \\ \frac{0.050}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ |
| Building Entrances and Exits |  |  |  |  |
| Pedestrian and vehicular entrances and exits | ((14)) 5.6 W/linear foot of opening | ((14)) 9.8 W/linear foot of opening | $\begin{gathered} ((21)) \\ \frac{14.0 \mathrm{~W} /}{\text { linear }} \\ \text { foot of } \\ \text { opening } \end{gathered}$ | $\begin{gathered} ((21)) \\ 19.6 \mathrm{~W} / \\ \hline \text { linear } \\ \text { foot of } \\ \text { opening } \end{gathered}$ |
| Entry canopies | $\begin{aligned} & ((\theta .2)) \\ & \frac{0.072}{} \\ & \hline \mathrm{~W} / \mathrm{ft}^{2} \end{aligned}$ | $\begin{aligned} & ((0.25)) \\ & \frac{0.126}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{aligned} & ((\theta .4)) \\ & 0.180 \\ & \hline W / \mathrm{ft}^{2} \end{aligned}$ | $\begin{aligned} & ((\theta .4)) \\ & \frac{0.252}{} \begin{array}{l} \mathrm{W} / \mathrm{ft}^{2} \end{array} \end{aligned}$ |
| Loading docks | $\begin{aligned} & ((0.35)) \\ & \frac{0.104}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{aligned} & ((0.35)) \\ & \frac{0.182}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ | $\begin{gathered} ((0.35)) \\ \frac{0.260}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{aligned} & ((0.35)) \\ & \frac{0.364}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ |
| Sales Canopies |  |  |  |  |
| Free standing and attached | $\begin{gathered} ((\theta .4)) \\ \underline{0.20} \mathrm{~W} / \mathrm{ft}^{2} \end{gathered}$ | $\begin{gathered} ((0.4)) \\ \frac{0.35}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{gathered} ((\theta .6)) \\ \frac{0.50}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{gathered} ((0.7)) \\ \frac{0.70}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ |
| Outdoor Sales |  |  |  |  |
| Open areas (including vehicle sales lots) | $\begin{aligned} & ((0.2)) \\ & \frac{0.072}{} \begin{array}{l} \mathrm{W} / \mathrm{ft}^{2} \end{array} \end{aligned}$ | $\begin{aligned} & ((0.2)) \\ & \frac{0.126}{W} / \mathrm{ft}^{2} \end{aligned}$ | $\begin{gathered} ((0.35)) \\ \frac{0.180}{\mathrm{~W} / \mathrm{ft}^{2}} \end{gathered}$ | $\begin{aligned} & ((0.5)) \\ & \frac{0.252}{\mathrm{~W} / \mathrm{ft}^{2}} \end{aligned}$ |
| Street frontage for vehicle sales lots in addition to "open area" allowance | No <br> Allowance | 7 W/ linear foot | $\begin{aligned} & ((7)) \underline{10.3} \\ & \text { W/linear } \\ & \text { foot } \end{aligned}$ | $\begin{gathered} ((24)) \\ 14.4 \mathrm{~W} / \\ \text { linear } \\ \text { foot } \end{gathered}$ |

For SI: $\quad 1$ foot $=304.8 \mathrm{~mm}, 1$ watt per square foot $=((W / 0.0929)) \underline{10.76}$ W per $\mathrm{m}^{2}$

Table C405.5.3(3)
Individual Lighting Power Allowances for Building Exteriors

|  | ((Highting Zones |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Building facades | Ne allowance | 0.075 <br> $\mathrm{W} / \mathrm{ft}^{2}$ <br> of gross abovegrade wall area | 0.113 <br> $\mathrm{W} / \mathrm{ft}^{2}$ of <br> gross <br> above- <br> grade <br> wall area | $\theta .150$ <br> W/ft ${ }^{2}$ of <br> gross <br> above- <br> grade <br> wall area |
| Autemated teller machines and night depositories | 135 W per location plus 45 W per additional ATM per location |  |  |  |
| Uncovered entrances and gatehouse inspection stations at gwarded facilities | $\theta .5 \mathrm{~W} / \mathrm{ft}^{2}$ |  |  |  |
| Uncovered <br> loading areas <br> for law <br> enforeement, <br> fire, ambulance <br> and other <br> emergency <br> service <br> vehicles | $\theta .35 \mathrm{~W} / \mathrm{ft}^{2}$ |  |  |  |


|  | ((tighting Zones |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Drive-up <br> windows/doors | 200 W per drive-through |  |  |  |
| Parking near <br> 24-hour retail <br> entrances | 400 W per main entry)) |  |  |  |


|  | Lighting Zones |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Building façade | No allowance | $\frac{\begin{array}{l} 0.075 \mathrm{~W} / \mathrm{ft}^{2} \text { of } \\ \text { gross above-grade } \end{array}}{\underline{\text { wall area }}}$ | $0.113 \mathrm{~W} / \mathrm{ft}^{2}$ of gross above-grade wall area | $\frac{\begin{array}{l} 0.150 \mathrm{~W} / \mathrm{ft}^{2} \text { of } \\ \text { gross above-grade } \end{array}}{\text { wall area }}$ |
| Automated teller machines (ATM) and night depositories | $\begin{aligned} & \frac{80 \mathrm{~W} \text { per location }}{\text { plus } 25 \text { per }} \\ & \text { additional ATM } \end{aligned}$ | $\begin{aligned} & \frac{80 \mathrm{~W} \text { per location }}{\text { plus } 25 \text { per }} \\ & \text { additional ATM } \end{aligned}$ | $\begin{aligned} & \frac{80 \mathrm{~W} \text { per location }}{\text { plus } 25 \text { per }} \\ & \text { additional ATM } \end{aligned}$ | $\begin{aligned} & \frac{80 \mathrm{~W} \text { per location }}{\text { plus } 25 \text { per }} \\ & \text { additional ATM } \end{aligned}$ |
| Uncovered entrances and gatehouse inspection stations at guarded facilities | $\underline{0.144 ~ W / f t^{2}}$ | $\underline{0.252 ~ W / f t^{2}}$ | $\underline{0.360 \mathrm{~W} / \mathrm{ft}^{2}}$ | $0.504 \mathrm{~W} / \mathrm{ft}^{2}$ |
| Uncovered loading areas for law enforcement, fire, ambulance and other emergency service vehicles | $0.104 \mathrm{~W} / \mathrm{ft}^{2}$ | $0.182 \mathrm{~W} / \mathrm{ft}^{2}$ | $0.260 \mathrm{~W} / \mathrm{ft}^{2}$ | $0.364 \mathrm{~W} / \mathrm{ft}^{2}$ |
| Drive-up windows/doors | $\frac{53 \mathrm{~W} \text { per drive }}{\text { through }}$ | $\frac{92 \mathrm{~W} \text { per drive }}{\text { through }}$ | $\frac{132 \mathrm{~W} \text { per drive }}{\text { through }}$ | $\frac{185 \mathrm{~W} \text { per drive }}{\text { through }}$ |
| Parking near 24-hour retail entrances | 80 W per main entry | $\frac{140 \mathrm{~W} \text { per main }}{\text { entry }}$ | $\frac{200 \mathrm{~W} \text { per main }}{\text { entry }}$ | $\frac{280 \mathrm{~W} \text { per main }}{\underline{\text { entry }}}$ |

[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405064, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405064, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405064, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405064, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40507
Sections C405.6 and C405.7-Electrical energy consumption.
C405.6 Electrical transformers. Low-voltage dry-type distribution electric transformers shall meet the minimum efficiency requirements of Table C405.6 as tested and rated in accordance with the test procedure listed in DOE 10 C.F.R. 431. The efficiency shall be verified through certification under an approved certification program or, where no certification program exists, the equipment efficiency ratings shall be supported by data furnished by the transformer manufacturer.
EXCEPTION: The following transformers are exempt:

1. Transformers that meet the Energy Policy Act of 2005 exclusions based on the DOE 10 C.F.R. 431 definition of special purpose applications.
2. Transformers that meet the Energy Policy Act of 2005 exclusions that are not to be used in general purpose applications based on information provided in DOE 10 C.F.R. 431.
3. Transformers that meet the Energy Policy Act of 2005 exclusions with multiple voltage taps where the highest tap is not less than 20 percent more than the lowest tap.
4. Drive transformers.
5. Rectifier transformers.
6. Auto-transformers.
7. Uninterruptible power system transformers.
8. Impedance transformers.
9. Regulating transformers.
10. Sealed and nonventilating transformers.
11. Machine tool transformer.
12. Welding transformer.
13. Grounding transformer.
14. Testing transformer.

Table C405.6
Minimum Nominal Efficiency Levels For 10 C.F.R. 431 Low Voltage DryType Distribution Transformers

| Single Phase <br> Transformers |  | Three Phase <br> Transformers |  |
| :---: | :---: | :---: | :---: |
| $\mathbf{k V A}^{\mathbf{a}}$ | Efficiency <br> $\mathbf{( \% )}^{\mathbf{b}}$ | $\mathbf{k V A}^{\mathbf{a}}$ | Efficiency <br> $\mathbf{( \% )}^{\mathbf{b}}$ |
| 15 | 97.70 | 15 | 97.89 |
| 25 | 98.00 | 30 | 98.23 |
| 37.5 | 98.20 | 45 | 98.40 |
| 50 | 98.30 | 75 | 98.60 |
| 75 | 98.50 | 112.5 | 98.74 |
| 100 | 98.60 | 150 | 98.83 |
| 167 | 98.70 | 225 | 98.94 |
| 250 | 98.80 | 300 | 99.02 |
| 333 | 98.90 | 500 | 99.14 |
|  |  | 750 | 99.23 |
|  |  |  |  |

a kiloVolt-Amp rating.
b Nominal efficiencies shall be established in accordance with the DOE 10 C.F.R. 431 test procedure for low voltage dry-type transformers.

C405.7 Dwelling unit electrical energy consumption. Each dwelling unit located in a Group R-2 building shall have a separate electrical meter. A utility tenant meter meets this requirement. See Section C409 for additional requirements for energy metering and energy consumption management.
EXCEPTION: Dwelling units in other than Group R-2 multi-family and live/work units are not required to provide a separate electrical metering at each dwelling unit where electrical usage is metered separately for each of the following building end uses:

1. Dwelling units.
2. Sleeping units.
3. Commercial kitchens.
4. Central laundries.

C405.7.1 Electric receptacles at dwelling unit gas appliances. Where dwelling unit appliances are served by natural gas, an electrical receptacle or junction box and circuit shall be provided at each gas appliance with sufficient capacity to serve a future electric appliance in the same location. The receptacles and circuits shall be included in the electrical service load calculation and shall meet the requirements of items 1 through 3 below. The receptacle or junction box for each gas appliance shall be located within 12 inches of the appliance and without obstructions between the appliance and the outlet. An electric receptacle is not required for a decorative gas fireplace.

1. Each gas range, cooktop, or oven, or combination appliance, location shall be served by a dedicated $240 / 208$-volt, 40 -amp receptacle connected to the dwelling unit electric panel with a 3-conductor
branch circuit complying with $210.19(A)(3)$ of the NEC as adopted by Washington state and a minimum included load of 9600 VA for $240-\mathrm{Volt}$ systems or 8000 VA for 208 -volt systems.
2. Each gas clothes dryer location shall be served by a dedicated 240/208-volt, 30-amp receptacle connected to the dwelling unit electric panel with a 3-conductor branch circuit and a minimum included load of 5000 VA.
3. The location of each gas domestic water heater installed within a dwelling unit shall be served by a dedicated 240/208-volt, 30-amp junction box connected to the dwelling unit electrical panel with a 3conductor branch circuit and a minimum included load of 4500 VA .
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40507, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-40507, filed 5/2/17, effective 6/2/17; WSR 16-13-089, § 51-11C-40507, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, s 51-11C-40507, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40507, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40508 Section C405.8-Electric motors.

C405.8 Electric motor efficiency. All electric motors, fractional or otherwise, shall meet the minimum efficiency requirements of Tables C405.8(1) through C405.8(4) when tested and rated in accordance with DOE 10 C.F.R. 431. The efficiency shall be verified through certification under an approved certification program or, where no certification program exists, the equipment efficiency ratings shall be supported by data furnished by the motor manufacturer.
EXCEPTION: The standards in this section shall not apply to the following exempt electric motors.

1. Air-over electric motors.
2. Components sets of an electric motor.
3. Liquid-cooled electric motors.
4. Submersible electric motors.
5. Inverter-only electric motors.

Fractional hp fan motors that are $1 / 12 \mathrm{hp}$ or greater and less than 1 hp (based on output power) which are not covered by Tables C405.8(3) and C405.8(4) shall be electronically commutated motors or shall have a minimum motor efficiency of 70 percent when rated in accordance with DOE 10 C.F.R. 431. These motors shall also have the means to adjust motor speed for either balancing or remote control. Belt-driven fans may use sheave adjustments for airflow balancing in lieu of a varying motor speed.
EXCEPTIONS: $\quad 1$. Motors that are an integral part of specialized process equipment.
2. Where the motor is integral to a listed piece of equipment for which no complying motor has been approved.
3. Motors used as a component of the equipment meeting the minimum efficiency requirements of Section C403.3.2 and Tables C403.3.2(1) through $\mathrm{C} 403.3 .2(((12)))(16)$ provided that the motor input is included when determining the equipment efficiency. 4. Motors in the airstream within fan-coils and terminal units that operate only when providing heating to the space served. 5. Fan motors that are not covered by Tables C405.8(1) through C405.8(4) and are used to power heat recovery ventilators, energy recovery ventilators, or local exhaust fans in Group R subject to the efficacy requirements of Section C403.8.4.
6. Domestic clothes dryer booster fans, range hood exhaust fans, and domestic range booster fans that operate intermittently. 7. Radon and contaminated soil exhaust fans.
8. Group R heat recovery ventilator and energy recovery ventilator fans that are less than 400 cfm .

Table C405.8(1)
Minimum Nominal Full-load Efficiency for NEMA Design A, NEMA Design B and IEC Design $N$ Motors (Excluding Fire Pump) Electric Motors at 60 $\mathrm{Hz}^{\mathrm{a}, \mathrm{b}}$

| Motor horsepower <br> (Standard kilowatt <br> equivalent) | Nominal full-load efficiency (\%) as of June 1, 2016 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 pole |  | 4 pole |  | 6 pole |  | 8 pole |  |  |
|  | Enclosed | Open | Enclosed | Open | Enclosed | Open | Enclosed | Open |  |
| $1(0.75)$ | 77.0 | 77.0 | 85.5 | 85.5 | 82.5 | 82.5 | 75.5 | 75.5 |  |
| $1.5(1.1)$ | 84.0 | 84.0 | 86.5 | 86.5 | 87.5 | 86.5 | 78.5 | 77.5 |  |
| $2(1.5)$ | 85.5 | 85.5 | 86.5 | 86.5 | 88.5 | 87.5 | 84.0 | 86.5 |  |
| $3(2.2)$ | 86.5 | 85.5 | 89.5 | 89.5 | 89.5 | 88.5 | 85.5 | 87.5 |  |
| $5(3.7)$ | 88.5 | 86.5 | 89.5 | 89.5 | 89.5 | 89.5 | 86.5 | 88.5 |  |
| $7.5(5.5)$ | 89.5 | 88.5 | 91.7 | 91.0 | 91.0 | 90.2 | 86.5 | 89.5 |  |
| $10(7.5)$ | 90.2 | 89.5 | 91.7 | 91.7 | 91.0 | 91.7 | 89.5 | 90.2 |  |
| $15(11)$ | 91.0 | 90.2 | 92.4 | 93.0 | 91.7 | 91.7 | 89.5 | 90.2 |  |
| $20(15)$ | 91.0 | 91.0 | 93.0 | 93.0 | 91.7 | 92.4 | 90.2 | 91.0 |  |
| $25(18.5)$ | 91.7 | 91.7 | 93.6 | 93.6 | 93.0 | 93.0 | 90.2 | 91.0 |  |
| $30(22)$ | 91.7 | 91.7 | 93.6 | 94.1 | 93.0 | 93.6 | 91.7 | 91.7 |  |
| $40(30)$ | 92.4 | 92.4 | 94.1 | 94.1 | 94.1 | 94.1 | 91.7 | 91.7 |  |
| $50(37)$ | 93.0 | 93.0 | 94.5 | 94.5 | 94.1 | 94.1 | 92.4 | 92.4 |  |
| $60(45)$ | 93.6 | 93.6 | 95.0 | 95.0 | 94.5 | 94.5 | 92.4 | 93.0 |  |
| $75(55)$ | 93.6 | 93.6 | 95.4 | 95.0 | 94.5 | 94.5 | 93.6 | 94.1 |  |
| $100(75)$ | 94.1 | 93.6 | 95.4 | 95.4 | 95.0 | 95.0 | 93.6 | 94.1 |  |
| $125(90)$ | 95.0 | 94.1 | 95.4 | 95.4 | 95.0 | 95.0 | 94.1 | 94.1 |  |
| $150(110)$ | 95.0 | 94.1 | 95.8 | 95.8 | 95.8 | 95.4 | 94.1 | 94.1 |  |
| $200(150)$ | 95.4 | 95.0 | 96.2 | 95.8 | 95.8 | 95.4 | 94.5 | 94.1 |  |
| $250(186)$ | 95.8 | 95.0 | 96.2 | 95.8 | 95.8 | 95.8 | 95.0 | 95.0 |  |
| $300(224)$ | 95.8 | 95.4 | 96.2 | 95.8 | 95.8 | 95.8 |  |  |  |
| $350(261)$ | 95.8 | 95.4 | 96.2 | 95.8 | 95.8 | 95.8 |  |  |  |
| $400(298)$ | 95.8 | 95.8 | 96.2 | 95.8 |  |  |  |  |  |
| $450(336)$ | 95.8 | 96.2 | 96.2 | 96.2 |  |  |  |  |  |
| $500(373)$ | 95.8 | 96.2 | 96.2 | 96.2 |  |  |  |  |  |

a Nominal efficiencies shall be established in accordance with DOE 10 C.F.R. 431.
b For purposes of determining the required minimum nominal full-load efficiency of an electric motor that has a horsepower or kilowatt rating between two horsepower or two kilowatt ratings listed in this table, each such motor shall be deemed to have a listed horsepower or kilowatt rating, determined as follows:

1. A horsepower at or above the midpoint between the two consecutive horsepowers shall be rounded up to the higher of the two horsepowers.
2. A horsepower below the midpoint between the two consecutive horsepowers shall be rounded down to the lower of the two horsepowers.
3. A kilowatt rating shall be directly converted from kilowatts to horsepower using the formula $1 \mathrm{~kW}=(1 / 0.746)$ horsepower. The conversion should be calculated to three significant decimal places, and the resulting horsepower shall be rounded in accordance with 1 or 2 , whichever applies.

Table C405. 8 (2)
Minimum Nominal Full-load Efficiency for NEMA Design C and IEC Design H Motors at $60 \mathrm{~Hz}^{\mathrm{a}, \mathrm{b}}$

| Motor horsepower <br> (Standard kilowatt equivalent) | Nominal full-load efficiency (\%) as of June 1, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 pole |  | 6 pole |  | 8 pole |  |
|  | Enclosed | Open | Enclosed | Open | Enclosed | Open |
| $1(0.75)$ | 85.5 | 85.5 | 82.5 | 82.5 | 75.5 | 75.5 |
| $1.5(1.1)$ | 86.5 | 86.5 | 87.5 | 86.5 | 78.5 | 77.5 |
| $2(1.5)$ | 86.5 | 86.5 | 88.5 | 87.5 | 84.0 | 86.5 |


| $*$ <br> Motor horsepower <br> (Standard kilowatt equivalent) | Nominal full-load efficiency (\%) as of June 1, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enclosed | Open | Enclosed | Open | Enclosed | Open |
| $3(2.2)$ | 89.5 | 89.5 | 89.5 | 88.5 | 85.5 | 87.5 |
| $5(3.7)$ | 89.5 | 89.5 | 89.5 | 89.5 | 86.5 | 88.5 |
| $7.5(5.5)$ | 91.7 | 91.0 | 91.0 | 90.2 | 86.5 | 89.5 |
| $10(7.5)$ | 91.7 | 91.7 | 91.0 | 91.7 | 89.5 | 90.2 |
| $15(11)$ | 92.4 | 93.0 | 91.7 | 91.7 | 89.5 | 90.2 |
| $20(15)$ | 93.0 | 93.0 | 91.7 | 92.4 | 90.2 | 91.0 |
| $25(18.5)$ | 93.6 | 93.6 | 93.0 | 93.0 | 90.2 | 91.0 |
| $30(22)$ | 93.6 | 94.1 | 93.0 | 93.6 | 91.7 | 91.7 |
| $40(30)$ | 94.1 | 94.1 | 94.1 | 94.1 | 91.7 | 91.7 |
| $50(37)$ | 94.5 | 94.5 | 94.1 | 94.1 | 92.4 | 92.4 |
| $60(45)$ | 95.0 | 95.0 | 94.5 | 94.5 | 92.4 | 93.0 |
| $75(55)$ | 95.4 | 95.0 | 94.5 | 94.5 | 93.6 | 94.1 |
| $100(75)$ | 95.4 | 95.4 | 95.0 | 95.0 | 93.6 | 94.1 |
| $125(90)$ | 95.4 | 95.4 | 95.0 | 95.0 | 94.1 | 94.1 |
| $150(110)$ | 95.8 | 95.8 | 95.8 | 95.4 | 94.1 | 94.1 |
| $200(150)$ | 96.2 | 95.8 | 95.8 | 95.4 | 94.5 | 94.1 |

NR - No requirement.
a Nominal efficiencies shall be established in accordance with DOE 10 C.F.R. 431.
b For purposes of determining the required minimum nominal full-load efficiency of an electric motor that has a horsepower or kilowatt rating between two horsepower or two kilowatt ratings listed in this table, each such motor shall be deemed to have a listed horsepower or kilowatt rating, determined as follows:

1. A horsepower at or above the midpoint between the two consecutive horsepowers shall be rounded up to the higher of the two horsepowers.
2. A horsepower below the midpoint between the two consecutive horsepowers shall be rounded down to the lower of the two horsepowers.
3. A kilowatt rating shall be directly converted from kilowatts to horsepower using the formula $1 \mathrm{~kW}=(1 / 0.746)$ horsepower. The conversion should be calculated to three significant decimal places, and the resulting horsepower shall be rounded in accordance with 1 or 2, whichever applies.

Table C405.8(3)
Minimum Average Full Load Efficiency
for Polyphase Small Electric Motors

| OPEN MOTORS |  |  |  |
| :---: | :---: | :---: | :---: |
| NUMBER OF POLES <br> $=>$ | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{6}$ |
| SYNCHRONOUS <br> SPEED (RPM) ==> | $\mathbf{3 6 0 0}$ | $\mathbf{1 8 0 0}$ | $\mathbf{1 2 0 0}$ |
| MOTOR HORSEPOWER $\mathbf{~}$ |  |  |  |
| 0.25 | 65.6 | 69.5 | 67.5 |
| 0.33 | 69.5 | 73.4 | 71.4 |
| 0.50 | 73.4 | 78.2 | 75.3 |
| 0.75 | 76.8 | 81.1 | 81.7 |
| 1 | 77.0 | 83.5 | 82.5 |
| 1.5 | 84.0 | 86.5 | 83.8 |
| 2 | 85.5 | 86.5 | N/A |
| 3 | 85.5 | 86.9 | N/A |

${ }^{\text {a }}$ Average full load efficiencies shall be established in accordance with 10 C.F.R. 431.

Table C405.8(4)
Minimum Average Full Load Efficiency For Capacitor-start Capacitor-run

Washington State Register, Issue 22-14
and Capacitor-start Induction-run
Small Electric Motors ${ }^{\text {a }}$

| OPEN MOTORS |  |  |  |
| :---: | :---: | :---: | :---: |
| NUMBER OF POLES <br> $=>$ | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{6}$ |
| SYNCHRONOUS <br> SPEED (RPM) = | $\mathbf{3 6 0 0}$ | $\mathbf{1 8 0 0}$ | $\mathbf{1 2 0 0}$ |
| MOTOR HORSEPOWER $\mathbf{V}$ |  |  |  |
| 0.25 | 66.6 | 68.5 | 62.2 |
| 0.33 | 70.5 | 72.4 | 66.6 |
| 0.50 | 72.4 | 76.2 | 76.2 |
| 0.75 | 76.2 | 81.8 | 80.2 |
| 1 | 80.4 | 82.6 | 81.1 |
| 1.5 | 81.5 | 83.8 | N/A |
| 2 | 82.9 | 84.5 | N/A |
| 3 | 84.1 | N/A | N/A |

${ }^{\text {a }}$ Average full load efficiencies shall be established in accordance with 10 C.F.R. 431.
[Statutory Authority: RCW 19.27A.025, 19.27A. 045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40508, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40508, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40508, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40508, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40509 Section C405.9-Vertical and horizontal transportation systems.
C405.9 Vertical and horizontal transportation systems and equipment. Vertical and horizontal transportation systems and equipment shall comply with this section.

C405.9.1 Elevator cabs. For the luminaires in each elevator cab, not including signals and displays, the sum of the lumens divided by the sum of the watts shall be no less than 35 lumens per watt. Ventilation fans in elevators that do not have their own air conditioning system shall not consume more than 0.33 watts/cfm at the maximum rated speed of the fan. Controls shall be provided that will deenergize ventilation fans and lighting systems when the elevator is stopped, unoccupied and with its doors closed for over 15 minutes.
C405.9.2 Escalators and moving walks. Escalators and moving walks shall comply with ASME A17.1/CSA B44 and shall have automatic controls ( (eonfigured $t \theta$ )) that reduce speed ((to the minimum)) as permitted speed in accordance with ASME A17.1/CSA B44 ((ox)) and applicable local code when not conveying passengers.

EXCEPTION: A variable voltage drive system that reduces operating voltage in response to light loading conditions ((may)) is allowed to be provided in ((place)) lieu of the variable speed function.
C405.9.2.1 ((Regenerative drive. An escalator designed either for oneway down operation only or for reversible operation shall have a variable frequency regencrative drive that supplics electrical energy to the building electrical system when the escalator is loaded with passengers whose combined weight exceeds 750 pounds.) ) Energy recovery. Escalators shall be designed to recover electrical energy when resisting overspeed in the down direction.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40509, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40509, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, §51-11C-40509, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40510 Section C405.10-Controlled receptacles.

C405.10 ((Controlled)) Automatic receptacle((s)) control. ((At least 50 percent of all 125 volt 15 - and 20 -ampere receptacles installed in private offices, open offices, conference rooms, rooms used primarily for printing and/or copying functions, break rooms, individual workstations and classrooms, including those installed in modular partitions and modular office workstation systems, shall be controlled as required by this section. In rooms larger than 200 square feet (19 $\mathrm{m}^{2}$ ), a controlled receptacle shall be located within 72 inches ( 1.8 m ) ef each uncontrolled receptacle. Controlled receptacles shall be visibly differentiated from standard receptacles and shall be controlled by one of the following automatic control devices:

1. An oceupant sensor that turns receptacle powex off when no oceupants have been detected for a maximum of 20 minutes.
Z. A time-of-day operated control device that turns receptacle power off at specific programmed times and can be programmed separately for each day of the week. The control device shall be configured to provide an independent schedule for each portion of the building not to exceed 5,000 square feet ( $465 \mathrm{~m}^{2}$ ) and not to exceed one full floor. The device shall be capable of being overridden for periods of up to two hours by a timer in a location with access to occupants. Any individual override switeh shall control the controlled receptacles for a maximum area of 5,000 square feet ( $465 \mathrm{~m}^{2}$ ). Override switehes for con trolled receptacles are permitted to control the lighting within the same area.
EXCEPTION: Receptactes designated for specific equipment requiring 24 hour operation, for building maintenanee functions, or for specific safety of seeturity equipment are not required to be controlled by an autematic control deviee and are not required to be loeated within 72 inches ( 1.8 m ) of a controlled reeeptacte.))
The following shall have automatic receptacle control complying with Section C405.10.1:
2. At least 50 percent of all $125 \mathrm{~V}, 15$ - and 20 -amp receptacles installed in enclosed offices, conference rooms, rooms used primarily for copy or print functions, breakrooms, classrooms and individual
workstations, including those installed in modular partitions and module office workstation systems.
3. At least 50 percent of branch circuit feeders installed for modular furniture not shown on the construction documents.
C405.10.1 Automatic receptacle control function. Automatic receptacle controls shall comply with the following:
4. Either split controlled receptacles shall be provided with the top receptacle controlled, or a controlled receptacle shall be located within 12 inches ( 304.8 mm ) of each uncontrolled receptacle.
5. One of the following methods shall be used to provide control:
2.1. A scheduled basis using a time-of-day operated control device that turns receptacle power off at specific programmed times and can be programmed separately for each day of the week. The control device shall be configured to provide an independent schedule for each portion of the building of not more than 5,000 square feet ( $464.5 \mathrm{~m}^{2}$ ) and not more than one floor. The occupant shall be able to manually override an area for not more than 2 hours. Any individual override switch shall control the receptacles of not more than 5,000 feet (1524 m).
2.2. An occupant sensor control that shall turn off receptacles within 20 minutes of all occupants leaving a space.
2.3. An automated signal from another control or alarm system that shall turn off receptacles within 20 minutes after determining that the local area is unoccupied.
6. All controlled receptacles shall be permanently marked in accordance with NFPA 70 and be uniformly distributed throughout the space.
7. Plug-in devices shall not comply.

EXCEPTION: Automatic receptacle controls are not required for the following:

1. Receptacles specificically designated for equipment requiring continuous operation (24 hours per day, 365 days per year). 2. Spaces where an automatic control would endanger the safety or security of the room or building occupants. 3. Within a single modular office workstation, noncontrolled receptacles are permitted to be located more than 12 inches ( 304.8 mm ), but not more than 72 inches ( 1828 mm ) from the controlled receptacles serving that workstation.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40510, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40510, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40510, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40511 Section C405.11-Voltage drop ((in feeders and branch eireuits)).

C405.11 Voltage drop ((in feeders and branch cireuits)). The total voltage drop across the combination of ((fecders and branch circuits)) customer-owned service conductors, feeder conductors and branch circuit conductors shall not exceed five percent.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40511, filed 10/19/20, effective 2/1/21.

Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and Chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40511, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40511, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40511, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40511, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40512 Section C405.12-((Electrical commissioning.)) Alternating current-output uninterruptible power supplies (AC-output UPS).
((C405.12 Commissioning. Controlled receptacles and lighting systems shall be commissioned in accordance with Section c408.)) AC-output UPS systems serving a computer room shall meet or exceed the calculation and testing requirements identified in ENERGY STAR Program Requirements for Uninterruptible Power Supplies (UPSs) - Eligibility Criteria Version 2.0 .
EXCEPTION: AC-output UPC that utilizes standardized NEMA-1-15P or NEMA 5-15P input plug, as specified in ANSI/NEMA WD 6.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40512, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40512, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40512, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40513 ((Reserved.)) Section C405.13-Electrical commissioning.
C405.13 Commissioning. Controlled receptacles and lighting systems shall be commissioned in accordance with Section C408.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40513, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40513, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-40600 Section C406-Efficiency ((paekages)) and load management measures.
C406.1 Additional energy efficiency and load management measures credit requirements. The project as defined in the building permit shall meet the following requirements as applicable:

1. New buildings ((and)) \& changes in space conditioning category, change of occupancy group, and building additions in accordance with Chapter 5 shall comply with sufficient ((packages)) measures from ((table C406.1)) Section C406.2 so as to achieve ((z)) the minimum number of ( ( 6 ) ) required efficiency credits ( (. Fach area shall be permitted to apply for different packages provided all areas in the building comply with the requirements for 6 credits. Areas included in the same permit within mized use buildings shall be permitted to dem= enstrate compliance by an area wighted average number of credits by building oceupancy achieving a minimum number of 6 credits) ) shown in Table C406.1.
2. New buildings greater than 5000 gross square feet of floor area shall comply with sufficient measures from Section c406.3 so as to achieve the minimum number of required load management credits shown in Table c406.1.
3. Tenant spaces shall comply in accordance with Section C406.1.1.
4. Projects using discrete area credit weighting shall comply in accordance with Section C406.1.2.
EXCEPTIONS: $\quad$ 1. Low energy spaces in accordance with Section C402.1.1.1 ((and)), equipment buildings in accordance with Section C402.1.2 ((shall)), unconditioned spaces, open parking garages, and enclosed parking garages that comply with sufficient ((packages)) measures from Table ((C406.1)) C406.2 to achieve a minimum ((number of 3)) of 50 percent of the efficiency credits required for new construction. Such projects shall be exempt from the load management requirements in Table C406.1.
5. Building additions that have less than 1,000 square feet of conditioned floor area ((shall)) that comply with sufficient ((packes)) measures from Table ((C406.1)) $\underline{\mathrm{C} 406.2 \text { to achieve a minimum ((ntmber of } 3) \text { ) of } 50 \text { percent of the efficiency credits required for }}$ additions.
6. Warehouses are exempt from the load management credit requirements in Table C406.1.

Table C406.1
((Efficiency Package Credits))
Energy Measure Credit Requirements

| ( Code-Section | Commercial Building Oceupancy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group R-1 | Group R-2 | Group B | Group E | Group M | AHPther |
|  | Additional Efficiency Credits |  |  |  |  |  |
| 1. More efficient HVAC performance in accordance with Section C406.2 | 2.0 | 3.0 | 3.0 | 2.0 | 1.0 | 2.0 |
| z. Reduced lighting power: Option 1 in accordance with Section C406.3.1 | 4.0 | 1.0 | 2.0 | 2.0 | 3.0 | 2.0 |
| 3. Reduced lighting power: Option 2 in accordance with Section C406.3.2 ${ }^{\text {a }}$ | 2.0 | 3.0 | 4.0 | 4.0 | 6.0 | 4.0 |
| 4. Enhanced lighting eontrols in accordance with Section C406.4 | NA | NA | 1.0 | 1.0 | 1.0 | 1.0 |
| 5. On-site stupply of renewable energy in accordance with C406.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |


| ((Code Section | Commercial Building Oceupancy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group R-1 | Group R-2 | Group B | Group E | Group M | A\#Hther |
|  | Additional Efficiency Credits |  |  |  |  |  |
| 6. Dedicated outdoor air system in accordance with Section C406.6 ${ }^{6}$ | 4.0 | 4.0 | 4.0 | NA | NA | 4.0 |
| 7. High performance dedicated outdoor air system in accordance with Section C406.7 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 8. High-efficiency service water heating in accordance with Sections C406.8.1 and C406.8.2 | 4.0 | 5.0 | NA | NA | NA | 8.0 |
| 9. High performance service water heating in multi- family buildings in accordance with Section C406.9 | 7.0 | 8.0 | NA | NA | NA | NA |
| 10. Enhanced envelope performance in accordance with Seetion C406.10 | 3.0 | 6.0 | 3.0 | 3.0 | 3.0 | 4.0 |
| 11. Reduced air infiltration in accordance with Section C406.11 ${ }^{\text {c }}$ | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 12. Enhanced commereial kitchen equipment in accordance with Section C406.12 | 5.0 | NA | NA | NA | 5.0 | 5.0 (Group A-2only) |

a Projects using this option may not use Item 2.
$b$ This option is not available to buildings subject to the preseriptive requirements of Section C403.3.5.
c Buildings or building areas that are exempt from the thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2, do not qualify for this package.))

| Required Credits for Projects | Section | Occupancy Group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \frac{\text { Group }}{\underline{R-1}} \end{aligned}$ | $\begin{aligned} & \text { Group } \\ & \underline{\text { R-2 }} \end{aligned}$ | $\frac{\text { Group }}{\underline{\text { B }}}$ | $\begin{aligned} & \underline{\text { Group }} \\ & \underline{\underline{E}} \end{aligned}$ | $\begin{gathered} \text { Group } \\ \underline{\underline{M}} \end{gathered}$ | $\begin{gathered} \text { All } \\ \text { Other } \end{gathered}$ |
| New building energy efficiency credit requirement | C406.2 | $\underline{54}$ | 41 | 42 | 48 | 74 | 49 |
| Building additions energy efficiency credit requirement | C406.2 | $\underline{27}$ | $\underline{20}$ | $\underline{21}$ | $\underline{23}$ | 36 | $\underline{21}$ |
| If proposal 21-GP-136 is not included in the final adoption, then replace the two rows above with the following two rows: |  |  |  |  |  |  |  |
| New building energy efficiency credit requirement | C406.2 | $\underline{68}$ | $\underline{80}$ | 48 | 55 | $\underline{84}$ | 49 |
| Building additions energy efficiency credit requirement | C406.2 | 33 | 40 | $\underline{24}$ | $\underline{27}$ | 41 | $\underline{24}$ |
| New building load management credit requirement | C406.3 | 12 | 15 | $\underline{27}$ | 15 | 13 | $\underline{26}$ |

C406.1.1 Tenant spaces. An initial tenant improvement shall comply with sufficient ((packages)) measures from Table ( ( 4 406.1)) C406.2 to achieve a minimum ((number of six)) of efficiency credits required in Table C406.1 and are not required to achieve any load management credits. In ((buildings)) projects with multiple tenant spaces, each tenant space is permitted to apply for different ((packages)) measures provided the weighted average of all areas in the ((building)) project comply with the overall efficiency credit requirement ((for siz credits)) in Table c406.1. Whole building or addition energy credits shall be allocated to tenant spaces in accordance with Sections c406.1.1.1 and C406.1.1.2.

Washington State Register, Issue 22-14
EXCEPTIONS: 1. An initial tenant improvement where the core and shell building complied via Section C407 in 2018 or later edition of the Washington State Energy Code.
2. Previously occupied tenant spaces in existing buildings that comply with this code in accordance with Section C501.

C406.1.1.1 Applicable envelope ((and on-site)) \& renewable and elevator energy credits. Where an entire building or building addition complies with Section ((C406.5, c406.10 or c406.11)) C406.2.4, C406.2.9, C406.2.10, or C406.2.14, under an initial tenant improvement permit, tenant spaces within the building qualify for the number of credits assigned to the occupancy ((type)) group of the tenant space in accordance with Table (( $\subset 406.1)$ ) C 406.2 . Where prior energy credits were achieved under the 2018 Washington State Energy Code, they shall be multiplied by 6 for applicability to this code.
C406.1.1.2 Applicable HVAC and service water heating credits. Where HVAC and service water heating systems and services are installed and comply with Section (( 4406.2 or c406.8)) C406.2.4, C406.2.9, C406.2.10, or C406.2.14 under an initial tenant improvement permit, those systems and services shall be considered a part of the tenant space. Tenant spaces qualify for the credits assigned to the occupancy ((もype)) group of the tenant space in accordance with Table (( $(406.1)$ ) C406.2 if the tenant space includes the distribution system and equipment that the central HVAC systems or service water heating systems were designed to support.
((EXCEPTION: Previously oceupied tenant spaces in existing buildings that comply with this code in accordance with Section C501.))
C406.1.2 Discrete area-weighted project compliance. Discrete building areas shall be permitted to select different packages of measures provided that the whole project complies with both the energy and load management credit requirements. Compliance shall be determined as follows:

1. Project credit requirement shall be the individual occupancy group requirements from Table C406.1 for each discrete area weighted by discrete area conditioned floor area. Where one occupancy group is less than 10 percent of the floor area of the project, use the primary occupancy group for all credits.
2. Determine the energy and load management credits achieved for each discrete area based on its occupancy group. Where envelope or lighting power credits in Section C406.2.3.1, C406.2.3.2, or C406.2.3.12 are used, the lighting power or envelope UA percentage reduction shall be calculated for the project as a whole to determine achieved credits.
3. Determine total project credits achieved by weighting individual discrete area credits by discrete area conditioned floor area.
4. A project complies when both energy and load management credits are equal to or greater than the weighted project requirement.
[Statutory Authority: RCW 19.27A.025, 19.27A. 045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40600, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40600, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40600, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40600, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40602 ( (Seetion C406.2-HVAC option-)) Reserved.

( (C406. 2 More efficient HVAC equipment and fan performance. No less than 90 percent of the total HVAC capacity serving the total conditioned floor area of the entire building, building addition or tenant space in accordance with section c406.1.1 shall comply with sections C406.2.1 through c406.2.3. For systems required to comply with section C403.1.1, HVAC total system performance ratio, exceed the minimum re= quirement by 10 percent.
EXCEPTION: In low energy spaces complying with Section C402.1.1 and semi-heated spaces complying with Section C402.1.1.2, no less than 90 percent of the installed heating eapacity is provided by electrie infrared or gas-fired radiant heating equipment for loealized heating applieations. Stand-alone supply, return and exhaust fans shall comply with Section C406.2.3.

C406.2.1 HVAC system selection. Equipment installed shall be types that are listed in Tables C403.3.2(1) through C403.3.2(12) or a combi= nation thereof. Flectric resistance heating does not meet this re= quirement.
EXCEPTION: Allowed equipment not listed in Tables C403.3.2(1) through C403.3.2(12):

1. Air-to-water heat pumps.
2. Heat recovery chillers.

C406.2.2 Minimum equipment efficiency. Equipment shall exceed the minimum efficiency requirements listed in Tables C403.3.2(1) through C403.3.2(12) by 15 percent, in addition to the requirements of section 6403. Where multiple performance requirements are provided, the equip= ment shall exceed all requirements by 15 percent.

EXCEPTIONS: 1. Equipment that is larger than the maximmm capacity range indieated in Tables C403.3.2(1) threugh C403.3.2(12) shall utilize the values listed for the largest capacity equipment for the associated equipment type shown in the table.
2. Equipment that complies with the exception to Section C406.2.1 is not required to comply with the minimum equipment efficieney requirement.
3. Compliance may be demenstrated by caleulating a total weighted average percentage for all heating and cooling equipment eombined. All equipment shall have effieieney that is no less than 5 pereent better than the minimem required efficieney in Table C403.3.2(1) through C403.3.2(12), and the resulting weighted average percentage for all equipment performance requirements shall exceed 15 percent. Calculation shall include heating and cooling capacities for all equipment, percentage better or worse than minimum required efficiency per Tables $\mathrm{C} 403.3 .2(1)$ through $\mathrm{C} 403.3 .2(12)$ for each performanee requirement (SEER, EER/IEER, COP, HSPF, $\mathrm{E}_{\mathrm{T}}$, $\mathrm{E}_{\mathrm{c}}$, and AFUE), and the total weighted average efficieney pereentage.
4. Hot water boilers with input capacity greater than $2,500,000 \mathrm{Btu} / \mathrm{h}$ shall be considered to comply with this section with a minimum thermal efficiency of 95 percent $\mathrm{E}_{\mathrm{t}}$ in accordance with the test procedure in 10 C.F.R. Part 431 .

C406.2.3 Minimum fan efficiency. Stand-alone supply, return and exhaust fans designed for operating with motors over 750 watts (1 hp) shall have a fan efficiency grade of not less than FPG 71 as defined in AMCA 205. The total efficiency of the fan at the design point of operation shall be within 10 percentage points of either the maximum total efficicncy of the fan or the static efficiency of the fan.) )
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40602, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40602, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40602, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40602, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40603 ((Seetion C406.3-IPA option-)) Reserved.

( (C406.3 Reduced lighting power. Interior lighting within the whole building, building addition or tenant space shall comply with section C406.3.1 or section c406.3.2. Dwelling units and slecping units within the building shall comply with Section C406.3.3.

C406.3.1 Reduced lighting power Option 1. The total connected interior lighting power calculated in accordance with section 6405.4 .1 shall be 90 percent or less of the lighting power valucs specificd in Table 6405.4.2(1) times the floor area for the building types, or 90 pereent or less of the total interior lighting power allowance calculated in accordance with Section C405.4.2.

C406.3.2 Reduced lighting power Option 2. The total connected interior lighting power calculated in accordance with section 6405.4.1 shall be 80 percent or less of the lighting power values specified in Table C405.4.2(1) times the floor area of the building types, or 80 percent or less of the total interior lighting power allowance calculated in accordance with section C405.4.2.

C406.3.3 Lamp fraction. No less than 95 percent of the permanently in= stalled light fixtures in dwelling units and slceping units shall be provided by lamps with a minimum efficacy of 65 lumens per watt.)
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40603, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40603, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40603, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40604 ((Section C406.4- Lighting controls option.)) Reserved.
((C406.4 Enhanced digital lighting controls. No less than 90 percent of the total installed interior lighting power within the whole building, building addition or tenant space shall comply with section C406.4.1.

C406.4.1 Lighting controls function. Interior lighting shall be located, scheduled and operated in accordance with Section 6405.2 , and shall be configured with the following enhanced control functions:

1. Luminaires shall be configured for continuous dimming.
Z. Fach luminaire shall be individually addressed.

EXCEPTIONS TA 1. Multiple luminaires mounted on no more than 12 linear feet of a single lighting track and addressed as a single luminaire.
ITEM 2: 2. Multiple linear luminaires that are ganged together to create the appearance of a single longer fixture and addressed as a single luminaire, where the total length of the combined luminaires is not more than 12 feet.
3. No more than eight luminaires within a daylight zone are permitted to be controlled by a single daylight responsive control.
4. Luminaires shall be controlled by a digital control system configured with the following capabilities:
4.1. Scheduling and illumination levels of individual luminaires and groups of luminaires are capable of being reconfigured through the system.
4.2. Load shedding.
4.3. In open and enclosed offices, the illumination level of
overhead gencral illumination luminaires are configured to be individually adjusted by occupants.
4.4. Oceupancy sensors and daylight responsive controls are capable of being reconfigured through the system.
5. Construction documents shall include submittal of a sequence of Operations, including a specification outlining each of the functions required by this section.) )
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40604, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40604, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40605 ( (Section C406.5 On-site renewable energy op-tion-)) Reserved.

( (C406.5 On-site renewable energy. A whole building, building addition or tenant space shall be provided with on-site renewable enexgy systems with an annual encrgy production per square foot of no less than the value specified in Table 4406.5 based on the total conditioned floor area of the whole building. The on-site renewable used in this option shall be separate from on-site renewables used as part of Sec= tion c406.8 or used to qualify for any exception in this code.

Table C406.5
On-Site Renewable Fnergy System Rating
(per square foot)

| Building Area Type | kBtu/year | kWh/year |
| :--- | :---: | :---: |
| Assembly | 1.8 | 0.53 |
| Pining | 10.7 | 3.14 |
| Hospital | 3.6 | 1.06 |
| Hotel/Motel | 2.0 | 0.59 |
| Multifamily residential | $\theta .50$ | 0.15 |
| Office | 0.82 | 0.24 |
| Other | 2.02 | 0.59 |
| Retail | 1.31 | $\theta .38$ |
| Sehool/University | 1.17 | 0.34 |
| Stpermarket | 5.0 | 1.47 |
| Warehouse | 0.43 | $\theta .13))$ |

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40605, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, S 51-11C-40605, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40605, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40606 ((Seetion C406.6-DOAS option.)) Reserved.

 ( (C406.6 Dedicated outdoor air system (DOAS). No less than go percent of the total conditioned floor area of the whole building, building addition or tenant space, excluding floor area of unoceupied spaces that do not require ventilation per the International Mechanical Code, shall be served by DOAS installed in aceordance with section c403.3.5. This option is not available to buildings subject to the prescriptive requirements of section C403.3.5.) )[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40606, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40606, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40606, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40607 ((Section C406.7 High performance dedicated outdoor air system option.)) Reserved.
( (C406.7 High performance dedicated outdoor air system (DOAS). A whole building, building addition or tenant space which includes a DOAS com= plying with Section C 406.6 shall also provide minimum sensible effec= tiveness of heat recovery of 80 percent and DOAs total combined fan power less than $0.5 \mathrm{~W} / \mathrm{cfm}$ of outdoor air. For the purpose of this section, total combined fan power includes all supply, exhaust, recireulation and other fans utilized for the purpose of ventilation.) )
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40607, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40607, filed 12/6/16, effective 5/1/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, S 51-11C-40607, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40608 ((Section C406.8-Service water heating option.)) Reserved.

( (C406.8 Reduced energy use in service water heating. Buildings with service hot water heating equipment shall comply with sections C406.8.1 and C406.8.2.

C406.8.1 Building or area type. Not less than 90 percent of the conditioned floor area of the whole building, building addition or tenant space shall be of the following types:

1. Group R-1: Boarding houses, hotels, or motels.
Z. Group I-2: Hospitals, psychiatric hospitals, and nursing
homes.
2. Group A-2: Restaurants and banquet halls or buildings contain-
ing food preparation areas.
3. Group F: Laundries.
4. Group R-2.
5. Group A-3: Health clubs and spas.
6. Buildings with a service hot water load of 10 percent or more of total building energy loads, as show with an energy analysis as described in Section C407 or as shown through alternate service hot water load calculations showing a minimum service water energy use of $15 \mathrm{k} /$ Btu per square foot per year, as approved by the building offiEial.

C406.8.2 Load fraction. Not less than 60 pereent of the annual service hot water heating energy use, or not less than 100 percent of the an= nual service hot water heating energy use with water-cooled systems subject to the requirements of Section c403.9.5 or qualifying for one of its exceptions, shall be provided by one or more of the following:

1. Service hot water system delivering heating requirements using heat pump technology with a minimum COP of 3.0 . For air-source equipment, the COP rating will be reported at the design leaving heat pump water temperature with an entering air temperature of $60^{\circ} \mathrm{F}\left(15.6^{\circ} \mathrm{C}\right)$ or lower. For water-source equipment, the COP rating will be reported at the design leaving load water temperature with an entering water temperature of $74^{\circ} \mathrm{F}\left(23.3^{\circ} \mathrm{C}\right)$ or lower.
$z$. Waste heat recovery from service hot water, heat recovery ehillers, building equipment, process equipment, or other approved system. Qualifying heat recovery must be above and beyond heat recouery required by other sections of this code.
2. On-site rencwable energy watex-heating systems.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40608, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27A and 19.27 RCW. WSR 19-02-089, § 51-11C-40608, filed 1/2/19, effective 7/1/19. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40608, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40608, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40609 ( (Section C406.9-High performance service water heating in multifamily option-)) Reserved.
( (C406.9 High performance service water heating in multifamily buildings. For a whole building, building addition or tenant space with not less than 90 percent of the conditioned floor area being Group $R=2$ oceupancy, not less than 90 percent of the annual building service hot water encrgy use shall be provided by a heat pump system with a mini= mum COP of 3.0. This efficicncy package is allowed to be taken in addition to Section C406.8.2.) )
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40609, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40609, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40610 ( (Section C406.10 Envelope option-)) Reserved.
( (C406.10 Enhanced envelope performance. The Proposed Total UA of the thermal envelope of the whole building or building addition shall be 15 percent lower than the Allowable Total UA for an area of identical configuration and fenestration area in accordance with section (402.1.5 and Equation 4-2.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40610, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40611 ( (Seetion C406.11 Air infiltration option-)) Reserved.
((C406.11 Reduced air infiltration. Measured air infiltration of the total conditioned floor area of the whole building, fully isolated building addition or tenant space shall comply with section c406.11.1.
C406.11.1 Air leakage testing and verification. Air infiltration shall be verified by whole building pressurization testing conducted in acCordance with ASTM F779 or ASTM E1827 by an independent third party. The measured air leakage rate of the building envelope shall not ex= eeed 0.17 efm/fit under a pressure differential of 0.3 in. watet (75 Pa), with the calculated surface area being the sum of the above and below grade building envelope. A report that includes the tested surface area, floor area, air by volume, storics above grade, and leakage rates shall be submitted to the code official and the building owner.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40611, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40612 ((Seetion C406.12 Commercial kitchen option.)) Reserved.

( (C406.12 Enhanced commercial kitchen equipment. For buildings or areas designated as Group $A=2$, or facilitics whose primary busincss type involves the use of a commercial kitchen with at least one gas or electric fryer, all fryers, dishwashers, steam cookers and ovens shall comply with all of the following:

1. Achicve the energy spar label in accordance with the specifica= tions current as of January 1, 2018.
2. Be installed prior to the issuance of the certificate of occupancy.
3. Have the energy spar qualified model number listed on the construction documents submitted for permitting.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40612, filed 11/26/19, effective 7/1/20.]

## NEW SECTION

WAC 51-11C-40620 Section C406.2-Additional energy efficiency credit measures.

C406.2 Additional energy efficiency credit measures. Each energy efficiency credit measure used to meet credit requirements for the project shall include efficiency that is greater than the energy efficiency required for the building type and configuration requirements in Sections C402 through C405. Measures installed in the project that meet the requirements in Sections C 406.2 .1 through C406.2.14 shall achieve the credits listed for the measure and occupancy group in Table C406.2 or where calculations required by Sections c406.2.1 through C406.2.14 create or modify the table credits, the credits achieved shall be based upon the section calculations.

Table C406. 2
Efficiency Measure Credits

| Measure Title | Applicable Section | Occupancy Group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Group R-1 | $\underset{\text { R-2 }}{\text { Group }}$ | Group B | Group E | Group M | All Other |
| 1. Dwelling unit HVAC control | C406.2.1 | NA | 7 | NA | NA | NA | NA |
| 2. Improved HVAC TSPR ${ }^{\text {a }}$ | C406.2.2.1 | NA | 8 | 11 | 17 | 22 | NA |


| Measure Title | Applicable Section | Occupancy Group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Group R-1 | Group R-2 | Group B | Group E | Group M | All Other |
| 3. Improve cooling and fan efficiency | C406.2.2.2 | 2 | 2 | 3 | 4 | 3 | 2 |
| 4. Improve heating efficiency | C406.2.2.3 | 2 | 3 | 3 | 10 | 16 | 7 |
| 5. Improved low-carbon district energy system ( $10 \%$ better) | C406.2.2.4 | 3 | 3 | 4 | 11 | 17 | 8 |
| 6. Improved low-carbon district energy system $(20 \% \text { better })^{\text {b }}$ | C406.2.2.5 | 9 | 10 | 12 | 33 | 52 | 24 |
| 7. High performance DOAS | C406.2.2.6 | 31 | 31 | 21 | 39 | 40 | $\begin{gathered} 21 / \\ \text { (A) } 40^{\mathrm{c}} \end{gathered}$ |
| 8. Fault detection \& diagnostics (FDD) | C406.2.2.7 | 2 | 2 | 2 | 6 | 9 | 4 |
| 9. $10 \%$ reduced lighting power | C406.2.3.1 | 7 | 4 | 18 | 16 | 20 | 15 |
| 10. $20 \%$ reduced lighting power ${ }^{\text {d }}$ | C406.2.3.2 | 13 | 8 | 36 | 32 | 40 | 29 |
| 11. Lamp efficacy improvement | C406.2.3.3 | 5 | 6 | NA | NA | NA | NA |
| 12. Residential lighting control | C406.2.4.1 | NA | 8 | NA | NA | NA | NA |
| 13. Enhanced lighting control | C406.2.4.2 | 1 | 1 | 6 | 6 | 11 | 6 |
| 14. Renewable energy | C406.2.5 | 7 | 12 | 13 | 13 | 10 | 11 |
| 15. Shower drain heat recovery | C406.2.6.1 | 9 | 30 | NA | 3 | NA | NA |
| 16. Service water heat recovery | C406.2.6.2 | 35 | 111 | 13 | 14 | $\begin{gathered} \text { (Grocery) } \\ 41^{\mathrm{e}} \end{gathered}$ | NA |
| 17. Heat pump water heating | C406.2.6.3 | 81 | 261 | 17 | 33 | $\begin{gathered} \text { (Grocery) } \\ 95^{\mathrm{e}} \end{gathered}$ | $\begin{gathered} (\mathrm{A}-2) \\ 95^{\mathrm{f}} \end{gathered}$ |
| 18. Heat trace system | C406.2.7.1 | 6 | 13 | 4 | 1 | NA | 6 |
| 19. Point of use water heater | C406.2.7.2 | NA | NA | 19 | 5 | NA | NA |
| 20. Service hot water distribution right sizing | C406.2.8 | 13 | 42 | NA | NA | NA | NA |
| 21. High performance service hot water temperature maintenance system | C406.2.9 | 6 | 13 | 4 | 1 | NA | 6 |
| 22. High efficiency service hot water circulation system | C406.2.10 | 3 | 6 | 2 | 1 | NA | 4 |
| 23. Low flow residential showerheads | C406.2.11 | 3 | 3 | NA | NA | NA | NA |
| 24. Enhanced envelope performance ${ }^{\text {g }}$ | C406.2.12 | 24 | 20 | 13 | 5 | 19 | 14 |
| 25. Base reduced air leakage ${ }^{\text {g }}$ | C406.2.13.2 | 29 | 24 | 6 | 3 | 9 | 11 |
| 26. Enhanced reduced air leakage ${ }^{\text {g }}$ | C406.2.13.3 | 53 | 44 | 11 | 5 | 16 | 20 |
| 27. Enhanced commercial kitchen equipment | C406.2.14 | $30^{\text {h }}$ | $18^{\text {h }}$ | $18^{\text {h }}$ | $30^{\text {h }}$ | $30^{\text {h }}$ | $31^{\text {h }}$ |
| 28. Enhanced residential kitchen equipment | C406.2.15 | 12 | 19 | NA | NA | NA | NA |
| 29. Enhanced residential laundry equipment | C406.2.16 | NA | 6 | NA | NA | NA | NA |
| 30. Heat pump clothes dryers | C406.2.17 | 6 | 6 | NA | NA | NA | NA |
| 31. Efficient elevator equipment | C406.2.18 | 3 | 5 | 5 | 5 | 4 | 4 |

a Projects using Item 2 shall not use Items 3 through 5.
b Projects using C406.2.2.5 shall not use C406.2.2.4.
c For C406.2.2.6, occupancy Group A achieves 40 credits while other occupancy groups within the "all other" category achieve 21 credits.
d Projects using C406.2.3.2 shall not use C406.2.3.1.
e Service water heat recovery and heat pump water heating are available in Group M only for grocery stores larger than $10,000 \mathrm{ft}^{2}$. Large mixed retail with full grocery and butcher sections shall achieve half the credits. This credit is not available where refrigeration recovery to heat service hot water is used to meet the requirements of Section C403.9.2.3.
f Heat pump water heating efficiency credits are available in the "all other" category only for Group A-2.
g Buildings or building areas that are exempt from the thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2, do not qualify for this package.

[^5]
## []

NEW SECTION
WAC 51-11C-40621 Section C406.2.1-Dwelling unit HVAC measures.
C406.2.1 Dwelling unit HVAC controls. HVAC systems serving dwelling units or sleeping units shall be controlled with a programmable thermostat that is configured to automatically activate a setback condition of at least $5^{\circ} \mathrm{F}\left(3^{\circ} \mathrm{C}\right)$ for both heating and cooling. The programmable thermostat shall be configured to provide setback during occupied sleep periods. The unoccupied setback mode shall be configured to operate in conjunction with one of the following:

1. A manual main control device by each dwelling unit main entrance that initiates setback for all HVAC units in the dwelling unit and is clearly identified as "Heating/Cooling Master Setback."
2. Occupancy sensors in each room of the dwelling unit combined with a door switch to initiate setback for all HVAC units in the dwelling within 20 minutes of all spaces being vacant immediately following a door switch operation. Where separate room HVAC units are used, an individual occupancy sensor on each unit that is configured to provide setback shall meet this requirement.
3. An advanced learning thermostat that senses occupant presence and automatically creates a schedule for occupancy and provides a dynamic setback schedule based on when the spaces are generally unoccupied.
4. An automated control and sensing system that uses geographic sensing connected to the dwelling unit occupants' cell phones and initiates the setback condition when all occupants are away from the building.
[]

## NEW SECTION

WAC 51-11C-40622 Section C406.2.2-HVAC measures. C406.2.2 More efficient HVAC system performance. All heating and cooling systems shall meet the minimum requirements of Section C403 and efficiency improvements shall be referenced to the minimum efficiency requirements listed in the tables in Section C403.3.2. Where multiple efficiency requirements are listed, equipment shall meet the seasonal efficiencies including SEER, EER/IEER, IPLV or AFUE. Equipment that is larger than the maximum capacity range indicated in the tables in Section C403.3.2 shall utilize the values listed for the largest capacity equipment for the associated equipment type shown in the table. Where multiple individual heating or cooling systems serve the project, the improvement shall be the weighted average improvement based on individual system capacity.

For occupancies and systems required to comply with Section C403.1.1, credits are permitted to be achieved by meeting the require-
ments of Section C406.2.2.1. Other systems are permitted to achieve credits by meeting the requirements of either:

1. Section C406.2.2.2, More efficient HVAC equipment cooling and fan performance.
2. Section C406.2.2.3, More efficient HVAC equipment heating performance.
3. Section C406.2.2.4, High performance dedicated outdoor air system (DOAS).
4. Any combination of Sections C406.2.2.2, C406.2.2.3, and C406.2.2.4.

In addition, energy credits are permitted to be achieved for Section C406.2.2.7, Fault detection and diagnostics, where not otherwise required by Section C403.2.3 or C403.6.10(15).
C406.2.2.1 Improved HVAC TSPR. For systems required to comply with Section C403.1.1, the HVAC TSPR shall exceed the minimum requirement by five percent. If improvement is greater, the credits in Table C406.2 are permitted to be prorated up to a 20 percent improvement.
C406.2.2.2 More efficient HVAC equipment cooling and fan performance. No less than 90 percent of the total HVAC capacity serving the total conditioned floor area of the entire building, building addition or tenant space in accordance with Section C406.1.1 shall comply with Sections C406.2.2.2.1 through C406.2.2.2.3. Where individual equipment efficiencies vary, weigh them based on capacity.
C406.2.2.2.1 HVAC system selection. Equipment installed shall be types that are listed in the tables in Section C403.3.2.
C406.2.2.2.2 Cooling equipment efficiency. Equipment shall exceed the minimum cooling efficiency requirements listed in the tables in Section C403.3.2 by at least 5 percent. Where equipment exceeds the minimum annual cooling efficiency and heat rejection efficiency requirements by more than 5 percent, energy efficiency credits for cooling shall be determined using Equation 4-15, rounded to the nearest whole number.

$$
\begin{gathered}
\text { (Equation 4-15) } \\
E E C_{H E C}=E E C_{5} \times\left[1+\frac{C E I-0.05}{0.05}\right]
\end{gathered}
$$

Where:

$\mathrm{EEC}_{\text {HEC }}=\quad$| Energy efficiency credits for |
| :--- |
| cooling efficiency improvement. |

$\mathrm{EEC}_{5} \quad=\quad$ Section C406.2.2.2 credits from Table C406.2.
CEI $\quad=\quad$ The lesser of the improvement above minimum cooling efficiency requirements, minimum heat rejection efficiency requirements, or 20 percent ( 0.20 ). Where cooling efficiency varies by system, use the capacity weighted average efficiency improvement for all cooling equipment combined. The CEI expressed as a fraction shall be determined one of the following ways:

For metrics that increase as efficiency increases, CEI shall be calculated as follows:

$$
C E I=\frac{C M_{D E S}}{C M_{M I N}}-1
$$

For metrics that decrease as efficiency increases, CEI shall be calculated as follows:

$$
C E I=\frac{C M_{M I N}}{C M_{D E S}}-1
$$

Where:

| $\mathrm{CM}_{\text {DES }}=$ | Design cooling efficiency <br> metric, part-load or annualized <br> where available. |
| ---: | :--- |
| $\mathrm{CM}_{\text {MIN }}=$ | Minimum required cooling <br> efficiency metric, part-load or <br> annualized where available from |
| Section C403.3.2. |  |

For data centers using ASHRAE 90.4, CEI shall be calculated as follows:

$$
C E I=\frac{A M L C_{M A X}}{A M L C_{D E S}}-1
$$

Where:

| AMLC $_{\text {DES }}=$ | As-designed annualized <br> mechanical load component <br> calculated in accordance with |
| ---: | :--- |
| AMLC $_{\text {MAX }}=$ASHRAE 90.4 Section 6.5. |  |
| Maximum annualized <br> mechanical load component <br> from ASHRAE 90.4 Table 6.5. |  |

C406.2.2.2.3 Minimum fan efficiency. Where fan energy is not included in packaged equipment rating or it is and the fan size has been increased from the as-rated equipment condition, fan power or horsepower shall be less than 95 percent of the allowed fan power in Section C403.8.1.

C406.2.2.3 More efficient HVAC equipment heating performance. No less than 90 percent of the total HVAC capacity serving the total conditioned floor area of the entire building, building addition or tenant space in accordance with Section $C 406.1 .1$ shall comply with Sections C406.2.2.3.1 through C406.2.2.3.2.
C406.2.2.3.1 HVAC system selection. Equipment installed shall be types that are listed in the tables in Section C403.3.2. Electric resistance heating shall be limited to 20 percent of system capacity, with the exception of heat pump supplemental heating.
C406.2.2.3.2 Heating equipment efficiency. Equipment shall exceed the minimum heating efficiency requirements of the tables in Section C403.3.2 by at least 5 percent. Where equipment exceeds the minimum annual heating efficiency requirements by more than 5 percent, energy efficiency credits for heating shall be determined using Equation 4-16, rounded to the nearest whole number.

$$
\begin{gathered}
\text { (Equation 4-16) } \\
E E C_{H E H}=E E C_{5} \times\left[1+\frac{H E I-0.05}{0.05}\right]
\end{gathered}
$$

Where:

$\mathrm{EEC}_{\text {HEH }}=\quad$| Energy efficiency credits for |
| :--- |
| heating efficiency improvement. |

$\mathrm{EEC}_{5}=$ Section C406.2.2.2 credits from Table C406.2.
HEI $=$ The lesser of the improvement above minimum heating efficiency requirements or 20 percent ( 0.20 ). Where heating efficiency varies by system, use the capacity weighted average percentage for all heating equipment combined. For metrics that increase as efficiency increases, HEI shall be calculated as follows:

$$
H E I=\frac{H M_{D E S}}{H M_{M I N}}-1
$$

Where:

| $\mathrm{HM}_{\text {DES }} \quad=$ | Design heating efficiency <br> metric, part-load or annualized <br> where available. |
| ---: | :--- |
| $\mathrm{HM}_{\text {MIN }}=$ | $=$Minimum required heating <br> efficiency metric, part-load or <br> annualized where available from <br> Section C403.3.2. |

EXCEPTION: In low energy spaces complying with Section C402.1.1 and semi-heated spaces complying with Section C402.1.1.2, no less than 90 percent of the installed heating capacity is provided by electric infrared or gas-fired radiant heating equipment for localized heating applications. Such spaces shall achieve credits for $\mathrm{EEC}_{5}$.

C406.2.2.4 Improved low-carbon district energy systems (10 percent better). Not less than 90 percent of the annual service hot water and space heating load, or not less than 90 percent of the annual service hot water, space heating, and space cooling load shall meet the criteria of Section C406.2.2.4.1 or C406.2.2.4.2.

Documentation for the low-carbon district system that is operational prior to the final inspection shall be provided to demonstrate that the definition as modified in Section C406.2.2.4.1 or C406.2.2.4.2 of low-carbon district energy exchange system is satisfied.

C406.2.2.4.1 Improved low-carbon district energy exchange systems (10 percent better). Low-carbon district energy exchange systems must demonstrate the following:

1. Forty-five percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources; and
2. No more than 25 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources.
C406.2.2.4.2 Improved low-carbon district energy heating and cooling or heating only systems (10 percent better). Distribution losses must
be accounted for and may not exceed 5 percent of the annual load delivered to buildings served by the system. Low-carbon district energy heating and cooling or heating only systems must demonstrate the following:
3. Forty-five percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources and no more than 25 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources; or
4. No more than 10 percent of the system annual heat input to the system comes from fossil fuels or electric-resistance sources. The remaining annual heat input must be provided using heat pump technology with a minimum annual operating COP of 3.0 .
C406.2.2.5 Improved low-carbon district energy systems (20 percent better). Not less than 90 percent of the annual service hot water and space heating load, or not less than 90 percent of the annual service hot water, space heating, and space cooling load shall meet the criteria of Section C406.2.2.5.1 or C406.2.2.5.2.

Documentation for the low-carbon district system that is operational prior to the final inspection shall be provided to demonstrate that the definition as modified in Section C406.2.2.4.1 or c406.2.2.4.2 of low-carbon district energy exchange system is satisfied.
C406.2.2.5.1 Improved low-carbon district energy exchange systems (20 percent better). Low-carbon district energy exchange systems must demonstrate the following:

1. Fifty percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources; and
2. No more than 10 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources.

C406.2.2.5.2 Improved low-carbon district energy heating and cooling or heating only systems ( 20 percent better). Distribution losses must be accounted for and may not exceed 5 percent of the annual load delivered to buildings served by the system. Low-carbon district energy heating and cooling or heating only systems must demonstrate the following:

1. Fifty percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources and no more than 10 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources; or
2. No more than 10 percent of the system annual heat input to the system comes from fossil fuels or electric-resistance sources. The remaining annual heat input must be provided using heat pump technology with a minimum annual operating COP of 4.0 .
C406.2.2.6 High performance dedicated outdoor air system (DOAS). No less than 90 percent of the total conditioned floor area of the whole project, excluding floor area of unoccupied spaces that do not require ventilation as specified by the International Mechanical Code, shall be served by DOAS installed in accordance with Section C403.3.5 with the following adjustments:
3. Minimum heat recovery sensible effectiveness of 80 percent, calculated in accordance with Section C403.3.5.1.
4. Where design outdoor airflow is greater than $500 \mathrm{cfm}(250$ L/s), the DOAS shall be equipped with an economizer bypass, damper control, or wheel speed control that is active between $55^{\circ} \mathrm{F}\left(13^{\circ} \mathrm{C}\right)$ and $75^{\circ} \mathrm{F}\left(24^{\circ} \mathrm{C}\right)$ outdoor air temperature and minimizes energy recovery or maintains an appropriate DOAS leaving air temperature when the building is generally in cooling, based either on outdoor air temperature or a DDC zone-based cooling system reset.
5. DOAS total combined fan power shall be less than either:
3.1. $0.769 \mathrm{~W} / \mathrm{cfm}(1.55 \mathrm{~W} / \mathrm{L} / \mathrm{s})$ when calculated in accordance with Section C403.3.5.2.
3.2. Eighty percent of fan power allowance for a constant volume system when calculated in accordance with Section C406.8.1.

This option is not available to areas served by systems utilizing Section C403.2.2.1 exception 5 .
C406.2.2.7 Fault detection and diagnostics system. A project not required to comply with Section C403.2.3 or C403.6.10(16) shall achieve energy credits for installing a fault detection and diagnostics system to monitor the HVAC system's performance and automatically identify faults. The installed system shall comply with items 1 through 6 in Section C403.2.3.
[]

## NEW SECTION

## WAC 51-11C-40623 Section C406.2.3-Lighting measures.

C406.2.3 Reduced lighting power. Interior lighting within the whole project shall achieve credits by complying with Section c406.2.3.1 or C406.2.3.2. In Group R-1 and Group R-2 occupancies, dwelling and sleeping units shall comply with Section C406.2.3.3 and all other areas shall comply with section C406.2.3.1 or C406.2.3.2. Credits apply to the whole Group R-1 or Group R-2 area.
C406.2.3.1 Reduced lighting power option 1. The total connected interior lighting power calculated in accordance with Section C405.4.1 shall be 90 percent or less of the lighting power values specified in Table C405.4.2(1) times the floor area for the building types, or 90 percent or less of the total interior lighting power allowance calculated in accordance with Section C405.4.2.
C406.2.3.2 Reduced lighting power option 2. The total connected interior lighting power calculated in accordance with Section C405.4.1 shall be 80 percent or less of the lighting power values specified in Table C405.4.2(1) times the floor area of the building types, or 80 percent or less of the total interior lighting power allowance calculated in accordance with Section C405.4.2.

C406.2.3.3 Lamp efficacy. No less than 95 percent of the permanently installed light fixtures in dwelling units and sleeping units shall be provided by lamps with a minimum efficacy of 90 lumens per watt.
C406.2.4 Lighting controls. For buildings with nontransient dwelling units and sleeping units, energy credits shall be achieved by instal-
lation of systems that comply with the requirements of Section
c406.2.4.1. All other buildings shall achieve energy credits by complying with Section C406.2.4.2. For buildings with mixed occupancies, credits shall be prorated based on floor area.
C406.2.4.1 Residential building lighting control. In buildings with nontransient dwelling units and sleeping units, lighting controls shall be configured to meet the following:

1. Each dwelling unit or sleeping unit shall have a main control by the main entrance that turns off all the lights and switched receptacles in the unit. The main control shall be permitted to have two controls, one for permanently wired lighting and one for switched receptacles. The main controls shall be clearly identified as "lights master off" and "switched outlets master off."
2. Switched receptacles shall be clearly identified and all switched receptacles shall be located within 12 inches of an unswitched receptacle. Each room shall have a minimum of two switched receptacles except bathrooms, kitchens, and closets.

C406.2.4.2 Enhanced digital lighting controls. Measure credits shall be achieved where no less than 50 percent of the gross floor area within the project has luminaires and lighting controls that include high end trim in compliance with Section C405.2.8.3 and either lumin-aire-level lighting controls in compliance with Section C405.2.8.1 or networked lighting controls in accordance with Section C405.2.8.2. Where general lighting in more than 50 percent of the gross floor area complies, the base credits from Table C406.2 shall be prorated as follows:
[Floor area with high end trim, \%] x [Base energy credits for C406.2.4.2] / 50\%
[]

## NEW SECTION

## WAC 51-11C-40624 Section C406.2.5-Renewable energy measures.

C406.2.5 On-site and off-site renewable energy. Projects installing on-site or off-site renewable energy systems with a capacity of at least 0.1 watts per gross square foot ( $1.08 \mathrm{~W} / \mathrm{m}^{2}$ ) of building area in addition to the renewable energy capacity required elsewhere in this code shall achieve energy credits for this measure. Renewable energy systems achieving energy credits shall not be used to satisfy other requirements of this code. Off-site renewable energy systems shall comply with Sections C411.2.2 and C411.2.3. Credits shall be prorated from the table value in accordance with Equation 4-17.
(Equation 4-17)

$$
A E C_{R R a}=A E C_{b} \times \frac{\sum\left(R E F \times R R_{t}\right)-R R_{r}}{R R_{b} \times P G F A}
$$

Where:

Washington State Register, Issue 22-14
WSR 22-14-091

| $\mathrm{AECRRa}_{\mathrm{RRa}}$ | $=$Section C406.2.5 achieved <br> energy credits for this project as <br> calculated in accordance with <br> Equation 4-17, limited to 50 <br> percent of the required credits in |
| :--- | :--- |
| Section C406.1. |  |

Informative Note: On-site renewable energy may include thermal service water heating or pool water heating, in which case ratings in Btu/h can be converted to W where $\mathrm{W}=\mathrm{Btu} / \mathrm{h} / 3.413$.

## []

## NEW SECTION

WAC 51-11C-40625 Section C406.2.6-Service water measures.
C406.2.6 Reduced energy use in service water heating. Buildings with service hot water heating equipment that serves the whole building, building addition or tenant space shall achieve credits through compliance with:

1. Section C406.2.6.1, C406.2.6.2, or C406.2.6.3.
2. Sections C406.2.6.1 and C406.2.6.2.
3. Sections C406.2.6.1 and C406.2.6.3.

C406.2.6.1 Shower drain heat recovery. Shower drain heat recovery units shall comply with Section C404.10 and preheat cold water supply to the showers. Potable waterside pressure loss shall be less than 10 psi (69 kPa) at maximum design flow. The efficiency of drain water heat recovery units shall be 54 percent in accordance with CSA B55.1. Full credits are applicable to the following building use types: Mul-ti-family, hotel, motel, dormitory, and schools with locker room showers. Where not all showers in the project have drain heat recovery, the credit is adjusted based on the following:
[Section C406.2.6.1 table credits] x [Showers with drain recovery] / [Total number of showers]
C406.2.6.2 Service water heating energy recovery. Not less than 30 percent of the annual service hot water heating energy use, or not less than 70 percent of the annual service hot water heating energy use in buildings with condenser water systems subject to the require-
ments of Section C403.9.2.1 or qualifying for one of its exceptions, shall be provided by one or more of the following:

1. Waste heat recovery from service hot water, heat recovery chillers, building equipment, process equipment, or other approved system. Qualifying heat recovery must be above and beyond heat recovery required by other sections of this code.
2. On-site renewable energy water-heating systems where not used to meet other requirements or to obtain other energy credits.
C406.2.6.3 Heat pump service water heating. Projects shall achieve credits through compliance with Section C406.2.6.3.1.
C406.2.6.3.1 Heat pump water heater. Credit shall be achieved where service hot water system capacity is $82,000 \mathrm{Btu} / \mathrm{h}(24 \mathrm{~kW})$ or less and is served using heat pump technology with no more than 4.5 kW of resistance supplemental heating and meets one of the following:
3. The COP rating shall be a minimum COP of 3.0 reported at the design leaving heat pump water temperature with an entering air temperature of $60^{\circ} \mathrm{F}\left(16^{\circ} \mathrm{C}\right)$ or lower. For water-source equipment, the COP rating will be reported at the design leaving load water temperature with an entering load water temperature of $74^{\circ} \mathrm{F}\left(23^{\circ} \mathrm{C}\right)$ or lower.
4. The uniform energy factor (UEF) shall be a minimum of 3.40 rated based on U.S. Department of Energy requirements.
C406.2.7 Improved service hot water temperature maintenance. For buildings with gross floor area greater than 10,000 square feet, credit shall be achieved when hot water temperature maintenance is installed in accordance with Section C406.2.7.1 or C406.2.7.2.
C406.2.7.1 Self-regulated heat trace system. The credit achieved shall be from Table C406.2. This system shall include self-regulating electric heat cables, connection kits and electronic controls. The cable shall be installed directly on the hot water supply pipes underneath the insulation to replace standby losses.

C406.2.7.2. Point of use water heater. The credit achieved shall be from Table C406.2 where any fixtures requiring hot water shall be supplied from a localized electric source of hot water with no recirculation or heat trace and limited to 2 kW and 6 gallons of storage. The supply pipe length from the point of use water heater to the termination of the fixture supply pipe shall be no more than 20 feet.
C406.2.8 Service hot water distribution right sizing. To achieve this credit, where Group R-1 and R-2 occupancies are served by a central service hot water system, the distribution system serving dwelling units, sleeping units and guestrooms shall be sized using Appendix M of the Uniform Plumbing Code.
C406.2.9 High performance service hot water temperature maintenance system. Systems with multiple riser service hot water circulation systems shall use only heat pump technology for temperature maintenance. The heat pump technology shall have a minimum COP of 3.0 or UEF of 3.4. For air-source equipment, the COP rating will be reported at the design leaving heat pump water temperature with an entering dry bulb air temperature of $60^{\circ} \mathrm{F}\left(16^{\circ} \mathrm{C}\right)$ or lower and a relative humidity of 50 percent or lower. For water-source equipment, the COP rating will be reported at the design leaving load side water temperature with an entering source side water temperature of $74^{\circ} \mathrm{F}\left(23^{\circ} \mathrm{C}\right)$ or lower. The system shall comply with the requirements of Section C404.7.1.

C406.2.10 High efficiency service hot water circulation system. Multiple riser service hot water circulation systems shall use a variable volume circulation pump controlled to vary the pump speed based on system demand and shall include self-actuated thermostatic balancing valves to control the system flow at each riser.

C406.2.11 Low flow showerheads for Group R-1 and R-2 occupancies. All showerheads installed in Group $R-1$ and $R-2$ dwelling units or sleeping units shall have a maximum listed flowrate of 1.25 gallons per minute or less at 80 psi operating pressure for fixed showerheads and a maximum listed flowrate of 1.50 gallons per minute or less at 80 psi operating pressure for handheld showerheads. When a shower is served by more than one showerhead, including handheld showerheads, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.25 gallons per minute or less for fixed or 1.5 gallons per minute or less for handheld, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
[]

## NEW SECTION

## WAC 51-11C-40626 Section C406.2-Envelope measures.

C406.2.12 Enhanced envelope performance. The Proposed Total UA of the thermal envelope of the project shall be 15 percent lower than the Allowable Total UA determined in accordance with Section C402.1.5 and Equation 4-2.
C406.2.13 Reduced air leakage. Energy credits shall be achieved where measured air leakage of the total conditioned floor area of the whole building, fully isolated building addition or tenant space is determined in accordance with Section C402.5.1.2 and complies with the maximum leakage in either Section C406.2.13.1 or C406.2.13.2.
C406.2.13.1 Base reduced air leakage. Measured air leakage shall not exceed 68 percent of the maximum leakage allowed by Section C402.5.1.2.
C406.2.13.2 Enhanced reduced air leakage. Measured air leakage shall not exceed 33 percent of the maximum leakage allowed by Section C402.5.1.2.
[]

## NEW SECTION

WAC 51-11C-40627 Section C406.2-Other measures.
C406.2.14 Enhanced commercial kitchen equipment. For buildings or areas designated as Group A-2, or facilities whose primary business type involves the use of a commercial kitchen with at least one gas or electric fryer, all fryers, dishwashers, steam cookers and ovens shall comply with all of the following:

1. Achieve the ENERGY STAR label in accordance with the specifications current as of January 1, 2022.
2. Be installed prior to the issuance of the certificate of occupancy.
3. Have the ENERGY STAR qualified model number listed on the construction documents submitted for permitting.

Energy efficiency credits for efficient commercial kitchen equipment shall be determined based on Equation 4-19, rounded to the nearest whole number.
(Equation 4-19)

$$
\mathrm{AEEC}_{K}=20 \times \frac{\mathrm{Area}_{K}}{\operatorname{Area}_{B}}
$$

Where:

| AEEC $_{\mathrm{K}}=$ | Section C406.2.14 table credits, to a <br> maximum of those allowed in Table <br> C406.2 for this option. |
| ---: | :--- |
| Area $_{\mathrm{K}}$ | $=$Floor area of full-service kitchen $\left(\mathrm{ft}^{2}\right.$ <br> or $\left.\mathrm{m}^{2}\right)$ |
| Area $_{\mathrm{B}}$ | $=$Gross floor area of building $\left(\mathrm{ft}^{2}\right.$ or <br> $\left.\mathrm{m}^{2}\right)$. |

C406.2.15 Residential kitchen equipment. For projects with Group R-1 and R-2 occupancies, energy credits shall be achieved where not less than 90 percent of dishwashers, refrigerators, and freezers comply with all of the following:

1. Achieve the ENERGY STAR Most Efficient label in accordance with the 2021 specifications.
2. Be installed prior to the issuance of the certificate of occupancy.

For Group R-1 where only some guestrooms are equipped with both refrigerators and dishwashers, the table credits shall be prorated as follows:
[Section C406.2.15 table credits] x [Floor area of guestrooms with kitchens] / [Total guestroom floor area]
C406.2.16 Residential laundry appliances. For projects with Group R-2 occupancies, energy credits shall be achieved where not less than 90 percent of clothes washers and dryers in the project meet the following requirements:

1. Each dwelling unit contains in-unit washing washer and dryer equipment that meets the following requirements:
1.1. Achieve the ENERGY STAR Most Efficient label in accordance with the 2021 specifications.
1.2. Be installed prior to the issuance of the certificate of occupancy.
2. Where only some dwelling units are equipped with both washers and dryers, the table credits shall be prorated as follows:
[Section C406.2.16 table credits] x [Floor area of dwelling units with laundry] / [Total dwelling unit floor area]
C406.2.17 Heat pump clothes dryers. Not less than 90 percent of domestic clothes dryers located in Group R-1 and R-2 of the whole project are ENERGY STAR rated heat pump dryers. Credit applies only to build-
ings where laundry facilities are provided either within each residetial dwelling or sleeping units or grouped together in central multifamily use laundry rooms, or a mix of the two.

To claim this credit, the building permit drawings shall specify the appliance type and provide documentation of ENERGY STAR compliance. At the time of inspection, all appliances shall be installed and connected to utilities.

C406.2.18 Efficient elevator equipment. Qualifying elevators in the building shall be Energy Efficient Class A in accordance with ISO 25745-2, Table 7. Only buildings three or more floors above grade shall be permitted to use this credit. Credits shall be prorated based on Equation 4-18, rounded to the nearest whole credit. Projects with a compliance ratio ( $\mathrm{CRe}_{e}$ in Equation 4-18) below 0.5 do not qualify for this credit.

$$
\begin{gathered}
\stackrel{\text { (Equation 4-18) }}{ } \mathrm{EC}_{\mathrm{e}} \stackrel{\mathrm{EC}_{\mathrm{t}}}{ } \times C R_{e}
\end{gathered}
$$

Where:

$$
\begin{aligned}
\mathrm{EC}_{\mathrm{e}} & =\begin{array}{l}
\text { Elevator energy credit achieved for } \\
\text { building. }
\end{array} \\
\mathrm{EC}_{\mathrm{t}} & =\text { Section C406.2.18 table energy credit. } \\
\mathrm{CR}_{\mathrm{e}} & =\frac{F_{A}}{F_{B}} \\
\mathrm{~F}_{\mathrm{A}} & =\begin{array}{l}
\text { Sum of floors served by Class } \mathrm{A} \\
\text { elevators. }
\end{array} \\
\mathrm{F}_{\mathrm{B}} & =\begin{array}{l}
\text { Sum of floors served by all building } \\
\text { elevators and escalators. }
\end{array}
\end{aligned}
$$

## []

## NEW SECTION

## WAC 51-11C-40630 Section C406.3-Load management credits.

C406.3 Load management credits. Load management measures installed in the building that meet the requirements in Sections C406.3.1 through c406.3.7 shall achieve the credits listed for the occupancy group in Table C406.3 or where calculations required by Sections c406.3.1 through c406.3.7 create or modify the table credits the credits archieved will be based upon the section calculations.

Each load management measure shall require automatic controls activated by either utility demand response, utility price response signal, peak price period time control, or local building demand monitoring. Controls shall be capable of and configured to provide the require load management sequences. As used in this section, "peak period" shall be either the coincident peak building load period, the peak price period, the peak utility load period, or the peak building demad period. The following additional requirements apply to these measures:

1. Where credit is taken for c406.3.6, service water heating energy storage, the equipment shall be provided with controls that comply with ANSI/CTA 2045-B.
2. For load management measures in Sections C406.3.1 through C406.3.5:
2.1. Where the serving utility has a real-time demand response or pricing program, an interface compliant with serving utility requirements shall be installed.
2.2. Where the serving utility does not have a real-time demand response or pricing program, a digital input to the system to support future utility programs shall be installed and building demand monitoring shall be installed and integrated into the load management sequence.
2.3. All equipment involved in the required load management sequence shall have controls connected to a central DDC system.

Table C406.3
Load Management Measure Credits

| Measure Title | Applicable Section | Occupancy Group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Group } \\ \mathbf{R - 1} \end{gathered}$ | $\underset{R-2}{\text { Group }}$ | Group B | Group E | Group M | $\begin{gathered} \text { All } \\ \text { Other } \end{gathered}$ |
| 1. Lighting load management | C406.3.1 | 12 | 15 | 27 | 15 | NA | NA |
| 2. HVAC load management | C406.3.2 | 29 | 24 | 42 | 23 | 13 | 26 |
| 3. Automated shading | C406.3.3 | NA | 7 | 12 | 16 | NA | NA |
| 4. Electric energy storage | C406.3.4 | 41 | 50 | 126 | 72 | 37 | 65 |
| 5. Cooling energy storage | C406.3.5 | 13 | 10 | 14 | 19 | NA | 14 |
| 6. Service hot water energy storage | C406.3.6 | 31 | 248 | 59 | 8 | 5 | 70 |
| 7. Building thermal mass | C406.3.7 | NA | NA | 50 | 95 | 96 | 80 |

C406.3.1 Lighting load management. Automatic controls shall be capable of gradually reducing general lighting power with continuous dimming in 75 percent of the building area by at least 20 percent during peak demand periods. Where less than 75 percent, but at least 50 percent, of the building area lighting is controlled, the credits from Table C406.3 shall be prorated as follows:
[Area of building with lighting load management, $\%$ ] $\times$ [Table credits for C 406.3 .1 ]
$75 \%$
EXCEPTION: Warehouse or retail storage building areas shall be permitted to achieve this credit by switching off at least 25 percent of lighting power in 75 percent of the building area without dimming.

C406.3.2 HVAC load management. Automatic controls shall:

1. Where electric cooling is used, be configured to gradually increase, over a minimum of three hours, the cooling setpoint by at least $3^{\circ} \mathrm{F}$ during the summer peak periods.
2. Where electric heating is used, be configured to gradually reduce, over a minimum of three hours, the heating setpoint by at least $3^{\circ} \mathrm{F}$ during winter peak periods.
C406.3.3 Automated shading load management. Where fenestration on south and west exposures exceeds 20 percent of the wall area, automatic controls shall be configured to operate movable exterior shading devices or dynamic glazing to reduce solar gain through sunlit fenestration on southern and western exposures by at least 50 percent during summer peak periods.
Informative Note: This credit can be met by exterior roller, movable blind or movable shutter shading devices; however, fixed overhang, screen or shutter shading will not meet the requirement. Roller shades that reject solar gain but still allow a view are allowed as long as they provide an effective 50 percent reduction in net solar gain (e.g., have a shading coefficient of less than 0.5 for the shading material itself). Interior shading devices will not meet the requirement. Electrochromatic windows that achieve 50 percent of SHGC would qualify.

C406.3.4 Electric energy storage. Automatic controls shall store electricity in electric storage devices during nonpeak periods and use stored energy during peak periods. Electric storage devices shall have a minimum capacity of $5 \mathrm{~Wh} / \mathrm{ft}^{2}\left(58 \mathrm{~Wh} / \mathrm{m}^{2}\right)$ of gross building area. For greater storage capacity up to $15 \mathrm{~Wh} / \mathrm{ft}^{2}\left(160 \mathrm{~Wh} / \mathrm{m}^{2}\right)$, credits shall be prorated as follows:
[Installed electric storage capacity, $\left.\mathrm{Wh} / \mathrm{ft}^{2}\right] \times[\mathrm{C} 406.3 .4$ credits from Table C406.3]
C406.3.5 Cooling energy storage. Automatic controls shall be capable of activating ice or chilled water storage to reduce peak period electric demand. Credits shown in Table 4406.3 are based on storage capacity of 2 ton-hours per design day ton of cooling load (2 kWh per design day kW) with a 1.15 sizing factor. Credits shall be prorated for installed storage systems sized between 0.5 and 3.5 ton-hours per design day ton (kWh per design day kW) of cooling load rounded to the nearest whole credit. The storage tank shall have no more than 1.5 percent of storage capacity standby loss per day.

C406.3.6 Service hot water energy storage. To achieve this credit, where service hot water is heated by electricity, automatic controls shall preheat stored service hot water before the peak period and suspend electric water heating during the peak period. Storage capacity shall be provided by either:

1. Preheating water above $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ delivery temperature with at least 1.34 kWh of energy storage per kW of water heating capacity. Tempering valves shall be provided at the water heater delivery location.
2. Providing additional heated water tank storage capacity above peak service hot water demand with equivalent peak storage capacity to item 1 .

C406.3.7 Building thermal mass. To achieve this credit, the building shall have both additional passive interior mass and a night-flush control of the HVAC system.

1. Interior to the building thermal envelope insulation, provide 15 pounds of passive thermal mass per square foot of building floor area. Mass construction shall be in the building interior and the indoor facing portion of the exterior wall, and interior floor construction. Mass construction shall have mass surfaces in direct contact with the air in conditioned spaces with directly attached wall board or hard surface flooring allowed. Mass with carpet or furred wallboard shall not be counted toward the building mass required. For integral insulated concrete block walls complying with ASTM C90, only the mass of the interior face shall be counted toward the building mass required.
2. When summer mode is active and indoor average temperature is $5^{\circ} \mathrm{F}\left(3^{\circ} \mathrm{C}\right)$ or more above outdoor temperature and between 10:00 p.m. and 6:00 a.m., automatic night flush controls shall operate outdoor air economizers at low fan speed less than 66 percent during the unoccupied period until the average indoor air temperature falls to the occupied heating setpoint. Summer mode shall be activated when outdoor air exceeds $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$ and continues until deactivated when outdoor air falls below $45^{\circ} \mathrm{F}\left(7^{\circ} \mathrm{C}\right)$. Another night flush strategy shall be permitted where demonstrated to be effective, avoids added morning heating and is approved by the code official.

The simplified night flush sequence described will operate in "summer mode" below the $70^{\circ} \mathrm{F}$ outdoor air trigger temperature down until outdoor air of $45^{\circ} \mathrm{F}$ is hit when the "summer mode" is deactivated until the outdoor air temperature rises above $70^{\circ} \mathrm{F}$ again. Other strategies may be implemented that cool the space below the heating setpoint and adjust the morning heating setpoint to avoid morning reheating.
[]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40702 Section C407.2-Mandatory requirements.

C407.2 Mandatory requirements. Compliance with ((もhis)) Section C407 also requires compliance with those sections shown in Table C407.2.

The building permit application for projects utilizing this method shall include in one submittal all building and mechanical drawings and all information necessary to verify that the building envelope and mechanical design for the project corresponds with the annual energy analysis. If credit is proposed to be taken for lighting energy savings, then an electrical permit application shall also be submitted and approved prior to the issuance of the building permit. If credit is proposed to be taken for energy savings from other components, then the corresponding permit application (e.g., plumbing, boiler, etc.) shall also be submitted and approved prior to the building permit application. Otherwise, components of the project that would not be approved as part of a building permit application shall be modeled ( (the same in both the proposed building and the standard reference design and shall comply with the requirements of this)) in the baseline in accordance with ANSI/ASHRAE/IESNA 90.1 Appendix $G$ and in the proposed model in accordance with the requirements of the Washington State Energy Code.

Table C407. 2
Mandatory Compliance Measures for Total Building Performance Method

| Section $n_{-}$ | Title | Comments |
| :--- | :--- | :--- |
| Envelope |  |  |
| C401 | Thermal envelope <br> certificate |  |
| C402.2.7 | Airspaces |  |
| C402.5 | Air leakage |  |
| Mechanical |  |  |
| C403.1.2 | Calculation of heating <br> and cooling loads |  |
| C403.1.3 | Data centers |  |
| C403.1.4 | Use of electric <br> resistance and fossil <br> fuel-fired HVAC <br> heating equipment |  |
| C403.2 | System design |  |
| C403.3.1 | Equipment and <br> system sizing |  |
| C403.3.2 | HVAC equipment <br> performance <br> requirements |  |


| Section ${ }_{-}^{\text {a }}$ | Title | Comments |
| :---: | :---: | :---: |
| C403.3.3 | Hot gas bypass limitation |  |
| C403.3.4.4 | Boiler turndown |  |
| C403.3.6 | Ventilation for Group R occupancy |  |
| ((C403.4 | HVAC system eentrols)) |  |
| C403.4.1 | Thermostatic controls | ((Except for (403.4.1.4)) |
| C403.4.2 | Off-hour controls | ((Except for Group R)) |
| C403.4.7 | Combustion heating equipment controls |  |
| C403.4.8 | Group R-1 hotel/ motel guestrooms | See Section C403.7.4 |
| C403.4.9 | Group R-2 and R-3 dwelling units |  |
| C403.4.10 | Group R-2 sleeping units |  |
| C403.4.11 | Direct digital control systems |  |
| C403.5.5 | Economizer fault detection and diagnostics (FDD) |  |
| C403.7 | Ventilation and exhaust systems | Except for C403.7.6 |
| C403.8 | Fan and fan controls |  |
| C403.9.1.1 | Variable flow controls | For cooling tower fans $\geq 7.5$ hp |
| C403.9.1.2 | Limitation on centrifugal fan cooling towers | For open cooling towers |
| C403.10 | Construction of HVAC elements |  |
| C403.11 | Mechanical systems located outside of the building thermal envelope |  |
| C403.14 | Commissioning |  |
| Service Water Heating |  |  |
| C404 | Service water heating |  |
| Lighting and Electrical |  |  |
| ( $(\mathrm{C} 405.1$ | General |  |
| 6405.2 | Lighting eontrors |  |
| C405.3 | Exit signs |  |
| C405.4 | Interior lighting power |  |
| 6405.5 | Exterior building lighting power |  |
| 6405.6 | Electrical transformers |  |


| Section ${ }_{-}^{\text {a }}$ | Title | Comments |
| :---: | :---: | :---: |
| C405.7 | Bwelling unit energy eonstmption |  |
| 6405.8 | Electric motor efficiency |  |
| 6405.9 | Vertical and horizontal transportation |  |
| C405.10 | Controlled receptacles |  |
| 6405.14 | Voltage drop in feeders)) |  |
| C405 | Electrical power and lighting systems |  |
| Other Requirements |  |  |
| C407 | Total building performance |  |
| C408 | System commissioning |  |
| C409 | Energy metering |  |
| C410 | Refrigeration requirements |  |
| C411- ${ }_{\text {b }}$ | ((Solar readiness)) Renewable energy |  |
| C412 | Compressed air systems |  |

a Reference to a code section includes all the relative subsections

- except as indicated in the table.
b Compliance with any of these sections includes compliance with any exception to that section.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40702, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40702, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40702, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40702, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-40703 Section C407.3-Performance-based compliance.
C407.3 Performance-based compliance. Compliance with this section requires compliance with ASHRAE Standard 90.1 Appendix G, Performance Rating Method, in accordance with Standard 90.1 Section 4.2.1 with the following modifications:

1. The mandatory requirements of the Washington State Energy Code are required to be met, instead of those of Section G1.2.1a of ((Standard)) ANSI/ASHRAE/IESNA 90.1 ((are not required to be met)).
2. ( (The reduction in annual carbon emissions of the proposed building design associated with on-site renewable energy shall not be more than 3 percent of the total carbon emissions of the bascline building design.
3. References to energy cost in Section 4.2.1.1 and Appendix G shall be replaced by carbon emissions calculated by multiplying site energy consumption by the carbon emission factor from Table c407.3(1).
4. The building performance factors in Table c4.2.1.1 shall be replaced with those in Table C407.3(2).)) Compliance with Section C407 requires meeting both an emissions and site energy reduction target in accordance with the following:
2.1. Carbon emissions target. The carbon emissions target is focused on regulated load energy efficiency, thus shall be met only via regulated load savings without consideration of the contribution of on-site or off-site renewable energy or unregulated load savings. Adjustments to the PCI, to account for the contribution of renewable energy found in ANSI/ASHRAE/IESNA 90.1 Section 4.2.1.1 shall not be used. References to energy cost in Section 4.2.1.1 and Appendix G shall be replaced by carbon emissions calculated by multiplying site energy consumption by the carbon emission factor from Table C407.3(1). The building performance factors in Table 4.2.1.1 of ANSI/ASHRAE/IESNA 90.1 shall be replaced with those in Table C407.3(2).
2.2. Site energy target. The site energy performance target shall be met including the contributions of on-site or off-site renewable energy as described in Section C411.2 as well as the contributions of improvements in unregulated loads as allowed by Section c407.3.4. The annual on-site and off-site renewable energy production (as adjusted by the factors in Table C411.2.1) shall be subtracted from the proposed building annual site energy use. Compliance with the site energy performance target requires that the proposed building site energy use/baseline building site energy use is less than or equal to the site energy performance target from Table C407.3(3).
5. Documentation requirements in Section G1.3.2.d shall be replaced by a list showing compliance with the mandatory provisions of Table C407.2.
6. Forms demonstrating compliance with Appendix $G$ developed by the U.S. Department of Energy shall be completed and submitted to the code official. The forms are available at energycodes.gov/ashrae-standard-901-performance-based-compliance-form.
7. References to yet-to-be-designed future building components in the Proposed Building Performance column of Table G3.1 shall be modified to reference the corresponding sections of the Washington State Energy Code in lieu of the requirements of ANSI/ASHRAE/IESNA 90.1 in the following sections of the table:
5.1. No. 1, Design Model, subclause c.
5.2. No. 6, Lighting, subclause c.
5.3. No. 11, Service Water Heating System, subclause c.
5.4. No. 12, Receptacle and Other Loads, subclause b.
8. HVAC systems, subclauses $c$ and d of Table G3.1, shall meet the following requirements:
6.1. For yet-to-be-designed systems in office, retail, library, education, and multifamily buildings and occupancies subject to the TSPR requirements of Section C403.1.1, the system type and efficiency parameters in the proposed model shall meet but not exceed those shown in Table D602.11 Standard Reference Design HVAC Systems.
6.2. For all other buildings and occupancies, the system type shall be the same as the system modeled in the baseline design and
shall comply with but not exceed the requirements of Section C403 in lieu of ANSI/ASHRAE/IESNA 90.1.
6.3. For HVAC systems serving future tenant spaces, where the current building permit applies to only a portion of an HVAC system, and future components will receive HVAC services from systems included in the current building permit, those future components shall be modeled as the type required to complete the HVAC system portions under the current permit and shall meet but not exceed the requirements found in Section C403.
9. The requirements for proposed and baseline building lighting system shall be modified in accordance with Addendum af to ANSI/ ASHRAE/IESNA 90.1.
10. Energy modeler qualifications. The energy analyst in responsible charge of the Section $C 407$ submittal shall meet at least one of the following:
8.1. ASHRAE Building Energy Modeling Professional (BEMP) certification.
8.2. Association of Energy Engineer's Building Energy Simulation Analyst (BESA) certification.
8.3. Successful completion of at least five projects modeled following any version of ANSI/ASHRAE/IESNA 90.1 Appendix $G$ within the last three years that were reviewed and approved by a code official or rating authority.
C407.3.1 Limits on nonmandatory measures. The Proposed Total UA of the proposed building shall be no more than 20 percent higher than the Allowed Total UA as defined in Section C402.1.5.
C407.3.2 On-site and off-site renewable energy accounting for use with Appendix G. Qualifying on-site and off-site renewable energy delivered or credited to the building project to comply with Section $C 407.3$ item 2.2 shall meet the requirements of Section C411.2.

C407.3.3 Low-carbon district energy use with Appendix G. Qualifying low-carbon district heating and cooling or heating only systems and low-carbon district energy exchange systems shall meet the requirements of Section C407.3.3.1 or C407.3.3.2, as applicable.
C407.3.3.1 Utilization of low-carbon district heating and cooling or
heating only systems. Applicable if heating and cooling or heating only is provided to the proposed building from a low-carbon district heating and cooling or heating only system that is fully operational prior to the final inspection. Proposed model shall account for all on-site HVAC and service hot water related equipment, such as circulation pump energy and heat-exchanger efficiency.

1. The following modifications shall be applied to Appendix $G$ of ANSI/ASHRAE/IESNA 90.1 in addition to what is described in Section C407.3:
1.1. For low-carbon district heating and cooling systems, strike the text of Sections G3.1.1.1, G3.1.1.2, G3.1.1.3.1, and G3.1.1.3.4. Baseline system shall be selected based on unmodified versions of Tables G3.1.1-3 and G3.1.1-4, with carbon emission factors from Table C407.3(1).
1.2. For low-carbon district heating only systems, strike the text of Sections G3.1.1.1, G3.1.1.3.1, and G3.1.1.3.4. Baseline system shall be selected based on unmodified versions of Tables G3.1.1-3 and G3.1.1-4, with carbon emission factors from Table C407.3(1).
2. Any heating or cooling energy provided by the low-carbon district heating and cooling or heating only system shall utilize foot-
note a of Table C407.3(1) for the district system carbon emission factor in the proposed model to account for carbon emissions from those end uses.
3. Carbon emission "credit" for any waste/recoverable heat exported to the low-carbon district heating and cooling or heating only systems shall be accounted for in the proposed design by multiplying the quantity of heat exported by the Carbon Emissions Factor established in footnote a of Table C407.3(1) multiplied by the appropriate seasonal utilization factor in Items 3.1 and 3.2 below. This carbon emissions "credit" is subtracted from the total proposed design carbon emissions calculated in accordance with ASHRAE 90.1 Section 4.2.1.1.
3.1. Fifty percent of the waste heat exported to the low-carbon district heating and cooling or heating only systems during the months of October through December and January through March.
3.2. Twenty-five percent of the waste heat exported to the lowcarbon district heating and cooling or heating only systems during the months of April through September.
EXCEPTION: Waste heat exported from the building to the low-carbon district heating and cooling or heating only system shall not be subtracted from the proposed design carbon emissions if they are already accounted for in the calculation of emissions from the district heating or cooling plant.
Documentation for the low-carbon district system that is operational prior to the final inspection shall be provided to demonstrate the following:
4. Distribution losses must be accounted for and may not exceed 10 percent of the annual load delivered to buildings served by the system.
5. Twenty-five percent of the annual district-system-net-load-met (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat or renewable energy resources and no more than 25 percent of the annual heat input to the system comes from fossil fuel or electric-resistance sources, or not more than 10 percent of the system annual heat input to the system comes from fossil fuel or electric-resistance sources.
C407.3.3.2 Utilization of low-carbon district energy exchange systems. Applicable if heating or cooling is provided to the proposed building from a low-carbon district energy exchange system that is fully operational prior to the final inspection. Proposed model shall account for all on-site HVAC and service hot water related equipment, such as circulation pump energy and heat-exchanger efficiency.
6. The following modifications shall be applied to Appendix $G$ of ANSI/ASHRAE/IESNA 90.1 in addition to what is described in Section C407.3:
1.1. Strike the text of Sections G3.1.1.1, G3.1.1.2, G3.1.1.3, G3.1.1.3.1, G3.1.1.3.2, G3.1.1.3.3, and G3.1.1.3.4. Baseline system shall be selected based on unmodified versions of Tables G3.1.1-3 and G3.1.1-4, with carbon emission factors from Table C407.3(1).
7. Any heating or cooling energy provided by a low-carbon district energy exchange system shall utilize footnote a of Table c407.3(1) for the district system carbon emission factor in the proposed model.
8. Carbon emission "credit" for any waste/recoverable heating exported to the low-carbon district energy exchange system shall be accounted for in the proposed design by multiplying the quantity of heat exported by the Carbon Emissions Factor established in footnote a of Table C407.3(1) multiplied by the appropriate seasonal utilization factor in Items 3.1 and 3.2 below. This carbon emissions "credit" is
subtracted from the total proposed design carbon emissions calculated in accordance with ASHRAE 90.1 Section 4.2.1.1.
3.1. Fifty percent of the waste heat exported to the low-carbon district energy exchange system during the months of October through December and January through March.
3.2. Twenty-five percent of the waste heat exported to the lowcarbon district energy exchange system during the months of April through September.
EXCEPTION: Waste heat exported from the building to the low-carbon district heating and cooling or heating only system shall not be subtracted from the proposed design carbon emissions if they are already accounted for in the calculation of emissions from the district heating or cooling plant.
Documentation for the low-carbon district system that is operational prior to the final inspection shall be provided to demonstrate that the definition of low-carbon district energy exchange system is satisfied.
C407.3.4 Credit for improvements in unregulated loads when using Appendix G. When calculating savings for site energy targets in accordance with Section C 407.3 item 2.2 , but not when calculating savings for emissions targets in accordance with Section C407.3 item 2.1, differences in the simulation of unregulated loads and equipment modeled in the baseline building design from those in the proposed design shall be approved by the code official based on documentation that the equipment installed in the proposed design represents a significant verifiable departure from documented current conventional practice. All unregulated equipment for which savings is claimed must be installed by the time of final inspection. The burden of this documentation is to demonstrate that accepted conventional practice would result in baseline building equipment different from that installed in the proposed design. Occupancy and occupancy schedules shall not be changed.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40703, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40703, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40703, filed $2 / 1 / 13$, effective 7/1/13.]

## NEW SECTION

## WAC 51-11C-407031 Tables for Section C407.3.

Table C407.3(1)
Carbon Emissions Factors

| Type | CO2e (lb/unit) | Unit |
| :--- | :---: | :---: |
| Electricity | 0.44 | kWh |
| Natural gas | 11.7 | Therm |
| Oil | 19.2 | Gallon |
| Propane | 10.5 | Gallon |
| Other $^{\text {a }}$ | 195.00 | mmBtu |
| On-site <br> renewable <br> energy | 0.00 |  |

a District energy systems may use alternative emissions factors supported by calculations approved by the code official.

Table C407.3(2)
Building Performance Factors (BPF) to be used for Compliance with Section C407.3

| Building Area Type | Building Performance <br> Factor |
| :--- | :---: |
| Multifamily | 0.55 |
| Health care/hospital | 0.71 |
| Hotel/motel | 0.53 |
| Office | 0.45 |
| Restaurant | 0.35 |
| Retail | 0.41 |
| School | 0.36 |
| Warehouse | 0.19 |
| All others | 0.44 |

Table C407.3(3)
Site Energy Performance Targets to be used for Compliance with Section C407. 3

| Building Area Type | Site Energy Performance <br> Targets |
| :--- | :---: |
| Multifamily | 0.59 |
| Health care/hospital | 0.72 |
| Hotel/motel | 0.62 |
| Office | 0.58 |
| Restaurant | 0.59 |
| Retail | 0.46 |
| School | 0.52 |
| Warehouse | 0.29 |
| All others | 0.55 |

[]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-407051 ( (Tables for Section C407.5 Carbon emissions factors and building performance factors.)) Reserved.
( (Table C407.3(1)
Carbon Emissions Factors

| Type | CO2e ((b/umit) | Unit |
| :--- | :---: | :---: |
| Electricity | 0.70 | kWh |
| Natural Gas | 11.7 | Therm |
| Oil | 19.2 | Gallon |
| Propane | 10.5 | Gallon |

Washington State Register, Issue 22-14

| Type | CO2e (lb/unit) | Unit |
| :--- | :---: | :---: |
| Other' $^{\text {a }}$ | 195.00 | mmBtat |
| On-site <br> renewable <br> energy | 0.00 |  |

a Bistrict energy systems may use alternative emissions factors supperted by calculations approved by the code official.

Table-C407.3(2)
Building Performance Factors (BPF) to be used for Compliance with Section C407.3

| Building Area Type | Building Performance <br> Factor |
| :--- | :---: |
| Multifamily | 0.58 |
| Healtheare/hospital | 0.54 |
| Hotel/motel | 0.64 |
| Office | 0.56 |
| Restatrant | 0.70 |
| Retail | 0.47 |
| School | 0.36 |
| Warehouse | 0.48 |
| All others | $0.54))$ |

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-407051, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-407051, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-407051, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-407051, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-407051, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40801 Section C408.1-General.

C408.1 General. A building commissioning process led by a certified commissioning professional and functional testing requirements shall be completed for mechanical systems in Section C403; service water heating systems in Section C404; controlled receptacle and lighting control systems in Section C405; equipment, appliances and systems installed to comply with Sections C406 or C407; energy metering in Section C409; and refrigeration systems in Section C410.
EXCEPTION: Buildings, or portions thereof, which are exempt from Sections C408.2 through C408.7 may be excluded from the commissioning process.

1. Mechanical systems that are not required to comply with Section C403.3.5 are exempt from the commissioning process where the installed total mechanical equipment capacity is less than $((240,000)) 180,000 \mathrm{Btu} / \mathrm{h}(15$ tons $)$ cooling capacity and less than ( $(300,000))$
$\underline{240,000} \mathrm{Btu} / \mathrm{h} \underline{20}$ tons) heating capacity and energy recovery ventilation (ERV) equipment is less than 300 cfm capacity.
2. Service water heating systems are exempt from the commissioning process in buildings where the largest service water heating system capacity is less than $200,000 \mathrm{Btu} / \mathrm{h}$ and where there are ((no pools or permanent spas.)) any of the following:
2.1. No pools or permanent spas.
2.2. No solar thermal water heating.
2.3. No recirculation pumps.
2.4. No heat pump water heaters, except fully-packaged for individual residential dwelling unit use. 3. Lighting control systems are exempt from the commissioning process in buildings where both the total installed lighting load is less than $((2 \theta)) 10 \mathrm{~kW}$ and the lighting load controlled by occupancy sensors or automatic daylighting controls is less than $((1 \theta)) \underline{5} \mathrm{~kW}$.
3. Refrigeration systems are exempt from the commissioning process in buildings if they are limited to self-contained units.

C408.1.1 Commissioning in construction documents. Construction documents shall clearly indicate provisions for commissioning process. The construction documents shall minimally include the following:

1. A narrative description of the activities that will be accomplished during the commissioning process. At a minimum, the commissioning process is required to include:
1.1. Development and execution of the commissioning plan, including all subsections of Section C408.1.2;
1.2. The certified commissioning professional's review of the building documentation and close out submittals in accordance with Section C103.6; and
1.3. The commissioning report in accordance with Section C408.1.3.
2. Roles, responsibilities, and required qualifications of the certified commissioning professional.
3. A listing of the specific equipment, appliances, or systems to be tested.
C408.1.2 Commissioning plan. A commissioning plan shall be developed by the project's certified commissioning professional and shall outline the organization, schedule, allocation of resources, and documentation requirements of the commissioning process.
4. A narrative description of the activities that will be accomplished during each phase of commissioning, including the personnel intended to accomplish each of the activities, systems testing and balancing, functional performance testing, and verification of the building documentation requirements in Section C103.6.
5. Roles and responsibilities of the commissioning team, including the name and statement of qualifications of the certified commissioning professional.
6. A listing of the specific equipment, appliances or systems to be tested and a description of the tests to be performed.
C408.1.2.1 In-house commissioning disclosure and conflict management plan. Where the certified commissioning professional's contract or employment is other than directly with the building owner, an in-house commissioning disclosure and conflict management plan shall be a part of the commissioning process. A copy shall be included in the commissioning plan. This plan shall disclose the certified commissioning professional's contractual relationship with other team members and provide a conflict management plan demonstrating that the certified commissioning professional is free to identify any issues discovered and report directly to the owner.
C408.1.2.2 Functional performance testing. Functional performance testing shall be conducted for mechanical systems in Sections C403; service water heating systems in Section C404; controlled receptacles and lighting control systems in Section C405; equipment, appliances, systems installed to comply with Section C406 or C407; energy metering in Section C409; and refrigeration systems in Section C410. Written procedures which clearly describe the individual systematic test procedures, the expected system response or acceptance criteria for each procedure, the actual response or findings, and any pertinent discus-
sion shall be followed. This testing shall include control systems which will be tested to document that control devices, components, equipment, and systems are calibrated and adjusted to operate in accordance with approved construction documents. Testing shall affirm the conditions required within Sections C408.2 through C408.7 under system testing.
C408.1.2.3 Functional performance testing - Sampling. For projects with 7 or fewer similar systems, each system shall be tested. For projects with more than 7 systems, testing shall be done for each unique combination of control types. Where multiples of each unique combination of control types exist, no fewer than 20 percent of each combination shall be tested unless the code official or design professional requires a higher percentage to be tested. Where 30 percent or more of the tested system fail, all remaining identical combinations shall be tested.
C408.1.2.4 Deficiencies. Deficiencies found during testing shall be resolved including corrections and retesting.
C408.1.3 Commissioning report. A commissioning report shall be completed and certified by the certified commissioning professional and delivered to the building owner or owner's authorized agent. The report shall be organized with mechanical, service water heating, controlled receptacle and lighting control systems, energy metering, and refrigeration findings in separate sections to allow independent review. The report shall record the activities and results of the commissioning process and be developed from the final commissioning plan with all of its attached appendices. The report shall include:
7. Results of functional performance tests.
8. Disposition of deficiencies found during testing, including details of corrective measures used or proposed.
9. Functional performance test procedures used during the commissioning process including measurable criteria for test acceptance, provided herein for repeatability.
10. Commissioning plan.
11. Testing, adjusting and balancing report.

EXCEPTION: Deferred tests which cannot be performed at the time of report preparation due to climatic conditions.
C408.1.4. Commissioning process completion requirements. Prior to the final mechanical, plumbing and electrical inspections or obtaining a certificate of occupancy, the certified commissioning professional shall provide evidence of building commissioning in accordance with the provisions of this section.
C408.1.4.1 Commissioning compliance. Buildings, or portions thereof, shall not be considered acceptable for a final inspection pursuant to Section C104.2.6 until the code official has received a letter of transmittal from the building owner acknowledging that the building owner or owner's authorized agent has received the Commissioning Report. Completion of Commissioning Compliance Checklist (Figure C408.1.4.1) is deemed to satisfy this requirement. Phased acceptance of Commissioning Compliance Checklist for portions of the work specific to the trade that is being inspected is permissible where accepted by the code official and where the certified commissioning professional remains responsible for completion of the commissioning process. If there are unresolved deficiencies when the final inspection is scheduled, the Commissioning Report shall be submitted and shall describe the unresolved deficiencies.

C408.1.4.2 Copy of report. The code official shall be permitted to require that a copy of the Commissioning Report be made available for review by the code official.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40801, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40801, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-40801, filed 12/6/16, effective 5/1/17; WSR 16-13-089, s 51-11C-40801, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, s 51-11C-40801, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40801, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-40901 Section C409.1-General.

C409.1 General. All new buildings and additions shall have the capability of metering all source energy usage in accordance with Section C409.2 in addition to the source energy for on-site renewable energy production in accordance with section C409.2.4 and the end-use energy usage for electric vehicle charging in accordance with Section C409.3.4. New buildings and additions with a gross conditioned floor area over ( 50,000 ) 25,000 square feet shall comply with Sections ( (-c409. Buildings)) C409.2, C409.3, and C409.4. New buildings and additions shall be equipped to measure, monitor, record and display energy consumption data for each energy source and end use category per the provisions of this section, to enable effective energy management. Existing buildings shall comply with the energy metering provisions of Section C506.1.
EXCEPTIONS: $\quad$. Tenant spaces smaller than $((50,000)) \underline{25,000}$ square feet within buildings if the tenant space has its own utility service and utility meters shall comply with Section C409.2 and are exempt from the end-use metering, measurement devices, data acquisition system and energy display requirements of Sections C409.3 and C409.4.
2. Buildings in which there is no gross conditioned floor area over 25,000 square feet, including building common area, that is served by its own utility services and meters shall comply with Section C409.2 and are exempt from the end-use metering, measurement devices, data acquisition system and energy display requirements of Sections C409.3 and C409.4.

C409.1.1 Alternate metering methods. Where approved by the building official, energy use metering systems may differ from those required by this section, provided that they are permanently installed and that the source energy measurement, end use category energy measurement, data storage and data display have similar accuracy to and are at least as effective in communicating actionable energy use information to the building management and users, as those required by this section.

C409.1.2 Conversion factor. Any threshold stated in kW shall include the equivalent BTU/h heating and cooling capacity of installed equipment at a conversion factor of 3,412 Btu per kW ( (at 50 percent demand) ) or 2,730 Btu per kVA.

C409.1.3 Dwelling units. See Sections C404.9 and C405.7 for additional metering requirements for Group R-2 dwelling units.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40901, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40901, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40901, filed $2 / 1 / 13$, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-40904 Section C409.4-Measurement devices, data acquisition system and energy display.

C409.4 Measurement devices, data acquisition system and energy display.
C409.4.1 Meters. Meters and other measurement devices required by this section shall ((have local displays or)) be configured to automatically communicate energy data to a data acquisition system and energy display. Source meters may be any digital-type meters. Current sensors or flow meters are allowed for end use metering, provided that they have an accuracy of +/- 5\%. All required metering systems and equipment shall provide ((at least hourly)) data that is fully integrated into the data acquisition and display system per the requirements of Section C409. Electrical meters shall be configured to communicate data to the data acquisition system and energy display for both consumption (e.g., kWh) and consumption rate (e.g., kW). Other meters and measurement devices shall be configured to communicate data to the data acquisition system for consumption.

C409.4.2 Data acquisition system. The data acquisition system shall store the data from the required meters and other sensing devices in a single database for a minimum of 36 months. For each energy supply and end use category required by C409.2 and C409.3, it shall provide ( (re-al-time energy consumption data and logged data for any hour, day, month or year)) energy consumption logged in one-hour or less intervals and energy consumption rate logged in 10 -minute or less intervals. Data from the data acquisition system shall be viewable via the energy display in accordance with the requirements of Section c409.4.3.
C409.4.3 Energy display. For each building subject to Section C409.2 and C409.3, either a single visible display in a location with ready access, or a single web page or other electronic document available for access to building operation and management personnel or to a third-party energy data analysis service shall be provided in the building ((available for aceess by)); for metering data acquisition systems and energy displays monitored by a third-party energy data analysis service, building operation and management personnel shall retain access to the metering data acquisition system and energy display. The display shall ((graphically)) numerically provide the current energy consumption rate and energy consumption total for each
whole building energy source((, plus)) and each end use category ( (, as well as the total and peak values for any day, week, month, and year)). The energy display shall also graphically and numerically display logged data from the data acquisition system for energy consumption for each whole building energy source and energy consumption rate for whole building electrical use and each end use category for any selected day, week, month, or year.
C409.4.4 Commissioning. Energy metering and energy consumption management systems shall be commissioned in accordance with Section (( 4408 )) C408.6.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-40904, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40904, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40904, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40904, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 16-03-072, filed 1/19/16, effective 7/1/16)

## WAC 51-11C-40905 ( (Seetion C409.5-Metexing fox existing buildings.)) Reserved.

## ( (C409.5 Metering for existing buildings.

C409.5.1 Existing buildings that were constructed subject to the requirements of this section. Where new or replacement systems or equipment are installed in an existing building that was constructed subject to the requirements of this section, metcring shall be provided for such now or replacement systems or equipment so that their energy use is included in the corresponding end-use category defined in seetion C409.2. This includes systems or equipment added in conjunction with additions or alterations to existing buildings.
C409.5.1.1 Small existing buildings. Metering and data acquisition systems shall be provided for additions over 25,000 square feet to buildings that were constructed subject to the requirement of this section, in accordance with the requirements of sections c409.2 and (409.3-))
[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40905, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40905, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-41000 Section C410-Refrigeration system requirements.
C410.1 General. Walk-in coolers, walk-in freezers, refrigerated warehouse coolers, refrigerated warehouse freezers, and refrigerated display cases shall comply with this Section.
( (Refrigerated warehouse coolers and refrigerated warehouse freczers shall comply with Section C402. Section C402.1.5 Component performance alternative, may be used if granted prior approval by the jurisdiction.
C410.1.1 Refrigeration equipment performance. Refrigeration equipment shall have an energy use in kWh/day not greater than the values of Tables $\mathrm{C} 410.1(1)$ and $\mathrm{C} 410.1(2)$ when tested and rated in accordance with AHRI Standard 1200. The encrgy use shall be verified through certification under an approved certification program or, where a certification program does not exist, the energy use shall be supported by data furnished by the equipment manufacturer.

Table C410.1.1(1)
Minimum Efficiency Requirements: Commercial Refrigeration

| EQUIPMENT TYPE | APPLICATION | ENERGY USE LHMTS (kWhper day) ${ }^{\text {a }}$ | TEST <br> PROCEDURE |
| :---: | :---: | :---: | :---: |
| Refrigerator with solid doors | Holding Temperature | $0.10 \times \mathrm{V}+2.04$ | AHRI 1200 |
| Refrigerator with transparent doors |  | $0.12 \times \mathrm{V}+3.34$ |  |
| Freezers with solid doors |  | $0.40 \times \mathrm{V}+1.38$ |  |
| Freezers with transparent doors |  | $0.75 \times \mathrm{V}+4.10$ |  |
| Refrigerator/freezers with solid doors |  | The greater of $0.12 \times \mathrm{V}+3.34$ or |  |
| Commercial refrigerators | Pulldown | $0.126 \times \mathrm{V}+3.51$ |  |

${ }^{\mathrm{a}} \mathrm{V}=$ Volume of the ehiller for frozen compartment as defined in AHAM-IARF-1.
Table C410.1.1(2)
Minimum Ffficiency Requirements: Commercial Refrigerators and Freezers

| EQUPMENT TYPE |  |  |  | ENERGY USE HMMTS ( $k$ Wh per day $)^{\text {a,b }}$ | TEST <br> PROCEDURE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equipment Class ${ }^{\text {c }}$ | Family Code | Operating Mode | Rating Femperature |  |  |
| VOP.RC.M | Vertical open | Remote eondensing | Medium | $0.82 \times \mathrm{TDA}+4.07$ | AHRI 1200 |
| SVO.RC.M | Semivertical өреп | Remote eondensing | Medium | $0.83 \times$ TDA +3.18 |  |
| HZO.RC.M | Horizontal өpen | Remote eondensing | Medium | $0.35 \times \mathrm{TDA}+2.88$ |  |
| VOP.RC.L | Vertical open | Remote eondensing | Low | $2.27 \times$ TDA +6.85 |  |
| HZO.RC.L | Horizontal өpen | Remote condensing | Low | $0.57 \times$ TDA +6.88 |  |
| VCT.RC.M | Vertical transparent door | Remote condensing | Medium | $0.22 \times \mathrm{TDA}+1.95$ |  |
| VCT.RC.L | $\begin{gathered} \text { Vertical } \\ \text { transparent } \\ \text { door } \end{gathered}$ | Remote eondensing | Low | $0.56 \times \mathrm{TDA}+2.61$ |  |


| EQUPPMENT TYPE |  |  |  | ENERGY USE LMMTS (kWh-per day)a,h | TEST <br> PROCEDURE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equipment-Class | Family Code | Operating Mode | Rating Temperature |  |  |
| SOC.RC.M | Service over counter | Remote condensing | Medium | $0.51 \times \mathrm{TDA}+0.14$ |  |
| VOP.SC.M | Vertical open | Self-contained | Meditm | $4.74 \times$ TDA +4.74 |  |
| SVO.SC.M | Semivertical өреп | Self-contained | Medium | $4.73 \times \mathrm{TDA}+4.59$ |  |
| HZO.SC.M | Horizontal өреп | Self-contained | Medium | $0.77 \times$ TDA +5.55 |  |
| HZO.SC.L | Horizontal өреп | Self-contained | Low | $1.92 \times \mathrm{TDA}+7.08$ |  |
| VCT.SC.I | $\begin{gathered} \text { Vertical } \\ \text { transparent } \\ \text { door } \end{gathered}$ | Self-contained | Ice cream | $0.67 \times \mathrm{TDA}+3.29$ |  |
| VCS.SC.I | Vertical solid door | Self-contained | fee cream | $0.38 \times \mathrm{V}+0.88$ |  |
| HCT.SC. | Horizontal transparent door | Self-eontained | fee cream | $0.56 \times \mathrm{TDA}+0.43$ |  |
| SVO.RC.L | Semivertical өpen | Remete eondensing | Low | $2.27 \times$ TDA +6.85 |  |
| VOP.RC.I | Vertical open | Remote eondensing | fee cream | $2.89 \times$ TDA +8.7 |  |
| SVO.RC.I | Semivertical өреп | Remote eondensing | fee cream | $2.89 \times$ TDA +8.7 |  |
| HZO.RC.I | Horizontal өpen | Remote eondensing | feecream | $0.72 \times$ TDA +8.74 |  |
| VCT.RC.I | Vertical transparent door | Remote eondensing | Ice cream | $0.66 \times \mathrm{TDA}+3.05$ |  |
| HCT.RC.M | Horizontal transparent door | Remote eondensing | Medium | $0.16 \times$ TDA +0.13 |  |
| HCT.RC.L | Horizontal transparent door | Remote eondensing | Low | $0.34 \times \mathrm{TDA}+0.26$ |  |
| HCT.RC. | Horizontal transparent door | Remote condensing | Iee cream | $0.4 \times \mathrm{TDA}+0.31$ |  |
| VCS.RC.M | Vertical solid door | Remote eondensing | Medium | $0.11 \times \mathrm{V}+0.26$ |  |
| VCS.RC.L | Vertical solid door | Remote condensing | Low | $0.23 \times \mathrm{V}+0.54$ |  |
| VCS.RC.I | Vertical solid door | Remote condensing | Iee cream | $0.27 \times \mathrm{V}+0.63$ |  |
| HCS.RC.M | Horizontal solid door | Remote condensing | Medium | $0.11 \times \mathrm{V}+0.26$ |  |
| HCS.RC.L | Horizontal solid door | Remote condensing | Low | $0.23 \times \mathrm{V}+0.54$ |  |
| HCS.RC. | Horizontal solid door | Remote condensing | fee cream | $0.27 \times \mathrm{V}+0.63$ |  |
| SOC.RC.L | Service over counter | Remote eondensing | Low | $4.08 \times \mathrm{TDA}+0.22$ |  |
| SOC.RC. | Service over eotunter | Remote eondensing | Fee cream | $1.26 \times \mathrm{TDA}+0.26$ |  |


| EQUPMENT TYPE |  |  |  | energy use himits ( $k$ Wheper day ${ }^{\text {a,b }}$ | fesf <br> PROCEDURE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equipment Class ${ }^{\text {c }}$ | Family Code | Operating Mode | Rating Temperature |  |  |
| VOP.SC.L | Vertical open | Self contained | Low | $4.37 \times$ TDA + 11.82 |  |
| VOP.SC. | Vertieal open | Self-eontained | Fee cream | $5.55 \times \mathrm{TDA}+15.02$ |  |
| SVO.SC.L | Semivertical өpen | Self-contained | Low | $4.34 \times \mathrm{TDA}+11.51$ |  |
| SVO.SC.I | Semivertical өреп | Self contained | Fee cream | $5.52 \times \mathrm{TDA}+14.63$ |  |
| HZO.SC.I | Horizontal өpen | Self contained | Fee cream | $2.44 \times \mathrm{TDA}+9.0$ |  |
| SOC.SC.I | Service over counter | Self contained | Fee cream | $1.76 \times$ TDA +0.36 |  |
| HCS.SC. | Herizontal solid door | Self contained | Fee cream | $0.38 \times \mathrm{V}+0.88$ |  |

a $V$-Voltme of the case, as meastred in aceordance with Appendix C Of AHRI 1200 .
b TDA = Total display area of the case, as measured in accordance with Appendix D of AHRI 1200.
c Equipment class designations consist of a combination [(in sequential order separated by periods. (AAA).(BB).(C))] of:
(AAA) An equipment family code where:
VOP $=$ Vertical open
SVO $=$ Semi-vertical open
HZO = Horizontal open
VCT $=$ Vertieal tramsparent doors
$\mathrm{VCS}=$ Vertical solid doors
HCT $=$ Horizontal transparent doors
$\mathrm{HCS}=$ Horizontal solid doors
SOC = Service over counter
(BB) An operating mode code:
$\mathrm{RC}=$ Remote condensing
$\mathrm{SC}=$ Self-contained
(C) A rating temperature code:
$\mathrm{M}=$ Meditim temperatare $\left(38^{\circ} \mathrm{F}\right)$
$\mathrm{L}=$ Low temperature $\left(\theta^{\circ} \mathrm{F}\right)$
$\mathrm{I}=$ Ice cream temperature $\left(15^{\circ} \mathrm{F}\right)$
For example, "VOP.RC.M" refers to the "vertical-open, remote-condensing, medium-temperature" equipment class.))
Table C410.2
Minimum Efficiency Requirements: Commercial Refrigerators and Freezers and Refrigeration

| $\frac{\text { Equipment }}{\text { Category }}$ | $\begin{aligned} & \text { Condensing } \\ & \text { Unit } \\ & \text { Configuration } \end{aligned}$ | $\frac{\text { Equipment }}{\text { Family }}$ | $\xrightarrow[\text { Rating }]{\text { Temp. }{ }^{\circ} \text { F }}$ | $\begin{aligned} & \text { Operating } \\ & \text { Temp. }{ }^{\circ} \mathrm{F} \\ & \hline \end{aligned}$ | $\xrightarrow[\text { Classification }]{\text { c }}$ | Maximum Daily Energy Consumption kWh/day ${ }^{\text {d,e }}$ | $\underline{\text { Standard }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Remote condensing commercial refrigerators and commercial freezers | Remote (RC) | Vertical open | $38(\mathrm{M})$ | $\geq 32$ | VOP.RC.M | $\underline{0.64 \times \text { TDA }+4.07}$ | $\frac{\text { AHRI }}{1200}$ |
|  |  | (VOP) | $\underline{0}$ (L) | $\leq 32$ | VOP.RC.L | $2.20 \times$ TDA +6.85 |  |
|  |  | Semivertical ope | 38 (M) | $\geq 32$ | SVO.RC.M | $\underline{0.66 \times \text { TDA }+3.18}$ |  |
|  |  | (SVO) | $\underline{0}$ (L) | $\leq 32$ | SVO.RC.L | $2.20 \times$ TDA +6.85 |  |
|  |  | Horizontal open | 38 (M) | $\geq 32$ | HZO.RC.M | $\underline{0.35 \times \text { TDA }+2.88}$ |  |
|  |  |  | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | HZO.RC.L | $\underline{0.55 \times \text { TDA }+6.88}$ |  |
|  |  | Vertical closed | 38 (M) | $\geq 32$ | VCT.RC.M | $\underline{0.15 \times \text { TDA }+1.95}$ |  |
|  |  | transparent (VCT) | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | VCT.RC.L | $\underline{0.49 \times \text { TDA }+2.61}$ |  |
|  |  | Horizontal closed | 38 (M) | $\geq 32$ | HCT.RC.M | $\underline{0.16 \times \text { TDA }+0.13}$ |  |
|  |  | transparent (HCT) | 0 (L) | $\leq 32$ | HCT.RC.L | $0.34 \times$ TDA +0.26 |  |
|  |  |  | $38(\mathrm{M})$ | $\geq 32$ | VCS.RC.M | $\underline{0.10 \times \mathrm{V}+0.26}$ |  |
|  |  | solid (VCS) | 0 (L) | $\leq 32$ | VCS.RC.L | $0.21 \times \mathrm{V}+0.54$ |  |
|  |  | Horizontal closed | $38(\mathrm{M})$ | $\geq 32$ | HCS.RC.M | $\underline{0.10 \times V+0.26}$ |  |
|  |  | solid (HCS) | 0 (L) | $\leq 32$ | HCS.RC.L | $0.21 \times \mathrm{V}+0.54$ |  |
|  |  | ervice over | 38 (M) | $\geq 32$ | SOC.RC.M | $0.44 \times \mathrm{TDA}+0.11$ |  |
|  |  | counter (SOC) | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | SOC.RC.L | $\underline{0.93 \times \mathrm{TDA}+0.22}$ |  |

Washington State Register, Issue 22-14
WSR 22-14-091

| $\begin{aligned} & \text { Equipment } \\ & \hline \text { Category } \end{aligned}$ | $\begin{gathered} \text { Condensing } \\ \text { Unit } \\ \text { Configuration } \\ \hline \end{gathered}$ | $\frac{\text { Equipment }}{\underline{\text { Family }}}$ | $\begin{aligned} & \text { Rating } \\ & \underline{\text { Temp. }{ }^{\circ} \mathbf{F}} . \end{aligned}$ | $\frac{\text { Operating }}{\text { Temp. }{ }^{\circ} \mathbf{F}}$ | Equipment Classification ${ }^{\text {c }}$ | Maximum Daily Energy Consumption $\mathbf{k W h}^{\mathbf{d}} \mathrm{day}^{\mathrm{d}, \mathrm{e}}$ | $\begin{gathered} \text { Test } \\ \underline{\text { Standard }} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Self-contained commercial refrigerators and commercial freezers with and without doors | $\frac{\text { Self-contained }}{(\mathrm{SC})}$ | Vertical open (VOP) | 38 (M) | $\geq 32$ | VOP.RC.M | $1.69 \times$ TDA +4.71 | $\frac{\text { AHRI }}{1200}$ |
|  |  |  | 0 (L) | $\leq 32$ | VOP.RC.L | $4.25 \times$ TDA +11.82 |  |
|  |  | $\frac{\text { Semivertical open }}{(\mathrm{SVO})}$ | 38 (M) | $\geq 32$ | SVO.RC.M | $1.70 \times$ TDA +4.59 |  |
|  |  |  | 0 (L) | $\leq 32$ | SVO.RC.L | $4.26 \times$ TDA +11.51 |  |
|  |  | $\frac{\text { Horizontal open }}{(\mathrm{HZO})}$ | 38 (M) | $\geq 32$ | HZO.RC.M | $\underline{0.72 \times \text { TDA }+5.55}$ |  |
|  |  |  | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | HZO.RC.L | $1.90 \times$ TDA +7.08 |  |
|  |  | Vertical closed transparent (VCT) | $38(\mathrm{M})$ | $\geq 32$ | VCT.RC.M | $\underline{0.10 \times V+0.86}$ |  |
|  |  |  | 0 (L) | $\leq 32$ | VCT.RC.L | $\underline{0.29 \times V+2.95}$ |  |
|  |  | Vertical closed solid (VCS) | 38 (M) | $\geq 32$ | VCS.RC.M | $\underline{0.05 \times V+1.36}$ |  |
|  |  |  | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | VCS.RC.L | $\underline{0.22 \times V+1.38}$ |  |
| Self-contained commercial refrigerators and commercial freezers with and without doors | $\frac{\text { Self-contained }}{(\mathrm{SC})}$ | Horizontal closed transparent (HCT) | 38 (M) | $\geq 32$ | HCT.RC.M | $\underline{0.06 \times V+0.37}$ | $\frac{\text { AHRI }}{\underline{1200}}$ |
|  |  |  | $\underline{0(\mathrm{~L})}$ | $\leq 32$ | HCT.RC.L | $\underline{0.08 \times \mathrm{V}+1.23}$ |  |
|  |  | $\frac{\text { Horizontal closed }}{\underline{\text { solid }(\mathrm{HCS})}}$ | 38 (M) | $\geq 32$ | HCS.RC.M | $\underline{0.05 \times V+0.91}$ |  |
|  |  |  | 0 (L) | $\leq 32$ | HCS.RC.L | $\underline{0.06 \times V+1.12}$ |  |
|  |  | $\begin{aligned} & \text { Service over } \\ & \text { counter (SOC) } \end{aligned}$ | $38(\mathrm{M})$ | $\geq 32$ | SOC.RC.M | $\underline{0.52 \times \text { TDA }+1.00}$ |  |
|  |  |  | 0 (L) | $\leq 32$ | SOC.RC.L | $1.10 \times$ TDA +2.10 |  |
| Self-contained commercial refrigerators with transparent doors for pull-down temperature applications | $\frac{\text { Self-contained }}{(\mathrm{SC})}$ | Pull-down | 38(M) | $\geq 32$ | PD.SC.M | $\underline{0.11 \times V+0.81}$ | $\frac{\text { AHRI }}{\underline{1200}}$ |
| Commercial ice cream freezers | $\underline{\text { Remote (RC) }}$ | $\frac{\text { Vertical open }}{(\text { VOP })}$ | $\underline{-15(\mathrm{I})}$ | $\leq-5^{\text {b }}$ | VOP.RC.I | $\underline{2.79 \times \mathrm{TDA}+8.70}$ | $\frac{\text { AHRI }}{1200}$ |
|  |  | $\frac{\text { Semivertical open }}{\frac{(\mathrm{SVO})}{}}$ |  |  | SVO.RC.I | $\underline{2.79 \times \text { TDA }+8.70}$ |  |
|  |  | $\frac{\text { Horizontal open }}{(\mathrm{HZO})}$ |  |  | HZO.RC.I | $\underline{0.70 \times \mathrm{TDA}+8.74}$ |  |
|  |  | Vertical closed transparent (VCT) |  |  | VCT.RC.I | $\underline{0.58 \times \mathrm{TDA}+3.05}$ |  |
|  |  | Horizontal closed transparent (HCT) |  |  | HCT.RC.I | $0.40 \times$ TDA +0.31 |  |
|  |  | $\begin{aligned} & \hline \frac{\text { Vertical closed }}{\text { Solid (VCS) }} \end{aligned}$ |  |  | VCS.RC.I | $\underline{0.25 \times V+0.63}$ |  |
|  |  | $\frac{\text { Horizontal closed }}{\text { solid (HCS) }}$ |  |  | HCS.RC.I | $\underline{0.25 \times V+0.63}$ |  |
|  |  | $\begin{gathered} \begin{array}{c} \text { Service over } \\ \text { counter }(\mathrm{SOC}) \end{array} \\ \hline \end{gathered}$ |  |  | SOC.RC.I | $1.09 \times$ TDA +0.26 |  |
|  | $\frac{\text { Self-contained }}{(\mathrm{SC})}$ | $\begin{aligned} & \frac{\text { Vertical open }}{\text { (VOP) }} \end{aligned}$ | $\underline{-15}$ (I) | $\leq-5^{\text {b }}$ | VOP.SC.I | $\times \mathrm{TDA}+$ | $\frac{\text { AHRI }}{\underline{1200}}$ |
|  |  | $\frac{\text { Semivertical open }}{(\text { SVO })}$ |  |  | SVO.SC.I | $\times$ TDA + |  |
|  |  | $\frac{\text { Horizontal open }}{(\mathrm{HZO})}$ |  |  | HZO.SC.I | $\times$ TDA + |  |
|  |  | $\begin{gathered} \text { Vertical closed } \\ \text { transparent (VCT) } \end{gathered}$ |  |  | VCT.SC.I | $\times$ TDA + |  |
|  |  | $\begin{aligned} & \text { Horizontal closed } \\ & \text { transparent (HCT) } \end{aligned}$ |  |  | HCT.SC.I | $\times$ TDA + |  |
|  |  | Vertical closed solid (VCS) |  |  | VCS.SC.I | $\times \mathrm{V}+$ |  |
|  |  | Horizontal closed solid (HCS) |  |  | HCS.SC.I | $\times \mathrm{V}+$ |  |
|  |  | $\begin{aligned} & \text { Service over } \\ & \text { counter (SOC) } \end{aligned}$ |  |  | SOC.SC.I | $\times$ TDA + |  |

For SI: 1 square foot $=0.0929 \mathrm{~m}^{2}, 1$ cubic foot $=0.02832 \mathrm{~m}^{3},{ }^{\circ} \mathrm{C}=\left({ }^{\circ} \mathrm{F}-32\right) / 1.8$.
${ }^{\text {a }}$ The meaning of the letters in this column is indicated in the columns to the left.
$\overline{\mathrm{b}} \quad$ Ice cream freezer is defined in DOE 10 C.F.R. Part 431.62 as a commercial freezer that is designed to operate at or below $-5^{\circ} \mathrm{F}$ and that the

- manufacturer designs, markets or intends for the storing, displaying, or dispensing of ice cream.
c Equipment class designations consist of a combination [(in sequential order separated by periods (AAA).(BB).(C))] of: (AAA) An equipment family code where: $\underline{V O P}=$ Vertical open

SVO $=$ Semi-vertical open
$\mathrm{HZO}=$ Horizontal open
VCT $=$ Vertical transparent doors
$\mathrm{VCS}=$ Vertical solid doors
HCT = Horizontal transparent doors
$\mathrm{HCS}=$ Horizontal solid doors
SOC = Service over counter
(BB) An operating mode code:
$\mathrm{RC}=$ Remote condensing
SC = Self-contained
(C) A rating temperature code:
$\mathrm{M}=$ Medium temperature $\left(38^{\circ} \mathrm{F}\right)$
L = Low temperature ( $0^{\circ} \mathrm{F}$ )
I = Ice cream temperature $\left(15^{\circ} \mathrm{F}\right)$
For example, "VOP.RC.M" refers to the "vertical-open, remote-condensing, medium-temperature" equipment class.
-V is the volume of the case $\left(\mathrm{ft}^{3}\right)$ as measured in AHRI 1200, Appendix C.
$\overline{\mathrm{e}}$ TDA is the total display area of the case $\left(\mathrm{ft}^{2}\right)$ as measured in AHRI 1200, Appendix D.
C410.2 Commercial refrigerators, freezers and refrigerator-freezers. Refrigeration equipment, defined in DOE 10 C.F.R. Part 431.62, shall have an energy use in $\mathrm{kWh} /$ day not greater than the values of Table C410.2 when tested and rated in accordance with AHRI Standard 1200. The energy use shall be verified through certification under an approved certification program or, where a certification program does not exist, the energy use shall be supported by data furnished by the equipment manufacturer.
C410.2.1 Refrigerated display cases. Refrigerated display cases shall comply with the following:

1. Lighting in refrigerated display cases shall be controlled by one of the following:
1.1. Time switch controls to turn off lights during nonbusiness hours. Timed overrides for display cases shall turn the lights on for up to 1 hour and shall automatically time out to turn the lights off.
1.2. Motion sensor controls on each display case section that reduce lighting power by at least 50 percent within 3 minutes after the area within the sensor range is vacated.
2. Low-temperature display cases shall incorporate temperaturebased defrost termination control with a time-limit default. The defrost cycle shall terminate first on an upper temperature limit breach and second upon a time limit breach.
3. Antisweat heater controls shall reduce the energy use of the antisweat heater as a function of the relative humidity in the air outside the door or to the condensation on the inner glass pane.
C410.3 Walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers. ( (Refrigerated warehouse eoolers, refrigerated warehouse freczers, and all walk-in coolers and walk-in freezexs including site assembled, site constructed and prefabricated units)) Site-assembled and site-constructed walk-in coolers and walk-in freezers and refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with the following:
4. Automatic door-closers shall be provided that fully close walk-in doors that have been closed to within 1 inch ( 25 mm ) of full closure.
EXCEPTION: Automatic closers are not required for doors more than 45 inches ( 1143 mm ) in width or more than 7 feet ( 2134 mm ) in height.
5. Doorways shall be provided with strip doors, curtains, springhinged doors or other method of minimizing infiltration when doors are open.
6. Walk-in coolers and refrigerated warehouse coolers shall be provided with wall, ceiling, and door insulation of not less than $R-25$ or have wall, ceiling and door assembly U-factors no greater than U-0.039. Walk-in freezers and refrigerated warehouse freezers shall be
provided with wall, ceiling and door insulation of not less than $R-32$ or have wall, ceiling and door assembly U-factors no greater than U-0.030.
EXCEPTION: Insulation is not required for glazed portions of doors or at structural members associated with the walls, ceiling or door frame.
7. The floor of walk-in coolers shall be provided with floor insulation of not less than $R-25$ or have a floor assembly U-factor no greater than $U-0.40$. The floor of walk-in freezers shall be provided with floor insulation of not less than $R-28$ or have a floor assembly $U$-factor no greater than $U-0.035$.
EXCEPTION: Insulation is not required in the floor of a walk-in cooler that is mounted directly on a slab on grade.
8. Transparent fixed window and reach-in doors for walk-in freezers and windows in walk-in freezer doors shall be provided with tri-ple-pane glass, with the interstitial spaces filled with inert gas or be provided with heat-reflective treated glass.
9. Transparent fixed window and reach-in doors for walk-in coolers and windows for walk-in coolers doors shall be provided with dou-ble-pane or triple-pane glass, with interstitial space filled with inert gas, or be provided with heat-reflective treated glass.
10. Evaporator fan motors that are less than $1 \mathrm{hp}(0.746 \mathrm{~kW})$ and less than 460 volts shall be provided with electronically commutated motors, brushless direct-current motors, or 3 -phase motors.
11. Condenser fan motors that are less than 1 hp ( 0.746 kW ) shall use electronically commutated motors, permanent split capacitor-type motors or 3-phase motors.
12. Antisweat heaters that are not provided with antisweat heater controls shall have a total door rail, glass and frame heater power draw of not greater than $7.1 \mathrm{~W} / \mathrm{ft}^{2}\left(76 \mathrm{~W} / \mathrm{m}^{2}\right)$ of door opening for walkin freezers and not greater than $3.0 \mathrm{~W} / \mathrm{ft}^{2}\left(32 \mathrm{~W} / \mathrm{m}^{2}\right)$ of door opening for walk-in coolers.
13. Where antisweat heater controls are provided, they shall be capable of reducing the energy use of the antisweat heater as a function of the relative humidity in the air outside the door or to the condensation on the inner glass pane.
14. Lights in walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall either be provided with light sources with an efficacy of not less than 40 lumens per watt, including ballast losses, or shall be provided with a device that automatically turns off the lights within 15 minutes of when the walk-in cooler or walk-in freezer space is not occupied.
((C410.2.1)) C410.3.1 Performance standards. Site-assembled and siteconstructed walk-in coolers and walk-in freezers shall meet the requirements of Tables (( $(410.2 .1 .1(1)$, c410.2.1.1(2), and (410.2.1.1(3)) C C410.3.1(1), C410.3.1(2), and C410.2.1(3).

Table ((C410.2.1.1(1))) C410.3.1(1) Walk-in Cooler and Freezer Display Doors Efficiency Requirements

|  | Class | Maximum Energy <br> Consumption <br> $(\mathbf{k W h} / \mathbf{d a y})^{\mathbf{a}}$ |
| :--- | :---: | :---: |
| Display doorr, <br> medium temperature | DD, M | $0.04 \times \mathrm{A}_{\mathrm{dd}}+0.41$ |
| Display door, <br> low temperature | DD, L | $0.15 \times \mathrm{A}_{\mathrm{dd}}+0.29$ |

a $\mathrm{A}_{d d}$ is the surface area of the display door.

Table ((C410.2.1.1(2))) C410.3.1(2) Walk-in Cooler and Freezer Nondisplay Doors Efficiency Requirements

| Class Description | Class | Maximum Energy <br> Consumption <br> $(\mathbf{k W h} / \mathbf{d a y})^{\mathbf{a}}$ |
| :--- | :---: | :---: |
| Passage door, <br> medium temperature | PD, M | $0.05 \times \mathrm{A}_{\mathrm{nd}}+1.7$ |
| Passage door, <br> low temperature | PD, L | $0.14 \times \mathrm{A}_{\mathrm{nd}}+4.8$ |
| Freight door, <br> medium temperature | FD, M | $0.04 \times \mathrm{A}_{\mathrm{nd}}+1.9$ |
| Freight door, <br> low temperature | $\mathrm{FD}, \mathrm{L}$ | $0.12 \times \mathrm{A}_{\mathrm{nd}}+5.6$ |

a $A_{n d}$ is the surface area of the display door.
Table ((C410.2.1.1(3))) C410.3.1(3) Walk-in Cooler and Freezer Refrigeration Systems Efficiency Requirements

| ((Class-Deseription | Class | Minimum Anntal Walk-in Energy Factor AWEF (Bta/hW-h) |
| :---: | :---: | :---: |
| Đedicated condensing, medium temperature, indoor system | DC.M.I | 5.64 |
| Dedicated condensing, medium temperature, indoor system, $>9,000$ Btu/h eapacity | $\begin{aligned} & \text { BC.M.I. }, \end{aligned}$ | 5.61 |
| Dedicated condensing, medium temperature, outdoor system | DC.MI | 7.60 |
| Dedicated condensing, medium temperature, eutdoor system, $>9,000$ Btu/h capacity | $\begin{aligned} & \text { DC.M.I, } \\ & >9,000 \end{aligned}$ | 7.60)) |


| Class Description | Class | $\frac{\text { Minimum Annual Walk-in }}{\text { Energy Factor AWEF }}$ (Btu/hW-h) | Test <br> Procedure |
| :---: | :---: | :---: | :---: |
| Dedicated condensing, medium temperature, indoor system | DC.M.I | 5.61 | $\underline{\text { AHRI } 1250}$ |
| Dedicated condensing, medium temperature, outdoor system | DC.M.O | 7.60 |  |
| Dedicated condensing, low temperature, indoor system, net capacity $\left(\mathrm{q}_{\text {net }}\right)<6,500 \mathrm{Btu} / \mathrm{h}$ | DC.L.I, $<6,500$ | $\underline{9.091 \times 10^{-5} \times \mathrm{q}_{\text {net }}+1.81}$ |  |
| Dedicated condensing, low temperature, indoor system, net capacity $\left(\mathrm{q}_{\text {net }}\right) \geq 6,500 \mathrm{Btu} / \mathrm{h}$ | DC.L.I, $\geq 6,500$ | 2.40 |  |
| Dedicated condensing, low temperature, outdoor system, net capacity $\left(\mathrm{q}_{\text {net }}\right)<6,500$ Btu/h | DC.L.O, <6,500 | $\underline{9.091 \times 10^{-5} \times \mathrm{q}_{\text {net }}+2.73}$ |  |
| Dedicated condensing, low temperature, outdoor system, net capacity $\left(\mathrm{q}_{\text {net }}\right) \geq 6,500$ Btu/h | DC.L.O, $\geq 6,500$ | 3.15 |  |
| Unit cooler, medium | UC.M | $\underline{9.00}$ |  |


| Class Description | Class | Minimum Annual Walk-in Energy Factor AWEF (Btu/hW-h) | Test Procedure |
| :---: | :---: | :---: | :---: |
| Unit cooler, low temperature, net capacity ( $\mathrm{q}_{\text {net }}$ ) $\leq 15,500 \mathrm{Btu} / \mathrm{h}$ | UC.L, < 15,500 | $\underline{9.091 \times 10^{-5} \times \mathrm{g}_{\text {net }}+2.73}$ |  |
| Unit cooler, low temperature, net capacity ( $\mathrm{q}_{\text {net }}$ ) $\geq 15,500 \mathrm{Btu} / \mathrm{h}$ | UC.L, $\geq 15,500$ | 4.15 |  |

((C410.2.2)) C410.4 Refrigerated ((display)) case ((s)) and walk-on display doors. ((Site-assembled or site-constructed refrigerated display cases)) Lighting in glass doors in all walk-in coolers and walkin freezers and all refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with the following:

1. ( (Iighting and glass doors in refrigerated display cases shall be controlled by one of the following:
1.1.)) Time switch controls to turn off lights during nonbusiness hours. Timed overrides for display cases shall turn the lights on for up to 1 hour and shall automatically time out to turn the lights off.
((1.2.)) 2. Motion sensor controls on each display case section that reduce lighting power by at least 50 percent within 3 minutes after the area within the sensor range is vacated.
( (Z. Low-temperature display cases shall incorporate temperaturebased defrost termination control with a time-limit default. The defrost cycle shall terminate first on an upper temperature limit breach and second upon a time limit breach.
2. Antiswat heater controls shall reduce the energy use of the antisweat heater as a function of the relative humidity in the aix outside the door or to the condensation on the inner glass pane.
C410.3)) C410.5 Refrigeration systems. Refrigerated display cases, walk-in coolers or walk-in freezers that are served by remote compressor and remote condensers not located in a condensing unit, shall comply with Sections (( (C410.4.1, c410.4.2)) C410.5.1, C410.5.2, and C403.9.2.3.
EXCEPTION: Systems where the working fluid in the refrigeration cycle goes through both subcritical and supercritical states (transcritical) or that use ammonia refrigerant are exempt.
((C410.3.1)) C410.5.1 Condensers serving refrigeration systems. Fanpowered condensers shall comply with the following:
3. The design saturated condensing temperatures for air-cooled condensers shall not exceed the design dry-bulb temperature plus $10^{\circ} \mathrm{F}$ ( $5.6^{\circ} \mathrm{C}$ ) for low-temperature refrigeration systems, and the design drybulb temperature plus $15^{\circ} \mathrm{F}\left(8^{\circ} \mathrm{C}\right)$ for medium temperature refrigeration systems where the saturated condensing temperature for blend refrigerants shall be determined using the average of liquid and vapor temperatures as converted from the condenser drain pressure.
4. Condenser fan motors that are less than $1 \mathrm{hp}(0.75 \mathrm{~kW})$ shall use electronically commutated motors, permanent split-capacitor-type motors or 3-phase motors.
5. Condenser fans for air-cooled condensers, evaporatively cooled condensers, air- or water-cooled fluid coolers or cooling towers shall reduce fan motor demand to not more than 30 percent of design wattage at 50 percent of design air volume, and incorporate one of the following continuous variable speed fan control approaches:
3.1. Refrigeration system condenser control for air-cooled condensers shall use variable setpoint control logic to reset the condensing temperature setpoint in response to ambient dry-bulb temperature.
3.2. Refrigeration system condenser control for evaporatively cooled condensers shall use variable setpoint control logic to reset the condensing temperature setpoint in response to ambient wet-bulb temperature.
6. Multiple fan condensers shall be controlled in unison.
7. The minimum condensing temperature setpoint shall be not greater than $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$.
((C410.3.2)) C410.5.2 Compressor systems. Refrigeration compressor systems shall comply with the following:
8. Compressors and multiple-compressor system suction groups shall include control systems that use floating suction pressure control logic to reset the target suction pressure temperature based on the temperature requirements of the attached refrigeration display cases or walk-ins.
EXCEPTION: Controls are not required for the following:
9. Single-compressor systems that do not have variable capacity capability.
10. Suction groups that have a design saturated suction temperature of $30^{\circ} \mathrm{F}\left(-1.1^{\circ} \mathrm{C}\right)$ or higher, suction groups that comprise the high stage of a two-stage or cascade system, or suction groups that primarily serve chillers for secondary cooling fluids.
11. Liquid subcooling shall be provided for all low-temperature compressor systems with a design cooling capacity equal to or greater than 100,000 Btu/hr (29.3 kW) with a design-saturated suction temperature of $-10^{\circ} \mathrm{F}\left(-23^{\circ} \mathrm{C}\right)$ or lower. The subcooled liquid temperature shall be controlled at a maximum temperature setpoint of $50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right)$ at the exit of the subcooler using either compressor economizer (interstage) ports or a separate compressor suction group operating at a saturated suction temperature of $18^{\circ} \mathrm{F}\left(-7.8^{\circ} \mathrm{C}\right)$ or higher.
2.1. Insulation for liquid lines with a fluid operating temperature less than $60^{\circ} \mathrm{F}\left(15.6^{\circ} \mathrm{C}\right)$ shall comply with Table C403.2.10.
12. Compressors that incorporate internal or external crankcase heaters shall provide a means to cycle the heaters off during compressor operation.
((C410.4)) C410.6 Commissioning. Refrigeration systems shall be commissioned in accordance with Section C408.
EXCEPTION: Self-contained units.
[Statutory Authority: RCW 19.27A.025, 19.27A. 045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-41000, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-41000, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-41000, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-41000, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-41000, filed 1/19/16, effective 7/1/16.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective $7 / 1 / 20)$

## WAC 51-11C-41100

## Section C411-((Solar readiness-)) Renewable

 energy.C411.1 ( (General.)) On-site renewable energy. Each new building, or addition larger than 10,000 square feet of gross conditioned floor area, shall include a renewable energy generation system consisting of not less than $0.5 \mathrm{~W} / \mathrm{ft}^{2}$ or $1.7 \mathrm{Btu} / \mathrm{ft}^{2} \mathrm{multiplied}$ by the sum of the gross conditioned floor area.
EXCEPTIONS: 1. Any building where more than 50 percent of the roof area is shaded from direct beam sunlight by natural objects or by structures that are not part of the building for more than 2500 annual hours between 8:00 a.m. and 4:00 p.m.
2. Any building where more than 80 percent of the roof area is covered by any combination of equipment other than for on-site renewable energy systems, planters, vegetated space, skylights or occupied roof deck.
3. Buildings which can document they do not have adequate roof area to install the required on-site solar and that comply with Section C411.1.1 may install a lesser amount of on-site renewables but not zero.

C411.1.1 Additional efficiency credits. Buildings which qualify for one of the exceptions in Section c411.1 to omit installation of onsite renewable energy must achieve an additional 18 efficiency package credits from Table C406.2. The additional 18 credits can be reduced based on a prorated fraction of renewable capacity that is installed on-site.

On-site renewable energy installations of lower than required capacity can be counted proportionally toward achievement of required or additional efficiency credits in Section C411.1.1 based on the capacity of renewable energy installed compared to the requirements of Section C411.1.
C411.2 On-site and off-site renewable energy accounting. Qualifying on-site and off-site renewable energy delivered or credited to the building project to comply with this code shall meet the requirements of this section. Renewable energy certificates for an on-site or offsite renewable energy system shall be retired on behalf of the building owner for a period of not less than 15 years and tracked in accordance with Section C411.2.3 and submitted to the code official as part of the permit application.
C411.2.1 Qualifying types of off-site renewable energy systems. The following are considered qualifying off-site renewable energy systems: 1. Self-generation (an off-site renewable energy system owned by the building project owner) systems complying with Section c411.2.2.
2. Community renewable energy facility systems complying with Section C411.2.2.
3. Purchase contracts complying with Section c411.2.3.
4. Each source of renewable energy delivered to or credited to the building project shall be connected to the Western Interconnection and energy or capacity multiplied by the factors in Table c411.2.1.

Table C411.2.1 Multipliers for Renewable Energy Procurement Methods

| Location | Renewable Energy Source | Renewable Energy Factor |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | In the state of Washington | Western Interconnected | In the states of Oregon or Idaho |
| On-site | On-site renewable energy system | $\underline{1}$ | NA | NA |
| Off-site | Directly owned off-site renewable energy system that begins operation after submission of the initial permit application | 0.95 | 0.75 | 0.85 |
| Off-site | Community renewable energy facility that begins operation after submission of the initial permit application | $\underline{0.95}$ | $\underline{0.75}$ | $\underline{0.85}$ |


| Location | Renewable Energy Source | Renewable Energy Factor |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | In the state of Washington | $\xrightarrow{\text { Western }}$ | In the states of Oregon or Idaho |
| Off-site | Directly owned off-site renewable energy system that begins operation before submission of the initial permit application | $\underline{0.75}$ | $\underline{0.55}$ | $\underline{0.65}$ |
| Off-site | Community renewable energy facility that begins operation before submission of the initial permit application | $\underline{0.75}$ | $\underline{0.55}$ | $\underline{0.65}$ |
| Off-site | Renewable Power Purchase Agreement (PPA) | $\underline{0.75}$ | 0.55 | $\underline{0.65}$ |

C411.2.2 Documentation requirements for off-site renewable energy systems. Off-site renewable energy delivered or credited to the building project to comply with Section $C 407.3$ item 2.2 shall be subject to a legally binding contract to procure qualifying off-site renewable energy. Qualifying off-site renewable energy shall meet the following requirements:

1. Documentation of off-site renewable energy procurement shall be submitted to the code official.
2. The purchase contract shall have a duration of not less than 15 years. The contract shall be structured to survive a partial or full transfer of ownership of the building property.
3. Records on renewable power purchased by the building owner from the off-site renewable energy generator that specifically assign the RECs to the building owner shall be retained or retired by the building owner on behalf of the entity demonstrating financial or operational control over the building seeking compliance to this standard and made available for inspection by the code official upon request.
4. Where multiple buildings in a building project are allocated energy procured by a contract subject to this section, the owner shall allocate for not less than 15 years the energy procured by the contract to the buildings in the building project. A plan on operation shall be developed which shall indicate how renewable energy produced from on-site or off-site systems that is not allocated before issuance of the certificate of occupancy will be allocated to new or existing buildings included in the building project.
C411.2.3 Renewable energy certificate (REC) tracking. For multitenant buildings where RECs are transferred to tenants, the plan for operation shall include procedures for tracking the quantity and vintage of RECs that are required to be retained and retired. The plan shall include provisions to transfer the RECs to building tenants, or to retire RECs on their behalf, in proportion to the gross conditioned and semi-heated floor area leased or rented. The plan shall include provisions to use a REC tracking system that meets the requirements of Section V.B of the Green-e Framework for Renewable Energy Certification. The plan shall describe how the building owner will procure alternative qualifying renewable energy in the case that the renewable energy producer ceases.

C411.3 Solar readiness. A solar zone shall be provided on ((nonresidential)) buildings that are 20 stories or less in height above grade plan. The solar zone shall be located on the roof of the building or on another structure elsewhere on the site. The solar zone shall be in
accordance with ((Sections C411.2 through c411.8)) this section and the International Fire Code.

EXCEPTION: A solar zone is not required ((where the selar expesure of the building's roof area is less than 75 percent of that of an unshaded area, as defined in Section C411.5, in the same location, as meastred by one off)) under the following conditions:

1. Where the solar exposure of the building's roof area is less than 75 percent of that of an unshaded area, as defined in Section C411.5, in the same location, as measured by one of the following:
1.1. Incident solar radiation expressed in $\mathrm{kWh} / \mathrm{ft}^{2}$-yr using typical meteorological year (TMY) data.
((z.)) 1.2. Annual sunlight exposure expressed in cumulative hours per year using TMY data.
((3.)) 1.3. Shadow studies indicating that the roof area is more than 25 percent in shadow, on September 21 st at 10 a.m., 11 a.m., 12 p.m., 1 p.m., and 2 p.m. solar time.
2. Buildings, building additions, changes in space conditioning or occupancy where the total floor area is equal to or less than 500 square feet.
((C411.2)) C411.3.1 Minimum area. The minimum area of the solar zone shall be determined by one of the following methods, whichever results in the smaller area:
3. 40 percent of roof area. The roof area shall be calculated as the horizontally projected gross roof area less the area covered by skylights, occupied roof decks, mechanical equipment, mechanical equipment service clearances, and planted areas.
4. 20 percent of electrical service size. The electrical service size is the rated capacity of the total of all electrical services to the building, and the required solar zone size shall be based upon 10 peak watts of photovoltaic per square foot.
EXCEPTION: Subject to the approval of the code official, buildings with extensive rooftop equipment that would make full compliance with this section impractical shall be permitted to reduce the size of the solar zone required by Section ((C411.2)) $\underline{\mathrm{C} 411.3}$ to the maximum practicable area.
((C411.3)) C411.3.2 Contiguous area. The solar zone is permitted to be comprised of separated subzones. Each subzone shall be at least 5 feet wide in the narrowest dimension.
((C411.4)) C411.3.3 Obstructions. The solar zone shall be free of pipes, vents, ducts, HVAC equipment, skylights and other obstructions, except those serving photovoltaic systems within the solar zone. The solar zone is permitted to be located above any such obstructions, provided that the racking for support of the future system is installed at the time of construction, the elevated solar zone does not shade other portions of the solar zone, and its height is permitted by the International Building Code. Photovoltaic or solar water heating systems are permitted to be installed within the solar zone.
((C411.5)) C411.3.4 Shading. The solar zone shall be set back from any existing or new object on the building or site that is located south, east or west of the solar zone a distance at least two times the object's height above the nearest point on the roof surface. Such objects include, but are not limited to, taller portions of the building itself, parapets, chimneys, antennas, signage, rooftop equipment, trees, and roof plantings. No portion of the solar zone shall be located on a roof slope greater than 2:12 that faces within 45 degrees of true north.
((C411.6)) C411.3.5 Access. Areas contiguous to the solar zone shall provide access pathways and provisions for emergency smoke ventilation as required by the International Fire Code.
((C411.7)) C411.3.6 Structural integrity. The as-designed dead load and live load for the solar zone shall be clearly marked on the record drawings and shall accommodate future photovoltaic system arrays at an assumed dead load of 4 pounds per square foot in addition to other required live and dead loads. A location for future inverters shall be designated either within or adjacent to the solar zone, with a minimum
area of 2 square feet for each 1000 square feet of solar zone area, and shall accommodate an assume dead load of 175 pounds per square foot. Where photovoltaic systems are installed in the solar zone, structural analysis shall be based upon calculated loads, not upon these assumed loads.
((C411.8)) C411.3.7 Photovoltaic interconnection. Interconnection of the future photovoltaic system shall be provided for at the main service panel, either ahead of the service disconnecting means or at the end of the bus opposite the service disconnecting means, in one of the following forms:
5. A space for the mounting of a future overcurrent device, sized to accommodate the largest standard rated overcurrent device that is less than 20 percent of the bus rating.
6. Lugs sized to accommodate conductors with an ampacity of at least 20 percent of the bus rating, to enable the mounting of an external overcurrent device for interconnection.

The electrical construction documents shall indicate all of the following:

1. Solar zone boundaries and access pathways.
2. Location for future inverters and metering equipment.
3. Route for future wiring between the photovoltaic panels and the inverter, and between the inverter and the main service panel.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-41100, filed 11/26/19, effective 7/1/20.]

## NEW SECTION

## WAC 51-11C-41200 Section C412-Compressed air systems.

C412.1 General. All new compressed air systems, and all additions or alterations of compressed air systems where the total combined horsepower (hp) of the compressor(s) is 25 hp or more, shall meet the requirements of this section. These requirements apply to the compressors, related piping systems, and related controls that provide compressed air and do not apply to any equipment or controls that use or process the compressed air.
EXCEPTION: Medical gas compressed air systems in health care facilities.
C412.2 Trim compressor and storage. The compressed air system shall be equipped with an appropriately sized trim compressor and primary storage to provide acceptable performance across the range of the system and to avoid control gaps. The compressed air system shall comply with 1 or 2 below:

1. The compressed air system shall include one or more variable speed drive (VSD) compressors. For systems with more than one compressor, the total combined capacity of the VSD compressor(s) acting as trim compressors must be at least 1.25 times the largest net capacity increment between combinations of compressors. The compressed air systems hall include primary storage of at least one gallon per actual cubic feet per minute (acfm) of the largest trim compressor; or
2. The compressed air system shall include a compressor or set of compressors with total effective trim capacity at least the size of the largest net capacity increment between combinations of compres-
sors, or the size of the smallest compressor, whichever is larger. The total effective trim capacity of single compressor systems shall cover at least the range from 70 percent to 100 percent of rated capacity. The effective trim capacity of a compressor is the size of the continuous operational range where the specific power of the compressor (kW/100 acfm) is within 15 percent of the specific power at its most efficient operating point. The total effective trim capacity of the system is the sum of the effective trim capacity of the trim compressors. The system shall include primary storage of at least 2 gallons per acfm of the largest trim compressor.
EXCEPTIONS: 1. Alterations where the total combined added or replaced compressor horsepower is less than the average per-compressor horsepower of all compressors in the system.
3. Alterations where all added or replaced compressors are variable speed drive (VSD) compressors and compressed air systems includes primary storage of at least one gallon per acfm of the largest trim compressor.
4. Compressed air systems that have been preapproved as having demonstrated that the system serves loads for which typical air demand fluctuates less than 10 percent.
5. Alterations of existing compressed air systems that include one or more centrifugal compressors.

C412.3 Controls. Compressed air systems with three or more compressors and a combined horsepower rating of more than 100 hp , shall operate with controls that are able to choose the most energy efficient combination and loading of compressors within the system based on the current compressed air demand.
C412.4 Monitoring. Compressed air systems having a combined horsepower rating equal to or greater than 100 hp shall have an energy and air demand monitoring system with the following minimum requirements:

1. Measurement of system pressure.
2. Measurement of amps or power of each compressor.
3. Measurement or determination of total airflow from compressors
in cfm.
4. Data logging of pressure, power in kW, airflow in cfm, and compressed air system specific efficiency in kW/l00 cfm at intervals of five minutes or less.
5. Maintained data storage of at least the most recent 24 months.
6. Visual trending display of each recorded point, load and specific efficiency.
C412.5 Leak testing of compressed air piping. Compressed air system piping greater than 50 adjoining feet in length shall be pressure tested after being isolated from the compressed air supply and end-uses. The piping shall be pressurized to the design pressure and test pressures shall be held for a length of time at the discretion of the local jurisdiction, but in no case for less than 30 minutes, with no perceptible drop in pressure.

If dial gauges are used for conducting this test, for pressure tests less than or equal to 100 psi ( 689 kPa ) gauges shall be incremented in units of 1 psi ( 7 kPa ) less, for pressure tests greater than 100 psi ( 689 kPa ) gauges shall be incremented in units less than 2 percent of the test pressure. Test gauges shall have a pressure range not exceeding twice the test pressure.

Piping less than or equal to 50 adjoining feet in length shall be pressurized and inspected. Connections shall be tested with a noncorrosive leak-detecting fluid or other leak-detecting methods as preapproved by the local jurisdiction.
C412.6 Pipe sizing. Compressed air piping greater than 50 adjoining feet in length shall be designed and installed to minimize frictional losses in the distribution network. These piping installations shall
meet the requirements of Section C412.6.1 and either Section C412.6.2 or C412.6.3.
C412.6.1 Service line piping. Service line piping shall have inner diameters greater than or equal to $3 / 4$ inch. Service line piping are pipes that deliver compressed air from distribution piping to end uses.

C412.6.2 Piping section average velocity. Compressor room interconnection and main header piping shall be sized so that at coincident peak flow conditions, the average velocity in the segment of pipe is no greater than $20 \mathrm{ft} / \mathrm{sec}$. Compressor room interconnection and main header piping are the pipes that deliver compressed air from the compressor outlets to the inlet to the distribution piping. Each segment of distribution and service piping shall be sized so that at coincident peak flow conditions, the average velocity in the segment of pipe is no greater than $30 \mathrm{ft} / \mathrm{sec}$. Distribution piping are pipes that deliver compressed air from the compressor room interconnection piping or main header piping to the service line piping.
C412.6.3 Piping total pressure drop. Piping shall be designed such that piping frictional pressure loss at coincident peak loads are less than 5 percent of operating pressure between the compressor and end use or end use regulator.

C412.6 Compressed air system acceptance. Before an occupancy permit is granted for a compressed air system, a certificate of acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the requirements of this code.
[]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-50000 Chapter 5 [CE]-Existing buildings.

## C501 General.

C501.1 Scope. The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing buildings and structures.
((C501.2)) C501.1.1 Existing buildings. Except as specified in this chapter, this code shall not be used to require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system lawfully in existence at the time of adoption of this code.

C501.2 Compliance. Additions, alterations, repairs, changes in space conditioning and changes of occupancy to, or relocation of, existing buildings and structures shall comply with Section C502, C503, C504, or C 505 of this code, and with all applicable provisions in the International Building Code, International Existing Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, Uniform Plumbing Code, and NFPA 70.
C501.2.1 U-factor requirements for additions and alterations. For existing building projects where an addition or building envelope alter-
ation area is combined with existing-to-remain building areas to demonstrate compliance with this code as a whole building, the U-factors applied to existing-to-remain envelope assemblies shall be in accordance with record documents.
EXCEPTION: If accurate record documents are not available, $U$-factors for the existing envelope assemblies may be in accordance with the edition of the Washington State Energy Code that was in effect at the time the building was permitted, or as approved by the code official.

C501.2.2 Calculations of mechanical heating and cooling loads for alterations. For the installation of new or replacement mechanical equipment that serves existing building areas, design loads associated with heating, cooling and ventilation of the existing building areas served shall be determined in accordance with Section c403.1.2. $R$-values and U-factors used to determine existing thermal envelope performance for the purpose of calculating design loads shall be in accordance with record documents or existing conditions.
EXCEPTION: If accurate record documents are not available, $R$-values and $U$-factors used to determine existing building thermal envelope performance may be in accordance with the edition of the Washington State Energy Code that was in effect at the time the building was permitted, or as approved by the code official.

C501.3 Maintenance. Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices and systems which are required by this code shall be maintained in conformance with the code edition under which installed. The owner or the owner's authorized agent shall be responsible for the maintenance of buildings and structures. The requirements of this chapter shall not provide the basis for removal or abrogation of energy conservation, fire protection and safety systems and devices in existing structures.
((C501.4 Compliance. Altexations, repairs, additions and changes of oceupancy to, or relocation of, existing buildings and structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in this code and in the International Building code, International Existing Building code, International Fire code, International Fuel Gas code, International Mechanical Code, Uniform Plumbing Code, and NPPA 70.
C501.4.1 U-factor requirements for additions and alterations. For existing building projects where an addition or building envelope alter= ation area is combined with existing-to-remain building areas to demenstrate compliance with this code as a whole building, the U-factors applied to existing-to-remain envelope assemblies shall be in accordance with record documents.
EXCEPTION: If accurate record documents are not available, $U$-factors for the existing envelope assemblies may be in accordance with the edition of the Washington State Energy Code that was in effect at the time the building was permitted, or as approved by the code official.

C501.4.2 Caleulations of mechanical heating and cooling loads for alterations. For the installation of new or replacement mechanical equipment that serves existing building areas, design loads associated with heating, cooling and ventilation of the existing building areas served shall be determined in accordance with Section c403.1.2.

R-values and U-factors used to determine existing thermal envelope performance for the purpose of calculating design loads shall be in accordance with record documents or existing conditions.
EXCEPTION: If aceurate record documents are not available, $R$ - valtues and $U$ factors used to determine existing building thermal envelope performanee may be in aceordanee with the edition of the Washington State Energy Code that was in effee the the the building was permitted, or as approved by the code official.

C501.5)) C501.4 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be
permitted for repairs, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.
((C501.6)) C501.5 Historic buildings. ((The building official may modify the specific requirements of this code for historic buildings and require alternate provisions which will result in a reasonable degree of energy efficiency. This modification may be allowed for those buildings or structures that are listed in the state or national register of historic places; designated as a historic property under loeal or state designation law or survey; certified as a contributing resource with a national register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the national or state registers of historic places either individually or as a contributing building to a historic district by the state historic preservation officer or the keeper of the national register of historic places.) ) Provisions of this code relating to the construction, repair, alteration, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings provided that a report has been submitted to the code official and signed by a registered design professional, or a representative of the state historic preservation office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade or destroy the historic form, fabric or function of the building.
((C501.7)) C501.6 Commissioning. Existing building systems shall be commissioned in accordance with Section C408. For the purposes of meeting the commissioning thresholds in Section C408.1, only the new and altered system capacities are considered when determining whether the project is exempt from some portion of the commissioning process.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-50000, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-50000, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-50000, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A. 025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-50000, filed 2/1/13, effective 7/1/13.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-50200 Section C502—Additions.

C502.1 General. Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code. Additions shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with
this code if the addition alone complies or if the existing building and addition comply with this code as a single building. ( (Additions shall comply with Sections $\mathrm{C} 402, \mathrm{C} 403, \mathrm{C} 404, \mathrm{C} 405, \mathrm{C} 406, \mathrm{C} 409.5, \mathrm{C} 410$ and C 502.2 .

C502.2 Prescriptive compliance. Additions shall comply with sections 6502.2.1 through C502.2.6.2.

C502.2.1 Vertical fenestration. Additions with vertical fenestration that results in a total building vertical fencstration area less than or equal to that specified in Section C402.4.1 shall comply with Section C402.4. Additions with vertical fencstration that results in a total building vertical fencstration area greater than that specified in Section C402.4.1 shall comply with one of the following:

1. Component performance alternative with target area adjustment per section C402.1.5 for the addition area of the building only. Z. Existing building and addition area are combined to demonstrate compliance with the component performance alternative for the whole building. 3. Total building performance in accordance with section 6407 fox the addition area of the building only. 4. Total building performance for the whole building.

C502.2.2 Skylight area. Additions with skylights that result in a total building skylight area less than or equal to that specified in section C 402.4 .1 shall comply with section C402.4. Additions with skylights that result in a total building skylight area greater than that specified in section 6402.4 .1 shall comply with one of the following: 1. Vertical fenestration alternate per section C402.4.1.1 or C402.4.1.3 for the addition area of the building only. Z. Component performance alternative with target area adjustment per section $C 402.1 .5$ for the addition area of the building only. 3. Existing building and addition area are combined to demonstrate compliance with the component performance alternative for the whole building. 4. Total building performance in accordance with section 6407 for the addition area of the building only.
5. Total building performance for the whole building.

C502.2.3 Building mechanical systems. New mechanical systems and equipment serving the building heating, cooling or ventilation needs, that are part of the addition, shall comply with section c403.
C502.2.4 Service water heating systems. New service water-heating equipment, controls and service water heating piping shall comply with Section C404.

C502.2.5 Pools and permanent spas. New pools and permanent spas shall eomply with section C404.11.

C502.2.6 Lighting and power systems. New lighting systems that are in= stalled as part of the addition shall comply with section 6405 .

C502.2.6.1 Interior lighting power. The total interior lighting power for the addition shall comply with section c405.4.2 for the addition alone, or the existing building and the addition shall comply as a single building.
C502.2.6.2 Exterior lighting power. The total exterior lighting power for the addition shall comply with section 6405.5 .1 for the addition
alone, or the existing building and the addition shall comply as a single building.
C502.2.7 Refrigeration systems. New refrigerated spaces and refrigexation equipment shall comply with Section c410.)) This allowance applies to prescriptive compliance in accordance with Section C502.2 or total building performance in accordance with Section c407.

C502.1.1 Additional energy efficiency credits. Additions shall comply with Section C406.1. The addition shall be deemed to comply with this section if the addition alone complies or if the addition area is combined with existing building areas to demonstrate compliance with an additional efficiency credit.
C502.1.2 Renewable energy. Additions shall comply with Section C411. The addition shall be deemed to comply with this section if the addition alone complies or if the addition area is combined with existing building areas to demonstrate compliance with the requirements for onsite renewable energy or solar readiness, as applicable.
C502.2 Prescriptive compliance. Additions shall comply with Sections C502.3 through C502.8.

C502.2.2 Skylights. Additions with skylights shall comply with the following:

1. Where an addition with skylight area results in a total building skylight area less than or equal to the maximum allowed by Section C402.4.1, the addition shall comply with Section c402.4.
2. Where an addition with skylight area results in a total building skylight area greater than the maximum allowed by Section c402.4.1 (regardless of the ratio prior to the addition), the addition shall comply with one of the following:
2.1. Component performance alternative with target area adjustment per Section C402.1.5 for the addition area of the building only.
2.2. Existing building and addition area are combined to demonstrate compliance with the component performance alternative for the whole building. U-factors applied to existing envelope assemblies in the UA calculation shall comply with Section C501.2.1.
2.3. Total building performance in accordance with Section C407 for the addition area of the building only.
2.4. Total building performance for the whole building.

C502.2.4 Building mechanical systems. New mechanical systems and equipment serving the building heating, cooling or ventilation needs, that are installed as a part of the addition shall comply with Sections C403, C408.2, C409.5, and C501.6.

C502.2.5 Service water heating systems. New service water-heating systems and equipment that are installed as a part of the addition shall comply with Sections C404, C408.3, C409.5, and C501.6.
C502.2.6 Pools and permanent spas. Systems and equipment serving new pools and permanent spas that are installed as a part of the addition shall comply with Sections C404.11, C408.3, C409.5, and C501.6.
C502.2.7 Electrical power and lighting systems and motors. New electrical power and lighting systems and motors that are installed as a part of the addition shall comply with Sections C405, C408.4, C409.5, and C501.6.
C502.2.7.1 Interior lighting power. The total interior lighting power for the addition shall comply with Section C405.4.2 for the addition
alone, or the existing building and the addition shall comply as a single building.
C502.2.7.2 Exterior lighting power. The total exterior lighting power for the addition shall comply with Section C405.5.2 for the addition alone, or the existing building and the addition shall comply as a single building.

C502.2.8 Refrigeration systems. New refrigerated spaces and refrigeration systems and equipment that are installed as a part of the addition shall comply with Sections C408.7, C409.5, C410, and C501.6.

C502.3 Building envelope. Additions shall comply with Sections C402.1 through C402.5, C502.3.1, and C502.3.2.
C502.3.1 Vertical fenestration. Additions with vertical fenestration shall comply with the following:

1. Where an addition with vertical fenestration area results in a total building vertical fenestration area less than or equal to the maximum allowed by Section c402.4.1, the addition shall comply with Section C402.4.
2. Where an addition with vertical fenestration area results in a total building vertical fenestration area greater than the maximum allowed by Section C402.4.1 (regardless of the ratio prior to the addition), the addition shall comply with one of the following:
2.1. Component performance alternative with target area adjustment per Section c402.1.5 for the addition area of the building only.
2.2. Existing building and addition area are combined to demonstrate compliance with the component performance alternative for the whole building. U-factors applied to existing envelope assemblies in the UA calculation shall comply with Section C501.2.1.
2.3. Total building performance in accordance with Section C 407 for the addition area of the building only.
2.4. Total building performance for the whole building.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-50200, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-50200, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

## WAC 51-11C-50300 Section C503-Alterations.

C503.1 General. Alterations to any building or structure shall comply with the requirements of Section C503 and the code for new construction. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall be such that the existing building or structure is no less conforming with the provisions of this code than the existing building or structure was prior to the alteration. The additional energy efficiency credit requirements in Section $C 406.1$ and the renewable energy requirements in Section $C 411$ do not apply to alterations.

EXCEPTION: The following alterations need not comply with the requirements for new construction provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Surface applied window film installed on existing single pane fenestration assemblies to reduce solar heat gain provided the code does not require the glazing fenestration to be replaced.
3. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are insulated to full depth with insulation having a minimum nominal value of R-3.0 per inch installed per Section C402.
4. Construction where the existing roof, wall or floor cavity is not exposed.
5. Roof recover.
6. Air barriers shall not be required for roof recover and roof replacement where the alterations or renovations to the building do not include alterations, renovations or repairs to the remainder of the building envelope.
7. Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided however that an existing vestibule that separates a conditioned space from the exterior shall not be removed.
C503.2 ((Change in space conditioning)) Reserved. ((Any low energy space in accordance with Section C402.1.1.1 that is altered to become conditioned space or semi-heated space shall be brought into full com= pliance with this code. Any semi-heated space in accordance with Section C402.1.1.2 that is altered to become conditioned space shall be brought into full compliance with this code.

For buildings with more than one space conditioning category, the intcrior partition walls, ceilings, floors and fencstration that separate space conditioning arcas shall comply with the thermal envelope requirements per the area with the highest level of space conditioning.

A change in space conditioning project shall be deemed to comply with this code if the project area alone complies or if the existing building and the project area combined comply with this code as a whole building.
EXCEPTION: Butldings or spaces that were permitted prior to the 2009 Washington State Energy Code, or were originally permitted as uneonditioned, may comply with this section as follows:

1. Where the component performance alternative in Section C 402.1 .5 is used to demonstrate compliance with this Section, the Proposed Total UA is allowed to be up to 110 percent of the Allowable Total UA. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.
2. Where total building performance in accordance with Section C407 is used to demonstrate compliance with this Section, the total annual carbon emissions from energy consumption of the proposed design is allowed to be up to 110 percent of the annual carbon emissions from energy consumption allowed by Section C407.3. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.))
C503.3 Building envelope. New building envelope assemblies that are part of the alteration shall comply with Sections C402.1 through C402.5 ((zs applicable)) and Sections C503.3.1 through C503.3.3.
EXCEPTION: Air leakage testing is not required for alterations and repairs, unless the project includes a change in space conditioning according to Section C503.2 or a change of occupancy or use according to Section C505.1.
C503.3.1 Roof replacement. Roof replacements shall comply with Table C402.1.3 or C402.1.4 where the existing roof assembly is part of the building thermal envelope and contains no insulation or the insulation is located entirely above the roof deck. In no case shall the $R$-value of the roof insulation be reduced or the $U$-factor of the roof assembly be increased as part of the roof replacement.
C503.3.2 Vertical fenestration. Alterations that include the addition of new vertical fenestration area shall comply with the following:
3. Where the addition of new vertical fenestration ((that)) area results in a total building vertical fenestration area less than or equal to ((that specified in)) the maximum allowed by Section C402.4.1, the alteration shall comply with Section C402.4.
4. Where the addition of new vertical fenestration ((that)) area result in a total building vertical fenestration area greater than ((specified in)) the maximum allowed by Section C402.4.1 (regardless of the ratio prior to the addition), the alteration shall comply with one of the following:
((1.)) 2.1. Vertical fenestration alternate in accordance with Section C402.1.3 for the new vertical fenestration added.
( $\left(Z_{-}\right)$) 2.2. Vertical fenestration alternate in accordance with Section C402.4.1.1 for the area adjacent to the new vertical fenestration added.
((3.)) 2.3. Existing building and alteration areas are combined to demonstrate compliance with the component performance alternate in accordance with Section C402.1.5 for the whole building. U-factors applied to existing envelope assemblies in the UA calculation shall comply with Section C501.2.1. The Proposed Total UA is allowed to be up to 110 percent of the Allowed Total UA.
((4.)) 2.4. Total building performance in accordance with Section C407 for the whole building. The total annual carbon emissions from energy consumption of the proposed design is allowed to be up to 110 percent of the annual carbon emissions from energy consumption allowed in accordance with Section C407.3.
EXCEPTION: ((Additional envelope upgrades are included in the project so the addition of vertical fenestration does not cause a reduction in overall building energy efficieney, as approved by the official.)) Where approved by the code official, additional fenestration is permitted where sufficient envelope upgrades beyond those required by other sections of this code are included in the project so that the addition of new vertical fenestration does not cause an increase in the overall energy use of the building.

C503.3.2.1 ((Application to)) Replacement fenestration products. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table C402.4.
EXCEPTION: An area-weighted average of the $U$-factor of replacement fenestration products being installed in the building for each fenestration product category listed in Table C402.4 shall be permitted to satisfy the $U$-factor requirements for each fenestration product category listed in Table C402.4. Individual fenestration products from different product categories listed in Table C402.4 shall not be combined in calculating the area-weighted average $U$-factor.
C503.3.3 Skylights ((area)). Alterations that include the addition of new skylight area shall comply with the following:

1. Where the addition of new skylight((s that)) area results in a total building skylight area less than or equal to ((that specified in)) the maximum allowed by Section C402.4.1, the alteration shall comply with Section C402.4.
2. Where the addition of new skylight((s that)) area results in a total building skylight area greater than ((that specified in)) the maximum allowed by Section C 402.4 .1 (regardless of the ratio prior to the addition), the alteration shall comply with one of the following:
((1.)) 2.1. Existing building and alteration area are combined to demonstrate compliance with the component performance alternative with target area adjustment in accordance with Section C402.1.5 for the whole building. U-factors applied to existing envelope assemblies in the UA calculation shall comply with Section C501.2.1. The Proposed Total UA is allowed to be up to 110 percent of the Allowed Total UA.
((z.)) 2.2. Total building performance in accordance with Section C407 for the whole building. The annual carbon emissions from energy consumption of the proposed design is allowed to be up to 110 percent of the annual carbon emissions from energy consumption allowed in accordance with Section C407.3.
EXCEPTION: Additional envelope upgrades are included in the project so the addition of new skylights does not cause a reduction in overall building energy efficiency, as approved by the code official.

C503.4 Building mechanical systems. ((Those parts of)) Components of existing mechanical systems ((which)) that are altered or replaced shall comply with Section C403, unless specifically exempted in this section, and Sections C408.2, C409.5, C501.2.2, C501.6, and C503.4.2 through C503.4.5. Additions or alterations shall not be made to an existing mechanical system that will cause the existing ((mechanical)) system to become out of compliance.

EXCEPTIONS: 1. Existing mechanical systems ((which are altered or parts of the systems are replaced are not required to be modified to eomply with Section C403.3.5 as long as)) are not required to be modified to comply with Section C403.3.5 where mechanical cooling capacity is not added to a system that did not have cooling capacity prior to the alteration.
2. Compliance with Section C403.1.4 is not required where the alteration does not include replacement of a heating appliance. 3. Alternate mechanical system designs that are not in full compliance with this code may be approved when the code official determines that existing building constraints including, but not limited to, available mechanical space, limitations of the existing structure, or proximity to adjacent air intakes or exhausts makes full compliance impractical. Alternate designs shall include additional energy saving strategies not prescriptively required by this code for the scope of the project including, but not limited to, demand control ventilation, energy recovery, or increased mechanical cooling or heating equipment efficiency above that required by Tables C403.3.2(1) through C403.3.2(((12))) (16).
((3.)) 4. Only those components of existing HVAC systems that are altered or replaced shall be required to ((meet the requirements of)) comply with Section C403.8.1((, Allowable fan motor horsepower. Components replaced or altered shall not exceed the fan power limitation pressure drop adjustment values in Table C403.8.1(2) at design conditions)). Section C403.8.1 does not require the removal and replacement of existing system ductwork. Additional fan power allowances are available when determining the fan power budget (Fan $\mathrm{kW}_{\text {hudget }}$ ) as specified in Table C503.4. These values can be added to the fan power allowance values in Tables C403.8.1.1(1) and C403.8.1.1(2) when calculating a new Fan $\mathrm{kW}_{\text {budget }}$ for the fan system being altered. The additional fan power allowance is not applicable to alterations that add or change passive components which do not increase the fan system static pressure.

Table C503.4
Additional Fan Power Allowances (W/CFM)

| Airflow | $\begin{aligned} & \frac{\text { Multi-Zone }}{\text { VAV }} \\ & \frac{\text { Systems }}{}{ }^{\mathbf{S 5 , 0 0 0 \mathrm { cfm }}} \end{aligned}$ | $\begin{aligned} & \text { Multi-Zone } \\ & \frac{\text { VAV }}{} \\ & \frac{\text { Systems }}{} \\ & >5,000 \mathrm{and} \\ & \leq 10,000 \mathrm{cfm} \end{aligned}$ | $\begin{array}{r} \text { Multi-Zone } \\ \frac{\text { VAV }}{} \\ \frac{\text { Systems }}{10,000 \mathrm{cfm}} \end{array}$ | $\frac{\begin{array}{l}\text { All Other } \\ \text { Fan Systems } \\ \leq 5,000 \mathrm{cfm}\end{array}}{\underline{0}}$ | $\begin{aligned} & \text { All Other } \\ & \text { Fan Systems } \\ & >5,000 \text { and } \\ & \leq 10,000 \mathrm{cfm}\end{aligned}$ | $\begin{aligned} & \text { All Other } \\ & \text { Fan Systems } \\ & \geq 10,000 \mathrm{cfm} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Supply Fan System additional allowance | $\underline{0.135}$ | 0.114 | $\underline{0.105}$ | $\underline{0.139}$ | $\underline{0.120}$ | $\underline{0.107}$ |
| Supply Fan System additional allowance in unit with adapter curb | $\underline{0.033}$ | $\underline{0.033}$ | 0.043 | 0.000 | 0.000 | 0.000 |
|  | $\underline{0.070}$ | $\underline{0.061}$ | $\underline{0.054}$ | $\underline{0.070}$ | $\underline{0.062}$ | $\underline{0.055}$ |
| Exhaust/ Relief/ Return/ Transfer Fan System additional allowance with adapter curb | 0.016 | 0.017 | 0.220 | $\underline{0.000}$ | $\underline{0.000}$ | $\underline{0.000}$ |

a See definition of FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV).
C503.4.1 New building mechanical systems. All new mechanical systems and equipment in existing buildings( (, including packaged unitary equipment and packaged split systems,) ) shall comply with Sections C403, C408.2, C409.5, and C501.6.
C503.4.2 Addition of cooling capacity. Where mechanical cooling is added to a space that was not previously cooled, the mechanical system shall comply with either Section C403.3.5 or C403.5.
EXCEPTIONS: 1. Qualifying small equipment: Economizers are not required for cooling units and split systems serving one zone with a total cooling capacity rated in accordance with Section C403.3.2 of less than $33,000 \mathrm{Btu} / \mathrm{h}$ (hereafter referred to as qualifying small systems) provided that these are high-efficiency cooling equipment with SEER and EER values more than 15 percent higher than minimum efficiencies listed in Tables C403.3.2 (1) ((through (3))), (2), (4), (8), (9), and (14), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify for this exception. The total capacity of all qualifying small equipment without economizers shall not exceed $72,000 \mathrm{Btu} / \mathrm{h}$ per building, or 5 percent of the building total air economizer capacity, whichever is greater.
Notes and exclusions for Exception 1:
1.1. The portion of the equipment serving Group R occupancies is not included in determining the total capacity of all units without economizers in a building.
1.2. Redundant units are not counted in the capacity limitations.
1.3. This exception shall not be used for the initial tenant improvement of a shell-and-core building or space, or for Total Building Performance in accordance with Section C407.
1.4. This exception shall not be used for unitary cooling equipment installed outdoors or in a mechanical room adjacent to the outdoors. 2. Chilled water terminal units connected to systems with chilled water generation equipment with IPLV values more than 25 percent higher than minimum part load equipment efficiencies listed in Table C403.3.2(( $(7))$ ) (3), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify for this exception. The total capacity of all systems without economizers shall not exceed $480,000 \mathrm{Btu} / \mathrm{h}$ per building, or 20 percent of the building total air economizer capacity, whichever is greater.
Notes and exclusions for Exception 2:
2.1. The portion of the equipment serving Group R occupancy is not included in determining the total capacity of all units without economizers in a building.
2.2. This exception shall not be used for the initial tenant improvement of a shell-and-core building or space, or for total building performance in accordance with Section C407.

C503.4.3 Alterations or replacement of existing cooling systems. Alterations to, or replacement of, existing mechanical cooling systems shall not decrease the building total economizer capacity unless the system complies with either Section C403.3.5 or C403.5. System alterations or replacement shall comply with Table (( 6503.4 )) C503.4.3 when either the individual cooling unit capacity ((and)) or the building total capacity of all cooling equipment without economizer ((d⿴)) does not comply with ((section c403.3.5 ox)) the exceptions in Section C403.5. Equipment replacements that include space heating shall also comply with Section C503.4.3.
( (C503.4.4 Controls for cooling equipment replacement. When space eooling equipment is replaced, controls shall comply with all requirements under section C403.3.5 and related subsections, and Section C403.5.1 for integrated economizer control.
C503.4.5 Cooling equipment relocation. Fxisting equipment currently in use may be relocated within the same floor or same tenant space if removed and reinstalled within the same permit.))

Table ((C503.4)) C503.4.3
Economizer Compliance Options for Mechanical Alterations

|  | Option A | Option B (alternate to A) | $\begin{gathered} \text { Option C } \\ \text { (alternate to A) } \end{gathered}$ | $\begin{gathered} \text { Option D } \\ \text { (alternate to A) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Unit Type | Any alteration with new or replacement equipment | Replacement unit of the same type with the same or smaller output capacity | Replacement unit of the same type with a larger output capacity | New equipment added to existing system or replacement unit of a different type |
| 1. Packaged Units | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ |
| 2. Split Systems | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | For units $\leq 60,000$ Btuh, comply with two of two measures: <br> 1. Efficiency: $+10 \%{ }^{\text {e }}$ <br> 2. Economizer: shall not decrease existing economizer capability | For units $\leq 60,000$ Btuh replacing unit installed prior to 1991 comply with at least one of two measures: <br> 1. Efficiency: $+10 \%{ }^{\mathrm{e}}$ <br> 2. Economizer: $50 \%$ f | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ |
|  |  | For all other capacities: Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | For all other capacities: Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ |  |
| 3. Water Source Heat Pump | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | For units $\leq 72,000$ Btuh, comply with at least two of three measures: <br> 1. Efficiency: $+10 \%{ }^{\text {e }}$ <br> 2. Flow control valve ${ }^{g}$ <br> 3. Economizer: $50 \%$ f | For units $\leq 72,000$ Btuh, comply with at least three of three measures: <br> 1. Efficiency: $+10 \%{ }^{e}$ <br> 2. Flow control valve ${ }^{g}$ <br> 3. Economizer: $50 \%$ f (except for certain pre-1991 systems ${ }^{q}$ ) | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b <br> (except for certain pre-1991 <br> systems ${ }^{q}$ ) |
|  |  | For all other capacities: Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | For all other capacities: Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5b |  |
| 4. Water Economizer using Air-Cooled Heat Rejection Equipment (Dry Cooler) | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | Efficiency: + 5\% ${ }^{\text {d }}$ Economizer: shall not decrease existing economizer capacity | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b |
| 5. Air-Handling Unit (including fan coil units) where the system has an aircooled chiller | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | Economizer: shall not decrease existing economizer capacity | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ <br> (except for certain pre-1991 <br> systems ${ }^{\text {q }}$ ) | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ <br> (except for certain pre-1991 <br> systems ${ }^{q}$ ) |


|  | Option A | $\begin{gathered} \text { Option B } \\ \text { (alternate to A) } \end{gathered}$ | $\begin{gathered} \text { Option C } \\ \text { (alternate to A) } \end{gathered}$ | $\begin{gathered} \text { Option D } \\ \text { (alternate to A) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Unit Type | Any alteration with new or replacement equipment | Replacement unit of the same type with the same or smaller output capacity | Replacement unit of the same type with a larger output capacity | New equipment added to existing system or replacement unit of a different type |
| 6. Air-Handling Unit (including fan coil units) and Watercooled Process Equipment, where the system has a watercooled chiller ${ }^{10}$ | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5b | Economizer: shall not decrease existing economizer capacity | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ (except for certain pre-1991 systems ${ }^{q}$ and certain 1991-2016 systems ${ }^{\text {i }}$ ) | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ (except for certain pre-1991 systems ${ }^{q}$ and certain 1991-2016 systems ${ }^{\text {i }}$ ) |
| 7. Cooling Tower | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5 ${ }^{\text {b }}$ | No requirements | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5 ${ }^{\text {b }}$ | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5 ${ }^{\text {b }}$ |
| 8. Air-Cooled Chiller | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5 ${ }^{\text {b }}$ | Efficiency: $+10 \%{ }^{\mathrm{k}}$ Economizer: shall not decrease existing economizer capacity | Efficiency: <br> Comply with two of two measures: <br> 1. $+10 \%{ }^{\mathrm{k}, \mathrm{l}}$ and <br> 2. Multistage compressor(s) <br> Economizer: shall not decrease existing economizer capacity | Efficiency: min. ${ }^{\text {a }}$ Economizer: C403.5b |
| 9. Water-Cooled Chiller | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ | Efficiency: <br> Comply with at least one of two measures: <br> 1. Part load IPLV $+15 \%^{n}$ or <br> 2. Plate frame heat exchanger ${ }^{\circ}$ <br> Economizer: shall not decrease existing economizer capacity | Efficiency: Comply with two of two measures: <br> 1. Part load IPLV $+15 \%{ }^{n}$ <br> 2. Plate-frame heat exchanger ${ }^{\circ}$ Economizer: shall not decrease existing economizer capacity | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b |
| 10. Package Terminal Air Conditioner | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 |  |  | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5 ${ }^{\text {b }}$ |
| 11. Package Terminal Heat Pump | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b | $\begin{aligned} & \text { Cooling efficiency: }+5 \% \mathrm{~d}^{\mathrm{d}} \\ & \text { Heating efficiency: }+10 \% \mathrm{e}^{\mathrm{e}} \\ & \hline \text { Shall not decrease existing } \\ & \text { economizer capacity } \end{aligned}$ | $\begin{aligned} & \hline \text { Cooling efficiency: }+5 \% \mathrm{~d}^{\mathrm{d}} \\ & \text { Heating efficiency: }+10 \mathrm{e}^{\mathrm{e}} \\ & \text { Shall not decrease existing } \\ & \text { economizer capacity } \end{aligned}$ | Efficiency: min. ${ }^{\text {a }}$ <br> Economizer: C403.5b |

a Minimum equipment efficiency shall comply with Section C403.3.2 and ((Fables C403.3.2(1) through C403.3.3.2(12))) the tables in Section C403.3.2.
b All separate new equipment and replacement equipment shall have air economizer complying with Section C403.5 including both the individual unit size limits and the total building capacity limits on units without economizer. It is acceptable to comply using one of the exceptions to Section C403.5.
c Reserved.
d Equipment shall have a capacity-weighted average cooling system efficiency that is $5 \%$ better than the requirements in ((Fables C403.3.2(1) and E403.3.2(2))) the tables in Section C403.3.2 (1.05 $\times$ values in ((Fables C403.3.2(1) and C403.3.2(2))) the tables).
e Equipment shall have a capacity-weighted average cooling system efficiency that is $10 \%$ better than the requirements in ((Fables C403.3.2(1)A and C403.3.2(2))) the tables in Section C403.3.2 (1.10 $\times$ values in ((Tables C403.3.2(1) A and C403.3.2(2))) the tables).
f Minimum of $50 \%$ air economizer that is ducted in a fully enclosed path directly to every heat pump unit in each zone, except that ducts may terminate within 12 inches of the intake to an HVAC unit provided that they are physically fastened so that the outside air duct is directed into the unit intake. If this is an increase in the amount of outside air supplied to this unit, the outside air supply system shall be configured to provide this additional outside air and be equipped with economizer control.
g Water-source heat pump systems shall have a flow control valve to eliminate flow through the heat pumps that are not in operation and variable speed pumping control complying with Section C403.4.3 for that heat pump.

- When the total capacity of all units with flow control valves exceeds $15 \%$ of the total system capacity, a variable frequency drive shall be installed on the main loop pump.
- As an alternate to this requirement, the capacity-weighted average cooling system efficiency shall be $5 \%$ better than the requirements in footnote ${ }^{\mathrm{e}}$ for water-source heat pumps (i.e., a minimum of $15 \%$ greater than the requirements in Table C403.3.2(((2))) (14)).
h Water economizer equipment shall have a capacity-weighted average cooling system efficiency that is $10 \%$ better than the requirements in Tables $\mathrm{C} 403.3 .2(((8)))(7), \mathrm{C} 403.3 .2(10)$, and $\mathrm{C} 403.3 .2(((9)))(16)(1.10 \times$ values in Tables C403.3.2(((8))))(7), C403.3.2(10), and C403.3.2(((9))))(16)).
i Air economizer is not required for systems installed with water economizer plate and frame heat exchanger complying with previous codes between 1991 and June 2016, provided that the total fan coil load does not exceed the existing or added capacity of the heat exchangers.
j For water-cooled process equipment where the manufacturers specifications require colder temperatures than available with waterside economizer, that portion of the load is exempt from the economizer requirements.
k The air-cooled chiller shall have an IPLV efficiency that is a minimum of $10 \%$ greater than the IPLV requirements in EER in Table C403.3.2(( $(7)))(3)(1.10 \times$ IPLV values in EER in Table C403.3.2(( $(7)))(3))$.
1 The air-cooled chiller shall be multistage with a minimum of two compressors.
$\mathrm{m} \quad$ The water-cooled chiller shall have full load and part load IPLV efficiency that is a minimum of $5 \%$ greater than the IPLV requirements in Table ((C403.2.3(7))) C403.3.2(3).
n The water-cooled chiller shall have an IPLV value that is a minimum of $15 \%$ lower than the IPLV requirements in Table ((C403.2.3(7))) C403.3.2(3) (1.15 $\times$ IPLV values in Table C403.3.2(( 7 (7)) )(3)). Water-cooled centrifugal chillers designed for nonstandard conditions shall have an NPLV value that is at least $15 \%$ lower than the adjusted maximum NPLV rating in kW per ton defined in Section ((C403.3.2.1)) C403.3.2.3 ( $1.15 \times$ NPLV).
o Economizer cooling shall be provided by adding a plate-frame heat exchanger on the waterside with a capacity that is a minimum of $20 \%$ of the chiller capacity at standard AHRI rating conditions.
p Reserved.
q Systems installed prior to 1991 without fully utilized capacity are allowed to comply with Option B, provided that the individual unit cooling capacity does not exceed 90,000 Btuh.

C503.4.4 Controls for cooling equipment replacement. When space cooling equipment is replaced, controls shall comply with all requirements under Section C403.3.5 and related subsections, and Section C403.5.1 for integrated economizer control.
C503.4.5 Mechanical equipment relocation. Existing equipment currently in use may be relocated within the same floor or same tenant space if removed and reinstalled within the same permit.

C503.4.6 Addition or replacement of heating appliances. Where a mechanical heating appliance is added or replaced, the added or replaced appliance shall comply with Section C403.1.4 or with an alternate compliance option in Table C503.4.6.
EXCEPTIONS: $\quad$ 1. Terminal unit equipment including, but not limited to, hydronic VAV boxes, electric resistance VAV boxes, electric duct heaters, water source heat pumps, fan coils, or VRF indoor units that are served by an unaltered central system.
2. Air handling equipment with hydronic coils.
3. Air handling equipment designed for 100 percent outdoor air that is not subject to the requirements in Section C403.3.5 or that qualifies for an exception to Section C403.3.5.
4. Replacement of existing oil-fired boilers.
5. Replacement of existing steam boilers with steam distribution to terminal units and the associated boiler feed equipment.
6. Where compliance with Section C403.1.4 would trigger an unplanned utility electrical service upgrade based on the NEC 220.87 method for determining existing loads.
7. Like-for-like replacement of a single heating appliance is permitted where that appliance is failing, requires immediate replacement, and where no other HVAC work is planned.

Table C503.4.6
Compliance Options for Mechanical Heating Equipment Alterations

|  | Proposed Heating Equipment Type ${ }^{\text {a }}$ | Heating Efficiency Table Reference | Alternate Compliance Options to Section C403.1.4 |
| :---: | :---: | :---: | :---: |
| 1 | Air-Cooled Unitary Heat Pumps | Table C403.3.2(2) | 1. Compliance with C403.1.4, except heat pump rated capacity in accordance with Section C403.1.4 exception 5 d is permitted to be sized equal to the supplemental internal resistance heating capacity in Climate Zone 4 or $5^{c}$ 2. Compliance with C403.1.4, except electric resistance mixed air preheat is permissible ${ }^{\mathrm{c}}$ |
| $\underline{2}$ | Packaged terminal, single-package vertical, and room air-conditioner heat pumps | Table C403.3.2(4) | 1. Compliance with C403.1.4, except heat pump rated capacity in accordance with Section C403.1.4 Exception 5 d is permitted to be sized equal to the supplemental internal resistance heating capacity in Climate Zone 4 or 5 |
| 3 | Furnaces, duct furnaces, and unit heaters | Table C403.3.2(5) | 1. Efficiency: $+10 \%{ }^{\text {b }}$ |
| 4 | Gas-fired hot water boilers with fewer than $80 \%$ of served coils replaced | Table C403.3.2(6) | 1. Efficiency: $+10 \%{ }^{\text {b }}$ |
| $\underline{5}$ | Variable refrigerant flow air-to-air and applied heat pumps | Table C403.3.2(9) | No alternate compliance option |
| $\underline{6}$ | DX-DOAS equipment | Table C403.3.2(12) and Table C403.3.2(13) | 1. DX-DOAS is provided with heat recovery if not required by C403.3.5.1. |
| 7 | Water-source heat pumps | Table C403.3.2(14) | No alternate compliance option |

a Includes replacement of equipment with a unit that is the same type or higher efficiency and the same or lower capacity, or a replacement of one equipment type with a different equipment type.
b Equipment shall have a capacity-weighted average heating system efficiency that is 10 percent better than that shown in the reference table ( 1.10 x values

- in reference table).
c Option 1 and Option 2 can be combined.
C503.4.6.1 Hydronic system alteration supply water temperature. Hydronic heating coils and appliances subject to Section C503.4.5 or Section C503.4.6 shall comply with Section C403.3.7.2.
C503.5 Service ((hot)) water ((systems)) heating equipment. All new service ( (hot)) water ((systems that are part of the alteration)) heating systems, equipment, and components of existing systems that are altered or replaced shall comply with Section C404, C408.3, C409.5, and C501.6. Additions or alterations shall not be made to an existing service water heating system that will cause the existing system to become out of compliance.
EXCEPTION: The following equipment is not required to comply with Section C404.2.1: 1. Replacement of a single electric resistance or fuel-fired service water heating appliance with a unit that is the same type and has the same or higher efficiency and the same or lower capacity, provided there are no other alterations made to the existing service water heating system size or configuration.

2. Replacement of any of the following water heater appliances:
2.1. Electric water heaters with an input of 12 kW or less.
2.2. Gas storage water heaters with an input of $75,000 \mathrm{Btu} / \mathrm{h}$ or less.
2.3. Gas instantaneous water heaters with an input of $200,000 \mathrm{Btu} / \mathrm{h}$ or less and 2 gallons or less of storage. 3. Where it has been determined by the code official that existing building constraints including, but not limited to, available floor space or ceiling height, limitations of the existing structure, or electrical service capacity, make compliance technically infeasible.
C503.6 Pools and permanent spas. All new systems and equipment serving pools and permanent spas and components of existing systems that are altered or replaced, shall comply with Sections C404.11, c408.3, C409.5, and C501.6. Additions or alterations shall not be made to an existing system serving a pool or spa that will cause the existing system to become out of compliance.
((C503.6 Lighting, controlled receptacles)) C503.7 Electrical power and lighting systems and motors. Alterations or the addition of lighting, ((electric)) receptacles and motors shall comply with Sections ( ( 6503.6 .1 through C503.6.6) ) C503.7.1 through C503.7.7. Additions or alterations shall not be made to an existing lighting or electrical system that will cause the existing system to become out of compliance.
((C503.6.1)) C503.7.1 New lighting systems and controls. All new interior and exterior lighting systems within an existing building site shall be provided with lighting controls in accordance with Section C405.2 and shall comply with C408.4, C409.5, and C501.6.

C503.7.2 Luminaire additions and alterations. Alterations that add or replace ((50)) 20 percent or more of the luminaires in a space enclosed by walls or ceiling-height partitions, replace ((50)) 20 percent or more of parking garage luminaires, or replace ((50)) $\frac{20}{20}$ percent or more of the total installed wattage of exterior luminaires shall comply with Sections C405.4 and C405.5. Exterior power allowance shall be determined using the specific area allowances for the areas altered and shall not include the base site allowance. Where less than ((50)) 20 percent of the fixtures in an interior space enclosed by walls or ceiling-height partitions or in a parking garage are added or replaced, or less than ((50)) 20 percent of the installed exterior wattage is replaced, the installed lighting wattage shall be maintained or reduced.
((C503.6.2)) C503.7.3 Rewiring and recircuiting. Where new wiring is being installed to serve added fixtures and/or fixtures are being re-
located to a new circuit, lighting controls shall comply with all applicable requirements in accordance with Sections c405.2.1, c405.2.3, $\mathrm{C} 405.2 .4, \mathrm{C} 405.2 .5, \mathrm{C} 405.2 .6$, ( (and as applicable c408.3. New lighting control devices shall comply with the requirements of section c405.2)) $\mathrm{C} 405.2 .7, \mathrm{C} 405.2 .8, \mathrm{C} 408.4$, and C 501.6 .
((C503.6.3)) C503.7.4 New or moved lighting panel. Where a new lighting panel (or a moved lighting panel) with all new raceway and conductor wiring from the panel to the fixtures is being installed, lighting controls shall also comply with, in addition to the requirements of Section (( $(503.6 .2)$ ) C503.7.3, all remaining requirements in Sections C405.2 ( (and C408.3)), C408.4, and C501.6.
((C503.6.4)) C503.7.5 Newly-created rooms. Where new walls or ceilingheight partitions are added to an existing space and create a new enclosed space, but the lighting fixtures are not being changed, other than being relocated, the new enclosed space shall have lighting controls that comply with all applicable requirements in accordance with Sections C405.2.1, C405.2.2, C405.2.3, C405.2.4, C405.2.5 ((and (408.3)), C405.2.6, C408.4 and C501.6.
((C503.6.5)) C503.7.6 Motors. ((Those motors which)) Motors that are altered or replaced shall comply with Section C405.8.
((C503.6.6)) C503.7.7 Controlled receptacles. Where electric receptacles are added or replaced, controlled receptacles shall be provided in accordance with Section C405.10 and shall comply with Sections C408.4 and C501.6.
EXCEPTIONS: 1. Where an alteration project impacts an area smaller than 5,000 square feet, controlled receptacles are not required. 2. Where existing systems furniture or partial-height relocatable office cubical partitions are reconfigured or relocated within the same area, controlled receptacles are not required in the existing systems furniture or office cubicle partitions. 3. Where new or altered receptacles meet the exception to Section C405.10, they are not required to be controlled receptacles or be located within 12 inches of noncontrolled receptacles.
((C503.7)) C503.8 Refrigeration systems. ( (Those parts of systems which are altered or replaced shall comply with Section c410. Additions or alterations shall not be made to an existing refrigerated space or system that will cause the existing mechanical system to become out of compliance. All new refrigerated spaces or systems in existing buildings, including refrigerated display cases, shall comply with Section (410.)) Components of existing refrigeration systems that are altered or replaced shall comply with Sections C408.7, C410 and C501.6. Additions or alterations shall not be made to an existing refrigeration system that will cause the existing system to become out of compliance. All new refrigerated spaces and refrigeration systems and equipment in existing buildings, including new refrigerated display cases, shall comply with Sections C408.7, c409.5, C410 and C501.6.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-50300, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-50300, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27A and 19.27 RCW. WSR 19-02-089, § 51-11C-50300, filed 1/2/19, effective 7/1/19. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-24-070, § 51-11C-50300, filed 12/6/16, effective 5/1/17; WSR 16-13-089, § 51-11C-50300, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.025,
19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-50300, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

WAC 51-11C-50500 Section C505-Change of space conditioning, occupancy or use.
C505.1 General. Buildings or spaces undergoing a change in space conditioning alteration shall comply with Sections C505.2 and C505.4. Buildings or spaces undergoing a change in occupancy alterations shall comply with Sections C505.3 and C505.4. Spaces changing from one use type to another shall comply with Section C505.5.

Buildings or spaces undergoing a change in space conditioning, change in occupancy or use shall conform to the provisions of this code without requiring the unaltered portion of the existing building to comply with this code. Alterations shall be such that the existing building or structure is no less conforming to the provisions of this code than the existing building or structure was prior to the alteration.

A change in space conditioning alteration shall be deemed to comply with this code if the alteration area alone complies or if the alteration area is combined with all other spaces within the existing building that are of the same space conditioning category according to Section C505.2 to demonstrate compliance. A change in occupancy alteration shall be deemed to comply with this code if the alteration area alone complies or if the existing building and the alteration area are combined to demonstrate complete for the whole building. This allowance applies to prescriptive compliance in accordance with Section C505.4 or total building performance in accordance with Section C407.

Buildings or spaces that were permitted prior to the 2009 Washington state energy code, or were originally permitted as unconditioned, may comply with this section as follows:

1. Where the component performance alternative in Section

C402.1.5 is used to demonstrate compliance with this section, the Proposed Total UA is allowed to be up to 110 percent of the Allowable Total UA. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.
2. Where total building performance in accordance with Section C407 is used to demonstrate compliance with this section, the total annual carbon emissions from energy consumption of the proposed design is allowed to be up to 110 percent of the annual carbon emissions from energy consumption allowed by Section c407.3. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.
C505.1.1 Additional energy efficiency credits. Buildings or spaces that are required to comply with Sections C505.2 or C505.3 shall also comply with Section C502.1.1 in the same manner as an addition.
C505.1.2 Renewable energy. Buildings or spaces that are required to comply with Section C505.2 or C505.3 shall also comply with Section C502.1.2 in the same manner as an addition.

$$
\text { [ } 560 \text { ] WSR Issue 22-14 - Permanent }
$$

C505.2 Change in space conditioning. Spaces undergoing a change in space conditioning alteration shall be brought up to full compliance with this code for all disciplines in the following cases:

1. Any low energy space in accordance with Section C 402.1 .1 .1 that is altered to become conditioned space or semi-heated space shall be brought into full compliance with this code.
2. Any semi-heated space in accordance with Section c402.1.1.2 that is altered to become conditioned space shall be brought into full compliance with this code.

For buildings with more than one space conditioning category, the interior partition walls, ceilings, floors and fenestration that separate space conditioning areas shall comply with the thermal envelope requirements per the area with the highest level of space conditioning.
C505.3 Change in occupancy. Spaces undergoing a change in occupancy alteration shall be brought up to full compliance with this code for all disciplines in the following cases:

1. Any space that is converted from ((an)) a Group $F$, $S$ or $U$ occupancy to an occupancy other than Group $F$, $S$ or $U$.
2. Any space that is converted to a Group $R$ dwelling unit or portion thereof, from another use or occupancy.
3. Any Group $R$ dwelling unit or portion thereof permitted prior to July 1, 2002, that is converted to a commercial use or occupancy. ( (A change in oceupancy project shall be deemed to comply with this code if the project area alone complics or if the existing building and the project area combined comply with this code as a whole building.
EXCEPTION: Buildings or spaces that were permitted prior to the 2009 WSEC may comply with this seetion as follows:
4. Where the component performance alternative in Section C402.1.5 is used to demonstrate compliance with this seetion, the Proposed TotalUA is allowed to be up to 110 pereent of the Allowable Total UA. This exeeption may be applied to the project area alone, or to the existing building and project area combined as whole butilling.
5. Where total building performance in Section C 407 is used to demonstrate compliance with this section, the total anmual carbon emissions from energy constmption of the proposed design is allowed to be 110 percent of the anntal carbon emissions from energy consumption allowed by Section C407.3. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.))

C505.4 Prescriptive compliance. Change in space conditioning and change in occupancy alterations shall comply with Sections C505.4.1 through C505.4.6.
C505.4.1 Vertical fenestration. A change in space conditioning alteration with vertical fenestration shall comply with the following:

1. Where the vertical fenestration area of the alteration combined with the vertical fenestration area of all equivalent space conditioning areas in the existing building results in a total vertical fenestration area that is less than or equal to the maximum allowed by Section C402.4.1, the alteration shall comply with Section C402.4.
2. Where the vertical fenestration area of the alteration combined with the vertical fenestration area of all equivalent space conditioning areas in the existing building results in a total vertical fenestration area that is greater than the maximum allowed by Section C402.4.1, the alteration shall comply with one of the following:
2.1. Component performance alternative with target area adjustment in accordance with Section C402.1.5 for the alteration area of the building only.
2.2. Alteration area is combined with all equivalent space conditioning areas to demonstrate compliance with the component performance alternative.
2.3. Total building performance in accordance with Section C 407 for the alteration area of the building only.
2.4. Alteration area is combined with all equivalent space conditioning areas to demonstrate total building performance compliance.
C505.4.1.2 Skylights. A change in space conditioning alteration with skylights shall comply with the following:
3. Where the skylight area of the alteration combined with the skylight area of all equivalent space conditioning areas in the existing building results in a total skylight area that is less than or equal to the maximum allowed by Section C402.4.1, the alteration shall comply with Section C402.4.
4. Where the skylight area of the alteration combined with the skylight area of all equivalent space conditioning areas in the existing building results in a total skylight area that is greater than the maximum allowed by Section C402.4.1, the alteration shall comply with one of the following:
2.1. Component performance alternative with target area adjustment in accordance with Section C402.1.5 for the alteration area of the building only.
2.2. Alteration area is combined with all equivalent space conditioning areas to demonstrate compliance with the component performance alternative.
2.3. Total building performance in accordance with Section C 407 for the alteration area of the building only.
2.4. Alteration area is combined with all equivalent space conditioning areas to demonstrate total building performance compliance.
C505.4.2 Building mechanical systems. All new and existing mechanical systems and equipment that serve the new building heating, cooling and ventilation needs of the alteration area shall comply with Sections C403, C408.2, C409.5 and C501.6.
C505.4.3 Service water-heating systems. All new and existing service water-heating systems and equipment that serve the new service waterheating needs of the alteration area shall comply with Sections c404, C408.3, C409.5 and C501.6.
C505.4.4 Pools and permanent spas. All new and existing systems and equipment serving pools and permanent spas that are included in the alteration shall comply with Sections C404.11, C408.3, C409.5 and C501.6.
C505.4.5 Electrical power and lighting systems and motors. All new and existing electrical power and lighting systems and motors that are included in the alteration shall comply with Sections C405, c408.4, C409.5 and C501.6.
C505.4.6 Refrigeration systems. All new and existing refrigerated spaces and refrigeration systems and equipment that serve the new refrigeration needs of the alteration area shall comply with Sections C410, C408.7, C409.5 and C501.6.
C505.5 Change of use. Where the use in a space changes from one use in Table C405.4.2 (1) or (2) to another use in Table C405.4.2 (1) or (2), the installed lighting wattage in the space shall comply with Section C405.4 and the ventilation air flow provided to the space shall be in accordance with Chapter 4 of the International Mechanical Code.
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-50500, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27A and 19.27 RCW. WSR 19-02-089, § 51-11C-50500, filed 1/2/19, effective 7/1/19. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-50500, filed 1/19/16, effective 7/1/16.]

## NEW SECTION

WAC 51-11C-50600 Section C506-Metering for existing buildings. C506.1 Existing buildings that were constructed subject to the requirements of this section. Where new or replacement systems or equipment are installed in an existing building that was constructed subject to the requirements of this section, metering shall be provided for such new or replacement systems or equipment so that their energy use is included in the corresponding end-use category defined in Section C409.2. This includes systems or equipment added in conjunction with additions or alterations to existing buildings.

C506.1.1 Small existing buildings. Metering and data acquisition systems shall be provided for additions over 25,000 square feet to buildings that were constructed subject to the requirements of this section, in accordance with the requirements of Sections c409.2 and C409.3.

## []

AMENDATORY SECTION (Amending WSR 13-04-056, filed 2/1/13, effective 7/1/13)

WAC 51-11C-60000 ((Appendix A-Default heat loss coeffieients.)) Reserved.
[Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-60000, filed 2/1/13, effective 7/1/13.]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-600000 Chapter 6 [CE]-Referenced standards. This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section C106.

|  | 1827 Walden Office Square Suite 550 <br> Schaumburg, IL 60173-4268 |  |  |
| :---: | :---: | :---: | :---: |
| Standard reference number | Title |  | Referenced in code section number |
| AAMA/WDMA/CSA 101/I.S.2/A C440-17 | North American Fenestration Standard/ Specifications for Windows, Doors and Unit Skylights |  | Table C402.4.1.1.2 |
| AHAM | Association of Home Appliance Manufacturers 1111 19th Street, N.W., Suite 402 Washington, D.C. 20036 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ANSI/AHAM RAC-1— 2008 | Room Air Conditioners |  | Table C403.3.2((f3))) (4) |
| AHAM HRF-1-2017 | Energy, Performance and Capacity of Household Refrigerators, RefrigeratorFreezers and Freezers |  | Table C410.1(1) |
| AHRI | Air Conditioning, Heating, and Refrigeration Institute <br> 4100 North Fairfax Drive, Suite 200 <br> Arlington, VA 22203 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ISO/AHRI/ASHRAE |  |  |  |
| 5801-2017 | Fans - Performance Testing Using Standardized Airways | ........ | C403.8.1.1 |
| ISO/AHRI/ASHRAE 13256-1 (2017) | Water-source Heat Pumps - Testing and Rating for Performance - Part 1: Water-to-air and Brine-to-air Heat Pumps |  | Table C403.3.2(((2))) (14) |
| ISO/AHRI/ASHRAE 13256-2 (2017) | Water-source Heat Pumps - Testing and Rating for Performance - Part 2: Water-towater and Brine-to-water Heat Pumps |  | Table C403.3.2(((2))) (14) |
| $\begin{aligned} & 210 / 240-((2016)) \underline{2017} \\ & \text { and 2023 } \end{aligned}$ | Performance Rating of Unitary Air Conditioning and Air-source Heat Pump Equipment |  | Table C403.3.2(1), <br> Table C403.3.2(2) |
| 310/380-()(2014)) 2017 | Standard for Packaged Terminal Air Conditioners and Heat Pumps |  | Table C403.3.2((f3))) (4) |
| 340/360-((2015)) 2018 | Commercial and Industrial Unitary Airconditioning and Heat Pump Equipment |  | $\begin{aligned} & \text { Table C403.3.2(1), } \\ & \text { Table C403.3.2(2) } \end{aligned}$ |
| 365-2009 | Commercial and Industrial Unitary Airconditioning Condensing Units |  | Table C403.3.2(1)((), <br> Table C403.3.2(6))) |
| 390-2015 | Performance Rating of Single Package Vertical Air Conditioners and Heat Pumps |  | Table C403.3.2((f3))) (4) |
| 400-2015 | Liquid to Liquid Heat Exchangers with Addendum 2 |  | ((Fable)) C403.3.2(((9))) |
| 430-2020 | Performance Rating of Central Station AirHandling Unit Supply Fans | ........ | C403.8.1.1 |
| 440-((08)) $\underline{19}$ | Room Fan Coil |  | C403.8.1.1, C403.10.3 |
| 460-05 | Performance Rating Remote Mechanical Draft Air-cooled Refrigerant Condensers |  | Table C403.3.2((f))) (7) |


| 550/590-((2015)) $\underline{2018}$ | Water Chilling Packages Using the Vapor Compression Cycle-with Addenda |  | $((\mathrm{C} 403.3 .2 .1)) \mathrm{C} 403.3 .2 .3$, Table C403.3.2((7))) (3), Table C403.3.2(15) |
| :---: | :---: | :---: | :---: |
| 560-( $($ (00)) $\underline{2018}$ | Absorption Water Chilling and Water-heating Packages |  | Table C403.3.2(()77)) (3) |
| 910-2014 | Performance Rating of Indoor Pool Dehumidifiers | $\ldots$ | Table C403.3.2(11) |
| 920-2015 | Performance Rating of DX-Dedicated Outdoor Air System Units |  | $\begin{gathered} \text { C202, Table } \\ \text { C403.3.2(((11)))(12), } \\ \text { Table C403.3.2(((12))) } \\ \underline{(13)} \end{gathered}$ |
| 1160-2014 | Performance Rating of Heat Pump Pool Heaters |  | Table C404.2, C404.11.1 |
| 1200-2013 | Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets |  | C410.1, Table C410.1(1), Table C410.1(2) |
| $1230-2014$ | Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment (with Addendum 1) | $\ldots$ | Table C403.3.2(9) |
| 1250-2014 | Standard for Performance Rating in Walk-in Coolers and Freezers | $\ldots$ | Table C410.2.1(3) |
| AMCA | Air Movement and Control Association International <br> 30 West University Drive <br> Arlington Heights, IL 60004-1806 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| 205-12 | Energy Efficiency Classification for Fans |  | C403.8.3 |
| 208-2018 | Calculation of the Fan Energy Index | $\ldots$ | C403.8.1.1, C 403.8 .3 |
| $210-2016$ | Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating | $\ldots$ | C403.8.1.1 |
| $220-((8(2012))) \underline{19}$ | Laboratory Methods for Testing Air Curtain Units for Aerodynamic Performance Rating |  | C402.5.7 |
| $\underline{230-15}$ | Laboratory Methods of Testing Air Circulating Fans for Rating and Certification | $\ldots$ | C403.9 |
| 500D-((12)) 18 | Laboratory Methods for Testing Dampers for Rating | . . . . . . . | $\begin{aligned} & \text { C402.4.5.1, } \\ & \text { C402.4.5.2 } \end{aligned}$ |
| ANSI | American National Standards Institute 25 West 43rd Street <br> Fourth Floor <br> New York, NY 10036 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ANSI/AMCA 208-2018 | Calculation of the Fan Energy Index | $\ldots$ | C403.8.1.1 |
| $\begin{aligned} & \text { ANSI/AMCA 210-16/ } \\ & \underline{\text { ASHRAE 51-16 }} \end{aligned}$ | Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating | ....... | C403.8.1.1 |
| ANSI/ASME A17.1-2010 | Safety code for elevators and escalators |  | C405.12.1 |
| ANSI/CTA 2045-A-2018 | Modular Communications Interface for Energy Management | $\ldots$ | C404.14 |
| ANSI/CTA 2045-B-2021 | Modular Communications Interface for Energy Management | ........ | C404.14 |
| $\begin{aligned} & \text { Z21.10.3/CSA } 4.3-((14)) \\ & \underline{17} \end{aligned}$ | Gas Water Heaters, Volume III-Storage Water Heaters with Input Ratings Above 75,000 Btu per Hour, Circulating Tank and Instantaneous |  | Table C404.2 |



| ASME A17.1/CSA B44- $((2016)) \underline{2019}$ | Safety Code for Elevators and Escalators |  | C405.9.2 |
| :---: | :---: | :---: | :---: |
| BPVC Section IV-2021 | Boiler and Pressure Vessel Code, Section IV -Rules for Construction of Heating Boilers | $\ldots$ | C404.14 |
| BPVC Section X-2021 | Boiler and Pressure Vessel Code, Section X -Fiber-Reinforced Plastic Pressure Vessels | ........ | C404.14 |
| ASTM | ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2859 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| C 90-((14)) 206A | Specification for Load-bearing Concrete Masonry Units |  | Table C402.1.3 |
| C518-17 | Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus | ........ | $\underline{\text { Table C403.10.1.1 }}$ |
| C1363-11 | Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus |  | $\begin{gathered} \text { C303.1.4.1, Table } \\ \text { C402.1.4 } \end{gathered}$ |
| C1363-11 | Standard Test Method for Thermal <br> Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus | ........ | $\begin{gathered} \text { C303.1.4.1, Table } \\ \text { C402.1.4, C402.2.7 } \end{gathered}$ |
| C 1371-15 | Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers |  | Table C402.4 |
| C 1549-09 | Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using A Portable Solar Reflectometer |  | Table C402.4 |
| D 1003-13 | Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics |  | C402.4.2.2 |
| E 283-04 (2012) | Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen |  | C402.5.8 |
| E 408-13 | Test Methods for Total Normal Emittance of Surfaces Using Inspection-meter Techniques |  | Table ((C402.4)) $\underline{\text { C402.3 }}$ |
| E 779-((10)) $\underline{2018}$ | Standard Test Method for Determining Air Leakage Rate by Fan Pressurization |  | C402.5.1.2.3 |
| E 903-12 | Standard Test Method Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres (Withdrawn 2005) |  | Table C402.4 |
| E 1677-11 | Standard Specification for an Air-retarder (AR) Material or System for Low-rise Framed Building Walls |  | C402.5.1.2.2 |
| E 1827-2011(2017) | Standard Test Methods for Determining Airtightness of Building Using an Orifice Blower Door | ........ | C402.5.2, C402.5.3 |
| E 1918-06 (2015) | Standard Test Method for Measuring Solar Reflectance of Horizontal or Low-sloped Surfaces in the Field |  | Table C402.4 |
| E 1980-11 | Standard Practice for Calculating Solar Reflectance Index of Horizontal and Lowsloped Opaque Surfaces |  | Table C402.2.1.1 |


| E 2178-13 | Standard Test Method for Air Permanence of Building Materials |  | C402.4 |
| :---: | :---: | :---: | :---: |
| E 2357-11 | Standard Test Method for Determining Air Leakage of Air Barrier Assemblies |  | C402.5.1.2.2 |
| F 1281-2017 | Specification for Cross-linked Polyethylene/ Aluminum/Cross-linked Polyethylene (PEXAL_PEX) Pressure Pipe | ........ | Table C404.5.2.1 |
| CSA | Canadian Standards Association <br> 5060 Spectrum Way <br> Mississauga, Ontario, Canada L4W 5N6 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| AAMA/WDMA/CSA 101/I.S.2/A440-11 | North American Fenestration Standard/ Specification for Windows, Doors and Unit Skylights |  | Table C402.4.2 |
| CSA B55.1-2015 | Test Method for Measuring Efficiency and Pressure Loss of DWHR Units |  | C404.10 |
| CSA B55.2-2015 | Drain Water Heat Recovery Units | ........ | C404.10 |
| CTA | Consumer Technology Association 1919 S Eads Street <br> Arlington, VA 22202 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ANSI/CTA 2045-A-2018 | Modular Communications Interface for Energy Management |  | C404.14 |
| ANSI/CTA 2045-B-2021 | Modular Communications Interface for Energy Management | $\ldots$ | C404.14 |
| CTI | Cooling Technology Institute 2611 FM 1960 West, Suite A-101 Houston, TX 77068 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ATC $105(((00)))=2019$ | Acceptance Test Code for Water Cooling Tower |  | Table C403.3.2((f))) (7) |
| ATC 105DS-2018 | Acceptance Test Code for Dry Fluid Coolers |  | Table C403.3.2(7) |
| ATC 105S-11 | Acceptance Test Code for Closed Circuit Cooling Towers |  | Table C403.3.2((f8))) (7) |
| ATC 106-11 | Acceptance Test Code for Mechanical Draft Evaporative Vapor Condensers |  | Table C403.3.2((f8))) (7) |
| STD 201-((\#)) $1 \underline{17}$ | Standard for Certification of Water Cooling Towers Thermal Performances |  | Table C403.3.2(((8))) (7) |
| DASMA | Door and Access Systems Manufacturers Association <br> 1300 Sumner Avenue <br> Cleveland, OH 44115-2851 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| $\begin{aligned} & 105-((92(\mathrm{R} 2004)-13)) \\ & \underline{17} \end{aligned}$ | Test Method for Thermal Transmittance and Air Infiltration of Garage Doors | $\ldots$ | Table C402.4.2 |
| DOE | U.S. Department of Energy c/o Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402-9325 |  |  |


| Standard reference number | Title |  | Referenced in code section number |
| :---: | :---: | :---: | :---: |
| 10 C.F.R., Part 430-2015 | Energy Conservation Program for Consumer Products: |  |  |
|  | Test Procedures and Certification and Enforcement Requirement for Plumbing Products; and Certification and Enforcement Requirements for Residential Appliances; Final Rule |  |  |
| ( 10 C.F.R., Part 430, <br> Sthpart B, Appendix N- <br> 2015 | Uniform Test Method for Measuring the Energy Consumption of Fumaces and Boilers |  | C202)) |
| 10 C.F.R., Part 431-2015 | Energy Efficiency Program for Certain Commercial and Industrial Equipment: Test Procedures and Efficiency Standards; Final Rules |  | $\begin{gathered} \text { Table C403.3.2(((5))) (6), } \\ \frac{\mathrm{C} 403.8 .4, \mathrm{C} 403.11,}{\text { Table }((\mathrm{C} 406.2(5)))} \\ \frac{\mathrm{C} 403.11, \mathrm{C} 403.11 .2,}{\mathrm{C} 405.7,} \\ \frac{\text { Table C405.7, C405.8, }}{\text { Table C405.8(1), }} \\ \frac{\text { Table C405.8(2), }}{\text { Table C405.8(3) }} \\ \text { Table } \end{gathered}$ |
| ((NAECA 87 (88) | National Appliance Energy Conservation Act 1987 [(Public Law 100-12 (with Amendments of 1988-P.L. 100-357)] | $\ldots$ | Fables C403.3.2 (1), (2), <br> (4))) |
| HVI | Home Ventilating Institute |  |  |
|  | 1740 Dell Range Blvd., Ste. H, PMB 450 |  |  |
|  | Cheyenne, WY 82009 |  |  |
| Standard reference number | Title |  | $\frac{\text { Referenced in code section }}{\text { number }}$ |
| 920-2020 | Product Performance Certification Procedure Including Verification and Challenge | $\underline{\underline{l . . . . . . ~}}$ | C403.3.5.1, C403.3.6 |
| IAPMO | International Association of Plumbing and Mechanical Officials <br> 4755 E. Philadelphia Street <br> Ontario, CA 91761 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| UPC-((2015)) $\underline{\underline{021}}$ | Uniform Plumbing Code | ......... | C201.3, ((C501.4)) C501.2 |
| ICC | International Code Council, Inc. 500 New Jersey Avenue, N.W., 6th Floor Washington, D.C. 20001 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| IBC-( (15)) $\underline{21}$ | International Building Code |  | $\begin{aligned} & \text { C201.3, C303.2, C402.4.3, } \\ & \underline{\text { C501.2 }} \end{aligned}$ |
| ICC 500-2020 | Standard for the Design and Construction of Storm Shelters | ........ | C402.4.2 |
| IFC-((15)) $\underline{21}$ | International Fire Code |  | C201.3, ((G501.4)) C501.2 |
| IFGC-((15)) 21 | International Fuel Gas Code |  | C201.3, ((C501.4)) C501.2 |

```
[ 569 ] WSR Issue 22-14 - Permanent
```

| IMC-((15)) $\underline{21}$ | International Mechanical Code |  | C106.3, C201.3, C402.5.3, C403.2.2.1, C403.2.2.2, C403.3.5, C403.3.5.1, C403.6.1, C403.6.5, C403.6.10, C403.7.1, C403.7.2, C403.7.5, C403.7.5.1, C403.7.6, C403.7.7.3, C403.7.8.1, C403.7.8.4, C403.8.4, C403.8.5.1, Table C403.10.1, C403.10.1.2, Table C403.10.1.2, C403.10.2.2, C403.12, C406.6, C408.2.2.1, $((\mathrm{C} 501.4))$ C501.2 |
| :---: | :---: | :---: | :---: |
| IEEE | The Institute of Electrical and Electronic Engineers, Inc. <br> 3 Park Avenue <br> New York, NY 10016 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| IEEE 515.1—2012 | IEEE Standard for the Testing, Design, Installation and Maintenance of Electrical Resistance Trace Heating for Commercial Applications |  | C404.6.2 |
| ((IESNA)) IES | Illuminating Engineering Society ((of Nerth America)) <br> 120 Wall Street, 17th Floor <br> New York, NY 10005-4001 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ANSI/ASHRAE/IESNA 90.1-((2016)) 2019 | Energy Standard for Buildings Except Lowrise Residential Buildings |  | Table C402.1.3, Table C402.1.4, Table C407.5.1 |
| ISO | International Organization for Standardization <br> 1, rue de Varembe, Case postale 56, CH-1211 Geneva, Switzerland |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| ISO/AHRI/ASHRAE 13256-1 (2017) | Water-Source Heat Pumps-Testing and Rating for Performance-Part 1: Water-to-air and Brine-to-air Heat Pumps |  | C403.3.2(( $(2))$ ) (14) |
| ISO/AHRI/ASHRAE $13256-2(2017)$ | Water-Source Heat Pumps-Testing and Rating for Performance-Part 2: Water-towater and Brine-to-water Heat Pumps |  | C403.3.2(((2))) (14) |
| 25745-2:2015 | Energy Performance of Lifts, Escalators and Moving Walks-Part 2: Energy Calculation and Classification for Lifts (Elevators) | ........ | C406.2.14 |
| NEEA | Northwest Energy Efficiency Alliance 421 SW 6th Ave. <br> Suite 600 <br> Portland, OR 97204 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| AWHS Vers. 8.0-2022 | Advanced Water Heating Specification | $\ldots$ | C404.2.1 |
| NEMA | National Electric Manufacturers Association 1300 North 17th Street |  |  |

## Washington State Register, Issue 22-14

|  | Suite 1752 <br> Rosslyn, VA 22209 |  |  |
| :---: | :---: | :---: | :---: |
| Standard reference number | Title |  | Referenced in code section number |
| ((TP-1-2002 | Guide for Determining Energy Efficiency for Pistribution Transformers | $\ldots$ | (405.9)) |
| ANSI/NEMA WD 6-2016 | Wiring Devices-Dimensional Specifications | ....... | C405.12 |
| MGI-((2014)) 2016 | Motors and Generators |  | C202 |
| TP-1-2002 | Guide for Determining Energy Efficiency for Distribution Transformers | $\ldots$ | C405.9 |
| NFRC | National Fenestration Rating Council, Inc. 6305 Ivy Lane, Suite 140 Greenbelt, MD 20770 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| 100-((2017)) $\underline{2020}$ | Procedure for Determining Fenestration Product U-factors |  | $\begin{aligned} & \hline \text { C303.1.2, } \\ & \text { C402.2.2 } \end{aligned}$ |
| 200-((2017)) $\underline{2020}$ | Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence |  | $\begin{aligned} & \text { C303.1.3, } \\ & \text { C402.4.1.1 } \end{aligned}$ |
| 202-2017 | Procedure for Determining Fenestration Product Visible Transmittance at Normal Incidence |  | C202 |
| NFRC 203-2017 | Procedure for Determining Visible Transmittance of Tubular Daylighting Devices |  | C202, C402.4.2 |
| 400-2017 | Procedure for Determining Fenestration Product Air Leakage |  | Table C402.4.2 |
| SMACNA | Sheet Metal and Air Conditioning Contractors National Association, Inc. 4021 Lafayette Center Drive Chantilly, VA 20151-1209 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| SMACNA-2012 | HVAC Air Duct Leakage Test Manual | $\ldots$ | C403.10.2.3 |
| UL | Underwriters Laboratories 333 Pfingsten Road <br> Northbrook, IL 60062-2096 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| 710-12 | Exhaust Hoods for Commercial Cooking Equipment |  | C403.7.5 |
| 727-((06)) 18 | Oil-fired Central Furnaces-with Revisions through April 2010 |  | Table C403.3.2(4), Table $\underline{\text { C403.3.2(5) }}$ |
| 731-((95)) 18 | Oil-fired Unit Heaters-with Revisions through April 2010 | ........ | Table C403.3.2((t4))) (5) |
| US-FTC | United States-Federal Trade Commission 600 Pennsylvania Avenue N.W. Washington, D.C. 20580 |  |  |
| Standard reference number | Title |  | Referenced in code section number |
| $\begin{aligned} & \text { C.F.R. Title } 16 \\ & (2015) \end{aligned}$ | R -value Rule | ......... | C303.1.4 |
| WDMA | Window and Door Manufacturers Association |  |  |

1400 East Touhy Avenue, Suite 470
Des Plaines, IL 60018

| Standard reference number | Title | Referenced in code section <br> number |
| :--- | :--- | ---: |
| AAMA/WDMA/CSA | North American Fenestration Standard/ <br> Specification for Windows, Doors and Unit <br> Skylights | $\ldots . . .$. |

[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-600000, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-600000, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-600000, filed 1/19/16, effective 7/1/16.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

## NEW SECTION

> WAC 51-11C-61000 Appendix A-Default heat loss coefficients.

## [ ]

AMENDATORY SECTION (Amending WSR 20-21-080, filed 10/19/20, effective 2/1/21)

WAC 51-11C-80500 Appendix D-Calculation of HVAC total system performance ratio.
D101 Scope. This appendix establishes criteria for demonstrating compliance using the HVAC total system performance ratio (HVAC TSPR) for systems serving office (including medical offices), retail, library and education occupancies and buildings, which are subject to the requirements of Section C 403.3 .5 without exceptions, and dwelling units and common areas within multifamily buildings. Those HVAC systems shall comply with Section C 403 and this appendix as required by Section C403.1.1.

## D101.1 Core and Shell/Initial Build-Out, and Future System Construction Analysis.

Where the building permit applies to only a portion of the HVAC system in a building and the remaining components will be designed under a future building permit or were previously installed, the future or previously installed components shall be modeled as follows:

1. Where the HVAC zones that do not include HVAC systems in the current permit will be or are served by independent systems, then the block including those zones shall not be included in the model.
2. Where the HVAC zones that do not include complete HVAC systems in the permit are intended to receive HVAC services from systems in the permit, their proposed zonal systems shall be modeled with equip-
ment that meets, but does not exceed, the requirements of section C403.
3. Where the zone equipment in the permit receives HVAC services from previously installed systems that are not in the permit, the previously installed systems shall be modeled with equipment matching the certified value of what is installed or equipment that meets the requirements of Section C403.
4. Where the central plant heating and cooling equipment is completely replaced and HVAC zones with existing systems receive HVAC services from systems in the permit, their proposed zonal systems shall be modeled with equipment that meets, but does not exceed, the requirements of Section C403.
Informative Notes: 1. Examples of HVAC systems that are intended to receive HVAC services from systems in the permit include future zonal water source heat pumps that will receive loop water that is heated by a boiler or cooled by a cooling tower included in the permit, any system that will receive outdoor ventilation air from a dedicated outdoor air system included in the permit, and future zone terminal units that will be connected to a central VAV system included in the permit.
5. An initial build-out with heating coils served from a previously installed system with a high-efficiency condensing boiler would use the installed efficiency if it exceeded the current requirements. If the installed boiler had a lower efficiency than the current requirements, the current requirement would be used.
6. A partial central plant upgrade (e.g., chiller, but not boiler replacement) cannot use this method.

D201 Compliance. Compliance based on HVAC total system performance ratio requires that the provisions of Section C403.3 are met and the HVAC total system performance ratio of the proposed design is more than or equal to the HVAC total system performance ratio of the standard reference design. The HVAC $T S P R$ is calculated according to the following formula:

HVAC TSPR = annual heating and cooling load/annual carbon emissions from energy consumption of the building HVAC systems

Where:

| Annual carbon <br> emissions from energy <br> consumption of the <br> building HVAC systems | $=$sum of the annual <br> carbon emissions in <br> pounds for heating, <br> cooling, fans, energy <br> recovery, pumps, and <br> heat rejection calculated |
| :--- | :--- |
| by multiplying site <br> energy consumption by <br> the carbon emission |  |
|  | factors from Table |
| C407.1 |  |
| Annual heating and | $=$sum of the annual <br> cooling load |
| heating and cooling |  |
| loads met by the |  |
| building HVAC system |  |

Table ((C407.1)) C407.3(1) (Reprinted from Chapter 4) Carbon Emissions Factors

| Type | CO2e (lb/unit) | Unit |
| :--- | :---: | :---: |
| Electricity | $((\theta .70)) \underline{0.44}$ | kWh |
| Natural gas | 11.70 | Therm |
| Oil | 19.2 | Gallon |
| Propane | 10.5 | Gallon |
| Other $^{\mathrm{a}}$ | 0.00 | mmBtu |
| On-site <br> renewable <br> energy_ |  |  |

District energy systems may use alternative emissions factors supported by calculations approved by the code official.
b Not applicable to TSPR calculation in Appendix D.

## D300 Simulation program.

## D301 General.

D302 Calculation of the HVAC TSPR for the Standard Reference Design. The simulation program shall calculate the HVAC TSPR based only on the input for the proposed design and the requirements of this appendix. The calculation procedure shall not allow the user to directly modify the building component characteristics of the standard reference design.
D303 Specific approval. Performance analysis tools meeting the applicable subsections of Appendix D and tested according to ASHRAE Standard 140 shall be permitted to be approved. Tools are permitted to be approved based on meeting a specified threshold for a jurisdiction. The code official shall be permitted to approve tools for a specified application or limited scope.
D400 Climatic data. The simulation program shall perform the simulation using hourly values of climatic data, such as temperature and humidity, using TMY3 data for the site as specified here: https:// buildingenergyscore.energy.gov/resources

D500 Documentation. Documentation conforming to the provisions of this section shall be provided to the code official.
D501 Compliance report. Building permit submittals shall include:

1. A report produced by the simulation software that includes the following:
1.1 Address of the building.
1.2 Name of individual completing the compliance report.
1.3 Name and version of the compliance software tool.
1.4 The dimensions, floor heights and number of floors for each block.
1.5 By block, the U-factor, C-factor, or $F$-factor for each simulated opaque envelope component and the U-factor and SHGC for each fenestration component.
1.6 By block or by surface for each block, the fenestration area.
1.7 By block, a list of the HVAC equipment simulated in the proposed design including the equipment type, fuel type, equipment efficiencies and system controls.
1.8 Annual site HVAC energy use by end use for the proposed and baseline building.
1.9 Annual sum of heating and cooling loads for the baseline building.
1.10 The HVAC total system performance ratio for both the standard reference design and the proposed design.
2. A mapping of the actual building HVAC component characteristics and those simulated in the proposed design showing how individual pieces of HVAC equipment identified above have been combined into average inputs as required by Section ((D601.11)) D601.10 including:
2.1 Fans.
2.2 Hydronic pumps.
2.3 Air handlers.
2.4 Packaged cooling equipment.
2.5 Furnaces.
3. 6 Heat pumps.
2.7 Boilers.
2.8 Chillers.
2.9 Cooling towers.
2.10 Electric resistance coils.
2.11 Condensing units.
2.12 Motors for fans and pumps.
2.13 Energy recovery devices.

For each piece of equipment identified above, include the following as applicable:
2.14 Equipment name or tag consistent with that found on the design documents.
2.15 Rated efficiency level.
2.16 Rated capacity.
2.17 ((Input power for fans and pumps.)) Electrical input power for fans and pumps (before any speed or frequency control device) at design conditions and calculation of input value (W/cfm or W/gpm).
3. Floor plan of the building identifying how portions of the building are assigned to the simulated blocks and areas of the building that are not covered under the requirements of Section C403.1.1.
D600 Calculation procedure. Except as specified by this appendix, the standard reference design and proposed design shall be configured and analyzed using identical methods and techniques.
D601 Simulation of the proposed building design. The proposed design shall be configured and analyzed as specified in this section.
D601.1 ( (Utility rates. For the purpose of calculating the HVAC TSPR the following simple utility rate determined by the Washington state department of commerce shall be used:
$\$ 0.112 / k W h$ of electricity.
\$1.158/therm of fossil fuel.
D601.2)) Block geometry. The geometry of buildings shall be configured using one or more blocks. Each block shall define attributes including block dimensions, number of floors, floor to floor height and floor to ceiling height. Simulation software may allow the use of simplified shapes (such as rectangle, $L$ shape, $H$ shape, $U$ shape or $T$ shape) to represent blocks. Where actual building shape does not match these predefined shapes, simplifications are permitted providing the following requirements are met:

1. The conditioned floor area and volume of each block shall match the proposed design within 10 percent.
2. The area of each exterior envelope component from Table C402.1.4 is accounted for within 10 percent of the actual design.
3. The area of vertical fenestration and skylights is accounted for within 10 percent of the actual design.
4. The orientation of each component in 2 and 3 above is accounted for within 45 degrees of the actual design.

The creation of additional blocks may be necessary to meet these requirements.
EXCEPTION: Portions of the building that are unconditioned or served by systems not covered by the requirements of Section C403.1.1 shall be omitted.
((D601.2.1)) D601.1.1 Number of blocks. One or more blocks may be required per building based on the following restrictions:

1. Each block can have only one occupancy type (multifamily dwelling unit, multifamily common area, office, library, education or
retail). Therefore, at least one single block shall be created for each unique use type.
2. Each block can be served by only one type of HVAC system. Therefore, a single block shall be created for each unique HVAC system and use type combination. Multiple HVAC units of the same type may be represented in one block. ((Table)) Section D601.10.2 provides directions for combining multiple HVAC units or components of the same type into a single block.
3. Each block can have a single definition of floor to floor or floor to ceiling heights. Where floor heights differ by more than 2 feet, unique blocks should be created for the floors with varying heights.
4. Each block can include either above grade or below grade floors. For buildings with both above grade and below grade floors, separate blocks should be created for each. For buildings with floors partially above grade and partially below grade, if the total wall area of the floor(s) in consideration is greater than or equal to 50 percent above grade, then it should be simulated as a completely above grade block, otherwise it should be simulated as a below grade block.
5. Each wall on a façade of a block shall have similar vertical fenestration. The product of the proposed design U-factor times the area of windows (UA) on each façade of a given floor cannot differ by more than 15 percent of the average UA for that façade in each block. The product of the proposed design SHGC times the area of windows ((fUSHCC)) (SHGCA) on each façade of a given floor cannot differ by more than 15 percent of the average ( (USHGC)) SHGCA for that façade in each block. If either of these conditions are not met, additional blocks shall be created consisting of floors with similar fenestration.
6. For a building model with multiple blocks, the blocks should be configured together to have the same adjacencies as the actual building design.
((D601.3)) D601.2 Thermal zoning. Each floor in a block shall be modeled as a single thermal zone or as five thermal zones consisting of four perimeter zones and a core zone. Below grade floors shall be modeled as a single thermal block. If any façade in the block is less than 45 feet in length, there shall only be a single thermal zone per floor. Otherwise each floor shall be modeled with 5 thermal zones. A perimeter zone shall be created extending from each façade to a depth of 15 feet. Where facades intersect, the zone boundary shall be formed by a 45 degree angle with the 2 facades. The remaining area or each floor shall be modeled as a core zone with no exterior walls.

## ((D601.4)) D601.3 Occupancy.

((D601.4.1)) D601.3.1 Occupancy type. The occupancy type for each block shall be consistent with the building area type as determined in accordance with Section C405.4.2.1. Portions of the building that are building area types other than multifamily dwelling unit, multifamily common area, office, school (education), library, or retail shall not be included in the simulation. Surfaces adjacent to such building portions shall be modeled as adiabatic in the simulation program.
((D601.4.2)) D601.3.2 Occupancy schedule, density, and heat gain. The occupant density, heat gain, and schedule shall be for multifamily, office, retail, library, or school as specified by ASHRAE Standard 90.1 Normative Appendix C.

## ((D601.5)) D601.4 Envelope components.

((D601.5.1)) D601.4.1 Roofs. Roofs will be modeled with insulation above a steel roof deck. The roof U-factor and area shall be modeled as in the proposed design. If different roof thermal properties are present in a single block, an area weighted U-factor shall be used. Roof solar absorbtance shall be modeled at 0.70 and emittance at 0.90 .
((D601.5.2)) D601.4.2 Above grade walls. Walls will be modeled as steel frame construction. The $U$-factor and area of above grade walls shall be modeled as in the proposed design. If different wall constructions exist on the façade of a block an area-weighted U-factor shall be used.
((D601.5.3)) D601.4.3 Below grade walls. The $C$-factor and area of below grade walls shall be modeled as in the proposed design. If different slab on grade floor constructions exist in a block, an area-weighted $C$-factor shall be used.
((D601.5.4)) D601.4.4 Above grade exterior floors. Exterior floors shall be modeled as steel frame. The U-factor and area of floors shall be modeled as in the proposed design. If different wall constructions exist in the block an area-weighted $U$-factor shall be used.
((D601.5.5)) D601.4.5 Slab on grade floors. The F-factor and area of slab on grade floors shall be modeled as in the proposed design. If different below grade wall constructions exist in a block, an areaweighted $F$-factor shall be used.
((D601.5.6)) D601.4.6 Vertical fenestration. The window area and area weighted U-factor and SHGC shall be modeled for each façade based on the proposed design. Each exterior surface in a block must comply with Section (( 0601.2 .1$)$ ) D601.1.1 item 5. Windows will be combined in to a single window centered on each façade based on the area and sill height input by the user. When different U-factors, SHGC or sill heights exist on a single facade, area weighted average for each shall be input by the user.
((D601.5.7)) D601.4.7 Skylights. The skylight area and area weighted U-factor and SHGC shall be modeled for each floor based the proposed design. Skylights will be combined in to a single skylight centered on the roof of each zone based on the area ((and sill height)) input by the user.

D601.4.8 Exterior shading. Permanent window overhangs shall be modeled. When windows with and without overhangs or windows with different overhang projection factors exist on a facade, window width weighted projection factors shall be input by the user as follows.

$$
\underline{P}_{a v g} \equiv \frac{A_{1} \times L_{o l}+A_{2} \times L_{o 2} \ldots A_{n} \times L_{o n}}{\underline{L_{w l}+L_{w 2} \ldots L_{w n}}}
$$

Where:
$\mathrm{P}_{\text {avg }} \equiv$ Average overhang projection modeled in the simulation tool.
A $\equiv$ Distance measured horizontally from the furthest continuous extremity of any overhang, eave or permanently attached shading device to the vertical surface of the glazing.
$\underline{L}_{\rho} \equiv$ Length off the overhang.

$$
\underline{L}_{\mathrm{w}} \equiv \text { Length of the window. }
$$

((D601.6)) D601.5 Lighting. Interior lighting power density shall be equal to the allowance in Table C405.4.2(1) for multifamily, office, retail, library, or school. The lighting schedule shall be for multifamily, office, retail, library, or school as specified by ASHRAE Standard 90.1 Normative Appendix C. The impact of lighting controls is assumed to be captured by the lighting schedule and no explicit controls shall be modeled. Exterior lighting shall not be modeled.
((D601.7)) D601.6 Miscellaneous equipment. The miscellaneous equipment schedule and power shall be for multifamily, office, retail, library, or school as specified by ASHRAE Standard 90.1 Normative Appendix C. The impact of miscellaneous equipment controls is assumed to be captured by the equipment schedule and no explicit controls shall be modeled.
EXCEPTIONS: $\quad \frac{1 . \text { Multifamily dwelling units shall have a miscellaneous load density of } 0.42 \mathrm{~W} / \mathrm{ft}^{2} \text {. }}{2 \text { Multifamily }}$
2. Multifamily common areas shall have a miscellaneous load density of $0 \mathrm{~W} / \mathrm{ft}^{2}$.
((D601.8)) D601.7 Elevators. Elevators shall not be modeled.
((D601.9)) D601.8 Service water heating equipment. Service water heating shall not be modeled.
((D601.10)) D601.9 On-site renewable energy systems. On-site renewable energy systems shall not be modeled.
((D601.11)) D601.10 HVAC equipment. HVAC systems shall meet the requirements of Section C403.
((D601.11.1)) D601.10.1 Supported HVAC systems. At a minimum, the HVAC systems shown in Table ((D601.11.1)) D601.10.1 shall be supported by the simulation program.

Table ((D601.11.1)) D601.10.1 Proposed Building HVAC Systems Supported by HVAC TSPR Simulation Software

| System <br> No. | System Name | System <br> Abbreviation |
| :---: | :--- | :---: |
| 1 | Packaged Terminal Air <br> Conditioner | PTAC |
| 2 | Packaged Terminal Air Heat <br> Pump | PTHP |
| 3 | Packaged Single Zone Gas <br> Furnace (includes split <br> system) | PSZGF |
| 4 | Packaged Single Zone Heat <br> Pump (air to air only) <br> (includes split system) | PSZHP |
| 5 | Variable Refrigerant Flow <br> (air cooled only) | VRF |
| 6 | Four Pipe Fan Coil | FPFC |
| 7 | Water Source Heat Pump | WSHP |
| 8 | Ground Source Heat Pump | GSHP |
| 9 | Packaged Variable Air <br> Volume (dx cooling) | PVAV |
| 10 | Variable Air Volume <br> (hydronic cooling) | VAV |


| System <br> No. | System Name | System <br> Abbreviation |
| :---: | :--- | :---: |
| 11 | Variable Air Volume with <br> Fan Powered Terminal Units | VAVFPTU |
| 12 | Dedicated Outdoor Air <br> System (in conjunction with <br> systems 1-8) | DOAS |

((D601.11.2)) D601.10.2 Proposed building HVAC system simulation. The HVAC systems shall be modeled as in the proposed design with clarifications and simplifications as described in Table ((D601.11.2)) D601.10.2. System parameters not described in the following sections shall be simulated to meet the minimum requirements of Section C403. All zones within a block shall be served by the same HVAC system type as described in Section ((1601.2.1)) D601.1.1 item 2. Where multiple system components serve a block, average values weighed by the appropriate metric as described in this section shall be used. Heat loss from ducts and pipes shall not be modeled.
((EXCEPTION: Where the building permit applies to only a portion of an HVAC system and remaining components will be designed under a future building permit, the future components shall be modeled to meet, but not exceed, the requirements of Section C403.))

1. Where multiple fan systems serve a single block, fan power shall be based on weighted average using the design supply air cfm.
2. Where multiple cooling systems serve a single block, COP shall be based on a weighted average using cooling capacity. DX coils shall be entered as multi-stage if more than $50 \%$ of coil capacity serving the block is multi-stage with staged controls.
3. Where multiple heating systems serve a single block, thermal efficiency or heating COP shall be based on a weighted average using heating capacity.
4. Where multiple boilers or chillers serve a heating water or chilled water loop, efficiency shall be based on a weighted average for using heating or cooling capacity.
5. When multiple cooling towers serving a condenser water loop are combined, the cooling tower efficiency, cooling tower design approach and design range are based on a weighted average of the design water flow rate through each cooling tower.
6. Where multiple pumps serve a heating water, chilled water or condenser water loop, pump power shall be based on a weighted average for using design water flow rate.
7. When multiple system types with and without economizers are combined, the economizer maximum outside air fraction of the combined system shall be based on weighted average of $100 \%$ supply air for systems with economizers and design outdoor air for systems without economizers.
8. Multiple systems with and without ERVs cannot be combined.
9. Systems with and without supply air temperature reset cannot be combined.
10. Systems with different fan control (constant volume, multispeed or VAV) for supply fans cannot be combined.
11. Demand Controlled Ventilation (DCV) shall be modeled using a simplified approach that adjusts the design outdoor supply air flow rate based on the area of the building that is covered by DCV.

Table ((D601.11.2)) D601.10.2

## Proposed Building System Parameters

Washington State Register, Issue 22-14
WSR 22-14-091

| Category | Parameter | Fixed or User Defined | Required | Applicable Systems |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { HVAC System } \\ & \text { Type } \end{aligned}$ | System Type | User Defined | Selected from Table ((D601.11.1)) D601.10.1 | All |
| System Sizing | Design Day Information | Fixed | 99.6 percent heating design and 1 percent drybulb and 1 percent wet-bulb cooling design | All |
|  | Zone Coil Capacity | Fixed | Sizing factors used are 1.25 for heating equipment and 1.15 for cooling equipment | All |
|  | Supply Airflow | Fixed | Based on a supply-air-to-room-air temperature set-point difference of $20^{\circ} \mathrm{F}$ | 1-11 |
|  |  | Fixed | Equal to required outdoor air ventilation | 12 |
| Outdoor Ventilation Air | Portion of Supply Air with Proposed Filter $\geq$ MERV 13 | User Defined | Percentage of supply air flow subject to higher filtration (Adjusts baseline fan power higher. Prorated) | All |
|  | Outdoor Ventilation Air Flow Rate <br> Flow Rate | Fixed | As specified in ASHRAE Standard 90.1 Normative Appendix C, adjusted for proposed DCV control | All |
|  | Outdoor <br> Ventilation <br> Supply Air Flow <br> Rate <br> Adjustments | Fixed | Based on ASHRAE Standard 62.1 Section 6.2.4.3 system ventilation efficiency $\left(E_{V} S\right)$ is 0.75 | 9-11 |
|  |  | Fixed | System ventilation efficiency ( $\mathrm{E}_{V} \mathrm{~S}$ ) is 1.0 | 1-8, 12 |
|  |  | Fixed | Base is 1.0 zone air distribution effectiveness | All |
| System Operation | Space Temperature Setpoints | Fixed | As specified in ASHRAE Standard 90.1 <br> Normative Appendix C, except multifamily which shall use $68^{\circ} \mathrm{F}$ heating and $76^{\circ} \mathrm{F}$ cooling setpoints | 1-11 |
|  | Fan Operation Occupied | User Defined | Runs continuously during occupied hours or cycled to meet load. Multispeed fans reduce airflow related to thermal loads | 1-11 |
|  | Fan Operation Occupied | Fixed | Fan runs continuously during occupied hours | 12 |
|  | Fan Operation Night Cycle | Fixed | Fan cycles on to meet setback temperatures | 1-11 |
| Packaged Equipment Efficiency | DX Cooling Efficiency | User Defined | Cooling COP without fan energy calculated in accordance with ASHRAE Standard 90.1 Section 11.5.2c. ${ }^{\text {b }}$ | $\begin{aligned} & 1,2,3,4,5 \\ & 7,8,9,11, \\ & 12 \end{aligned}$ |
|  | $\begin{aligned} & \text { DX Coil Number } \\ & \text { of Stages } \end{aligned}$ | User Defined | Single state or multistage | $\begin{gathered} \frac{3,4,9,10,}{11,12} \end{gathered}$ |
|  | Heat Pump Efficiency | User Defined | Heating COP without fan energy calculated in accordance with ASHRAE Standard 90.1 <br> Section 11.5.2c. ${ }^{\text {c }}$ | 2, 4, 5, 7, 8 |
|  | Furnace Efficiency | User Defined | Furnace thermal efficiency ${ }^{\text {c }}$ | 3, 9, 11, 12 |
| Heat Pump Supplemental Heat | Control | Fixed | Supplemental electric heat locked out above $40^{\circ} \mathrm{F}$. Runs in conjunction with compressor between $40^{\circ} \mathrm{F}$ and $0^{\circ} \mathrm{F}$. | 2, 4 |

Washington State Register, Issue 22-14
WSR 22-14-091

| Category | Parameter | Fixed or User Defined | Required | Applicable Systems |
| :---: | :---: | :---: | :---: | :---: |
| System Fan Power and Controls | Part-Load Fan Controls | User Defined | Constant volume or two speed | 1-8 |
|  | Part-Load Fan Controls ${ }^{\text {a }}$ | User Defined | Constant volume or variable air volume | 12 |
|  | $\begin{aligned} & \hline \text { Part-Load Fan } \\ & \text { Controls }^{\mathrm{a}} \end{aligned}$ | Fixed | Variable air volume. VFD with static pressure reset. | 9-11 |
|  | $\begin{aligned} & \text { Design Fan } \\ & \text { Power (W/cfm) } \end{aligned}$ | User Defined | Input electric power for all fans is required to operate at fan system design conditions divided by the supply airflow rate. This is a "wire to air" value including all drive, motor efficiency and other losses. | All |
|  | ((Single Zone System Fan Power During Deadband (W + (fm))) <br> Low-Speed Fan Power | User Defined | ((W/efm during deadband for VAV or multispeed single zone fans)) Low speed input electric power for all fans required to operate at low speed conditions divided by the low speed supply airflow rate. This is a "wire to air" value including all drive, motor efficiency and other losses. | $\begin{gathered} ((3,4,5,6, \\ 7,8)) \\ 1-8 \end{gathered}$ |
| Variable Air Volume Systems | $\begin{aligned} & ((\text { Part Load Fan } \\ & \text { Controls } \end{aligned}$ | User Defined | VFD included. User specifies presence of static presstre reset | 9,10,14)) |
|  | Supply Air Temperature (SAT) Controls | User Defined | If not SAT reset, constant at $55^{\circ} \mathrm{F}$. ((SAT reset results in $60^{\circ} \mathrm{F}$ SAT during low load conditions)) <br> Options for reset based on outdoor air temperature (OAT) or warmest zone. If warmest zone, then the user can specify the minimum and maximum temperatures. If OAT reset, SAT is reset higher to $60^{\circ} \mathrm{F}$ at outdoor low of $50^{\circ} \mathrm{F}$. SAT is $55^{\circ} \mathrm{F}$ at outdoor high of $70^{\circ} \mathrm{F}$. | 9, 10, 11 |
|  | Minimum <br> Terminal Unit <br> Airflow <br> Percentage | User Defined | Average minimum terminal unit airflow percentage for block weighted by cfm | 9, 10, 11 |
|  | Terminal Unit Heating Source | User Defined | Electric or hydronic | 9, 10, 11 |
|  | Dual Set Point Minimum VAV Damper Position | User Defined | Heating maximum airflow fractions | $\underline{9,10}$ |
|  | Fan Powered Terminal Unit (FPTU) Type | User Defined | Series or parallel FPTU | 11 |
|  | $\begin{aligned} & \text { Parallel FPTU } \\ & \text { Fan } \end{aligned}$ | Fixed | Sized for 50 percent peak primary air at 0.35 W/cfm | 11 |
|  | Series FPTU Fan | Fixed | Sized for 50 percent peak primary air at 0.35 W/cfm | 11 |
| Economizer | Economizer Presence | User Defined | Yes or No | $\begin{gathered} 3,4,9,10, \\ 11 \end{gathered}$ |
|  | Economizer ((High Limit)) Control Type | Fixed | ((759「 fixed)) Differential dry-bulb | $\underset{11}{3,4,9,10,}$ |

Washington State Register, Issue 22-14
WSR 22-14-091

| Category | Parameter | Fixed or User Defined | Required | Applicable Systems |
| :---: | :---: | :---: | :---: | :---: |
| Energy Recovery | Sensible Effectiveness | User Defined | Heat exchanger sensible effectiveness at design heating and cooling conditions | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
|  | Latent Effectiveness | User Defined | Heat exchanger latent effectiveness at design heating and cooling conditions | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
|  | Economizer Bypass | User Defined | If ERV is bypassed during economizer conditions | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
|  | ((Energy <br> Recovery Temp <br> Contral) <br> Bypass SAT <br> Setpoint | User Defined | If bypass, target supply air temperature | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
|  | Fan Power Reduction during Bypass (W/cfm) | User Defined | If ERV system include bypass, static pressure setpoint and variable speed fan, fan power can be reduced during economizer conditions | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
| Demand Controlled Ventilation | DCV <br> Application | User Defined | Percent of block floor area under DCV control | $\begin{gathered} 3,4,9,10 \\ 11,12 \end{gathered}$ |
| DOAS | DOAS Fan Power W/cfm | User Defined | Fan electrical input power in W/cfm of supply airflow( $\left.{ }^{( }{ }^{\mathrm{a}}\right)$ ) | 12 |
|  | DOAS <br> Supplemental Heating and Cooling | User Defined | Heating source, cooling source | 12 |
|  | $\begin{aligned} & \text { Minimum SAT } \\ & \hline \text { Setpoint } \\ & (\text { Cooling }) \end{aligned}$ | $\underline{\text { User Defined }}$ | SAT setpoint if DOAS includes supplemental cooling | $\underline{12}$ |
|  | ((BOAS Supply <br> Air Temperature Control)) <br> Minimum SAT <br> Setpoint <br> (Heating) | User Defined | SAT setpoint if DOAS includes supplemental heating ((or eooling and active temperature eentrols)) | 12 |
| Heating Plant | Boiler <br> Efficiency $\left({ }^{\text {d }}\right.$ ) ) | User Defined | Boiler thermal efficiency | $\begin{aligned} & 1,6,7,9 \\ & 10,11,12 \end{aligned}$ |
|  | $\begin{aligned} & \text { Heating Water } \\ & \text { Loop } \\ & \text { Configuration }^{\text {a }} \end{aligned}$ | User Defined | Constant flow primary only; variable flow primary only; constant flow primary-variable flow secondary; variable flow primary and secondary | $\begin{aligned} & 1,6,7,9 \\ & 10,11,12 \end{aligned}$ |
|  | $\begin{aligned} & \text { Heating Water } \\ & \text { Primary Pump } \\ & \text { Power (W/gpm) } \end{aligned}$ | User Defined | Heating water primary pump input W/gpm heating water flow | $\begin{aligned} & 1,6,7,9 \\ & 10,11,12 \\ & \hline \end{aligned}$ |
|  | Heating Water Secondary Pump Power (W/gpm) | User Defined | Heating water secondary pump input W/gpm heating water flow (if primary/secondary) | $\begin{aligned} & 1,6,7,9 \\ & 10,11,12 \end{aligned}$ |
|  | Heating Water Loop Temperature | ((Fixed)) <br> User Defined | (( $180^{\circ} \mathrm{F}$ supply, $130^{\circ} \mathrm{F}$ return) $)$ Heating water supply and return temperatures | $\begin{gathered} 1,6,9,10 \\ 11,12 \end{gathered}$ |
|  | Heating Water Loop Supply Temperature Reset Included | $\underline{\text { User Defined }}$ | $\underline{\text { Yes/No }}$ | $\frac{1,6,9,10,}{11,12}$ |
|  | Heating Water <br> Loop Supply <br> Reset <br> Temperature | Fixed | Reset HWS by 27.3 percent of design delta-T (HWS - $70^{\circ} \mathrm{F}\left(21.1^{\circ} \mathrm{C}\right)$ space heating temperature set point) between $20^{\circ} \mathrm{F}\left(-6.7^{\circ} \mathrm{C}\right)$ and $50^{\circ} \mathrm{F}\left(10^{\circ} \mathrm{C}\right) \mathrm{OAT}$ | $\frac{1,6,9,10,}{\underline{11,12}}$ |
|  | Boiler Type | Fixed | Noncondensing boiler where input thermal efficiency is less than 86 percent; condensing boiler otherwise | $\begin{aligned} & \frac{1,6,7,9}{10,11,12} \\ & \hline \end{aligned}$ |

Washington State Register, Issue 22-14
WSR 22-14-091

| Category | Parameter | Fixed or User Defined | Required | Applicable Systems |
| :---: | :---: | :---: | :---: | :---: |
| Chilled Water Plant | Chiller <br> Compressor <br> Type | User Defined | Screw/scroll, centrifugal or reciprocating | 6,10, 11, 12 |
|  | Chiller Condenser Type | User Defined | Air cooled or water cooled | $\begin{gathered} 6,10,11 \\ 12 \end{gathered}$ |
|  | Chiller Full Load Efficiency $\left({ }^{\text {d }}\right.$ ) $)$ | User Defined | Chiller COP | $\begin{gathered} 6,10,11, \\ 12 \end{gathered}$ |
|  | Chilled Water Loop Configuration_ ${ }_{-}^{\text {a }}$ | User Defined | Variable flow primary only, constant flow primary - variable flow secondary, variable flow primary and secondary | $\begin{gathered} 6,10,11 \\ 12 \end{gathered}$ |
|  | $\begin{aligned} & \text { Chilled Water } \\ & \text { Primary Pump } \\ & \hline \text { Power (W/gpm) } \end{aligned}$ | User Defined | Primary pump input W/gpm chilled water flow (if primary/secondary) | $\begin{gathered} 6,10,11 \\ 12 \end{gathered}$ |
|  | Chilled Water Secondary Pump Power (W/gpm) | $\underline{\text { User Defined }}$ | Secondary pump input W/gpm chilled water flow | $\frac{6,10,11,}{\underline{12}}$ |
|  | Chilled Water Temperature Reset Included | User Defined | Yes/No | $\begin{gathered} 6,10,11 \\ 12 \end{gathered}$ |
|  | Chilled Water Temperature Reset Schedule (if included) | Fixed | Outdoor air reset: CHW supply temperature of $44^{\circ} \mathrm{F}$ at $80^{\circ} \mathrm{F}$ outdoor air dry-bulb and above, CHW supply temperature of $54^{\circ} \mathrm{F}$ at $60^{\circ} \mathrm{F}$ outdoor air dry-bulb temperature and below, ramped linearly between | $\begin{gathered} 6,10,11, \\ 12 \end{gathered}$ |
|  | Condenser Water Pump Power (W/ gpm) | User Defined | Pump input W/gpm condenser water flow | $\begin{gathered} 6,7,8, \\ ((9,)) 10, \\ 11,12 \end{gathered}$ |
|  | Condenser Water Pump Control | User Defined | Constant speed or variable speed | $\begin{gathered} 6,7,8,10 \\ 11,12 \end{gathered}$ |
|  | Cooling Tower Efficiency | User Defined | gpm/hp tower fan | $6,7,10,11,$ |
| ((Cooling Tower)) | Cooling Tower Fan Control | User Defined | Constant or variable speed | $6, \underline{7,} 10,11,$ |
|  | Cooling Tower Approach and Range | User Defined | Design cooling tower approach and range temperature | $\begin{gathered} 6,7,10,11, \\ 12 \end{gathered}$ |
| Heat Pump Loop Flow Control | Loop Flow and Heat Pump Control Valve | Fixed | Two position valve with VFD on pump. Loop flow at $3 \mathrm{gpm} /$ ton | 7, 8 |
| Heat Pump Loop Temperature Control |  | ((Fixed)) User Defined | ((Set to maintain temperature between $50^{\circ} \mathrm{F}$ and $\left.70^{\circ} \mathrm{F}\right)$ ) <br> Restrict to minimum $20^{\circ} \mathrm{F}$ and maximum $40^{\circ} \mathrm{F}$ temperature difference | 7 |
| GLHP Well Field |  | Fixed | Bore depth $=250$ feet <br> Bore length 200 feet/ton for greater of cooling or heating load <br> Bore spacing = 15 feet <br> Bore diameter $=5$ inches <br> 3/4 inch Polyethylene pipe <br> Ground and grout conductivity $=4.8 \mathrm{Btu}-\mathrm{in} / \mathrm{h}-$ $\mathrm{ft}^{2}-{ }^{\circ} \mathrm{F}$ | 8 |
| ( ( a Where multiple fan systems serve a single block, fan power is based on weighted average using on supply air cfm. <br> b Where multiple cooling systems sevve a single block, cop is based on a weighted average using cooling capacity. |  |  |  |  |

c Where multiple heating systems serve a single block, theimal effi eiency or heating COP is based on a weighted average using heating ca= pacity.
d Where multiple boileis or chilleis seive a heating water or chilled water loop, efficiency is based on a weighted average for using heat= ing or cooling capacity-))
a Part load fan power and pump power modified in accordance with Table D601.10.3.
Table D601.10.3
Fan and Pump Power Curve Coefficients

| $\underline{\text { Equation Term }}$ | $\underline{\text { Fan Power Coefficients }}$ | $\underline{\text { Pump Power Coefficients }}$ |  |
| :---: | :---: | :---: | :---: |
|  | $\underline{\text { VSD + SP Reset }}$ | $\underline{\text { Ride Pump Curve }}$ | $\underline{\text { VSD + DP/Valve Reset }}$ |
| $\underline{\mathrm{b}}$ | $\underline{0.0408}$ | $\underline{0}$ | $\underline{0}$ |
| $\underline{\mathrm{x}}$ | $\underline{0.088}$ | $\underline{3.2485}$ | $\underline{0.0205}$ |
| $\underline{\mathrm{x}^{2}}$ | $\underline{0.0729}$ | $\underline{-4.7443}$ | $\underline{0.4101}$ |
| $\underline{\mathrm{x}^{3}}$ | $\underline{2.5437}$ | $\underline{0.575}$ |  |

D602 Simulation of the standard reference design. The standard reference design shall be configured and analyzed as specified in this section.
D602.1 Utility rates. Same as proposed.
D602.2 Blocks. Same as proposed.
D602.3 Thermal zoning. Same as proposed.
D602.4 Occupancy type, schedule, density, and heat gain. Same as proposed.
D602.5 Envelope components. Same as proposed.
D602.6 Lighting. Same as proposed.
D602.7 Miscellaneous equipment. Same as proposed.
D602.8 Elevators. Not modeled. Same as proposed.
D602.9 Service water heating equipment. Not modeled. Same as proposed. D602.10 On-site renewable energy systems. Not modeled. Same as proposed.
D602.11 HVAC equipment. The standard reference design HVAC equipment consists of separate space conditioning systems and dedicated outside air systems as described in Table D602.11 for the appropriate building occupancies.

Table D602.11
Standard Reference Design HVAC Systems

| Parameter | Building Type |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large Office ${ }^{\text {a }}$ | Small Office and Libraries ${ }^{\text {a }}$ | Retail | School | Multifamily |
| System Type | Water-source Heat Pump | Packaged air-source Heat Pump | Packaged air-source Heat Pump | Packaged air-source Heat Pump | Packaged air-source Heat Pump |
| Fan Control ${ }^{\text {b }}$ | Cycle on Load | Cycle on Load | Cycle on Load | Cycle on Load | Cycle on Load |
| Space Condition Fan Power (W/cfm) <br> Proposed < MERV 13 | 0.528 | 0.528 | 0.522 | 0.528 | $\underline{0.528}$ |
| Space Condition Fan Power (W/cfm) <br> Proposed $\geq$ MERV 13 | $\underline{0.634}$ | $\underline{0.634}$ | $\underline{0.634}$ | $\underline{0.634}$ | $\underline{0.634}$ |


| Heating/Cooling Sizing Factor ${ }^{\text {c }}$ | 1.25/1.15 | 1.25/1.15 | 1.25/1.15 | 1.25/1.15 | 1.25/1.15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Supplemental Heating Availability | NA | $<40^{\circ} \mathrm{F}$ | $<40^{\circ} \mathrm{F}$ | $<40^{\circ} \mathrm{F}$ | $\leq 40^{\circ} \mathrm{F}$ |
| $\begin{aligned} & \hline \text { Modeled cooling COP } \\ & \left(\text { Net of Fan) }{ }^{\mathrm{d}}\right. \end{aligned}$ | 4.46 | 3.83 | 4.25 | 3.83 | 3.83 |
| $\begin{aligned} & \text { Modeled heating COP } \\ & \text { (Net of Fan) }{ }^{d} \end{aligned}$ | 4.61 | 3.81 | 3.57 | 3.81 | 3.86 |
| Cooling Source | DX (Heat Pump) | DX (Heat Pump) | DX (Heat Pump) | DX (Heat Pump) | DX (Heat Pump) |
| Heat Source | Heat Pump | Heat Pump | Heat Pump | Heat Pump | Heat Pump |
| $\begin{aligned} & \text { Number of Stages of } \\ & \hline \text { Cooling } \\ & \hline \end{aligned}$ | Single | Single | Two | Single | Single |
| OSA Economizer ${ }^{\text {e }}$ | No | No | Yes | Yes | Yes |
| Occupied Ventilation Source ${ }^{f}$ | DOAS | DOAS | DOAS | DOAS | DOAS |
| DOAS Fan Power (W/cfm of Outside Air) | 0.819 | 0.819 | 0.730 | 0.742 | $\underline{0.780}$ |
| DOAS Fan Power (W/ cfm) Proposed $\geqq$ MERV 13 | 1.042 | 1.042 | $\underline{0.928}$ | 0.944 | 0.944 |
| DOAS Temperature Controlg, h | Bypass | Wild | Bypass | Bypass | Wild |
| ERV Efficiency (Sensible Only) | 70 percent | 70 percent | 70 percent | 70 percent | 70 percent |
| WSHP Loop Heat Rejection | Cooling Tower ${ }^{\text {i }}$ | NA | NA | NA | NA |
| WSHP Loop Heat Source | Gas Boiler ${ }^{\text {j }}$ | NA | NA | NA | NA |
| WSHP Loop Temperature Control ${ }^{k}$ | $50^{\circ} \mathrm{F}$ to $70^{\circ} \mathrm{F}$ | NA | NA | NA | NA |
| WSHP Circulation Pump W/gpm ${ }^{1}$ | 16 | NA | NA | NA | NA |
| WSHP Loop Pumping Control ${ }^{\text {m }}$ | HP Valves \& Pump VSD | NA | NA | NA | NA |

a Offices less than 50,000 square feet use "Small Office" parameters; otherwise use "Large Office" parameters.
b Space conditioning system shall cycle on to meet heating and cooling setpoint schedules as specified in ASHRAE Standard 90.1 Normative Appendix C. One space conditioning system is modeled in each zone. Conditioning system fan operation is not necessary for ventilation delivery.
c The equipment capacities (i.e., system coil capacities) for the standard reference design building design shall be based on design day sizing runs and shall be oversized by 15 percent for cooling and 25 percent for heating.
d COPs shown are direct heating or cooling performance and do not include fan energy use. See ASHRAE 90.1 Appendix G (G3.1.2.1) for separation of fan from COP in packaged equipment for units where the efficiency rating includes fan energy (e.g., SEER, EER, HSPF, COP).
e Economizer on space conditioning systems shall be simulated when outdoor air conditions allow free cooling. Economizer high limit shall be based on differential dry-bulb control. DOAS system continues to operate during economizer mode.
f Airflow equal to the outside air ventilation requirements is supplied and exhausted through a separate DOAS system including a supply fan, exhaust fan and sensible only heat exchanger. No additional heating or cooling shall be provided by the DOAS. A single DOAS system will be provided for each block. The DOAS supply and return fans shall
run whenever the HVAC system is scheduled to operate in accordance with ASHRAE 90.1 Normative Appendix C.
g "Wild" DOAS control indicates no active control of the supply air temperature leaving the DOAS system. Temperature will fluctuate based only on entering and leaving conditions and the effectiveness of ERV. h "Bypass" DOAS control includes modulating dampers to bypass ERV with the intent to maintain supply air temperature at a maximum of $60^{\circ} \mathrm{F}$ when outside air is below $75^{\circ} \mathrm{F}$. Once outside air is above $75^{\circ} \mathrm{F}$, bypass dampers will be fully closed.
i Includes a single axial fan cooling tower with variable speed fans at $40.2 \mathrm{gpm} / \mathrm{hp}$, sized for an approach of $10^{\circ} \mathrm{F}$ and a range of $10^{\circ} \mathrm{F}$. $j$ Includes a single natural draft boiler with 80 percent $E_{t}$.
$k$ Loop boiler and heat rejection shall be controlled to maintain loop temperature entering heat pumps between $50^{\circ} \mathrm{F}$ and $70^{\circ} \mathrm{F}$.
${ }^{l}$ Pump motor input power shall be $16 \mathrm{~W} / \mathrm{gpm}$.
$m$ Loop flow shall be variable with variable speed drive pump and unit fluid flow shutoff at each heat pump when its compressor cycles off.
[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-80500, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-80500, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-80500, filed 1/19/16, effective 7/1/16.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-90000 Appendix E-((Renewable-enexgy)) Reserved.

( (Informational Note: The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.
E101.1 On-site renewable energy systems. Each new commercial building or addition larger than 5,000 square fect of gross conditioned floor area shall include a renewable energy generation system consisting of at least 70 watts rated peak photovoltaic energy production, or 240 $k B t u$ of annual solar water heating energy production, per 1,000 square feet of conditioned floor area or fraction thereof. For buildings over 5 stories in height, the conditioned area for this calculation shall be based on the conditioned area of the largest 5 above-grade stories in the building. If the on-site renewable enexgy option in c406 is selected, this energy shall be in addition to that required by C406.
ЕКСЕРТЮN: Alternate means of achieving equivalent energy savings are permissible where approved by the code official, if the ealeulated net anntat energy savings equats or execeds the caleulated anntal energy produetion of the required on-site renewable energy system.))
[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-90000, filed 11/26/19, effective 7/1/20.]

AMENDATORY SECTION (Amending WSR 19-24-040, filed 11/26/19, effective 7/1/20)

## WAC 51-11C-90500 Appendix F-Outcome-based energy budget.

Informational Note: The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.
F101.1 General. This section is an outcome-based energy budget compliance requirement pursuant to RCW 19.27A. 160 to incrementally move toward achieving by 2031 a 70 percent reduction in annual net energy use compared with 2006 baseline. As an outcome-based energy budget, this requirement uses a building's actual energy use to determine compliance.

F101.2 Scope. Buildings permitted under this section shall document one year of net energy use below an energy budget within 3 years after occupancy and every 5 years thereafter. Buildings and sites shall also be designed with the ability to offset in the future all estimated energy needs through renewable energy generation with minimum 40 percent on-site, maximum 40 percent off-site, and maximum 20 percent through green power purchase. Buildings that exceed the energy budget by up to 20 percent shall offset the excess amount through a green power purchase agreement. Buildings that exceed the energy budget by more than 20 percent shall, using a posted performance bond or financial security, offset the excess amount over 20 percent by installing renewable energy or with an energy retrofit.
F101.3 Building permit submittal. Building designs shall establish on the Washington State Outcome-Based Energy Budget form (Figure F101.3): 1. The anticipated building energy use is lower than the energy budget.
2. The energy generation ability in the future is greater than or equal to the anticipated building energy use.

F101.3.1 Anticipated building energy use. The total yearly energy use from all metered fuel sources is the anticipated building energy use. Any energy used from district energy, combined heat and power, renewable energy, or captured waste heat systems must be metered. Buildings with any nonmetered energy sources are not permitted for compliance with this section. All secondary spaces and services (examples: Exterior building and site lighting, surface parking, garages, and exterior swimming pools) associated with the building shall be included in the overall energy use total. The anticipated site Energy Use Intensity (EUI) for each fuel source shall be reported in units of $k W h / f t^{2} / y r$ or $k B t u / f t^{2} / y r$ using the conversions listed below:

| Metered <br> Fuel <br> Source | to $\mathrm{kWh}:$ | to kBTU: |
| :--- | :--- | :--- |
| Electric | $\mathrm{kWh} \times 1$ | $\mathrm{kWh} \times 3.412$ |
| Gas | Therm $\times 29.308$ | Therm $\times 100$ |
| Propane | Cubic Foot $\times 0.738$ | Cubic Foot $\times 2.5185$ |
| Fuel Oil | Gallon $\times 43.872$ | Gallon $\times 149.6905$ |

F101.3.2 Building use and occupancy types. Building use and occupancy types permitted are indicated in Table F101.3.2(1).

F101.3.3 Maximum site energy budget. Table F101.3.2(1) indicates the site EUI budget for each building use and occupancy type along with the building enclosure requirements for all use and occupancy types.
F101.3.3.1 Mixed-use buildings. For buildings that contain more than one building use or occupancy type, the overall energy budget shall be based on the individual floor area percentage totals of each use times the individual energy budget and summing the results of all individual areas.

F101.3.3.2 Energy budget level options. Development teams may commit to a future, more stringent energy budget level from Table F101.3.2(1). Actual energy use and energy generation ability will be evaluated on this lower budget level.
F101.3.3.3 Energy modeling. A proposed building energy model is required for compliance with Section F101.3.2. A baseline energy model is not required. The proposed design model must show estimated energy use below the energy.

F101.3.4 Energy generation ability. Permit documents shall indicate the location, space allocated, and connection pathways for future installation of all potential energy generation systems. Only items defined by the Washington State Energy Code as on-site renewable energy shall be used to meet energy generation requirements.
F101.3.4.1 Energy generation categories. The development team shall complete the Washington State Outcome-Based Energy Budget form (Figure F101.3) to show the total renewable energy generation ability in the following categories:

1. Building integral: Renewable energy generation sources attached to the building. This value, combined with the on-site value, shall be at least 40 percent of the energy budget.
2. On-site: Renewable energy generation sources located on the building site property. This value, combined with the building integral value, shall be at least 40 percent of the energy budget.
3. Off-site: Renewable energy generation sources not located on the building site. This amount is limited to 40 percent of the energy budget. A specific off-site location does not need to be identified.
4. Green Power: Renewable energy purchased through the electric utility provider for the building. This amount is limited to 20 percent of the energy budget.
F101.3.4.2 Energy generation ability for building sites within a 2030 District. The development team for building sites within a designated 2030 District recognized by Architecture 2030 may use the Architecture 2030 Challenge 70 percent energy reduction target from the 2003 baseline as the energy budget. Building locations meeting this criteria and choosing this energy budget are exempt from the building integral and on-site requirements in Section F101.3.4.1. Green power remains capped at 20 percent. The generation requirements may be split, in any amount, among the building integral, on-site, or off-site categories. Actual energy use will be evaluated against the Architecture 2030 Challenge 70 percent energy reduction budget.
F101.4 Actual energy use submittal. The building owner or representative shall submit energy use documentation summary from all energy source providers or from an energy benchmarking service to the building code official. Code compliance is achieved with net energy use be-
low the energy budget for any continuous 12 -month span within the first 3 years of occupancy.
F101.4.1 Energy use monitoring period and occupancy. The energy use monitoring time frame shall start on the first full-month billing cycle of the utility or energy source provider(s) 6 months after a certificate of occupancy is issued. Buildings shall be deemed substantially occupied when a minimum 85 percent of the floor area, including all common areas, is occupied. The energy monitoring start time may be delayed up to an additional 6 months from certificate of occupancy (up to 12 months total) if 85 percent occupancy is not yet achieved. Buildings not 85 percent occupied after 12 months shall start the monitoring period for the portions occupied with an energy budget based on the spaces occupied and all common areas combined.
F101.4.2 Change of occupancy use during monitoring period. If an area within the building changes from one occupancy use to another with a different target EUI energy budget or if the building occupancy level drops below 50 percent, the target EUI energy budget shall be recalculated to become the new energy budget against which the building energy use shall be compared for compliance.
F101.4.3 Energy metering. All building spaces and uses subject to an energy budget or a portion of the energy budget shall be metered separately for all energy uses.
F101.4.4 Energy budget responsibility. The building owner is responsible for the compliance of the whole building. At the building owner's discretion, responsibility for the energy use budget may be divided and transferred into portions attributable to the occupant, operator or controller of each energy budget space. Common area spaces not under the control of an occupant or tenant may not be transferred.
F101.5 Actual energy use above the energy budget. Buildings exceeding the energy budget are not in compliance with the energy code and the building owner shall complete one of the following measures within 1 year:
5. Owners of buildings with actual energy use that exceeds the energy budget by up to 20 percent may offset the excess energy amount through annual green power purchase agreement from the utility provider at a rate of 1.1 times the excess energy amount until future code compliance is demonstrated.
6. Owners of buildings with actual energy use that exceeds the energy budget by more than 20 percent and up to 40 percent shall complete item 1 and either install on-building, on-site, or off-site energy generation equipment or invest in an energy conservation retrofit using the performance bond or financial security for energy amount remaining above 20 percent.
7. Owners of buildings with actual energy use that exceeds the energy budget by more than 40 percent shall complete item 1, item 2, and post a replacement performance bond or financial security equal to the first bond or security amount.
F101.5.1 Continued energy monitoring. Upon completing the necessary compliance measure(s) in Section F101.5 the building owner is provided another 3-year time frame to achieve and document net energy use below the energy budget for any continuous $12-m o n t h$ span. Owners of buildings that remain more than 20 percent above the energy budget shall repeat the measures in Section F101.5, up to 3 times maximum, using the performance bond or financial security to install energy genera-
tion equipment or to install an energy retrofit and post a new performance bond equal to the first.
F101.5.2 Tradable certificate for energy savings. As an alternate to the requirements of Section F101.5 a building owner may, when this market-based instrument becomes available, purchase a Tradable Certificate for Energy Savings (TCES) or "white certificates" from a building or entity with energy savings. The building owner shall purchase TCES's equal to 1.1 times the amount that the building's actual energy use exceeds the energy budget.

F101.6 Performance bond or financial security. A building developer must secure and submit to the code official a performance bond or an irrevocable financial security letter of credit from a state of Washington financial institution prior to certificate of occupancy issuance. The bond or security shall have a value equal to $\$ 4.00$ per square foot of gross conditioned floor area. The bond or security shall be used only to install renewable energy on the building or for investment into energy conservation measures as part of an energy retrofit. The bond or security may also be held for one additional 3-year energy-monitoring period if green power is purchased. Upon demonstrated compliance with the energy budget, the bond or security requirement shall be released.

F101.6.1 Failure to submit energy use data. Building owners that fail to submit energy use data at the end of the 3-year monitoring period shall forfeit the full amount of the performance bond or financial security as payment to the local jurisdiction. Building owners that fail to submit energy use data at the end of each continuing five-year monitoring period shall be fined an amount equal to the original bond or financial security by the local jurisdiction.
F101.7 Continued energy budget certification. After achieving code compliance buildings shall be required every 5 years to document a continuous 12 -month span with net energy use that is lower than the required energy budget. Owners of buildings with actual energy use that is at least 2.5 percent below their energy budget (from year permitted baseline, not voluntary year) may sell, when a future marketbased instrument becomes available, their unused energy equivalents in the form of a "white certificate" or Tradable Certificate for Energy Savings.
F101. 8 Local amendments. Local jurisdictions may amend the current code cycle EUI maximum energy budget by adopting a more stringent future code year value stated in Table F101.3.2(1).

Table F101.3.2(1)
Washington State Outcome-Based Energy Budget
( (Zone-4C:

|  | Site EUI | Base | Current | Future |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Building Occupancy/Use | $\mathbf{f t}^{2 / y e a r}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 4}$ | $\mathbf{2 0 2 7}$ | $\mathbf{2 0 3 0}$ |
| A-3 |  |  |  |  |  |  |  |
| Librafy | kWh | 30.5 | 14.6 | 13.3 | 11.9 | 10.5 | 9.4 |
|  | kBta | 104 | 49.9 | 45.3 | 40.6 | 35.9 | 31.2 |

Washington State Register, Issue 22-14
WSR 22-14-091

|  | Site EUI | Base | Current | Future |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Building Oectpaney/Use | $\mathrm{ft}^{2} / \mathrm{year}$ | 2003 | 2018 | 2024 | 2024 | 2027 | 2030 |
| Office/Bank | kWh <br> kBta | $\begin{aligned} & 19.7 \\ & 67.3 \end{aligned}$ | $\begin{gathered} 8.5 \\ 28.9 \end{gathered}$ | $\begin{gathered} \hline 7.8 \\ 26.7 \end{gathered}$ | $\begin{gathered} 7.2 \\ 24.5 \end{gathered}$ | $\begin{gathered} 6.6 \\ 22.4 \end{gathered}$ | $\begin{gathered} 5.9 \\ 20.2 \end{gathered}$ |
| Medical Office (nondiagnostic) | kWh kBta | $\begin{aligned} & 14.8 \\ & 50.4 \end{aligned}$ | $\begin{gathered} \hline 7.4 \\ 24.2 \end{gathered}$ | $\begin{gathered} 6.4 \\ 21.9 \end{gathered}$ | $\begin{gathered} \hline 5.8 \\ 19.6 \end{gathered}$ | $\begin{gathered} \hline 5.4 \\ 17.4 \end{gathered}$ | $\begin{gathered} 4.4 \\ 15.4 \end{gathered}$ |
| $\begin{array}{ll} \hline \text { E } & \\ & \text { SehoolK-12 } \end{array}$ | $\begin{aligned} & \text { kWh } \\ & \text { kBta } \end{aligned}$ | $\begin{aligned} & 17.4 \\ & 58.4 \end{aligned}$ | $\begin{gathered} 8.2 \\ 28.0 \end{gathered}$ | $\begin{gathered} 7.4 \\ 25.4 \end{gathered}$ | $\begin{gathered} 6.7 \\ 22.8 \end{gathered}$ | $\begin{gathered} 5.9 \\ 20.2 \end{gathered}$ | $\begin{gathered} 5.4 \\ 17.5 \end{gathered}$ |
| $12$ <br> Hospital (in patient) | kWh kBta | $\begin{gathered} 51.6 \\ 176.4 \end{gathered}$ | $\begin{aligned} & 24.8 \\ & 84.5 \end{aligned}$ | $\begin{aligned} & 22.5 \\ & 76.6 \end{aligned}$ | $\begin{aligned} & 20.1 \\ & 68.7 \end{aligned}$ | $\begin{aligned} & 17.8 \\ & 60.8 \end{aligned}$ | $\begin{aligned} & 15.5 \\ & 52.8 \end{aligned}$ |
| M <br> Grocery/Food Market | kWh <br> kBta | $\begin{gathered} 66.6 \\ 227.4 \end{gathered}$ | $\begin{gathered} 32.0 \\ 109.1 \end{gathered}$ | $\begin{aligned} & 29.0 \\ & 98.9 \end{aligned}$ | $\begin{aligned} & 26.0 \\ & 88.7 \end{aligned}$ | $\begin{aligned} & 23.0 \\ & 78.5 \end{aligned}$ | $\begin{aligned} & 20.0 \\ & 68.2 \end{aligned}$ |
|  | kWh <br> kBta | $\begin{aligned} & 25.7 \\ & 87.5 \end{aligned}$ | $\begin{aligned} & 12.3 \\ & 42.0 \end{aligned}$ | $\begin{aligned} & 11.2 \\ & 38.1 \end{aligned}$ | $\begin{aligned} & 10.0 \\ & 34.1 \end{aligned}$ | $\begin{gathered} 8.9 \\ 30.2 \end{gathered}$ | $\begin{gathered} 7.7 \\ 26.3 \end{gathered}$ |
| S-1 <br> Parking Enelosed Garage ${ }^{\text {a }}$ | kWh kBta | $\begin{gathered} 3.8 \\ 13.0 \end{gathered}$ | $\begin{aligned} & 2.3 \\ & 8.0 \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 7.0 \end{aligned}$ | $\begin{aligned} & 1.7 \\ & 5.9 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 4.9 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 3.9 \end{aligned}$ |
| Open Garage ${ }^{\text {a }}$ | kWh kBta | $\begin{aligned} & 2.3 \\ & 7.8 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 1.2 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 3.6 \end{aligned}$ | $\begin{aligned} & \hline 0.9 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 0.7 \\ & 2.3 \end{aligned}$ |
| S-2 <br> NonRefrigerated Distribution/ Shipping ${ }^{b}$ | kWh kBta | $\begin{gathered} 8.6 \\ 29.2 \end{gathered}$ | $\begin{gathered} 4.1 \\ 14.0 \end{gathered}$ | $\begin{gathered} 3.7 \\ 12.7 \end{gathered}$ | $\begin{gathered} 3.3 \\ 11.4 \end{gathered}$ | $\begin{gathered} 3.0 \\ 10.1 \end{gathered}$ | $\begin{aligned} & 2.6 \\ & 8.8 \end{aligned}$ |
| R-2 Multi-Family (3+ stories) <br> Lobby/Commen Area | kWh kBta | $\begin{gathered} 29.0 \\ 99 \end{gathered}$ | $\begin{aligned} & 17.5 \\ & 59.7 \end{aligned}$ | $\begin{aligned} & 15.3 \\ & 52.2 \end{aligned}$ | $\begin{aligned} & 13.1 \\ & 44.7 \end{aligned}$ | $\begin{aligned} & 10.9 \\ & 37.2 \end{aligned}$ | $\begin{gathered} 8.7 \\ 29.7 \end{gathered}$ |
| Studio/Miere-unit | kWh kBta | $\begin{gathered} 9238 \\ 31520 \end{gathered}$ | $\begin{gathered} 3284 \\ 11205 \end{gathered}$ | $\begin{gathered} 3156 \\ 10768 \end{gathered}$ | $\begin{gathered} 3028 \\ 10334 \end{gathered}$ | $\begin{aligned} & 2900 \\ & 9893 \end{aligned}$ | $\begin{aligned} & 2771 \\ & 9456 \end{aligned}$ |
| One Bedroom | kWh kBta | $\begin{aligned} & 18476 \\ & 63040 \end{aligned}$ | $\begin{gathered} 6568 \\ 22414 \end{gathered}$ | $\begin{gathered} 6312 \\ 21536 \end{gathered}$ | $\begin{gathered} 6055 \\ 20664 \end{gathered}$ | $\begin{gathered} 5799 \\ 19787 \end{gathered}$ | $\begin{gathered} 5543 \\ 18912 \end{gathered}$ |
| Two Bedroom | kWh <br> kBta | $\begin{aligned} & 27714 \\ & 94560 \end{aligned}$ | $\begin{gathered} 9852 \\ 33616 \end{gathered}$ | $\begin{gathered} 9468 \\ 32304 \end{gathered}$ | $\begin{gathered} 9083 \\ 30992 \end{gathered}$ | $\begin{gathered} 8699 \\ z 9680 \end{gathered}$ | $\begin{gathered} 8314 \\ 28368 \end{gathered}$ |
| Three Bedroom | kWh <br> kBta | $\begin{gathered} 36952 \\ 126080 \end{gathered}$ | $\begin{aligned} & 13136 \\ & 44821 \end{aligned}$ | $\begin{aligned} & 12624 \\ & 43072 \end{aligned}$ | $\begin{aligned} & 12114 \\ & 41323 \end{aligned}$ | $\begin{aligned} & 11598 \\ & 39573 \end{aligned}$ | $\begin{aligned} & 11086 \\ & 37824 \end{aligned}$ |
| Additional Bedreom | kWh <br> kBtu | $\begin{gathered} 9238 \\ 31520 \end{gathered}$ | $\begin{gathered} 3284 \\ 11205 \end{gathered}$ | $\begin{gathered} 3156 \\ 10768 \end{gathered}$ | $\begin{gathered} 3028 \\ 10331 \end{gathered}$ | $\begin{aligned} & 2900 \\ & 9893 \end{aligned}$ | $\begin{aligned} & 2771 \\ & 9456 \end{aligned}$ |
| All Oceupancies/Use Types |  | 2003 | 2018 | 2024 | 2024 | 2027 | 2030 |
|  |  |  |  | U-Fa |  |  |  |
| Vertieal Fenestration <br> Nonmetal <br> Metal-Fixed <br> Metal-Operable |  |  | $\begin{aligned} & 0.28 \\ & 0.33 \\ & 0.34 \end{aligned}$ | $\begin{aligned} & 0.27 \\ & 0.34 \\ & 0.32 \end{aligned}$ | $\begin{aligned} & 0.25 \\ & 0.28 \\ & 0.29 \end{aligned}$ | $\begin{aligned} & 0.24 \\ & 0.26 \\ & 0.26 \end{aligned}$ | $\begin{aligned} & 0.23 \\ & \theta .23 \\ & 0.23 \end{aligned}$ |
| Roof <br> Wall (above/below grade) |  |  | $\begin{aligned} & 0.016 \\ & 0.031 \end{aligned}$ | $\begin{aligned} & 0.015 \\ & 0.028 \end{aligned}$ | $\begin{aligned} & 0.014 \\ & 0.024 \end{aligned}$ | $\begin{aligned} & 0.013 \\ & 0.021 \end{aligned}$ | $\begin{aligned} & 0.012 \\ & 0.018 \end{aligned}$ |

Washington State Register, Issue 22-14
WSR 22-14-091

| All Oceupancies/Use Types | 2003 | 2018 | 2021 | 2024 | 2027 | 2030 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Floors |  | 0.024 | 0.023 | 0.024 | 0.020 | 0.018 |
|  | F-Value |  |  |  |  |  |
| Slab on Grade |  | 0.41 | 0.39 | 0.36 | 0.34 | 0.32 |
|  | CFM75/ft ${ }^{\mathbf{2}}$ |  |  |  |  |  |
| Air Leakage |  | 0.25 | 0.17 | $\theta .14$ | 0.14 | 0.08 |

Zone 5B:

|  | Site EUF | Base | Current | Future |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Butlding Oeeupaney/Use | $\mathbf{f t}^{2}$ /year | 2003 | 2018 | 2024 | 2024 | 2027 | 2030 |
| A-3 <br> Library | $\begin{aligned} & \text { kWh } \\ & \text { kBta } \end{aligned}$ | $\begin{gathered} 31.9 \\ 108.8 \end{gathered}$ | $\begin{aligned} & 15.3 \\ & 52.2 \end{aligned}$ | $\begin{aligned} & 13.9 \\ & 47.3 \end{aligned}$ | $\begin{aligned} & 12.4 \\ & 42.4 \end{aligned}$ | $\begin{aligned} & 11.0 \\ & 37.5 \end{aligned}$ | $\begin{gathered} 9.6 \\ 32.6 \end{gathered}$ |
| B <br> Office/Bank | kWh <br> kBta | $\begin{aligned} & 20.1 \\ & 68.6 \end{aligned}$ | $\begin{gathered} 9.4 \\ 30.9 \end{gathered}$ | $\begin{gathered} 8.3 \\ 28.3 \end{gathered}$ | $\begin{gathered} 7.5 \\ 25.8 \end{gathered}$ | $\begin{gathered} 6.8 \\ 23.2 \end{gathered}$ | $\begin{gathered} 6.0 \\ 20.6 \end{gathered}$ |
| Medical Office (nondiagnostic) | kWh kBta | $\begin{aligned} & 15.0 \\ & 51.3 \end{aligned}$ | $\begin{gathered} \hline 7.2 \\ 24.6 \end{gathered}$ | $\begin{gathered} 6.5 \\ 22.3 \end{gathered}$ | $\begin{gathered} 5.9 \\ 20.0 \end{gathered}$ | $\begin{gathered} 5.2 \\ 17.7 \end{gathered}$ | $\begin{gathered} 4.5 \\ 15.4 \end{gathered}$ |
| E <br> School K-12 | $\begin{aligned} & \mathrm{kWh} \\ & \text { kBta } \end{aligned}$ | $\begin{aligned} & 18.3 \\ & 62.4 \end{aligned}$ | $\begin{gathered} 8.8 \\ 30.0 \end{gathered}$ | $\begin{gathered} 8.0 \\ 27.2 \end{gathered}$ | $\begin{gathered} 7.4 \\ 24.3 \end{gathered}$ | $\begin{gathered} 6.3 \\ 21.5 \end{gathered}$ | $\begin{gathered} 5.5 \\ 18.7 \end{gathered}$ |
| $1-2$ <br> Hospital (in-patient) | $\begin{aligned} & \text { kWh } \\ & \text { kBta } \end{aligned}$ | $\begin{gathered} 48.5 \\ 165.5 \end{gathered}$ | $\begin{aligned} & 23.3 \\ & 79.4 \end{aligned}$ | $\begin{aligned} & 21.4 \\ & 72.0 \end{aligned}$ | $\begin{aligned} & 18.9 \\ & 64.5 \end{aligned}$ | $\begin{aligned} & 16.7 \\ & 57.1 \end{aligned}$ | $\begin{aligned} & 14.6 \\ & 49.7 \end{aligned}$ |
| M <br> Grocery/Food Market | $\begin{aligned} & \text { kWh } \\ & \text { kBta } \end{aligned}$ | $\begin{gathered} 66.3 \\ 226.4 \end{gathered}$ | $\begin{gathered} 31.8 \\ 108.5 \end{gathered}$ | $\begin{aligned} & 28.8 \\ & 98.4 \end{aligned}$ | $\begin{aligned} & 25.8 \\ & 88.2 \end{aligned}$ | $\begin{aligned} & 22.9 \\ & 78.0 \end{aligned}$ | $\begin{aligned} & 19.9 \\ & 67.8 \end{aligned}$ |
| Retail | kWh kBtt | $\begin{aligned} & 28.4 \\ & 97.0 \end{aligned}$ | $\begin{aligned} & 13.6 \\ & 46.6 \end{aligned}$ | $\begin{aligned} & 12.4 \\ & 42.2 \end{aligned}$ | $\begin{aligned} & 11.4 \\ & 37.8 \end{aligned}$ | $\begin{gathered} 9.8 \\ 33.5 \end{gathered}$ | $\begin{gathered} 8.5 \\ 29.4 \end{gathered}$ |
| S-1 <br> Parking Enelosed Garage ${ }^{\text {a }}$ | $\begin{aligned} & \text { kWh } \\ & \text { kBta } \end{aligned}$ | $\begin{gathered} 3.8 \\ 13.0 \end{gathered}$ | $\begin{aligned} & 2.3 \\ & 8.0 \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 7.0 \end{aligned}$ | $\begin{aligned} & 1.7 \\ & 5.9 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 4.9 \end{aligned}$ | $\begin{aligned} & 1.1 \\ & 3.9 \end{aligned}$ |
| Open Garage ${ }^{\text {a }}$ | kWh <br> kBta | $\begin{aligned} & 2.3 \\ & 7.8 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 1.2 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 3.6 \end{aligned}$ | $\begin{aligned} & 0.9 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 0.7 \\ & 2.3 \end{aligned}$ |
| ```S-2 NonRefrigerated Distribution/ Shipping}\mp@subsup{}{}{6``` | kWh <br> kBta | $\begin{aligned} & 10.5 \\ & 35.8 \end{aligned}$ | $\begin{gathered} 5.0 \\ 17.2 \end{gathered}$ | $\begin{gathered} 4.6 \\ 15.6 \end{gathered}$ | $\begin{gathered} 4.4 \\ 14.0 \end{gathered}$ | $\begin{gathered} 3.6 \\ 12.4 \end{gathered}$ | $\begin{gathered} 3.4 \\ 10.7 \end{gathered}$ |
| R-2 Mutti-Family (3+ stories) <br> Lobby/Common Area | kWh kBta | $\begin{gathered} 29.0 \\ 99 \end{gathered}$ | $\begin{aligned} & 18.8 \\ & 64.2 \end{aligned}$ | $\begin{aligned} & 16.3 \\ & 55.6 \end{aligned}$ | $\begin{aligned} & 13.8 \\ & 46.9 \end{aligned}$ | $\begin{aligned} & 11.2 \\ & 38.3 \end{aligned}$ | $\begin{gathered} 8.7 \\ 29.7 \end{gathered}$ |
| Studio/Micre unit | $\begin{aligned} & \mathrm{kWh} \\ & \text { kBta } \end{aligned}$ | $\begin{gathered} 9238 \\ 31520 \end{gathered}$ | $\begin{aligned} & 3495 \\ & 11925 \end{aligned}$ | $\begin{gathered} 3314 \\ 11308 \end{gathered}$ | $\begin{gathered} 3133 \\ 10694 \end{gathered}$ | $\begin{gathered} 2952 \\ 10073 \end{gathered}$ | $\begin{aligned} & 2771 \\ & 9456 \end{aligned}$ |
| One Bedroom | kWh kBta | $\begin{aligned} & 18476 \\ & 6304 \theta \end{aligned}$ | $\begin{gathered} 6990 \\ 23854 \end{gathered}$ | $\begin{gathered} 6628 \\ 22616 \end{gathered}$ | $\begin{gathered} 6267 \\ 21387 \end{gathered}$ | $\begin{gathered} 5905 \\ 20147 \end{gathered}$ | $\begin{gathered} 5543 \\ 18912 \end{gathered}$ |
| Two Bedroom | kWh kBta | $\begin{aligned} & 27714 \\ & 94560 \end{aligned}$ | $\begin{aligned} & 10485 \\ & 35776 \end{aligned}$ | $\begin{gathered} 9943 \\ 33924 \end{gathered}$ | $\begin{gathered} 9400 \\ 32072 \end{gathered}$ | $\begin{gathered} 8857 \\ 30220 \end{gathered}$ | $\begin{gathered} 8314 \\ 28368 \end{gathered}$ |

Washington State Register, Issue 22-14
WSR 22-14-091

|  | Site EUI | Base | Current | Future |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Butilding Oectpaney/Use | $\mathrm{ft}^{2 / \mathrm{year}}$ | 2003 | 2018 | 2024 | 2024 | 2027 | 2030 |
| Three Bedroom | kWh | 36952 | 13980 | 13257 | 12533 | 11809 | 11086 |
| Fhree Bedromm | kBta | 126080 | 47701 | 45232 | 42763 | 40293 | 37824 |
| m | kWh | 9238 | 3495 | 3314 | 3133 | 2952 | 2771 |
| m | kBta | 31520 | 11925 | 11308 | 10694 | 10073 | 9456 |
| All Oceupancies/Use Types |  | 2003 | 2018 | 2021 | 2024 | 2027 | 2030 |
|  |  |  |  | U-Fa |  |  |  |
| Vertical Fenestration |  |  |  |  |  |  |  |
| Nonmetal |  |  | 0.25 | 0.23 | 0.24 | 0.18 | 0.16 |
| Metal - Fixed |  |  | 0.31 | 0.27 | 0.23 | 0.20 | 0.16 |
| Metal-Operable |  |  | 0.32 | 0.28 | 0.24 | 0.20 | 0.16 |
| Roof |  |  | 0.016 | 0.015 | 0.014 | 0.013 | 0.012 |
| Wall (above/below grade) |  |  | 0.031 | 0.028 | 0.024 | 0.021 | 0.018 |
| Floors |  |  | 0.024 | 0.023 | 0.021 | 0.020 | 0.018 |
|  |  |  |  | F-Va |  |  |  |
| Slab on Grade |  |  | 0.44 | 0.39 | 0.36 | 0.34 | 0.32 |
|  |  |  |  | CFM7 |  |  |  |
| Air Leakage |  |  | 0.25 | 0.17 | $\theta .14$ | $\theta .14$ | 0.08)) |


| Building Occupancy/Use |  | Site EUI |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2021 |  | $\underline{2024}$ |  | $\underline{2027}$ |  | $\underline{2030}$ |  |
|  |  | 4c | 5b | 4c | 5b | 4c | 5b | 4c | 5b |
| B | Office - small | $\underline{19.48}$ | $\underline{20.60}$ | $\underline{16.79}$ | $\underline{17.74}$ | $\underline{14.09}$ | $\underline{14.87}$ | $\underline{11.40}$ | $\underline{12.00}$ |
|  | Office - medium | $\underline{22.22}$ | $\underline{24.47}$ | $\underline{18.91}$ | $\underline{20.81}$ | $\underline{15.61}$ | $\underline{17.16}$ | $\underline{12.30}$ | $\underline{13.50}$ |
|  | Office - large | $\underline{21.94}$ | $\underline{23.06}$ | $\underline{18.53}$ | $\underline{19.48}$ | $\underline{15.11}$ | $\underline{15.89}$ | $\underline{11.70}$ | $\underline{12.30}$ |
| B | Health out-patient | $\underline{69.75}$ | $\underline{70.88}$ | 58.90 | 59.85 | $\underline{48.05}$ | $\underline{48.83}$ | $\underline{37.20}$ | $\underline{37.80}$ |
| E | School - primary | $\underline{25.40}$ | $\underline{27.20}$ | $\underline{22.80}$ | $\underline{24.30}$ | $\underline{18.99}$ | $\underline{21.31}$ | $\underline{14.70}$ | $\underline{16.50}$ |
|  | School - secondary | $\underline{24.75}$ | $\underline{28.13}$ | $\underline{20.90}$ | $\underline{23.75}$ | $\underline{17.05}$ | 19.38 | 13.20 | 15.00 |
| I-2 | Hospital | $\underline{76.60}$ | $\underline{72.00}$ | $\underline{68.70}$ | $\underline{64.50}$ | $\underline{56.19}$ | $\underline{57.10}$ | $\underline{43.50}$ | $\underline{49.70}$ |
| M | Grocery | $\underline{98.90}$ | $\underline{98.40}$ | $\underline{88.70}$ | $\underline{88.20}$ | $\underline{75.56}$ | $\underline{78.00}$ | 58.50 | $\underline{62.70}$ |
| M | Retail - stand alone | $\underline{30.00}$ | $\underline{34.50}$ | $\underline{26.60}$ | $\underline{30.40}$ | $\underline{23.20}$ | $\underline{26.30}$ | $\underline{19.80}$ | $\underline{22.20}$ |
|  | Retail - strip mall | $\underline{29.14}$ | $\underline{34.76}$ | $\underline{26.53}$ | $\underline{31.28}$ | $\underline{23.91}$ | $\underline{27.79}$ | $\underline{21.30}$ | $\underline{24.30}$ |
| S-1 | Garage - enclosed ${ }^{\text {a }}$ | 7.00 | $\underline{7.00}$ | 5.90 | $\underline{5.90}$ | $\underline{4.90}$ | $\underline{4.90}$ | $\underline{3.90}$ | 3.90 |
|  | Garage - open ${ }^{\text {a }}$ | $\underline{4.20}$ | 4.20 | 3.60 | 3.60 | 3.00 | 3.00 | $\underline{2.30}$ | $\underline{2.30}$ |
| S-2 | Warehouse (nonref) ${ }^{\text {b }}$ | 6.49 | 7.61 | 5.63 | 6.58 | 4.76 | 5.54 | $\underline{3.90}$ | $\underline{4.50}$ |
| R-2 | kWh/person/year | 3,089 | 3,212 | $\underline{2,681}$ | 2,789 | 2,256 | 2,348 | 1,808 | 1,886 |
| R-2 | Common $\mathrm{kWh} / \mathrm{sf} / \mathrm{yr}$ | $\underline{15.0}$ | $\underline{15.8}$ | $\underline{11.6}$ | $\underline{12.2}$ | 8.5 | 8.9 | 5.7 | 5.9 |

${ }^{\text {a }}$ Lighting power allowance must still comply with Table c405.4.2(2).
${ }^{\text {b Applicable to heated warehouses only. }}$
Table F101.3.2(2)
COMMERCIAL BUILDING TYPE DESCRIPTIONS
Commercial Building Prototype Descriptions Compared to CBSA Building Types
$\left.\begin{array}{|c|c|c|}\hline \text { Commercial Prototypes } & \underline{\text { CBSA Detailed Building Type Included }} & \text { Other Criteria } \\ \hline \text { Small Office } & \begin{array}{c}\frac{\text { office- admin, professional, government, }}{\text { financial; call center; city hall; retail }}\end{array} & \text { Less than 20,000 square feet } \\ \hline \text { banking; sales office; other office }\end{array}\right]$

| Commercial Prototypes | CBSA Detailed Building Type Included | Other Criteria |
| :---: | :---: | :---: |
| Residential Care | $\underline{\text { assisted living; in-patient rehab; nursing }}$ |  |
|  | $\underline{\text { home; retirement home; other residential }}$ |  |

FIGURE F101.3.2
Washington State Outcome-based Energy Budget Form


## PROJECT SUMMARY

Building Name
Address
City
Owner

Address
City, State, Zip

| PROJECT CERTIFICATION |  |  |  |
| :--- | :--- | :---: | :---: |
| Name |  |  |  |
| Firm |  |  |  |
| Date |  |  | (seal) |

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, S 51-11C-90500, filed 11/26/19, effective 7/1/20.]

## REPEALER

The following sections of the Washington Administrative Code are repealed:

| WAC 51-11C-402131 | Reserved. |
| :---: | :---: |
| WAC 51-11C-402132 | Reserved. |
| WAC 51-11C-402133 | Reserved. |
| WAC 51-11C-402134 | Reserved. |
| WAC 51-11C-402200 | Reserved. |
| WAC 51-11C-40242 | Reserved. |
| WAC 51-11C-403231 | Table C403.3.2(1)—Minimum efficiency requirements-Electrically operated unitary air conditioners and condensing units. |
| WAC 51-11C-403232 | Table C403.3.2(2)—Minimum efficiency requirements-Electrically operated unitary and applied heat pumps. |
| WAC 51-11C-403233 | Table C403.3.2(3)—Minimum efficiency requirements-Electrically operated PTAC, PTHP, SPVAC, SPVHP, room air conditioners. |
| WAC 51-11C-403234 | Table C403.3.2(4)—Minimum efficiency requirements-Warm air furnaces and unit heaters. |
| WAC 51-11C-403235 | Table C403.3.2(5)—Minimum efficiency requirements-Gas- and oil-fired boilers. |
| WAC 51-11C-403236 | Table C403.3.2(6)—Reserved. |
| WAC 51-11C-403237 | Table C403.3.2(7)—Minimum efficiency requirements-Water chilling packages. |
| WAC 51-11C-403238 | Table C403.3.2(8)—Minimum efficiency requirements-Heat rejection equipment. |
| WAC 51-11C-403239 | Table C403.3.2(9) and Table C403.3.2(10)—Minimum efficiency requirements. |


| WAC 51-11C-403241 | Reserved. |
| :--- | :--- | :--- |
| WAC 51-11C-403242 | Reserved. |
| WAC 51-11C-403243 | Reserved. |
| WAC 51-11C-403244 | Reserved. |
| WAC 51-11C-403245 | Reserved. |
| WAC 51-11C-403246 | Reserved. |
| WAC 51-11C-403247 | Reserved. |
| WAC 51-11C-403248 | Reserved. |
| WAC 51-11C-403249 | Reserved. |
| WAC 51-11C-403251 | Reserved. |
| WAC 51-11C-403252 | Reserved. |
| WAC 51-11C-403253 | Reserved. |
| WAC 51-11C-403254 | Reserved. |
| WAC 51-11C-403261 | Reserved. |
| WAC 51-11C-403281 | Reserved. |
| WAC 51-11C-403291 | Reserved. |
| WAC 51-11C-403292 | Reserved. |
| WAC 51-11C-403293 | Reserved. |
| WAC 51-11C-403294 | Reserved. |
| WAC 51-11C-403295 | Reserved. |

PERMANENT RULES

## BOARD

[Filed July 6, 2022, 11:16 a.m., effective August 6, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: New WAC 314-42-005 Electronic transmission of documents for service and filing. The Washington state liquor and cannabis board has adopted a new rule section that authorizes electronic transmission as additional means for service and filing of documents, consistent with RCW 34.05.010.

Citation of Rules Affected by this Order: New WAC 314-42-005.
Statutory Authority for Adoption: RCW 66.08.030 and 34.05.010.
Adopted under notice filed as WSR 22-11-033 on May 11, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 1, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 1, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0 ; or Other Alternative Rule Making: New 1, Amended 0, Repealed 0.

Date Adopted: July 6, 2022.
David Postman Chair

OTS-3760.1

NEW SECTION
WAC 314-42-005 Electronic transmission of documents for service and filing. (1) Consistent with RCW 34.05.010, the board adopts electronic transmission as an additional means for service and filing of documents. "Electronic transmission" includes, but is not limited to, email, web portal, fax, or other similar methods.
(2) Electronic transmission is an approved method for service and filing of documents wherever terms such as, but not limited to, "delivery," "service," "filing," "notice," "notification," "request," "letter," "in writing," "submit," and "received" are used throughout Title 314 WAC.
(3) Service. Documents will be sent by electronic transmission to a person's email address as specified in the board's records. The date and time indicated on the electronic transmission from the board shall be evidence of the date and time of delivery.
(4) Filing. Documents received by electronic transmission to a board specified location will be deemed filed with the board the same day, excluding Saturdays, Sundays, and legal holidays. The deadline
for documents filed with the board will be based on the date and time indicated on the filing document. If no specific time is indicated, the deadline will be 11:59 p.m. of the date indicated. The date and time indicated on the electronic transmission shall be evidence of the date and time of receipt.
[]

# WSR 22-14-111 <br> PERMANENT RULES LIQUOR AND CANNABIS <br> BOARD 

[Filed July 6, 2022, 11:45 a.m., effective August 6, 2022]
Effective Date of Rule: Thirty-one days after filing.
Purpose: During the 2022 regular session, the Washington state legislature passed 2SHB 1210 (chapter 16, Laws of 2022) on March 11, 2022. In passing this bill, the legislature found that the use of the term "marijuana" in the United States has discriminatory origins and should be replaced with the more scientifically accurate term "cannabis." For this reason, the bill replaced the term "marijuana" with the term "cannabis" throughout RCW, including chapter 69.50 RCW, the Uniform Controlled Substances Act. The bill also directed the board to use expedited rule making to replace the term "marijuana" with "cannabis" throughout the rules of the liquor and cannabis board in Title 314 WAC.

Citation of Rules Affected by this Order: Amending WAC
314-11-015, 314-42-110, 314-42-115, 314-55-005, 314-55-010,
314-55-013, 314-55-017, 314-55-018, 314-55-035, 314-55-073,
314-55-075, 314-55-077, 314-55-080, 314-55-083, 314-55-084,
314-55-085, 314-55-086, 314-55-087, 314-55-089, 314-55-092,
314-55-095, 314-55-096, 314-55-097, 314-55-099, 314-55-0995,
314-55-101, 314-55-102, 314-55-1025, 314-55-103, 314-55-1035,
314-55-104, 314-55-105, 314-55-1055, 314-55-106, 314-55-107,
314-55-109, 314-55-115, 314-55-117, 314-55-135, 314-55-140,
314-55-145, 314-55-147, 314-55-150, 314-55-155, 314-55-160,
314-55-165, 314-55-185, 314-55-200, 314-55-210, 314-55-220,
314-55-225, 314-55-230, 314-55-310, 314-55-410, 314-55-415,
314-55-417, 314-55-430, 314-55-505, 314-55-5055, 314-55-509,
314-55-520, 314-55-521, 314-55-522, 314-55-523, 314-55-524, 314-55-525, 314-55-540, 314-55-550, 314-55-560, and 314-60-015.

Statutory Authority for Adoption: RCW 69.50.342.
Other Authority: 2SHB 1210 (section 168, chapter 16, Laws of 2022).

Adopted under notice filed as WSR 22-10-037 on April 27, 2022.
Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 68, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 68, Repealed 0.

Date Adopted: July 6, 2022.

AMENDATORY SECTION (Amending WSR 19-03-061, filed 1/10/19, effective 8/1/19)

## WAC 314-11-015 What are my responsibilities as a liquor licen-

 see? (1)(a) Liquor licensees are responsible for the operation of their licensed premises in compliance with the liquor laws and rules of the board (Title 66 RCW and Title 314 WAC). Any violations committed or permitted by employees will be treated by the board as violations committed or permitted by the licensee.(b) The penalties for violations of liquor laws or rules are in: WAC 314-29-015 through 314-29-035, as now or hereafter amended, for licensees; and WAC 314-17-105 and 314-17-110, as now or hereafter amended, for employees who hold mandatory alcohol server training permits. These rules also outline aggravating and mitigating circumstances that may affect what penalty is applied if a licensee or employee violates a liquor law or rule.
(2) Licensees and their employees also have the responsibility to conduct the licensed premises in compliance with the following laws, as they now exist or may later be amended:

- Titles 9 and 9A RCW, the criminal code laws;
- Title 69 RCW, which outlines the laws regarding controlled substances; and
- Chapters 70.155, 82.24 RCW, and RCW 26.28 .080 which outline laws regarding tobacco.
(3) Licensees have the responsibility to control their conduct and the conduct of employees and patrons on the premises at all times. Except as otherwise provided by law, licensees or employees may not:
(a) Be disorderly or apparently intoxicated on the licensed premises;
(b) Allow any disorderly person to remain on the licensed premises;
(c) Engage in or allow behavior that provokes conduct which presents a threat to public safety;
(d) Consume liquor of any kind while working on the licensed premises; except that:
(i) Entertainers per WAC 314-02-010 may drink while performing under the following conditions:
(A) Alcohol service must be monitored by MAST servers;
(B) Drinks must be served in unlabeled containers;
(C) Entertainers may not advertise any alcohol brands or products;
(D) Entertainers may not promote drink specials; and
(E) If any member of the entertainment group is under ((twentyөne)) 21 years of age, alcohol may not be consumed by any member of the group while performing.
(ii) Licensed beer manufacturers and their employees may sample beer of their own manufacture for manufacturing, evaluating or pricing product in areas where the public is not served, so long as the licensee or employee does not become apparently intoxicated;
(iii) Licensed wine manufacturers and their employees may:
(A) Sample wine for manufacturing, evaluating, or pricing product, so long as the licensee or employee does not become apparently
intoxicated; and the licensee or employee who is sampling for these purposes is not also engaged in serving alcohol to the public; and
(B) Sample wine of their own manufacture for quality control or consumer education purposes, so long as the licensee or employee does not become apparently intoxicated.
(e) Engage in, or allow others to engage in, conduct on the licensed premises which is prohibited by any portion of Titles 9, 9A, or 69 RCW;
(f) Engage in the consumption of any type of ((marijuana, usable marijuana) ) cannabis, useable cannabis, or ((marijuana-infused)) can-nabis-infused products in a liquor licensed business, including outdoor service areas or any part of the property owned or controlled by the licensee;
(g) Allow any person to consume any type of ((marijuana, usable marijuana)) cannabis, useable cannabis, or ((marijuana-infused)) can-nabis-infused products in a liquor licensed business, including outdoor service areas or any part of the property owned or controlled by the licensee;
(h) Allow any person consuming, or who has consumed on any part of the licensed premises, any type of ((marijuana, usable marijuana)) cannabis, useable cannabis, or ((marijuana-infused)) cannabis-infused products to remain on any part of the licensed premises; or
(i) Sell or serve liquor by means of drive-through service from pickup or pass-through windows.
(4) Licensees have the responsibility to control the interaction between the licensee or employee and their patrons. At a minimum, licensees or employees may not:
(a) Solicit any patron to purchase any beverage for the licensee or employee, or allow a person to remain on the premises for such purpose;
(b) Spend time or dance with, or permit any person to spend time or dance with, any patron for direct or indirect compensation by a patron.

See WAC 314-11-050 for further guidelines on prohibited conduct.
[Statutory Authority: RCW 66.08.030 and 66.24.360. WSR 19-03-061, § 314-11-015, filed 1/10/19, effective 8/1/19. Statutory Authority: RCW 66.08.030. WSR 14-02-002, § 314-11-015, filed 12/18/13, effective 1/18/14; WSR 11-22-035, § 314-11-015, filed 10/26/11, effective 11/26/11. Statutory Authority: RCW 66.08.030 and 66.28.320. WSR 10-01-090, § 314-11-015, filed 12/16/09, effective 1/16/10. Statutory Authority: RCW 66.08.030, 66.12.160, 66.44.010, 66.44.200, 66.44.240, 66.44.270, 66.24.291 [66.44.291], 66.44.310. WSR 04-15-162, § 314-11-015, filed 7/21/04, effective 8/21/04. Statutory Authority: RCW 66.08.030, 66.28.100, 66.28.040, 66.28.090, 66.44.010, 66.44.070, 66.44.200, 66.44.270, 66.44.291, 66.44.292, 66.44.310, 66.44.316, 66.44.318, 66.44.340, and 66.44.350. WSR 02-11-054, § 314-11-015, filed 5/9/02, effective 6/9/02. Statutory Authority: RCW 66.08.030, 66.28.100, 66.28.040, 66.28.090, 66.44.010, 66.44.070, 66.44.200, 66.44.270, 66.44.291, 66.44.292, 66.44.310, 66.44.316, 66.44.318, 66.44.340, 66.44.350, and chapter 66.44 RCW. WSR 01-06-014, § 314-11-015, filed 2/26/01, effective 3/29/01.]

AMENDATORY SECTION (Amending WSR 16-19-002, filed 9/7/16, effective 10/8/16)

WAC 314-42-110 Brief adjudicative proceedings. The Administrative Procedure Act provides for brief adjudicative proceedings in RCW 34.05.482 through 34.05.494. The board will conduct brief adjudicative proceedings where it does not violate any provision of law and where protection of the public interest does not require the board to give notice and an opportunity to participate to persons other than the parties. If an adjudicative proceeding is requested, a brief adjudicative proceeding will be conducted where the matter involves one or more of the following:
(1) Liquor license suspensions due to nonpayment of spirits taxes per RCW 66.24.010;
(2) Liquor license denials per WAC 314-07-065(2);
(3) Liquor license denials per WAC 314-07-040;
(4) Special occasion license application denials per WAC 314-07-040;
(5) Special occasion license application denials per WAC 314-07-065(7);
(6) MAST provider or trainer denials for noncompliance with a support order in accordance with RCW 66.20.085;
(7) MAST provider denials or revocations per WAC 314-17-070;
(8) Liquor license suspensions due to nonpayment of beer or wine taxes per WAC 314-19-015;
(9) One-time event denials for private clubs per WAC 314-40-080;
(10) Banquet permit denials per WAC 314-18-030;
(11) The restrictions recommended by the local authority on a nightclub license are denied per WAC 314-02-039 (a local authority may request a BAP);
(12) The restrictions recommended by a local authority are approved per WAC 314-02-039 (an applicant for a nightclub license may request a BAP);
(13) Liquor license suspensions due to noncompliance with a support order per RCW 66.24.010;
(14) Liquor license suspensions due to noncompliance with RCW 74.08.580(2), electronic benefits cards, per RCW 66.24.013;
(15) License suspension due to nonpayment of spirits liquor license fees per RCW 66.24.630;
(16) License suspension due to nonpayment of spirits distributor license fees per RCW 66.24.055;
(17) Tobacco license denials per WAC 314-33-005;
(18) ( (Maxijuana)) Cannabis license denials per WAC 314-55-050(2);
(19) ((Marijuana)) Cannabis license denials per WAC 314-55-050(4);
(20) ((Marijuana)) Cannabis license denials per WAC 314-55-050(8);
(21) ((Marijuana)) Cannabis license denials per WAC 314-55-050(10);
(22) ((Marijuana)) Cannabis license suspensions per WAC 314-55-050(11);
(23) ((Marijuana)) Cannabis license denials per WAC

314-55-050(12);
(24) ((Marijuana)) Cannabis license denials per WAC 314-55-050(13); and
(25) ((Marijuana)) Cannabis excise tax payment waiver denials per WAC 314-55-089.
[Statutory Authority: RCW 69.50.342, 69.50.345, 69.50.535, and 2016 1st sp.s. c 36. WSR 16-19-002, § 314-42-110, filed 9/7/16, effective 10/8/16. Statutory Authority: RCW 66.08.030. WSR 14-12-102, § 314-42-110, filed 6/4/14, effective 7/5/14; WSR 12-24-032, § 314-42-110, filed 11/28/12, effective 12/29/12.]

AMENDATORY SECTION (Amending WSR 14-12-102, filed 6/4/14, effective 7/5/14)

WAC 314-42-115 Preliminary record in brief adjudicative proceedings. (1) The preliminary record with respect to a liquor license suspension due to nonpayment of spirits taxes in RCW 66.24 .010 shall consist of:
(a) All correspondence from department of revenue requesting missing taxes or reports; and
(b) Request from department of revenue to the liquor control board requesting suspension of the liquor license.
(2) The preliminary record with respect to a liquor license intent to deny under WAC 314-07-065(2) where the applicant has failed to submit information or documentation shall consist of:
(a) All correspondence between the applicant and the board pertaining to requests for information or documentation; and
(b) A copy of the application report prepared by licensing division staff.
(3) The preliminary record with respect to a liquor license application intent to deny where the applicant failed to meet the criminal history standards outlined in WAC 314-07-040 shall consist of:
(a) A copy of the application report prepared by licensing division staff;
(b) The personal/criminal history statement(s) submitted by the applicant;
(c) Any interoffice correspondence reporting criminal history of applicant(s); and
(d) Copies of any correspondence submitted by the applicant explaining or rebutting the criminal history findings.
(4) The preliminary record with respect to a special occasion liquor license application (chapter 314-05 WAC) intent to deny where the applicant failed to meet the criminal history standards outlined in WAC 314-07-040 shall consist of:
(a) A copy of the application report prepared by licensing division staff;
(b) The personal/criminal history statement(s) submitted by the applicant(s);
(c) Any interoffice correspondence reporting criminal history of applicant(s); and
(d) Copies of any correspondence submitted by the applicant explaining or rebutting the criminal history findings.
(5) The preliminary record with respect to a special occasion liquor license application (chapter 314-05 WAC) intent to deny where the application was objected to by the local authority wherein the event is scheduled (WAC 314-07-065(7)) shall consist of:
(a) A copy of the special occasion license application and supporting materials;
(b) A copy of the notice sent to the local authority by licensing division staff;
(c) A copy of the objection received from the local authority; and
(d) A copy of any correspondence from the applicant rebutting the objection from the local authority.
(6) The preliminary record with respect to suspension of mandatory alcohol server, provider or trainer, for noncompliance with a support order in accordance with RCW 66.20 .085 shall consist of:
(a) A copy of the license suspension certification from the department of social and health services; and
(b) A copy of all documents received from or on behalf of the permit holder rebutting the identification of the server, provider, or trainer.
(7) The preliminary record with respect to suspension of mandatory alcohol server, provider or trainer, for failing to meet the criminal history standards outlined in WAC 314-07-070(1) shall consist of:
(a) A copy of the personal/criminal history statement submitted by the applicant;
(b) Any interoffice correspondence reporting criminal history of applicant; and
(c) Copies of any correspondence submitted by the applicant, permit holder, provider or trainer explaining or rebutting the criminal history findings.
(8) The preliminary record with respect to liquor license suspensions due to nonpayment of beer or wine taxes per WAC 314-19-015 shall consist of:
(a) Copies of any correspondence requesting missing taxes, fees, or penalties when identified after processing reporting form monthly; and
(b) Copies of backup documentation including envelopes showing late filing, corrections on reporting form, and audit findings.
(9) The preliminary record with respect to one-time event denials for private clubs in WAC 314-40-080 shall consist of:
(a) A copy of the written request for a one-time event;
(b) A copy of the written denial including the reason(s) for the denial; and
(c) Copies of all correspondence.
(10) The preliminary record with respect to banquet permit denials in WAC 314-18-030 shall consist of:
(a) The application for a banquet permit;
(b) A copy of the written denial including the reason(s) for denial; and
(c) All correspondence.
(11) The preliminary record with respect to denial of restrictions requested on a nightclub license by a local authority under the provisions in WAC 314-02-039 shall consist of:
(a) A copy of the application report prepared by licensing division staff and the threshold decision by the licensing director or his/her designee;
(b) A copy of all correspondence from the local authority requesting restrictions on the nightclub premises; and
(c) Copies of any correspondence submitted by the nightclub applicant or license holder rebutting the request for restrictions.
(12) The preliminary record with respect to licensing's approval of a request for restrictions on a nightclub license under the provisions of WAC 314-02-039 shall consist of:
(a) A copy of the application report prepared by licensing division staff and the threshold decision by the licensing director or his/her designee;
(b) A copy of all correspondence from the local authority requesting restrictions on the nightclub premises; and
(c) Copies of any correspondence submitted by the nightclub applicant or license holder rebutting the request for restrictions.
(13) The preliminary record with respect to a liquor license suspension due to noncompliance with a support order from the department of social and health services under RCW 66.24 .010 shall consist of:
(a) The written request from department of social and health services to suspend the liquor license;
(b) A copy of the written liquor control board suspension order;
and
(c) Copies of all correspondence.
(14) The preliminary record with respect to a liquor license suspension due to noncompliance with RCW 74.08.580, electronic benefits cards, per RCW 66.24.013 shall consist of:
(a) The written request from department of social and health services to suspend the liquor license;
(b) The complete investigation from department of social and health services to support the suspension;
(c) A copy of the written liquor control board suspension order; and
(d) Copies of all correspondence.
(15) The preliminary records with respect to liquor license suspension due to nonpayment of spirits liquor license fees per RCW 66.24 .630 shall consist of:
(a) All correspondence relating to discrepancies in fees and/or penalties when identified after processing reporting forms; and
(b) All backup documentation including envelopes showing late filing, corrections on reporting forms, and audit findings.
(16) The preliminary records with respect to liquor license suspensions due to nonpayment of spirits distributor license fees per RCW 66.24 .055 shall consist of:
(a) All correspondence requesting missing fees and/or penalties when identified after processing reporting forms; and
(b) All backup documentation including envelopes showing late filing, corrections on reporting forms, and audit findings.
(17) The preliminary record with respect to tobacco license denials shall consist of:
(a) The license application from business license services;
(b) The personal/criminal history statement submitted by the applicant;
(c) The judicial information system criminal history and division recommendation;
(d) The letter of denial from the liquor control board;
(e) The notice of intent to deny statement to the applicant; and
(f) All correspondence.
(18) The preliminary record with respect to a ((marijuana)) cannabis license intent to deny due to failure or refusal to submit information per WAC 314-55-050(2) shall consist of:
(a) All correspondence between the applicant and the board pertaining to requests for information or documentation; and
(b) A copy of the application report prepared by licensing division staff.
(19) The preliminary record with respect to a ((marijuana)) cannabis license application intent to deny where the applicant failed to meet the criminal history standards outlined in WAC 314-55-050(4) shall consist of:
(a) A copy of the application report prepared by licensing division staff;
(b) The personal/criminal history statement(s) submitted by the applicant;
(c) Any communication from the Washington state patrol or Federal Bureau of Investigation pertaining to the criminal history of the applicant;
(d) Any interoffice correspondence reporting criminal history of applicant(s); and
(e) Copies of any correspondence submitted by the applicant explaining or rebutting the criminal history findings.
(20) The preliminary record with respect to a ((marijuana)) cannabis license intent to deny due to denial, suspension, or cancellation of a ((marijuana)) cannabis license in another jurisdiction per WAC 314-55-050(8) shall consist of:
(a) A copy of the application report prepared by licensing division staff; and
(b) Documentation from any other state or jurisdiction demonstrating the action taken against the applicant.
(21) The preliminary record with respect to a ((marijuana)) cannabis license intent to deny due to proximity to the perimeter of entities listed in WAC 314-55-050(10) shall consist of:
(a) A copy of the application report prepared by licensing division staff;
(b) Any interoffice correspondence reporting the measurement from the proposed business location to the facility within ((one thousand)) 1,000 feet;
(c) Documentation of measurement data including Geographic Positioning System (GPS) and related calculations; and
(d) Correspondence from the applicant illustrating alternative measurement data and/or rebuttal of the LCB's measurement data.
(22) The preliminary record with respect to a ((marijuana)) cannabis license intent to suspension due to nonpayment of ((marijuana)) cannabis excise taxes per WAC 314-55-050(11) shall consist of:
(a) All correspondence relating to discrepancies in fees and/or penalties when identified after processing reporting forms; and
(b) All backup documentation including envelopes showing late filing, corrections on reporting forms, and audit findings.
(23) The preliminary record with respect to a ((marijuanz)) cannabis license intent to deny due to failure to submit an attestation concerning current tax obligations per WAC 314-55-050(12) shall consist of:
(a) A copy of the application report prepared by licensing division staff; and
(b) All correspondence with the applicant related to the request for this information.
(24) The preliminary record with respect to a ((marijuana)) cannabis license intent to deny due to denial, suspension, or revocation of a liquor license per WAC 314-55-050(13) shall consist of:
(a) A copy of the application report prepared by licensing division staff; and
(b) Documentation from liquor control board records or any other state demonstrating the action taken against the applicant.
[Statutory Authority: RCW 66.08.030. WSR 14-12-102, § 314-42-115, filed 6/4/14, effective 7/5/14; WSR 12-24-032, § 314-42-115, filed 11/28/12, effective 12/29/12.]

OTS-3719.1

AMENDATORY SECTION (Amending WSR 13-21-104, filed 10/21/13, effective 11/21/13)

WAC 314-55-005 What is the purpose of this chapter? The purpose of this chapter is to outline the application process, qualifications and requirements to obtain and maintain a ((marijuana)) cannabis license and the reporting requirements for a ((marijuana)) cannabis licensee.
[Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-005, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 21-05-075, filed 2/17/21, effective 3/20/21)

WAC 314-55-010 Definitions. The following definitions apply for the purpose of this chapter in addition to the definitions provided in RCW 69.50.101.
(1) "Applicant" or "((marijuana)) cannabis license applicant" means any person or business entity who is considered by the WSLCB as a true party of interest in a ((marijuana)) cannabis license, as outlined in WAC 314-55-035. However, for purposes of determining an application's priority under RCW 69.50.331 (1)(a), only the person or business entity that is applying for the license will be considered the applicant.
(2) "Batch" means a quantity of ((marijuana-infused)) cannabisinfused product containing material from one or more lots of ((marijuana)) cannabis.
(3) "Business name" or "trade name" means the name of a licensed business as used by the licensee on signs and advertising.
(4) "Characterizing flavor" means a noticeable taste, other than one of cannabis, resulting from an additive or combination of additives including, but not limited to, fruit, spice, herbs, alcohol, candy, or menthol, or that is noticeable before or during consumption of the cannabis product.
(5) "Child care center" means an entity that regularly provides child day care and early learning services for a group of children for periods of less than ((twenty-four)) 24 hours licensed by the Washington state department of early learning under chapter 170-295 WAC.
(6) "Consultant" means an expert who provides advice or services in a particular field, whether a fee is charged or not. A consultant who is in receipt of, or has the right to receive, a percentage of the
gross or net profit from the licensed business during any full or partial calendar or fiscal year is a true party of interest and subject to the requirements of WAC 314-55-035. A consultant who exercises any control over an applicant's or licensee's business operations is also subject to the requirements of WAC 314-55-035(4).
(7) "Cooperative" means a group of more than one, but no more than four qualified medical ((marijuana)) cannabis patients and/or designated providers who share responsibility for growing and processing ((marijuana)) cannabis only for the medical use of the members of the cooperative.
(8) "Domicile" means a person's true, fixed, primary permanent home and place of habitation and the tax parcel on which it is located. It is the place where the person intends to remain and to which the person expects to return when the person leaves without intending to establish a new domicile elsewhere.
(9) "Elementary school" means a school with a physical location for early education that provides the first four to eight years of basic education and recognized by the Washington state superintendent of public instruction.
(10) "Employee" means any person performing services on a licensed premises for the benefit of the licensee whether or not such person is compensated by the licensee.
(11) "End product" means a ((marijuana)) cannabis product that requires no further processing prior to retail sale.
(12) "Financier" means any person or entity, other than a banking institution, that provides money as a gift or loans money to the applicant/business and expects to be paid back the amount of the loan with or without reasonable interest.
(13) "Game arcade" means an entertainment venue featuring primarily video games, simulators, and/or other amusement devices where persons under twenty-one years of age are not restricted.
(14) "Harvest" means the ((marijuana)) cannabis plant material derived from plants of the same strain that were cultivated at the same licensed location and gathered at the same time.
(15) "Immature plant or clone" means a ((marijuana)) cannabis plant or clone that has no flowers, is less than ((elve)) 12 inches in height, and is less than ((もwe)) 12 inches in diameter.
(16) "Intermediate product" means ((marijuana)) cannabis flower lots or other material lots that have been converted by a ((marijuana) ) cannabis processor to a ((marijuana)) cannabis mix lot, ((marijuana)) cannabis concentrate or ((marijuana-infused)) cannabis-infused product that must be or are intended to be converted further to an end product.
(17) "Library" means an organized collection of resources made accessible to the public for reference or borrowing supported with money derived from taxation.
(18) "Licensed premises" means all areas of a premises where the licensee has leasehold rights as listed in the property lease submitted to the board. Any vehicle assigned for the purposes of transporting ((marijuana)) cannabis, useable ((marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products shall be considered an extension of the licensed premises.
(19) "Licensee" or "((marijuana)) cannabis licensee" means any person or entity that holds a ((marijuana)) cannabis license, or any person or entity who is a true party of interest in a ((marijuana)) cannabis license, as outlined in WAC 314-55-035.
(20) "Lot" means either of the following:
(a) The flowers from one or more ((marijuana)) cannabis plants of the same strain. A single lot of flowers cannot weigh more than five pounds; or
(b) The trim, leaves, or other plant matter from one or more ((marijuana)) cannabis plants. A single lot of trim, leaves, or other plant matter cannot weigh more than ((fifteen)) 15 pounds.
(21) "Lozenge" means a ((faxijuana-infused)) cannabis-infused product such as a hard candy, mint, pastille, tablet, or similar type of edible product that is generally swallowed whole, chewed and swallowed, or dissolved in the mouth.
(22) "((Marijuana)) Cannabis strain" means a pure breed or hybrid variety of Cannabis reflecting similar or identical combinations of properties such as appearance, taste, color, smell, cannabinoid profile, and potency.
(23) "((Marijuana)) Cannabis mix" means an intermediate lot that contains multiple strains of useable ((marijuana)) cannabis and is chopped or ground so no particles are greater than 3 mm .
(24) "((Marijuana)) Cannabis mix infused" or "mix infused" means an end product that contains ((marijuana)) cannabis mix and may contain other intermediate products or useable ((marijuana)) cannabis.
(25) "((Marijuana)) Cannabis mix packaged" or "mix packaged" means an end product containing only ((marijuana)) cannabis mix and no other product types.
(26) "Member," except as that term is used in relation to registered cooperatives, means a principal or governing person of a given entity ( $(\boldsymbol{\tau})$ ) including ${ }_{\perp}$ but not limited to: LLC member/manager, president, vice president, secretary, treasurer, CEO, director, stockholder, partner, general partner, limited partner. This includes all spouses of all principals or governing persons named in this definition and referenced in WAC 314-55-035.
(27) "Paraphernalia" means items used for the storage or use of useable ((marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products, such as, but not limited to, lighters, roach clips, pipes, rolling papers, bongs, and storage containers. Items for growing, cultivating, and processing ((marijuanz)) cannabis, such as, but not limited to, butane, lights, and chemicals are not considered "paraphernalia."
(28) "Pesticide" means, but is not limited to: (a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus, except virus on or in a living person or other animal which is normally considered to be a pest; (b) any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; and (c) any spray adjuvant. Pesticides include substances commonly referred to as herbicides, fungicides, insecticides, and cloning agents.
(29) "Perimeter" means a property line that encloses an area.
(30) "Plant" means a ((marijuana)) cannabis plant.
(31) "Plant canopy" means the square footage dedicated to live plant production, such as maintaining mother plants, propagating plants from seed to plant tissue, clones, vegetative or flowering area. Plant canopy does not include areas such as space used for the storage of fertilizers, pesticides, or other products, quarantine, office space, etc.
(32) "Playground" means a public outdoor recreation area for children, usually equipped with swings, slides, and other playground
equipment, owned and/or managed by a city, county, state, federal government, or metropolitan park district.
(33) "Product(s) otherwise taken into the body" means a ((mari-juana-infused)) cannabis-infused product for human consumption or ingestion intended for uses other than inhalation, oral ingestion, or external application to the skin.
(34) "Public park" means an area of land for the enjoyment of the public, having facilities for rest and/or recreation, such as a baseball diamond or basketball court, owned and/or managed by a city, county, state, federal government, or metropolitan park district. Public park does not include trails.
(35) "Public transit center" means a facility located outside of the public right of way that is owned and managed by a transit agency or city, county, state, or federal government for the express purpose of staging people and vehicles where several bus or other transit routes converge. They serve as efficient hubs to allow bus riders from various locations to assemble at a central point to take advantage of express trips or other route to route transfers.
(36) "Recreation center or facility" means a supervised center that provides a broad range of activities and events intended primarily for use by persons under ((twenty-one)) 21 years of age, owned and/or managed by a charitable nonprofit organization, city, county, state, federal government, or metropolitan park district.
(37) "Residence" means a person's address where he or she physically resides and maintains his or her abode.
(38) "Secondary school" means a high and/or middle school with a physical location: A school for students who have completed their primary education, usually attended by children in grades seven to ((twe)) 12 and recognized by the Washington state superintendent of public instruction.
(39) "Selling price" means the same meaning as in RCW 82.08.010, except that when the product is sold under circumstances where the total amount of consideration paid for the product is not indicative of its true value. Selling price means the true value of the product sold as determined or agreed to by the WSLCB. For purposes of this subsection:
(a) "Product" means ((marijuana, marijuana)) cannabis, cannabis concentrates, useable ((marijuana)) cannabis, or ((marijuana-infused)) cannabis-infused products; and
(b) "True value" means market value based on sales at comparable locations in the state of the same or similar product of like quality and character sold under comparable conditions of sale to comparable purchasers. In the absence of such sales of the same or similar product, true value means the value of the product sold as determined by all of the seller's direct and indirect costs attributed to the product.
(40) "Terpenes" means a class of compounds that impart smell, taste, or both occurring in the cannabis plant which consist of a carbon skeleton derived from isoprene units. The word "terpene" may include, but is not limited to, the following:
(a) "Botanical terpenes" means constituents derived from a spice, fruit, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, or leaf or similar plant material. Their significant function in cannabis products is flavoring. This includes:
(i) Essential oil, which is natural oil typically obtained by distillation and possessing the characteristic fragrance of the plant or other source from which it is extracted;
(ii) Oleoresin, which is a natural or artificial mixture of essential oils and a resin;
(iii) Distillate; or
(iv) Any product of roasting, heating, or enzymolysis which contains terpenes.
(b) "Synthetic terpenes" means any terpene that does not occur in the cannabis plant, or in other botanical sources, and is produced through chemical manipulation in a laboratory or similar facility.
(c) "Terpenoids" means the natural products and related compounds formally derived from isoprene units, or "isoprenoids," that have the same meaning as that found in the current version of the International Union of Pure and Applied Chemistry (IUPAC) and as hereafter amended.
(41) "Unit" means an individually packaged ((marijuana-infused)) cannabis-infused solid or liquid product meant to be eaten or swallowed, not to exceed ((ten)) 10 servings or ((ene hundred)) 100 milligrams of active tetrahydrocannabinol (THC), or Delta 9.
(42) "WSLCB" means the Washington state liquor and cannabis board.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 21-05-075, § 314-55-010, filed 2/17/21, effective 3/20/21. Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-010, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-010, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-010, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-010, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 20-21-056, filed 10/14/20, effective 11/14/20)

WAC 314-55-013 Voluntary ((marijuana)) cannabis licensee consultation and education program. (1) Purpose and scope. The purpose of this section is to:
(a) Establish a program for ((marijuana)) cannabis licensee consultation and education visits consistent with the requirements of RCW 69.50.342(3) and 69.50.561;
(b) Establish criteria for the provision of advice, consultation, and education visits including, but not limited to, recommendations on abating violations of this chapter;
(c) Ensure that advice, consultation and education visits are distinguished from inspections, technical visits, or investigations, and are limited to interpretation and applicability of standards in this chapter including, but not limited to, the conditions, structures, machines, equipment, apparatus, devices, materials, methods, means and practices in the licensee's licensed premise; and
(d) Advice, consultation, and educational visits provided under this program do not include business advice concerning issues that may include, but are not limited to, individual business operations, marketing, distribution, financing, profitability, or viability.
(2) Definitions.
(a) For purposes of this chapter, "a direct or immediate relationship to public health and safety" or "a direct or immediate risk
to public health and safety" means, where the board can prove by a preponderance of the evidence:
(i) Diversion of ((marijuana)) cannabis product out of the regulated market or sales across state lines;
(ii) Furnishing of ((marijuana)) cannabis product to persons under ((twenty-one)) 21 years of age;
(iii) Diversion of revenue to criminal enterprise, gangs, cartels, or parties not qualified to hold a ((marijuana)) cannabis license based on criminal history requirements;
(iv) The commission of ((nonmarijuana-related)) noncannabis-related crimes; or
(v) Knowingly making a misrepresentation of fact to the board, an officer of the board, or an employee of the board related to the conduct or action that is, or is alleged to be, any of the violations identified in (a)(i) through (iv) of this subsection.
(vi) Violations outlined in WAC 314-55-509 (1) (a), (b), and (c), and more fully described in WAC 314-55-520, 314-55-521, and 314-55-522.
(b) The definitions contained in chapters $314-55$ WAC and 69.50 RCW also apply to this section.
(3) Request for consultation.
(a) A ((marijuana)) cannabis licensee or their designee may make one request for advice and consultation per year by completing and submitting an application to request consultation through the board's website. Additional requests may be considered at the board's discretion.
(b) A board representative will schedule and complete advice and consultation visits within ((forty-five)) 45 calendar days of receipt of the request for consultation.
(i) If the ((marijuana)) cannabis licensee or designee, or the board representative requires more than ((forty-five)) 45 calendar days to schedule and complete the consultation visit, the board representative may extend the completion deadline.
(ii) If the deadline is extended, at the licensee's request, more than ((sixty)) 60 days after the board's receipt of the request for consultation, the ((marijuana)) cannabis licensee must resubmit a request for consultation consistent with this section.
(4) Advice and consultation services.
(a) Advice and consultation services offered in connection with a request for consultation do not preclude informal requests, or usual and customary interactions between licensees, the board, or any board staff.
(b) Regulatory issues described in this chapter observed during the course of an advice, consultation, and education visit are not subject to disciplinary action unless the identified issue has a direct or immediate relationship to public health and safety.
(c) Advice, consultation, education, and any written report or documentation provided under this section is limited to the matters specified in the request for consultation. At the request of the licensee, a consultation may include:
(i) An initial meeting to explain the licensee's rights and obligations;
(ii) A walk-through visit to evaluate the compliance concerns specified in the request for consultation;
(iii) A closing meeting to discuss conditions noted during the initial visit to make recommendations;
(iv) A written report of conditions found in the ((marijuana)) cannabis licensee's place of business and any recommendations or agreements made; or
(v) A follow-up visit, if appropriate, to ensure that the conditions specified in the request for consultation have been satisfactorily abated.
(d) If an identified condition is not a direct or immediate risk to public health and safety, the condition will be documented in the appropriate database as part of the consultation visit, and will include the following:
(i) A detailed description of the condition that is not in compliance;
(ii) The full text of the specific section or subsection of the statute or rule applicable to the condition that is not in compliance;
(iii) A statement and complete description of the actions and steps the licensee or their designee must take to achieve compliance;
(iv) The date, method of service, name, and signature of the licensee, their designee, or both participating in the visit; and
(v) The date that the licensee or their designee must achieve compliance. This date may be mutually agreed upon by the board representative and the licensee or their designee, and may be based on a variety of factors including, but not limited to, the cost and severity of the conditions to be abated.
(e) A consultation report or notice to correct made by a board representative under this section is not a formal enforcement action.
(f) The board representative will provide the licensee or their designee with instructions regarding how to request an extension of time consistent with subsection (5) of this section.
(g) The board representative may perform a follow-up visit within ((sixty)) 60 days of the mutually agreed upon compliance date based on the severity of the conditions described in this section.
(5) Licensee responsibilities.
(a) A ((marijuana)) cannabis licensee or their designee agrees to work with the board representative to schedule a consultation visit at a mutually agreed upon date and time.
(b) A ((marijuana)) cannabis licensee or their designee agrees to make reasonable efforts to correct or abate all conditions identified in the statement of conditions within the mutually agreed upon date and time.
(c) If a ((marijuana)) cannabis licensee or their designee is unable to correct or abate all of the conditions identified in the statement of conditions, the licensee or their designee may request an extension of time by submitting a written request. The written request must describe:
(i) The need for the extension;
(ii) Confirmation of the steps taken to abate the conditions described in the statement of conditions; and
(iii) A proposed abatement date.
[Statutory Authority: RCW 69.50.342 and 69.50.561. WSR 20-21-056, § 314-55-013, filed 10/14/20, effective 11/14/20.]

AMENDATORY SECTION (Amending WSR 15-11-107, filed 5/20/15, effective 6/20/15)

WAC 314-55-017 Conditional sales prohibited. Conditional sales of ((marijuana)) cannabis products are prohibited.
(1) ((Marijuana)) Cannabis producers and processors are prohibited from requiring the purchase of other products and/or services by another ((marijuana)) cannabis licensee as a condition of a transaction of ((marijuana)) cannabis product. Products and services include, but are not limited to, paraphernalia, lighters, promotional items, unreasonable processing and/or packaging charges.
(2) ((Marijuana)) Cannabis retailers are prohibited from requiring a customer to purchase other products and/or services as a condition to purchasing a ((marijuana)) cannabis product. Products and services include, but are not limited to, paraphernalia, lighters, promotional items, memberships, and bags, boxes, or containers.
(3) The selling price of ((marijuana)) cannabis product must be indicative of the true value when sold without any other products or services.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 15-11-107, § 314-55-017, filed 5/20/15, effective 6/20/15.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-018 Prohibited practices-Money advances-Contracts-Gifts-Rebates, discounts, and exceptions, etc. (1) No industry member or licensee shall enter into any agreement which causes undue influence over another licensee or industry member. This rule shall not be construed as prohibiting the placing and accepting of orders for the purchase and delivery of ((marijuana)) cannabis that are made in accordance with usual and common business practice and that are otherwise in compliance with chapter 69.50 RCW and this chapter.
(2) No ((marijuana)) cannabis producer or processor shall advance and no ((marijuanz)) cannabis licensee shall receive money or moneys' worth under an agreement written or unwritten or by means of any other business practice or arrangement such as:
(a) Gifts;
(b) Discounts;
(c) Loans of money;
(d) Premiums;
(e) Rebates;
(f) Free product of any kind except as allowed by WAC 314-55-096 and RCW 69.50.585; or
(g) Treats or services of any nature whatsoever except such services as are authorized in this section and under RCW 69.50.585.
(3) "Industry member" means a licensed ((marijuana)) cannabis producer, ((marijuanz)) cannabis processor, ((marijuana)) cannabis retailer, ((marijuana)) cannabis transportation licensee, ((marijuana)) cannabis research licensee, their authorized representatives, and including, but not limited to, any affiliates, subsidiaries, officers, partners, financiers, agents, employees, and representatives of any licensee.
(4) Consistent with WAC 314-55-017, no industry member or employee thereof shall sell to any ((marijuana)) cannabis licensee or solicit from any such licensee any order for any ((marijuana)) cannabis tied in with, or contingent upon, the licensee's purchase of some other ((marijuana)) cannabis, or any other merchandise, paraphernalia, property, or service.
(5) If the WSLCB finds in any instance that any licensee has violated this section, then all licensees involved in the violation shall be held equally responsible.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-018, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-018, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-018, filed 5/20/15, effective 6/20/15.]

AMENDATORY SECTION (Amending WSR 20-18-099, filed 9/2/20, effective 10/3/20)

WAC 314-55-035 Qualifying for a ((marijuana)) cannabis license. A ((marijuana)) cannabis license must be issued in the name(s) of the true party(ies) of interest. The board may conduct an investigation of any true party of interest who exercises control over the applicant's business operations. This may include financial and criminal background investigations.
(1) True parties of interest. True parties of interest must qualify to be listed on the license, and meet residency requirements consistent with this chapter. For purposes of this title, "true party of interest" means:

| Entity | True party(ies) of <br> interest |
| :--- | :--- |
| Sole proprietorship | Sole proprietor |
| General partnership | All partners |
| Limited partnership, <br> limited liability <br> partnership, or limited <br> liability limited <br> partnership | All general partners <br> All limited partners |
| Limited liability company <br> (LLC) | All LLC members <br> All LLC managers |
| Privately held corporation | All corporate officers and <br> directors (or persons with <br> equivalent title) <br> All stockholders |
| Multilevel ownership <br> structures | All persons and entities <br> that make up the <br> ownership structure |


| Entity | True party(ies) of <br> interest |
| :--- | :--- |
| Any entity(ies) or <br> person(s) with a right to <br> receive revenue, gross <br> profit, or net profit, or <br> exercising control over a <br> licensed business | Any entity(ies) or <br> person(s) with a right to <br> receive some or all of the <br> revenue, gross profit, or <br> net profit from the licensed <br> business during any full or <br> partial calendar or fiscal <br> year <br> Any entity(ies) or <br> person(s) who exercise(s) <br> control over the licensed <br> business |
| Nonprofit corporations | All individuals and entities <br> having membership rights <br> in accordance with the <br> provisions of the articles <br> of incorporation or bylaws |

(2) A married couple may not be a true party of interest in more than five retail ((marijuana)) cannabis licenses, more than three producer licenses, or more than three processor licenses. A married couple may not be a true party of interest in a ((marijuana)) cannabis retailer license and a ((marijuana)) cannabis producer license or a ((marijuana)) cannabis retailer license and a ((marijuana)) cannabis processor license.
(3) The following definitions apply to this chapter unless the context clearly indicates otherwise:
(a) "Control" means the power to independently order, or direct the management, managers, or policies of a licensed business.
(b) "Financial institution" means any bank, mutual savings bank, consumer loan company, credit union, savings and loan association, trust company, or other lending institution under the jurisdiction of the department of financial institutions.
(c) "Gross profit" means sales minus the cost of goods sold.
(d) "Net profit" means profits minus all other expenses of the business.
(e) "Revenue" means the income generated from the sale of goods and services associated with the main operations of business before any costs or expenses are deducted.
(4) For purposes of this chapter, "true party of interest" does not include (this is a nonexclusive list):
(a) A person or entity receiving payment for rent on a fixed basis under a lease or rental agreement. Notwithstanding, if there is a common ownership interest between the applicant or licensee, and the entity that owns the real property, the board may investigate all funds associated with the landlord to determine if a financier relationship exists. The board may also investigate a landlord in situations where a rental payment has been waived or deferred.
(b) A person who receives a bonus or commission based on their sales, so long as the commission does not exceed ((もen)) 10 percent of their sales in any given bonus or commission period. Commission-based compensation agreements must be in writing.
(c) A person or entity contracting with the licensee(s) to receive a commission for the sale of the business or real property.
(d) A consultant receiving a flat or hourly rate compensation under a written contractual agreement.
(e) A person with an option to purchase the applied for or licensed business, so long as no money has been paid to the licensee under an option contract or agreement for the purchase or sale of the licensed business, or a business that is applying for a license.
(f) Any business or individual with a contract or agreement for services with a licensed business, such as a branding or staffing company, will not be considered a true party of interest, as long as the licensee retains the right to and controls the business.
(g) A financial institution.
(5) Notification.
(a) Except as provided in this subsection (4) (a) (i), (ii), and (iii), after licensure the licensee must continue to disclose the source of all funds to be invested in the licensed business, including all funds obtained from financiers, prior to investing the funds into the licensed business.
(i) Revenues of the licensed ((marijuana)) cannabis business that are reinvested in the business do not require notification or vetting by the board.
(ii) Proceeds of a revolving loan where such loan has been approved by the board within the three previous years do not need to be vetted by the board, unless the source of the funds has changed or the approved loan amount has increased.
(iii) If the source of funds is an identified true party of interest on the license, or a previously approved financier associated with the license, or a previously approved revolving loan, the board will allow these funds to be used upon receipt of an application to use such funds. The board will then investigate the source of funds. If the board cannot verify the source of funds after reasonable inquiry, or the board determines that the funds were obtained in a manner in violation of the law, the board may take actions consistent with the provisions of this chapter.
(b) Licensees must receive board approval before making any ownership changes consistent with WAC 314-55-120.
(c) Noncompliance with the requirements of this section may result in action consistent with this chapter.
(6) Disclosure agreements and intellectual property.
(a) Licensed ((marijuana)) cannabis businesses may enter into agreements consistent with the provisions of RCW 69.50.395.
(b) Notwithstanding the foregoing, no producer or processors may enter into an intellectual property agreement with a retailer.
(7) Financiers.
(a) Consistent with WAC 314-55-010(11), a financier is any person or entity, other than a financial institution or a government entity, that provides money as a gift, a grant, or loans money to an applicant, business, or both, and expects to be paid back the amount of the loan, with or without reasonable interest.
(b) A financier may not receive an ownership interest, control of the business, a share of revenue, gross profits or net profits, a profit sharing interest, or a percentage of the profits in exchange for a loan or gift of funds, unless the financier, if directly involved in the loaning of funds, receives board approval and has qualified on the license as a true party of interest.
(c) Washington state residency requirements do not apply to financiers who are not also a true party of interest, but all financiers must reside within the United States.
(d) The board will conduct a financial and criminal background investigation on all financiers.
[Statutory Authority: RCW 69.50.342, 69.50.345, 69.50.395 and 2019 C 380. WSR 20-18-099, § 314-55-035, filed 9/2/20, effective 10/3/20. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-035, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-035, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-073 ((Marijuana)) Cannabis research license. A ((marijuana)) cannabis research license allows a holder of the license to produce, process, and possess ((marijuana)) cannabis for the limited research purposes provided in RCW 69.50.372. The WSLCB designates a scientific reviewer (reviewer) to review research applications and make recommendations for the approval or denial of research projects and to assess licensed research activities. The following provisions are in addition to the requirements for ((marijuana)) cannabis research licensees provided in RCW 69.50.372.
(1) Eligibility and continuing requirements for research license applications, prohibitions and restrictions.
(a) Other than the restrictions listed in this subsection, any person, organization, agency, or business entity may apply for a ((marijuana)) cannabis research license.
(b) Other ((farijuana)) cannabis licensees may apply for a research license. Facilities at which the research is conducted must be wholly separate and distinct from the ((marijuana)) cannabis business, except:
(i) Licensed producers with a research license and approved research project may grow ((marijuana)) cannabis plants or possess ((marijuana)) cannabis for research purposes at the producer's licensed premises. However, all ((marijuana)) cannabis grown or possessed for research purposes or purposes other than those related to the research project must be kept wholly separated and distinct from commercial operations and must not be comingled with or diverted to ((marijuana)) cannabis grown for commercial purposes or purposes other than those related to the research project; and
(ii) Licensed processors with a research license and approved research project may possess ((marijuana)) cannabis for research purposes at the processors licensed premises. However, all ((marijuana)) cannabis possessed for research purposes must be kept wholly separated and distinct from all ((marijuana)) cannabis possessed for commercial purposes or purposes other than those related to the research project and must not be comingled with or diverted to ((farijuana)) cannabis possessed for commercial purposes or purposes other than those related to the research project. Licensed processors who do not also hold a producer license may not grow ((marijuana)) cannabis plants for the purposes of research under a research license at the processor's licensed location.
(c) Labs certified to perform quality assurance testing on ((maxijuana) ) cannabis and ((marijuana)) cannabis products by the WSLCB may apply for a research license. Certified labs with a research license and approved research project must ensure that all ((marijuana)) cannabis possessed for research purposes is wholly separated from and is
not comingled with ((marijuana)) cannabis possessed for state required testing purposes for licensed producers or processors or ((marijuana)) cannabis possessed for any reason other than research purposes.
(d) All research license applicants and persons conducting research under the research license must be ((twenty-one)) 21 years of age or older.
(e) All research license applicants and those persons that have managing control over an organization, agency, or business entity must pass a criminal background check and financial investigation prior to being eligible to receive a research license.
(f) Except as otherwise provided by chapter 69.50 RCW and agency rule, no applicant for a research license may possess any ((marijuana)) cannabis plants or ((marijuana)) cannabis for research purposes unless and until the research project is approved and the applicant is notified that the research license is approved in writing by the WSLCB.
(g) No research licensee may conduct research unless and until the research project is approved by the reviewer and the WSLCB in writing.
(2) Initial applications.
(a) Application made with business licensing services (BLS).
(i) Applicants for a research license must apply through BLS to begin the application process for a research license.
(ii) Upon submitting an application for a research license through BLS, the applicant will receive an application letter from the WSLCB directing the applicant to submit the additional application materials directly to the WSLCB's designated scientific reviewer (reviewer).
(A) The applicant must submit complete and accurate additional application materials directly to the reviewer within ((thirty)) $\underline{\underline{30}}$ days of the date of the application letter from the WSLCB or by the date indicated on the application letter. It is the responsibility of the research license applicant to comply with the application requirements in this section and ensure the application is complete, accurate, and successfully submitted to the reviewer.
(B) Incomplete or incorrect additional application materials, materials that do not adhere to the content requirements in this section, or materials not received by the reviewer by 5:00 p.m. on the $30 t h$ day or the application date as indicated on the letter from the WSLCB will not be considered by the reviewer and the WSLCB will withdraw the application after receiving notice in writing from the reviewer.
(b) Additional application materials requirements.
(i) Application materials that do not adhere to the content requirements in this section or incomplete or incorrect applications will be withdrawn.
(ii) The applicant is responsible for ensuring that no information is included in the research plan that may compromise the applicant's ability to secure patent, trade secret, or other intellectual property protection. All application documents must be submitted by a person who has the legal authority to represent the entity if the applicant is an entity other than an individual person.
(iii) All documents must be submitted to the reviewer in a legible PDF format.
(iv) All of the following information and documents are required for each initial application:
(A) A completed cover page form, ((marijuana)) cannabis research license application form, and signature page form created by the WSLCB and available at the WSLCB's website at www.lcb.wa.gov.
(B) A research plan limited to eight pages, not including references or citations, that includes the following information:
(I) Purpose and goal(s) of the proposed research project(s);
(II) Key milestones and timelines for the research project(s);
(III) Background and preliminary studies;
(IV) Amount of ((marijuana)) cannabis to be grown, if applicable, including the justification with respect to milestone tasks;
(V) Anticipated cost of the proposed research project(s) and funding available for the work. The scientific reviewer may request additional information or ask clarifying questions about the cost of the proposal to determine whether the budget meets the scope and design of the proposed project;
(VI) Key personnel and organizations, including names and roles;
(VII) Facilities, equipment, and other resources required and available for conducting the proposed research project(s).
(C) A biosketch for each individual involved in executing the proposed research project limited to two pages per individual performing technical and administrative functions essential to performing the proposed research, including proof that the individual is ((もwentyone) ) 21 years of age or older. Biosketches must be prepared using the National Institutes of Health (NIH) biographical sketch format, available at http://grants.nih.gov/grants/forms/new-renewal-revisions.htm.
(D) Letters of support limited to two pages per letter confirming the commitment of time and resources from external personnel or organizations if external personnel or organizations will participate in research activities under an approved research project. Letters of support are required to confirm the commitment of time and resources from personnel involved in the proposed research project(s) who are not employed at the applicant organization. Letters of support must include specific details regarding the type(s) and magnitude of the time and resources being committed to the proposed research project(s) and must be signed by individuals having the authority to make such commitments.
(E) For all project(s) involving human or animal subjects, documentation of all required institutional review board (IRB) or institutional animal care and use committee (IACUC) approvals. Documents must be provided on IRB or IACUC letterhead and be signed by authorized officials of those regulatory bodies.
(v) Documents that do not conform to the requirements in subsection (b) of this section may be withdrawn. All nonform documents must conform to the following requirements:
(A) Eight and one-half by 11-inch portrait-oriented page dimensions;
(B) Single-spaced with all margins measuring at least one inch; and
(C) At least 12-point font in Times New Roman or Arial, not proportionately reduced.
(c) Review by the WSLCB's designated scientific reviewer.
(i) If the applicant submits application materials to the reviewer by the required deadline specified by the WSLCB's application letter and the reviewer determines the additional application materials are complete and meet the document requirements specified in this section, the reviewer will proceed with reviewing the research project to evaluate whether the project complies with the provisions of $R C W$
69.50 .372 (1) and (2). The scientific reviewer may require the applicant to provide additional information if the scientific reviewer determines that more information is necessary to complete the review.
(ii) When evaluating research projects, the reviewer must:
(A) Ensure confidentiality;
(B) Screen members of the reviewer panel for any conflicts of interest and take appropriate measures if a conflict of interest is identified;
(C) Review all information, including the budget, to evaluate whether the scope and design of the proposed project matches the budget and resources of the applicant; and
(D) The scientific reviewer may require the applicant to submit to a site inspection. The site inspection may occur after the initial review and before the license is issued to evaluate the adequacy of the location, facilities, or equipment to complete the proposed project.
(iii) The reviewer will assess fees for the review of the research project proposal directly to the applicant pursuant to RCW 69.50.372(7). The reviewer will not recommend approval of an application for any research license for which an unpaid balance of fees to the reviewer is due regardless of the recommendation of the reviewer regarding the sufficiency of the research project.
(iv) If at any time during the process of review the reviewer finds that the additional application materials are not complete, the reviewer will notify the WSLCB in writing and the WSLCB will withdraw the application.
(v) The reviewer will supply a written evaluation to the WSLCB in writing after completing review of the research project. Evaluations will provide the approval recommendation status; determination(s) of the applicable research category or categories; and, as applicable, the reasons for a "Not Approved" recommendation. The WSLCB will provide written evaluations to applicants following completion of the review process by the reviewer along with the WSLCB's approval or denial of the research license.
(d) WSLCB requirements and licensing process. If the reviewer indicates the application for a research license should be approved, the following requirements must be met prior to final approval of the license by the WSLCB.
(i) The WSLCB will request criminal background and financial information from the research license applicant and evaluate the applicant(s) pursuant to the standards and requirements established in WAC 314-55-020 except that research license applicants are not subject to prioritization under subsection (3) of that section;
(ii) Funding of the proposed research must be disclosed by the applicant(s) in amount, timing and source(s). Funding sources may include organizational resources and individuals and organizations that are not part of the person, organization, agency, or business entity applying for the research license. Out-of-state resources may be included, but must be identified;
(iii) The applicant(s) must adhere to the notice posting requirements under WAC 314-55-020;
(iv) The applicant must demonstrate access to and proficiency with the traceability system; and
(v) The applicant must meet facility security requirements as provided in WAC 314-55-083 prior to being granted a license.
(3) Research license withdrawal and denials.
(a) The WSLCB will withdraw an application if:
(i) The application or additional application materials are determined incomplete or incorrect by the WSLCB or its designated reviewer;
(ii) The additional application materials are not timely received by the reviewer as provided in this section; or
(iii) The applicant(s) request withdrawal of a research license application at any time in the application process. The applicant must request the withdrawal in writing and is responsible for any review costs due to the reviewer. The voluntary withdrawal of a research license application does not result in a hearing right.
(b) The WSLCB will deny a research license if:
(i) The scientific reviewer does not recommend approval of the license after reviewing the research proposal for compliance with this section or RCW 69.50.372;
(ii) The applicant does not meet the requirements for a license under this section or RCW 69.50.372; or
(iii) The applicant provides false or misleading information in any of the materials it submits to the WSLCB or the reviewer.
(c) If the WSLCB denies a research application for the reasons provided in (b) (iii) of this subsection or for failing to meet criminal history or administrative violations requirements under this section, the applicant(s) is prohibited from reapplying for a research license for one calendar year from the date of the WSLCB's denial of the license.
(d) A person or entity that has outstanding unpaid review fees owing to the scientific reviewer is prohibited from reapplying for a research license until all review fees are paid to the scientific reviewer.
(4) Reporting required.
(a) The WSLCB or the WSLCB's designated reviewer may require reporting by or auditing of research licensees as necessary.
(b) The WSLCB's designated reviewer must submit an annual status report of all completed and ongoing research projects for the previous year to the WSLCB by December 31st of each calendar year.
(c) The licensee must adhere to the reporting requirements in the traceability system under WAC 314-55-083.
(d) The reviewer must immediately notify the WSLCB if it receives information indicating that a research licensee is operating outside the scope of the projects approved under a research license.
(5) Adding an additional research project or changing existing approved research project process (after licensure).
(a) A research licensee is restricted to only those research activities under a research project that has been reviewed and approved by reviewer.
(b) Applications to add a new project or change an existing approved project is the same as what is required for initial application except that a new license application through BLS is not required. To apply to add a new research project or change an existing approved project, a research licensee must submit all materials to the reviewer as required under subsection (2)(b) of this section. Incomplete project applications will not be considered.
(c) The reviewer will review the application for a new research project or change to an existing approved research project pursuant to subsection (2)(c) of this section. The reviewer will supply a written evaluation to the WSLCB and the licensee in writing after completing review of the application for a new research project or a change to an existing approved research project. Evaluations will provide the ap-
proval recommendation status; determination(s) of the applicable research category or categories; and, as applicable, the reasons for a "Not Approved" recommendation.

## (6) Research license renewals.

(a) Research license renewals operate on an annual basis, based on the license issuance date. A licensee must have an ongoing approved research project or an application for a new research project to be eligible for license renewal. The WSLCB will notify the licensee and reviewer ((nincty)) 90 days prior to the license renewal date. The licensee must provide a status report to the reviewer or an application for a new research project if the licensee's ongoing approved research project will end within ((thirty)) 30 days prior to or after the renewal date. The status report or application must be received by the reviewer within ((もhirty)) 30 days of the ((ninety-day)) 90-day renewal notice from the $W S L C B$ or the license will not be renewed.
(b) The reviewer will notify the WSLCB in writing if the licensee meets the requirements for renewal not later than ((fifteen)) 15 days prior to the licensee's renewal date.
(c) If the reviewer determines that the research project does not meet requirements for renewal due to lack of an ongoing project or for failure to meet the requirements of RCW 69.50.372 or this section for a proposed new project, the reviewer will recommend the wSLCB not renew the license.
(d) The WSLCB will review the licensee's violation history and criminal background check prior to renewal. If the violation history or criminal records disqualifies the licensee from eligibility for a research license under WAC 314-55-050, the WSLCB will not renew the license.
(7) License revocation.
(a) The WSLCB may revoke an application for the following reasons:
(i) The WSLCB has reason to believe that ((marijuana)) cannabis is being diverted from the research licensee;
(ii) The research licensee operates outside the scope of the research project(s) approved under the license issued to the licensee;
(iii) The applicant makes a misrepresentation of fact, or fails to disclose a material fact to the WSLCB during the application process or any subsequent investigation after a license has been issued;
(iv) The WSLCB finds that the licensee possesses ((marijuana)) cannabis plants, ((marijuana)) cannabis, or ((marijuana)) cannabis products that are not accounted for in the traceability system;
(v) The research licensee makes changes to their operating plan, entity structure, or location without prior approval from the WSLCB;
(vi) The research licensee fails to maintain security requirements for the licensed research facility; or
(vii) The licensee violates any provision of chapter 69.50 RCW or this chapter.
(b) A licensee may request voluntary cancellation of a license at any time. The licensee must request cancellation of a research license to the WSLCB in writing. The voluntary cancellation of a research license does not result in a hearing right.
(8) ((Marijuana)) Cannabis disposal requirements.
(a) Licensees must dispose of ((marijuana)) cannabis as provided in WAC 314-55-097.
(b) Licensees must dispose of ((marijuana)) cannabis if the research license is discontinued for any reason. A licensee may transfer plants to another ((marijuana)) cannabis research licensee. A licensee
may work with the WSLCB to dispose of ((marijuana or marijuana)) cannabis or cannabis plants.
(9) An applicant or licensee may request an administrative hearing to contest the withdrawal, denial, nonrenewal, or revocation of a research license pursuant to chapter 34.05 RCW . A request for a hearing must be made in writing and received by the WSLCB no later than ((も nial, nonrenewal, or revocation was mailed to the applicant or licensee. Appeal requests submitted in paper form may be delivered to the WSLCB in person during normal business hours at 3000 Pacific Avenue S.E., Olympia, WA 98501, or mailed to the WSLCB. Mailed appeal requests must be addressed to: WSLCB, ATTN: Adjudicative Proceedings Coordinator, P.O. Box 43076, Olympia, WA 98504-3076 or, for certified mail, WSLCB, ATTN: Adjudicative Proceedings Coordinator, 3000 Pacific Avenue S.E., Olympia, WA 98501.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-073, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342, 69.50.345, and 69.50.372. WSR 17-04-038, § 314-55-073, filed 1/25/17, effective 2/25/17.]

AMENDATORY SECTION (Amending WSR 21-14-113, filed 7/7/21, effective 8/7/21)

WAC 314-55-075 ((Marijuana)) Cannabis producer license-Privileges, requirements, and fees. (1)(a) A (marijuana)) cannabis producer license allows the licensee to produce, harvest, trim, dry, cure, and package ((marijuana)) cannabis into lots for sale at wholesale to ((marijuana)) cannabis processor licensees and to other ((marijuana)) cannabis producer licensees. A ((marijuana)) cannabis producer may also produce and sell:
(i) ((Marijuana)) Cannabis plants, seed, and plant tissue culture to other ((marijuanz)) cannabis producer licensees;
(ii) Immature ((marijuana)) cannabis plants or clones and ((marijuana)) cannabis seeds to members of a registered cooperative, qualifying patients, or designated providers under the conditions provided in this chapter; and
(iii) Immature ((marijuana)) cannabis plants or clones and ((marijuana)) cannabis seeds to a licensed ((marijuana)) cannabis researcher under the conditions provided in this chapter.
(b) ((Marijuana)) Cannabis production must take place within a fully enclosed secure indoor facility or greenhouse with rigid walls, a roof, and doors. Outdoor production may take place in nonrigid greenhouses, other structures, or an expanse of open or cleared ground fully enclosed by a physical barrier. To obscure public view of the premises, outdoor production must be enclosed by a sight obscure wall or fence at least eight feet high. Outdoor producers must meet security requirements described in WAC 314-55-083. An outdoor grow must be physically separated at least ((t) ) $\underline{20}$ feet from another licensed outdoor grow. In addition, outdoor grows cannot share common walls or fences.
(2) The application fee for a ((marijuana)) cannabis producer license is ((two hundred fifty dollars)) \$250. The applicant is also re-
sponsible for paying the fees required by the approved vendor for fingerprint evaluation.
(3) The annual fee for issuance and renewal of a ((marijuana)) cannabis producer license is ((ene thousand dollars)) \$1,000. The annual fee for issuance and renewal of a ((marijuana)) cannabis producer license is ((one thousand three hundred eighty-one dollars)) $\$ 1,381$. The WSLCB will conduct random criminal history checks at the time of renewal that will require the licensee to submit fingerprints for evaluation from the approved vendor. The licensee is responsible for all fees required for criminal history checks.
(4) The application window for ((marijuana)) cannabis producer licenses is closed. The WSLCB may reopen the ((marijuana)) cannabis producer application window at subsequent times when the WSLCB deems necessary.
(5) Any entity and/or principals within any entity are limited to an interest, as defined in WAC 314-55-035, in no more than three ((marijuana)) cannabis producer licenses.
(6) The maximum amount of space for ((marijuana)) cannabis production cannot exceed the amount licensed. Applicants must designate on their operating plan the size category of the production premises and the amount of actual square footage in their premises that will be designated as plant canopy. There are three categories as follows:
(a) Tier 1 - Less than ((four thousand)) 4,000 square feet;
(b) Tier 2 - Four thousand square feet up to ((ten thousand)) 10,000 square feet; and
(c) Tier 3 - Ten thousand square feet up to ((thirty thousand)) 30,000 square feet.
(7) The WSLCB may reduce a licensee's or applicant's square footage designated to plant canopy for the following reasons:
(a) If the amount of square feet of production of all licensees exceeds the maximum square feet the WSLCB will reduce the allowed square footage by the same percentage.
(b) If ((fifty)) 50 percent production space used for plant canopy in the licensee's operating plan is not met by the end of the first year of operation the WSLCB may reduce the tier of licensure.
(8) If the total amount of square feet of ((marijuana)) cannabis production exceeds the maximum square feet, the WSLCB reserves the right to reduce all licensee's production by the same percentage or reduce licensee production by one or more tiers by the same percentage.
(9) The maximum allowed amount of ((marijuana)) cannabis on a producer's premises at any time is as follows:
(a) Outdoor or greenhouse grows - One and one-quarter of a year's harvest; or
(b) Indoor grows - Six months of their annual harvest.
(10) A producer may not treat or otherwise adulterate useable ((farijuana)) cannabis with any organic or nonorganic chemical or other compound whatsoever to alter the color, appearance, weight, or smell of the useable ((marijuana)) cannabis.
(11) A ((marijuana)) cannabis producer must make quality assurance test results available to any processor purchasing product. A ((marijuana)) cannabis producer must label each lot of ((marijuana)) cannabis with the following information:
(a) Lot number;
(b) UBI number of the producer; and
(c) Weight of the product.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 21-14-113, § 314-55-075, filed 7/7/21, effective 8/7/21. Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-075, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342, 69.50.345, 2016 c 170, 2016 c 171, and 2016 c 17. WSR 16-19-102, § 314-55-075, filed 9/21/16, effective 10/22/16. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-075, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-075, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-075, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-075, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 21-15-124, filed 7/21/21, effective 8/21/21)

WAC 314-55-077 ((Marijuana)) Cannabis processor license-Privileges, requirements, and fees. (1) A ((marijuana)) cannabis processor license allows the licensee to process, dry, cure, package, and label useable ((marijuana, maxijuana)) cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products for sale at wholesale to ((marijuana)) cannabis processors and ((marijuana)) cannabis retailers.
(2) Application and license fees.
(a) The application fee for a ((marijuana)) cannabis processor license is ((two hundred fifty dollars)) \$250. The applicant is also responsible for paying the fees required by the approved vendor for fingerprint evaluation.
(b) The annual fee for issuance and renewal of a ((marijuana)) cannabis processor license is ((one thousand three hundred eighty-one dollars)) \$1,381. The board will conduct random criminal history checks at the time of renewal that will require the licensee to submit fingerprints for evaluation from the approved vendor. The licensee is responsible for all fees required for the criminal history checks.
(c) The application window for ((marijuana)) cannabis processor licenses is closed. The board may reopen the ((marijuana)) cannabis processor application window at subsequent times when the board deems necessary.
(3) Any entity and/or principals within any entity are limited to no more than three ((marijuana)) cannabis processor licenses.
(4) (a) A ((marijuanz)) cannabis processor that makes ((marijuanainfused) ) cannabis-infused solid or liquid product meant to be ingested orally (((marijuana)) cannabis edibles) must obtain a ((marijuanainfused)) cannabis-infused edible endorsement from the department of agriculture as required under chapter 15.125 RCW and rules adopted by the department to implement that chapter (chapter 16-131 WAC). A licensee must allow the board or their designee to conduct physical visits and inspect the processing facility, recipes, and records required under WAC 314-55-087 during normal business hours or at any time of apparent operation without advance notice.
(b) A ((marijuana)) cannabis processor licensed by the board must ensure ((marijuana-infused)) cannabis-infused edible processing facilities are constructed, kept, and maintained in a clean and sanitary
condition in accordance with rules and as prescribed by the Washington state department of agriculture under chapter 15.125 RCW and rules promulgated to implement chapters 16-131, 16-165 and 16-167 WAC.
(5) (a) A ((marijuana)) cannabis processor may blend tested useable ((marijuana)) cannabis from multiple lots into a single package for sale to a ((marijuana)) cannabis retail licensee so long as the label requirements for each lot used in the blend are met and the percentage by weight of each lot is also included on the label.
(b) A processor may not treat or otherwise adulterate useable ((marijuana)) cannabis with any organic or nonorganic chemical or other compound whatsoever to alter the color, appearance, weight, or smell of the useable ((marijuana)) cannabis.
(6) Recipes, product, packaging, and labeling approval.
(a) A ((marijuana)) cannabis processor licensee must obtain label and packaging approval from the board for all ((marijuana-infused)) cannabis-infused products meant for oral ingestion prior to offering these items for sale to a ((marijuana)) cannabis retailer. The ((mari= juana)) cannabis processor licensee must submit a picture of the product, labeling, and packaging to the board for approval. More information on the product, packaging, and label review process is available on the board's website.
(b) All recipes for ((marijuana-infused)) cannabis-infused products meant for oral ingestion (((marijuana)) cannabis edible products) must be approved by the department of agriculture under chapter 16-131 WAC. Licensees must obtain recipe approval from the department of agriculture prior to submitting any ((marijuana)) cannabis edible products, packages, and labels for review and approval by the board. The recipe for any ((marijuana-infused)) cannabis-infused solid or liquid products meant to be ingested orally must be kept on file at the ((marijuana)) cannabis processor's licensed premises and made available for inspection by the board or its designee.
(c) If the board denies a ((marijuana-infused)) cannabis-infused product for sale in ((marijuana)) cannabis retail outlets, the ((marijuana)) cannabis processor licensee may request an administrative hearing under chapter 34.05 RCW, Administrative Procedure Act.
(7) With the exception of the ((marijuana)) cannabis, all ingredients used in making ((marijuana-infused)) cannabis-infused products for oral ingestion must be a commercially manufactured food as defined in WAC 246-215-01115.
(8) ((Marijuana-infused)) Cannabis-infused edible products in solid or liquid form must be homogenized to ensure uniform disbursement of cannabinoids.
(9) A ((flarijuana)) cannabis processor may infuse food or drinks with ((marijuana)) cannabis, provided that:
(a) The product or products do not require cooking or baking by the consumer;
(b) Coatings applied to the product or products are compliant with the requirements of this chapter;
(c) The product and package design is not similar to commercially available products marketed for consumption by persons under ((もwentyene)) $\frac{21}{}$ years of age, as defined by WAC 314.55 .105 (1)(c).
(10) To reduce the risk to public health, potentially hazardous foods as defined in WAC 246-215-01115 may not be infused with ((marijuana) ) cannabis. Potentially hazardous foods require time-temperature control to keep them safe for human consumption and prevent the growth of pathogenic microorganisms or the production of toxins. Any food that requires refrigeration, freezing, or a hot holding unit to keep
it safe for human consumption may not be infused with ((marijuana)) cannabis.
(11) Other food items that may not be infused with ((marijuana)) cannabis to be sold in a retail store include:
(a) Any food that has to be acidified to make it shelf stable;
(b) Food items made shelf stable by canning or retorting;
(c) Fruit or vegetable juices (this does not include shelf stable concentrates);
(d) Fruit or vegetable butters;
(e) Pumpkin pies, custard pies, or any pies that contain egg;
(f) Dairy products of any kind such as butter, cheese, ice cream, or milk; and
(g) Dried or cured meats.
(h) Vinegars and oils derived from natural sources may be infused with dried ((marijuana)) cannabis if all plant material is subsequently removed from the final product. Vinegars and oils may not be infused with any other substance, including herbs and garlic.
(i) ((Marijuana-infused)) Cannabis-infused jams and jellies made from scratch must utilize a standardized recipe in accordance with 21 C.F.R. Part 150, revised as of April 1, 2013.
(12) Consistent with WAC 314-55-104, a ((marijuana)) cannabis processor may infuse dairy butter or fats derived from natural sources, and use that extraction to prepare allowable ((marijuana-in= fused) ) cannabis-infused solid or liquid products meant to be ingested orally, but the dairy butter or fats derived from natural sources may not be sold as stand-alone products.

The board may designate other food items that may not be infused with ((marijuana)) cannabis.
(13) ((Marijuana)) Cannabis processor licensees are allowed to have a maximum of six months of their average useable ((marijuana)) cannabis and six months average of their total production on their licensed premises at any time.
(14) Processing service arrangements. A processing service arrangement is when one processor (processor B) processes useable ((maxijuana)) cannabis or an altered form of useable ((marijuana (marijuana)) cannabis (cannabis product) for another licensed processor (processor A) for a fee.
(a) Processor A is the product owner. However, processor B may handle the product under its license as provided in chapter 69.50 RCW and this chapter. Processor B is not allowed to transfer the product to a retailer and may only possess ((marijuana)) cannabis or ((marijuana) ) cannabis products received from processor A for the limited purposes of processing it for ultimate transfer back to processor A.
(b) Processing service arrangements must be made on a cash basis only as provided in WAC 314-55-115 and payment for the service and return of the processed product must be made within ((thirty)) 30 calendar days of delivery to processor B. Failure to do so as provided by the preceding sentence is a violation of this section and any ((marijuana)) cannabis or ((farijuana)) cannabis product involved in the transaction will be subject to seizure and destruction. Payment with any ((marijuana)) cannabis products, barter, trade, or compensation in any form other than cash for processing service arrangements is prohibited under processing service arrangements.
(c) Each processor that enters into a processing service arrangement must include records for each service arrangement in recordkeeping documents which must be maintained consistent with this chapter.
(15) ((Marijuana)) Cannabis may not be returned by any retail licensee to any processor except as provided in this section.
(a) Every processor must maintain on the licensed premises for a period of five years complete records of all refunds and exchanges made under this section including an inventory of ((marijuana)) cannabis and ((marijuana)) cannabis products returned to the processor by any retail licensee.
(b) ((Marijuana)) Cannabis may be returned by a retail licensee in the event a retailer goes out of the business of selling ((marijuana)) cannabis at retail and a cash refund, as defined by WAC 314-55-115, may be made upon the return of the ((marijuana)) cannabis or ((marijuana)) cannabis products, so long as WSLCB approval is acquired prior to returns and refunds under this subsection.
(c) ((Marijuana)) Cannabis products different from that ordered by a retailer and delivered to the retailer may be returned to a processor and either replaced with ((marijuana)) cannabis products which were ordered or a cash refund, as defined by WAC 314-55-115, may be made. These incorrect orders must be discovered and corrected within eight days of the date the delivery was made to be eligible for returns and refunds under this subsection.
(d) A ((marijuana)) cannabis processor may accept returns of products and sample jars from ((marijuana)) cannabis retailers for destruction, but is not required to provide refunds to the retailer. It is the responsibility of the retailer to ensure the product or sample jar is returned to the processor.
(16) The board may take disciplinary action against any ((marijuana) ) cannabis processor that fails to comply with the provisions of WAC 246-80-021.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 21-15-124, § 314-55-077, filed 7/21/21, effective 8/21/21. Statutory Authority: RCW 69.50.342, 69.50.345 and 2019 c 393. WSR 20-01-172, § 314-55-077, filed 12/18/19, effective 1/1/20. Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-077, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-077, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-077, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-077, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-077, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-080 Medical ((marijuana)) cannabis endorsement. A medical ((marijuana)) cannabis endorsement added to a (marijuana)) cannabis retail license allows the ((marijuana)) cannabis retail licensee to:
(a) Sell ((marijuana)) cannabis for medical use to qualifying patients and designated providers; and
(b) Provide ((marijuana)) cannabis at no charge, at their discretion, to qualifying patients and designated providers.
(2) Qualifying patients between ((eighteen and twenty-one)) 18 and 21 years of age with a recognition card may enter and remain on
the premises of a retail outlet holding a medical ((marijuana)) cannabis endorsement and may purchase products for their personal medical use. Qualifying patients who are under the age of ( (eighteen)) 18 with a recognition card and who accompany their designated providers may enter and remain on the premises of a retail outlet holding a medical ((marijuana)) cannabis endorsement, but may not purchase products for their personal medical use. Only a designated provider may purchase products for a qualifying patient under the age of ((eighteen)) 18 who holds a valid recognition card.
(3) To maintain a medical ((marijuana)) cannabis endorsement in good standing, a ((marijuana)) cannabis retailer must:
(a) Follow all rules adopted by the department of health regarding retail sales of medical ((marijuana)) cannabis;
(b) Have a consultant on staff in accordance with department of health rules;
(c) Prohibit the medical use of ((marijuana)) cannabis by anyone at the retail outlet at all times, including medical use by qualifying patients;
(d) Maintain at all times, a representative assortment of (marijuana) ) cannabis products necessary to meet the needs of qualified patients and designated providers;
(e) Not market ((marijuana)) cannabis concentrates, useable ((marijuana)) cannabis, or ((marijuana-infused)) cannabis-infused products in a way that make them especially attractive to minors;
(f) Demonstrate the ability to enter qualifying patients and designated providers in the medical ((marijuana)) cannabis authorization database established by the department of health;
(g) Issue recognition cards and agree to enter qualifying patients and designated providers into the database in compliance with the department of health standards;
(h) Keep records to document the validity of tax exempt sales as prescribed by the department of revenue for a minimum of five years. For the documentation requirements in RCW 69.50.375 (3) (e), licensees are not required to separately keep copies of the qualifying patient's or designated provider's recognition card because this information is stored in the medical ((marijuana)) cannabis authorization database;
(i) Train employees on the following:
(i) Procedures regarding the recognition of valid authorizations and the use of equipment to enter qualifying patients and designated providers into the medical ((marijuana)) cannabis authorization database;
(ii) Recognition of valid recognition cards; and
(iii) Recognition of strains, varieties, THC concentration, CBD concentration, and THC to CBD ratios of ( (marijuana)) cannabis concentrates, useable ((marijuana)) cannabis, and ((marijuana-infused)) can-nabis-infused products available for sale when assisting qualifying patients and designated providers at the retail outlet.
(4) A ((marijuana)) cannabis retailer holding a medical ((marijuana)) cannabis endorsement may sell products with a THC concentration of 0.3 percent or less. The licensee may also provide these products at no charge to qualifying patients or designated providers.
(5) Unlicensed practice of medicine. No owner, employee, or volunteer of a retail outlet and holding a medical ((marijuana)) cannabis endorsement may:
(a) Offer or undertake to diagnose or cure any human or animal disease, ailment, injury, infirmity, deformity, pain, or other condi-
tion, physical or mental, real or imaginary, by use of ((marijuana)) cannabis products or any other means or instrumentality; or
(b) Recommend or suggest modification or elimination of any course of treatment that does not involve the medical use of ( (marijuana)) cannabis products.
(6) Failure to comply with subsections (3) and (5) of this section may result in suspension or revocation of the medical ((marijuana)) cannabis endorsement.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-080, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-080, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-083 Security and traceability requirements for ((maxijuana)) cannabis licensees. The security requirements for a (marijuana)) cannabis licensee are as follows:
(1) Display of identification badge. All licensees and employees on the licensed premises shall be required to hold and properly display an identification badge issued by the licensed employer at all times while on the licensed premises and engaged in the transportation of ((marijuana)) cannabis. The identification badge must list the licensee's trade name and include the person's full and legal name and photograph. All licensees and employees must have their state issued identification available to verify the information on their badge is correct.
(a) All nonemployee visitors to the licensed premises, other than retail store customers, shall be required to hold and properly display an identification badge issued by the licensee at all times while on the licensed premises.
(b) A log must be kept and maintained showing the full name of each visitor entering the licensed premises, badge number issued, the time of arrival, time of departure, and the purpose of the visit.
(c) All log records must be maintained on the licensed premises for a period of three years and are subject to inspection by any WSLCB employee or law enforcement officer, and must be copied and provided to the WSLCB or law enforcement officer upon request.
(d) Employees, visitors, and other persons at a (marijuana)) cannabis licensed premises, including persons engaged in the transportation of ((marijuana)) cannabis, must provide identification to a WSLCB enforcement officer upon request.
(2) Alarm systems. At a minimum, each licensed premises must have a security alarm system on all perimeter entry points and perimeter windows. Motion detectors, pressure switches, duress, panic, and holdup alarms may also be used.
(3) Surveillance system. At a minimum, a licensed premises must have a complete video surveillance system with minimum camera resolution of $640 \times 470$ pixels or pixel equivalent for analog. The surveillance system storage device and/or the cameras must be internet protocol (IP) compatible. All cameras must be fixed and placement must allow for the clear and certain identification of any person and activities in controlled areas of the licensed premises. All entrances and
exits to an indoor facility must be recorded from both indoor and outdoor, or ingress and egress vantage points. All cameras must record continuously ((twenty-four)) 24 hours per day and at a minimum of ((もen)) 10 frames per second. The surveillance system storage device must be secured on the licensed premises in a lockbox, cabinet, closet, or secured in another manner to protect from employee tampering or criminal theft. All surveillance recordings must be kept for a minimum of ((forty-five)) 45 days on the licensee's recording device. All videos are subject to inspection by any WSLCB employee or law enforcement officer, and must be copied and provided to the WSLCB or law enforcement officer upon request. All recorded images must clearly and accurately display the time and date. Time is to be measured in accordance with the U.S. National Institute Standards and Technology standards. Controlled areas include:
(a) Any area within an indoor, greenhouse or outdoor room or area where ((marijuana)) cannabis is grown, or ((marijuana)) cannabis or ((marijuana)) cannabis waste is being moved within, processed, stored, or destroyed. Rooms or areas where ((marijuana)) cannabis or ((marijuana)) cannabis waste is never present are not considered control areas and do not require camera coverage.
(b) All point-of-sale (POS) areas.
(c) Twenty feet of the exterior of the perimeter of all required fencing and gates enclosing an outdoor grow operation. Any gate or other entry point that is part of the required enclosure for an outdoor growing operation must be lighted in low-light conditions. A motion detection lighting system may be employed to light the gate area in low-light conditions.
(d) Any room or area storing a surveillance system storage device.
(4) Traceability: To prevent diversion and to promote public safety, ((marijuana)) cannabis licensees must track ((marijuana)) cannabis from seed to sale. Licensees must provide the required information on a system specified by the WSLCB. All costs related to the reporting requirements are borne by the licensee. ((Marijuana)) Cannabis seedlings, clones, plants, lots of useable ((marijuana)) cannabis or trim, leaves, and other plant matter, batches of extracts, ((marijua= na-infused) ) cannabis-infused products, samples, and ((marijuana)) cannabis waste must be traceable from production through processing, and finally into the retail environment including being able to identify which lot was used as base material to create each batch of extracts or infused products. The following information is required and must be kept completely up-to-date in a system specified by the WSLCB:
(a) Key notification of "events," such as when a plant enters the system (moved from the seedling or clone area to the vegetation production area at a young age);
(b) When plants are to be partially or fully harvested or destroyed;
(c) When a lot or batch of ((marijuana, marijuana)) cannabis, cannabis extract, ((marijuana)) cannabis concentrates, ((marijuana-infused) ) cannabis-infused product, or ((marijuana)) cannabis waste is to be destroyed;
(d) When useable ((marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products are transported;
(e) Any theft of useable ((marijuana, marijuana)) cannabis, cannabis seedlings, clones, plants, trim or other plant material, ex-
tract, infused product, seed, plant tissue or other item containing ((marijuana)) cannabis;
(f) All ((marijuana)) cannabis plants eight or more inches in height or width must be physically tagged and tracked individually;
(g) A complete inventory of all ((marijuana)) cannabis, seeds, plant tissue, seedlings, clones, all plants, lots of useable ((marijuana)) cannabis or trim, leaves, and other plant matter, batches of extract, ((marijuana)) cannabis concentrates, ((marijuana-infused)) cannabis-infused products, and ((marijuana)) cannabis waste;
(h) All ((marijuana)) cannabis, useable ((marijuana, marijuanainfused) ) cannabis, cannabis-infused products, ((marijuana)) cannabis concentrates, seeds, plant tissue, clone lots, and ((marijuana)) cannabis waste must be physically tagged with the unique identifier generated by the traceability system and tracked;
(i) All point-of-sale records;
(j) ((Marijuana)) Cannabis excise tax records;
(k) All samples sent to an independent testing lab, any sample of unused portion of a sample returned to a licensee, and the quality assurance test results;
(l) All vendor samples provided to another licensee for purposes of education or negotiating a sale;
(m) All samples used for testing for quality by the producer or processor;
(n) Samples containing useable ((marijuana)) cannabis provided to retailers;
(o) Samples provided to the WSLCB or their designee for quality assurance compliance checks; and
(p) Other information specified by the board.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-083, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-083, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-083, filed 5/20/15, effective 6/20/15; WSR 14-07-116, § 314-55-083, filed 3/19/14, effective 4/19/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-083, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-084 ((Marijuana)) Cannabis plant production. (1) Only the following specified soil amendments, fertilizers, other crop production aids, and pesticides may be used in the production of ((marijuana)) cannabis:
(a) Pesticides registered by WSDA under chapter 15.58 RCW as allowed for use in the production, processing, and handling of ((marijuana)) cannabis. Pesticides must be used consistent with the label requirements.
(b) Commercial fertilizers registered by WSDA under chapter 15.54 RCW.
(c) Potting soil, crop production aids, soil amendments, and other growing media available commercially in the state of Washington may be used in ((marijuana)) cannabis production. Producers growing out-
doors are not required to meet land eligibility requirements outlined in 7 C.F.R. Part 205.202.
(2) Examples of prohibited products:
(a) The use of products containing plant growth regulators not allowed for use on food crops including, but not limited to, any of the following ingredients, is prohibited:
(i) Ancymidol;
(ii) Chlormequat chloride;
(iii) Clofencet;
(iv) Colchicine;
(v) Colloidal silver;
(vi) Daminozide;
(vii) Dikegulac-sodium;
(viii) Flumetralin;
(ix) Flurprimidol; and
(x) Paclobutrazol.
(b) The use of vitamin-hormone products not intended for use on food crops is prohibited.
(c) The use of products containing the insecticide DDVP (Dichlorvos) is prohibited in all areas where ((marijuana)) cannabis is being grown or processed.
(3) Soil amendments, fertilizers, growing media, other crop production aids, and pesticides that do not conform to subsections (1) and (2) of this section cannot be used, kept, or stored on the licensed premises.
(4) The following ((marijuana)) cannabis and ((marijuana)) cannabis products are subject to seizure and destruction:
(a) ((Marijuana)) Cannabis exposed to unauthorized soil amendments or fertilizers; and
(b) ((Marijuana)) Cannabis with levels of unauthorized pesticides or plant growth regulators as provided in WAC 314-55-108.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-084, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-084, filed 5/18/16, effective 6/18/16; WSR 14-10-044, § 314-55-084, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-084, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-085 What are the transportation requirements for a ((marijuana)) cannabis licensee? (1) Notification of shipment. Upon transporting any ((marijuana)) cannabis or ((marijuana)) cannabis product, a producer, processor, retailer, or certified third-party testing lab shall notify the WSLCB of the type and amount and/or weight of ((marijuana)) cannabis and/or ((marijuana)) cannabis products being transported, the name of transporter, information about the transporting vehicle, times of departure and expected delivery. This information must be reported in the traceability system described in WAC 314-55-083(4).
(2) Receipt of shipment. Upon receiving the shipment, the licensee or certified third-party lab receiving the product shall report the amount and/or weight of ((marijuana)) cannabis and/or ((marijuana)) cannabis products received in the traceability system.
(3) Transportation manifest. A complete printed transport manifest on a form provided by the WSLCB containing all information required by the WSLCB must be kept with the product at all times.
(4) Records of transportation. Records of all transportation must be kept for a minimum of three years at the licensee's location and are subject to inspection.
(5) Transportation of product. ((Marijuana)) Cannabis or ((marijuana)) cannabis products that are being transported must meet the following requirements:
(a) Only the ((marijuana)) cannabis licensee, an employee of the licensee, a transportation licensee, or a certified testing lab may transport product and/or occupy a transporting vehicle;
(b) Drivers and/or occupants of a transporting vehicle must be ((twenty-one)) 21 years of age or older;
(c) ((Marijuana)) Cannabis or ((marijuana)) cannabis products must be in a sealed package or container approved by the WSLCB pursuant to WAC 314-55-105;
(d) Sealed packages or containers cannot be opened during transport;
(e) ((Marijuana)) Cannabis or ((marijuana)) cannabis products must be in a locked, safe and secure storage compartment that is secured to the inside body/compartment of the vehicle transporting the ((marijuana)) cannabis or ((marijuana)) cannabis products;
(f) Any vehicle transporting ((marijuana)) cannabis or ((marijuana)) cannabis products must travel directly from the shipping licensee to the receiving licensee and must not make any unnecessary stops in between except to other facilities receiving product;
(g) Live plants may be transported in a fully enclosed, windowless locked trailer, or in a secured area within the inside body/ compartment of a van or box truck. A secured area is defined as an area where solid or locking metal petitions, cages, or high strength shatterproof acrylic can be used to create a secure compartment in the fully enclosed van or box truck. The secure compartment in the fully enclosed van or box truck must be free of windows. Live plants may not be transported in the bed of a pickup truck, a sports utility vehicle, or passenger car.
(6) For purposes of this chapter, any vehicle assigned for the purposes of transporting ((marijuana)) cannabis, usable ((marijuana, ffarijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products shall be considered an extension of the licensed premises. Transport vehicles are subject to inspection by enforcement officers of the WSLCB. Vehicles assigned for transportation may be stopped and inspected by a WSLCB enforcement officer at any licensed location, or while en route during transportation.
(7) All ((marijuana)) cannabis plants, clones, seeds, lots, batches, intermediate products, end products, vendor samples, and sample jars must remain physically tagged during transport.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-085, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-085, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-085, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW
69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-085, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 19-10-076, filed 5/1/19, effective 6/1/19)

WAC 314-55-086 Mandatory signage. (1) All licensed ((marijua= na) ) cannabis processors, producers, and retailers, with the exception of licensed retailers with a medical ((marijuana)) cannabis endorsement, must conspicuously post a notice provided by the board about persons under ((twenty-one)) 21 years of age at each entry to all licensed premises. The notice must contain all of the following language: "Persons under (( these premises."
(2) All licensed retailers with a medical ((marijuana)) cannabis endorsement must conspicuously post a notice provided by the board regarding persons under ((twnty-one)) 21 years of age at each entry to all licensed medical ((marijuana)) cannabis premises. The notice must contain all of the following language: "Persons under ((twenty-one)) 21 years of age not permitted on these premises without a valid qualifying patient card. Qualifying patients under the age of ((eighteen)) 18 must be accompanied by their designated provider at all times."
(3) All licensed ((marijuana)) cannabis retailers must conspicuously post a sign provided by the board regarding the use of ((marijuana)) cannabis during pregnancy and breastfeeding as follows:
(a) At each point of sale; and
(b) In a location easily visible to employees.
(4) All licensed ((marijuana)) cannabis retailers must conspicuously post a notice provided by the board prohibiting the opening of a package of ((marijuana)) cannabis or ((marijuana-infused)) cannabisinfused product in public or consumption of ((marijuana)) cannabis or ((marijuana-infused)) cannabis-infused products in public. The notice must be posted in plain view at the main entrance of the ((marijuana)) cannabis retail establishment.
(5) All licensed ((marijuana)) cannabis processors, producers, and retailers must conspicuously post on the premises and make available their current and valid master license or licenses with appropriate endorsements for inspection by board enforcement officers.
(6) Firearms prohibited signs provided by the board must be posted at the entrance of each producer, processor, and retailer licensed location.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 19-10-076, § 314-55-086, filed 5/1/19, effective 6/1/19; WSR 16-11-110, § 314-55-086, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-086, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-086, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-087 Recordkeeping requirements for ((marijuana)) cannabis licensees. (1) ((Marijuana)) Cannabis licensees are responsible to keep records that clearly reflect all financial transactions and the financial condition of the business. The following records must be kept and maintained on the licensed premises for a five-year period and must be made available for inspection if requested by an employee of the WSLCB:
(a) Purchase invoices and supporting documents, to include the items and/or services purchased, from whom the items were purchased, and the date of purchase;
(b) Bank statements and canceled checks for any accounts relating to the licensed business;
(c) Accounting and tax records related to the licensed business and each true party of interest;
(d) Records of all financial transactions related to the licensed business, including contracts and/or agreements for services performed or received that relate to the licensed business;
(e) All employee records to include, but not limited to, training, payroll, and date of hire;
(f) Records of each daily application of pesticides applied to the ((marijuanz)) cannabis plants or growing medium. For each application, the producer shall record the following information on the same day the application is made:
(i) Full name of each employee who applied the pesticide;
(ii) The date the pesticide was applied;
(iii) The name of the pesticide or product name listed on the registration label which was applied;
(iv) The concentration and total amount of pesticide per plant; and
(v) For outdoor production, the concentration of pesticide that was applied to the field. Liquid applications may be recorded as, but are not limited to, amount of product per ((өnc hundred)) 100 gallons of liquid spray, gallons per acre of output volume, ppm, percent product in tank mix (e.g., one percent). For chemigation applications, record "inches of water applied" or other appropriate measure.
(g) Soil amendment, fertilizers, or other crop production aids applied to the growing medium or used in the process of growing ((marijuana) ) cannabis;
(h) Production and processing records, including harvest and curing, weighing, destruction of ((marijuana)) cannabis, creating batches of ((marijuana-infused)) cannabis-infused products and packaging into lots and units;
(i) Records of each batch of extracts or infused ((marijuana)) cannabis products made, including at a minimum, the lots of useable ((marijuana)) cannabis or trim, leaves, and other plant matter used (including the total weight of the base product used), any solvents or other compounds utilized, and the product type and the total weight of the end product produced, such as hash oil, shatter, tincture, infused dairy butter, etc.;
(j) Transportation records as described in WAC 314-55-085;
(k) Inventory records;
(l) All samples sent to an independent testing lab and the quality assurance test results;
(m) All free samples provided to another licensee for purposes of negotiating a sale;
(n) All samples used for testing for quality by the producer or processor;
(o) Sample jars containing useable ((marijuana)) cannabis provided to retailers; and
(p) Records of any theft of ((marijuana)) cannabis seedlings, clones, plants, trim or other plant material, extract, ((marijuana-infused) ) cannabis-infused product, or other item containing ((marijuana) ) cannabis.
(q) Records of any ((marijuanz)) cannabis product provided free of charge to qualifying patients or designated providers.
(2) If the ((marijuana)) cannabis licensee keeps records within an automated data processing (ADP) and/or point-of-sale (POS) system, the system must include a method for producing legible records that will provide the same information required of that type of record within this section. The ADP and/or POS system is acceptable if it complies with the following guidelines:
(a) Provides an audit trail so that details (invoices and vouchers) underlying the summary accounting data may be identified and made available upon request.
(b) Provides the opportunity to trace any transaction back to the original source or forward to a final total. If printouts of transactions are not made when they are processed, the system must have the ability to reconstruct these transactions.
(c) Has available a full description of the ADP and/or POS portion of the accounting system. This should show the applications being performed, the procedures employed in each application, and the controls used to ensure accurate and reliable processing.
(3) The provisions contained in subsections (1) and (2) of this section do not eliminate the requirement to maintain source documents, but they do allow the source documents to be maintained in some other location.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-087, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-087, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-087, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-089 Tax and reporting requirements for ((marijuana)) cannabis licensees. (1) ((Marijuana)) Cannabis retailer licensees must submit monthly report(s) and payments to the WSLCB. The required monthly reports must be:
(a) On a form or electronic system designated by the WSLCB;
(b) Filed every month, including months with no activity or payment due;
(c) Submitted, with payment due, to the WSLCB on or before the ((もwentieth)) 20th day of each month, for the previous month. (For example, a report listing transactions for the month of January is due by February 20th.) When the ((twenticth)) 20 th day of the month falls
on a Saturday, Sunday, or a legal holiday, the filing must be postmarked by the U.S. Postal Service no later than the next postal business day;
(d) Filed separately for each ((marijuana)) cannabis license held; and
(e) All records must be maintained and available for review for a three-year period on licensed premises (see WAC 314-55-087).
(2) ((Marijuana)) Cannabis producer licensees: On a monthly basis, ((marijuana)) cannabis producers must maintain records and report purchases from other licensed ((marijuana)) cannabis producers, current production and inventory on hand, sales by product type, and lost and destroyed product in a manner prescribed by the WSLCB. The act of keeping data completely up-to-date in the state traceability system fulfills the monthly reporting requirement.
(3) ((Marijuana)) Cannabis processor licensees: On a monthly basis, ((marijuana)) cannabis processors must maintain records and report purchases from licensed ((marijuana)) cannabis producers, other ((marijuana)) cannabis processors, production of ((marijuana-infused)) cannabis-infused products, sales by product type to ((marijuana)) cannabis retailers, and lost and/or destroyed product in a manner prescribed by the WSLCB. The act of keeping data completely up-to-date in the state traceability system fulfills the monthly reporting requirement.
(4) ((Marijuana)) Cannabis retailer's licensees:
(a) On a monthly basis, ((marijuana)) cannabis retailers must maintain records and report purchases from licensed ((marijuana)) cannabis processors, sales by product type to consumers, and lost and/or destroyed product in a manner prescribed by the WSLCB.
(b) A ((marijuana)) cannabis retailer licensee must collect from the buyer and remit to the WSLCB a ((marijuana)) cannabis excise tax of ((thirty-seven)) 37 percent of the selling price on each retail sale of useable ((marijuana, marijuana)) cannabis, cannabis concentrates, and ((maxijuana-infused)) cannabis-infused products.
(c) Product inventory reductions that are not adequately documented will be deemed to be sales and will be assessed the excise tax.
(d) Excise tax collected in error must either be returned to the customer(s) or remitted to the WSLCB if returning to the customer(s) is not possible.
(5) Payment methods: ((Marijuana)) Cannabis excise tax payments are payable only by check, cashier's check, money order, or electronic payment or electronic funds transfer. Licensees must submit ((marijuana) ) cannabis excise tax payments to the board by one of the following means:
(a) By mail to WSLCB, Attention: Accounts Receivable, P.O. Box 43085, Olympia, WA 98504;
(b) By paying through online access through the WSLCB traceability system; or
(c) By paying using a money transmitter licensed pursuant to chapter 19.230 RCW. If a licensee uses a money transmitter service, the licensee must remit payments in U.S. dollars.
(6) Payments transmitted to the board electronically under this section will be deemed received when received by the WSLCB's receiving account. All other payments transmitted to the WSLCB under this section by United States mail will be deemed received on the date shown by the post office cancellation mark stamped on the envelope containing the payment.
(7) The WSLCB may waive the means of payment requirements as provided in subsection (5) of this section for any licensee for good cause shown. For the purposes of this section, "good cause" means the inability of a licensee to comply with the payment requirements of this section because:
(a) The licensee demonstrates it does not have and cannot obtain a bank or credit union account or another means by which to comply with the requirements of subsection (5) of this section and cannot obtain a cashier's check or money order; or
(b) Some other circumstance or condition exists that, in the WSLCB's judgment, prevents the licensee from complying with the requirements of subsection (5) of this section.
(8) If a licensee tenders payment of the ((marijuana)) cannabis excise tax in cash without applying for and receiving a waiver or after denial of a waiver, the licensee may be assessed a ((ten)) 10 percent penalty.
(9) If a licensee is denied a waiver and requests an adjudicative proceeding to contest the denial, a brief adjudicative proceeding will be conducted as provided under RCW 34.05.482 through 34.05.494.
(10) For the purposes of this section, "electronic payment" or "electronic funds transfer" means any transfer of funds, other than a transaction originated or accomplished by conventional check, drafts, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit a checking or other deposit account. "Electronic funds transfer" includes payments made by electronic check (e-check).
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-089, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342, 69.50.345, 69.50.535, and 2016 1st sp.s. c 36. WSR 16-19-002, § 314-55-089, filed 9/7/16, effective 10/8/16. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-089, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-089, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-089, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-089, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-092 Failure to pay excise taxes and late payment of excise taxes. (1) If a ((marijuana)) cannabis licensee does not submit its payment(s) to the WSLCB as required in WAC 314-55-089: The licensee is subject to penalties.

Penalties: A penalty of two percent per month will be assessed on the outstanding balance for any payments postmarked after the ((twenticth) ) 20th day of the month following the month of sale. When the ((twentieth)) 20th day of the month falls on a Saturday, Sunday, or a legal holiday, the filing must be postmarked by the U.S. Postal Service no later than the next postal business day. Absent a postmark, the date received at the WSLCB or authorized designee, will be used to assess the penalty of two percent per month on the outstanding balance
after the (( wentieth)) 20th day of the month following the month of sale.
(2) Failure to make a report and/or pay the license taxes and/or penalties in the manner and dates outlined in WAC 314-55-089 will be sufficient grounds for the WSLCB to suspend or revoke a ((marijuana)) cannabis license.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-092, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-092, filed 5/18/16, effective 6/18/16; WSR 14-10-044, § 314-55-092, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-092, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-095 ((Marijuana)) Cannabis servings and transaction limitations. Personal possession limits and transaction limits are detailed in RCW 69.50.360 and 69.50.4013.
(1) For persons age ((twenty-one)) 21 and older and qualifying patients or designated providers who are not entered into the medical ((marijuana)) cannabis authorization database, ((marijuana)) cannabis serving and transaction limitations are as follows:
(a) Single serving. A single serving of a ((marijuana-infused)) cannabis-infused product must not exceed ((ten)) 10 milligrams active tetrahydrocannabinol (THC), or Delta 9.
(b) Maximum number of servings. The maximum number of servings in any one single unit of ((marijuana-infused)) cannabis-infused product meant to be eaten or swallowed or otherwise taken into the body is ((ten)) 10 servings or ((ene hundred)) 100 milligrams of active THC, or Delta 9. A single unit of ((marijuana)) cannabis concentrate cannot exceed one gram.
(c) Transaction limits.
(i) A single transaction is limited to:
(A) One ounce of useable ((marijuana)) cannabis;
(B) Sixteen ounces of ((marijuana-infused)) cannabis-infused product meant to be eaten or swallowed in solid form;
(C) Seven grams of ((marijuana-infused)) cannabis-infused extract or ((marijuana)) cannabis concentrate for inhalation; and
(D) Seventy-two ounces of ((marijuana-infused)) cannabis-infused product in liquid form for oral ingestion or applied topically to the skin; and
(E) Ten units of a ((marijuana-infused)) cannabis-infused product otherwise taken into the body.
(ii) A licensee or employee of a licensee is prohibited from conducting a transaction that facilitates an individual in obtaining more than the personal possession amount.
(2) For qualifying patients and designated providers who are entered into the medical ((marijuana)) cannabis authorization database, serving and transaction limits are as follows:
(a) Single serving. Except as provided in chapter 246-70 WAC, a single serving of a ((marijuana-infused)) cannabis-infused product
must not exceed ((ten)) 10 milligrams active tetrahydrocannabinol (THC), or Delta 9.
(b) Maximum number of servings. Except as provided in chapter 246-70 WAC, the maximum number of servings in any one single unit of ((marijuana-infused)) cannabis-infused product meant to be eaten, swallowed or applied is ((ten)) 10 servings or ((one hundred)) 100 milligrams of active THC, or Delta 9. A single unit of ((marijuana)) cannabis concentrate cannot exceed one gram.
(c) Transaction limitation. A single transaction by a retail store with a medical ((marijuana)) cannabis endorsement to a qualifying patient or designated provider who is entered into the medical ((marijuana)) cannabis database is limited to three ounces of useable ((marijuana, forty-cight)) cannabis, 48 ounces of ((marijuana-infused) ) cannabis-infused product meant to be eaten or swallowed in solid form, ((twenty-one)) 21 grams of ((marijuana-infused)) cannabisinfused extract or ((marijuana)) cannabis concentrate for inhalation, and ((two hundred sixteen)) 216 ounces of ((marijuana-infused)) canna-bis-infused product in liquid form meant to be eaten or swallowed.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-095, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-095, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-095, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-095, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-096 Vendor, educational, and internal quality control samples. (1) Vendor samples: Producers or processors may provide free samples of useable ((marijuana, marijuana-infused)) cannabis, canna-bis-infused products, and ((marijuana)) cannabis concentrates to negotiate a sale on product the retail licensee does not currently carry. All vendor sample limits are based on calendar months. The producer or processor must record the amount of each vendor sample and the processor or retailer receiving the sample in the traceability system. The outgoing sample must be clearly labeled as a "vendor sample" to negotiate a sale and recorded on a transport manifest. The receiving licensee must receive the vendor sample in the traceability system prior to sampling.
(a) Vendor samples may only be given to and used by licensees or employees of licensees who have product ordering authority or employees who provide input on product to licensees or employees of licensees who have purchasing authority to inform purchasing decisions as detailed in a written business policy.
(b) Producers may not provide any one licensed processor more than eight grams of ((marijuana)) cannabis flower per month free of charge for the purpose of negotiating a sale.
(c) Processors may not provide any one licensed retailer more than eight grams of useable ((marijuana)) cannabis per month free of charge for the purpose of negotiating a sale.
(d) Processors may not provide any one licensed retailer more than eight units of ((marijuana-infused)) cannabis-infused products in
solid form meant to be ingested orally or otherwise taken into the body per month free of charge for the purpose of negotiating a sale. No single unit may exceed 10 mg of THC.
(e) Processors may not provide any one licensed retailer more than eight units of ((marijuana-infused)) cannabis-infused product in liquid form meant to be eaten, swallowed, or otherwise taken into the body per month free of charge for the purpose of negotiating a sale. No single unit may exceed 10 mg of THC.
(f) Processors may not provide any one licensed retailer more than eight units of ((maxijuana-infused)) cannabis-infused products meant to be applied topically per month free of charge for the purpose of negotiating a sale.
(g) Processors may not provide any one licensed retailer more than two units of ((marijuana-infused)) cannabis-infused extract meant for inhalation or infused ((marijuana)) cannabis mix per month free of charge for the purpose of negotiating a sale. No single unit may exceed 0.5 g .
(h) A ((marijuana)) cannabis producer must make quality assurance test results available to any processor receiving samples to negotiate a sale. The producer must also provide a statement that discloses all pesticides applied to the ((marijuana)) cannabis plants and growing medium during production.
(i) A ((marijuana)) cannabis processor must make quality assurance test results available to any retailer receiving samples to negotiate a sale. If a ((marijuana)) cannabis extract was added to the product, the processors must disclose the type of extraction process and any solvent, gas, or other chemical used in the extraction process, or any other compound added to the extract.
(j) Vendor sample labeling: All vendor samples must be clearly labeled as a vendor sample and meet all labeling requirements of the product to be sampled.
(i) The unique identifier number generated by the traceability system;
(ii) The UBI number of the licensed entity providing the sample; and
(iii) Weight of the product in ounces and grams or volume as applicable.
(2) Education sampling. Processors may provide free samples of useable ((marijuana, marijuana-infused)) cannabis, cannabis-infused products, and ((flarijuana)) cannabis concentrates to retail licensees to give to the licensee's employees for educational purposes. Products being sampled must be carried by the licensed retailer. The processor must record the amount of each sample and the retailer receiving the sample in the traceability system. The outgoing sample must be clearly labeled as "education sample" and recorded on a transport manifest. Once the retailer receives the sample, the retailer must accept the sample in the traceability system prior to distributing samples to the retailer's employees. All employees at a licensed retail location who receive educational samples must be entered into the traceability system for the purpose of distributing education samples.
(a) Retailers are restricted to receiving a maximum of ((one hun= dred)) 100 sample units per calendar month. No more than ((ten)) 10 sample units may be provided to any one employee per calendar month.
(b) The maximum size of education samples are:
(i) Useable ((marijuana, marijuana)) cannabis, cannabis mix, and infused ((marijuana)) cannabis mix - One unit not to exceed 0.5 g .
(ii) ((Marijuana)) Cannabis infused solid or liquid product meant to be ingested orally or otherwise taken into the body - One unit not to exceed 10 mg THC.
(iii) ( (Marijuana-infused)) Cannabis-infused extract for inhalation - One unit not to exceed 0.25 g .
(iv) ((Marijuana-infused)) Cannabis-infused products for topical application - One unit not to exceed ((sixteen)) 16 ounces.
(c) Distribution and consumption of all educational samples is limited to retail employees who directly sell product to retail customers. Retail employees who are not involved in direct sales to customers are not eligible for education samples.
(d) ((Marijuana)) Cannabis retail licensees are prohibited from providing educational samples to their employees as a form of compensation.
(e) A ((marijuana)) cannabis processor must make quality assurance test results available to any retailer receiving education samples. If a ((marijuana)) cannabis extract was added to the product, the processors must disclose the type of extraction process and any solvent, gas, or other chemical used in the extraction process, or any other compound added to the extract.
(f) Education sample labeling: All education samples must be clearly labeled "education sample" and include the following information on the label:
(i) The unique identifier number generated by the traceability system;
(ii) The UBI number and trade name of the licensed entity providing the sample;
(iii) Product name or strain name for useable ((marijuana)) cannabis;
(iv) Weight of the product in ounces and grams or volume as applicable; and
(v) Potency labeled as required under WAC 314-55-105.
(3) A ((marijuana)) cannabis processor is not required to provide free samples to negotiate a sale or educational samples to a (marijuana)) cannabis retail licensee, and a ((marijuana)) cannabis retail licensee may not require a ((marijuana)) cannabis processor to provide free sample to negotiate a sale or educational samples as a condition for purchasing the ((marijuana)) cannabis processor's products.
(4) Internal quality control sampling: Producers and processors may conduct limited self-sampling for quality control. All sample limits are based on calendar months. Consuming samples for quality control may not take place at a licensed premises. Only the producer, processor, or employees of the licensee may sample the ((marijuana)) cannabis flower, useable ((marijuana, marijuana-infused)) cannabis, cannabis-infused products, ((marijuana)) cannabis concentrates, and edible ((marijuana-infused)) cannabis-infused product. The producer or processor must record the amount of each sample and the employee(s) conducting the sampling in the traceability system.
(a) Producers may sample two grams of ((marijuana)) cannabis flower per strain, per month for quality sampling.
(b) Processors may sample one unit per batch of a new ((marijua-na-infused) ) cannabis-infused product meant to be ingested orally or otherwise taken into the body to be offered for sale on the market.
(c) Processors may sample up to one unit per batch of a new ((marijuana-infused)) cannabis-infused extract for inhalation to be offered for sale on the market. No single sample may exceed 0.5 g .
(d) Processors may sample one unit per batch of a new ((marijuana)) cannabis mix packaged to be offered for sale on the market. No single sample may exceed 1 g.
(e) Processors may sample one unit per batch of a new infused ((marijuana)) cannabis mix to be offered for sale on the market. No sample may exceed 0.5 g .
(f) Processors may sample one unit per batch of a new ((marijua-na-infused)) cannabis-infused product for topical application to be offered for sale on the market. No sample may exceed ((sixteen)) 16 ounces.
(5) Retailers may not provide free samples to customers.
(6) Sample jars:
(a) A processor may provide a retailer free samples of useable ((marijuana)) cannabis packaged in a sample jar protected by a plastic or metal mesh screen to allow customers to smell the product before purchase. The sample jar may not contain more than three and one-half grams of useable ((marijuana)) cannabis. The plastic or metal mesh screen must be sealed onto the container, and must be free of rips, tears, or holes greater than 2 mm in diameter. The sample jar and the useable ((farijuana)) cannabis within may not be sold to a customer and must be returned to the licensed processor who provided the useable ((marijuana)) cannabis and sample jar.
(b) Sample jar labeling: All sample jars must be labeled with the following:
(i) The unique identifier number generated by the traceability system;
(ii) Information identifying whether it is a vendor sample or sample jar;
(iii) The UBI number of the licensed entity providing the sample; and
(iv) Weight of the product in ounces and grams or volume as applicable.
(c) A ((marijuana)) cannabis processor must make quality assurance test results available to any retailer receiving sample jars. The processor must also provide a statement that discloses all pesticides applied to the ((marijuana)) cannabis plants and growing medium during production.
(d) If a ((marijuana)) cannabis extract was added to the product, the processor must disclose to the retailer the type of extraction process and any solvent, gas, or other chemical used in the extraction process, or any other compound added to the extract.
(7) Transportation. Outgoing and return vendor samples and sample jars must adhere to the transportation requirements in WAC 314-55-085.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-096, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-096, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-097 ((Marijuana)) Cannabis waste disposal-Liquids and solids. (1) Solid and liquid wastes generated during ((marijua-
na)) cannabis production and processing must be stored, managed, and disposed of in accordance with applicable state and local laws and regulations.
(2) Wastewater generated during ((maxijuana)) cannabis production and processing must be disposed of in compliance with applicable state and local laws and regulations.
(3) Wastes from the production and processing of ((marijuana)) cannabis plants must be evaluated against the state's dangerous waste regulations (chapter 173-303 WAC) to determine if those wastes designate as dangerous waste. It is the responsibility of each waste generator to properly evaluate their waste to determine if it is designated as a dangerous waste. If a generator's waste does designate as a dangerous waste, then that waste(s) is subject to the applicable management standards found in chapter 173-303 WAC.
(a) Wastes that must be evaluated against the dangerous waste regulations include, but are not limited to, the following:
(i) Waste from ((marijuana)) cannabis flowers, trim and solid plant material used to create an extract (per WAC 314-55-104).
(ii) Waste solvents used in the ((marijuana)) cannabis process (per WAC 314-55-104).
(iii) Discarded plant waste, spent solvents and laboratory wastes from any ((marijuana)) cannabis processing or quality assurance testing.
(iv) ((Marijuana)) Cannabis extract that fails to meet quality testing.
(b) ((Marijuaz)) Cannabis wastes that do not designate as dangerous shall be managed in accordance with subsection (4) of this section.
(c) A ((marijuana)) cannabis plant, useable ((marijuana)) cannabis, trim and other plant material in itself is not considered dangerous waste as defined under chapter 173-303 WAC unless it has been treated or contaminated with a solvent.
(4) ((Marijuana)) Cannabis waste that does not designate as dangerous waste (per subsection (3) of this section) must be rendered unuseable following the methods in subsection (5) of this section prior to leaving a licensed producer, processor, or laboratory. Disposal of the ((marijuana)) cannabis waste rendered unuseable must follow the methods under subsection (6) of this section.

Wastes that must be rendered unuseable prior to disposal include, but are not limited to, the following:
(a) Waste evaluated per subsection (3) of this section and determined to not designate as "Dangerous Waste."
(b) ((Marijuana)) Cannabis plant waste, including roots, stalks, leaves, and stems that have not been processed with solvent.
(c) Solid ((marijuana)) cannabis sample plant waste possessed by third-party laboratories accredited by the WSLCB to test for quality assurance that must be disposed of.
(d) Other wastes as determined by the WSLCB.
(5) The allowable method to render ((marijuana)) cannabis plant waste unuseable is by grinding and incorporating the ((marijuana)) cannabis plant waste with other ground materials so the resulting mixture is at least ((fifty)) 50 percent ((nonmarijuana)) noncannabis waste by volume. Other methods to render ((marijuana)) cannabis waste unuseable must be approved by the WSLCB before implementation.

Material used to grind with the ((marijuana)) cannabis falls into two categories: Compostable waste and noncompostable waste.
(a) Compostable mixed waste: ( (Marijuana)) Cannabis waste to be disposed as compost feedstock or in another organic waste method (for example, anaerobic digester) may be mixed with the following types of waste materials:
(i) Food waste;
(ii) Yard waste;
(iii) Vegetable based grease or oils; or
(iv) Other wastes as approved by the WSLCB.
(b) Noncompostable mixed waste: ((Marijuana)) Cannabis waste to be disposed in a landfill or another disposal method (for example, incinerator) may be mixed with the following types of waste materials:
(i) Paper waste;
(ii) Cardboard waste;
(iii) Plastic waste;
(iv) Soil; or
(v) Other wastes as approved by the WSLCB.
(6) ((Marijuana)) Cannabis wastes rendered unuseable following the method described in subsection (4) of this section can be disposed.
(a) Disposal of the ((marijuana)) cannabis waste rendered unuseable may be delivered to a permitted solid waste facility for final disposition. Examples of acceptable permitted solid waste facilities include:
(i) Compostable mixed waste: Compost, anaerobic digester, or other facility with approval of the jurisdictional health department.
(ii) Noncompostable mixed waste: Landfill, incinerator, or other facility with approval of the jurisdictional health department.
(b) Disposal of the ((marijuana)) cannabis waste rendered unuseable may be managed on-site by the generator in accordance with the standards of chapter 173-350 WAC.
(c) A record of the final destination of ((marijuana)) cannabis waste rendered unuseable.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-097, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-097, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-097, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-097, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-099 Standardized scales. (1) ((Marijuana)) Cannabis producer and processor licensees must have at least one scale on the licensed premises for the traceability and inventory of products.
(2) The scales and other measuring devices are subject to chapter 19.94 RCW, and must meet the requirements of the most current version of chapter 16-662 WAC.
(3) Licensees must register scales on a business license application with business license services through the department of revenue as required under chapter 19.94 RCW.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-099, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-099, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

WAC 314-55-0995 Laboratory certification and accreditation requirements. The following requirements apply to third-party labs seeking certification by the WSLCB or its designee to do quality assurance testing on ((marijuana)) cannabis and ((marijuana)) cannabis products in Washington state, and for certified third-party laboratories (certified labs) to remain certified by the WSLCB. The requirements provided in this section are continuing requirements, and must be adhered to and maintained for a third-party lab to remain certified. The WSLCB may summarily suspend a lab's certification if a certified lab is found out of compliance with the requirements of this chapter.
(1) A third-party laboratory must be certified by the WSLCB or their vendor as meeting the WSLCB's accreditation and other requirements prior to conducting quality assurance tests required under this chapter. Certified labs must conspicuously display the certification letter received by the WSLCB upon certification at the lab's premises in a conspicuous location where a customer may observe it unobstructed in plain sight.
(2) A person with financial interest in a certified lab may not have direct or indirect financial interest in a licensed ((marijuana)) cannabis producer or processor for whom they are conducting required quality assurance tests. A person with direct or indirect financial interest in a certified lab must disclose to the WSLCB by affidavit any direct or indirect financial interest in a licensed ((marijuana)) cannabis producer or processor.
(3) The following provisions are conditions of certification for third-party testing labs. Failure to adhere to the below requirements may result in the suspension or revocation of certification.
(a) Each lab must employ a scientific director responsible to ensure the achievement and maintenance of quality standards of practice. The scientific director must possess the following minimum qualifications:
(i) A doctorate in the chemical or microbiological sciences from a college or university accredited by a national or regional certifying authority with a minimum of two years' post-degree laboratory experience;
(ii) A master's degree in the chemical or microbiological sciences from a college or university accredited by a national or regional certifying authority with a minimum of four years' of post-degree laboratory experience; or
(iii) A bachelor's degree in the chemical or microbiological sciences from a college or university accredited by a national or regional certifying authority with a minimum of six years of post-education laboratory experience.
(b) Certified labs must follow the analytical requirements most current version of the Cannabis Inflorescence and Leaf Monograph pub-
lished by the American Herbal Pharmacopoeia or notify the WSLCB or its designee what alternative scientifically valid testing methodology the lab is following for each quality assurance test. Third-party validation by the WSLCB or its designee is required for any monograph or analytical method followed by a certified lab to ensure the methodology produces scientifically accurate results prior to use of alternative testing methods to conduct required quality assurance tests.
(c) The WSLCB may require third-party validation and ongoing monitoring of a certified lab's basic proficiency to correctly execute the analytical methodologies employed by the certified lab. The WSLCB may contract with a vendor to conduct the validation and ongoing monitoring described in this subsection. The certified lab must pay all vendor fees for validation and ongoing monitoring directly to the WSLCB's vendor.
(4) Certified labs must allow the WSLCB or the WSLCB's vendor to conduct physical visits and inspect related laboratory equipment, testing and other related records during normal business hours without advance notice.
(5) As a condition of certification, labs must adopt and follow minimum good lab practices (GLPs) as provided in WAC 314-55-103, and maintain internal standard operating procedures (SOPs), and a quality control/quality assurance (QC/QA) program as specified by the WSLCB. The WSLCB or authorized third-party organization (WSLCB's designee) may conduct audits of a lab's GLPs, SOPs, QC/QA, and inspect all other related records.
(6) The WSLCB or its designee will take immediate disciplinary action against any certified lab that fails to comply with the provisions of this chapter or falsifies records related to this section including, without limitation, revoking the certification of the certified lab.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-0995, filed 5/31/17, effective 8/31/17.]

AMENDATORY SECTION (Amending WSR 22-06-097, filed 3/2/22, effective 4/2/22)

WAC 314-55-101 Quality control sampling. (1) All licensed ((marijuana)) cannabis processors, producers, certified labs, and certified lab employees must comply with the sampling procedures described in this section, consistent with RCW 69.50.348. Noncompliance may result in disciplinary action as described in this chapter and applicable law.
(2) Sample collection. All samples of ((marijuana)) cannabis, useable ((marijuana)) cannabis, or ((marijuana-infused)) cannabis-infused products must be submitted to a certified lab for testing consistent with this chapter.
(a) All samples must be deducted, stored, and transported in a way that prevents contamination and degradation.
(b) To maximize sample integrity, samples must be placed in a sanitary container and stored in a location that prevents contamination and degradation.
(c) Each quality control sample container must be clearly marked "quality control sample" and labeled with the following information:
(i) The certificate number and name of the certified lab receiving the sample;
(ii) The license number and registered trade name of the licensee sending the sample;
(iii) The date the sample was collected; and
(iv) The weight of the ((marijuana)) cannabis, useable ((marijua= na)) cannabis, or ((marijuana-infused)) cannabis-infused product the sample was collected from.
(d) Sampling and analysis requirements apply to all ((marijuana)) cannabis products regulated by the board.
(3) Additional sampling protocols for quantities of ((marijuana)) cannabis flower:
(a) Samples must be of roughly equal weight not less than one gram each. Each sample must be deducted from a harvest as defined in WAC 314-55-010(14).
(b) For ((fnarijuana)) cannabis flower weighing up to 10 pounds, a minimum of eight samples must be taken.
(c) For ((marijuana)) cannabis flower weighing 10 pounds or more but less than 20 pounds, a minimum of 12 samples must be taken.
(d) For ((marijuana)) cannabis flower weighing 20 pounds or more but less than 30 pounds, a minimum of 15 samples must be taken.
(e) For ((marijuana)) cannabis flower weighing 30 pounds or more but less than 40 pounds, a minimum of 18 samples must be taken.
(f) For ((marijuana)) cannabis flower weighing 40 pounds or more but not more than 50 pounds, a minimum of 19 samples must be taken.
(4) Sample retrieval and transportation. Certified labs may retrieve samples from a ((marijuana)) cannabis licensee's licensed premises and transport the samples directly to the lab.
(5) Certified labs must reject or fail a sample if the lab has reason to believe the sample was not collected in the manner required by this section, adulterated in any way, contaminated with known or unknown solvents, or manipulated in a manner that violates the sampling protocols, limit tests, or action levels.
[Statutory Authority: RCW 69.50.345 and 69.50.348. WSR 22-06-097, § 314-55-101, filed 3/2/22, effective 4/2/22. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-101, filed 5/31/17, effective 8/31/17; WSR 16-11-110, § 314-55-101, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 22-06-097, filed 3/2/22, effective 4/2/22)

WAC 314-55-102 Quality assurance and quality control. (1) Lab certification and accreditation for quality control testing. To become certified, a third-party lab must meet the board's certification and accreditation requirements as described in WAC 314-55-0995 and this chapter before conducting quality control tests required under this section.
(a) Certified labs must be certified to conduct the following fields of testing:
(i) Water activity;
(ii) Potency analysis;
(iii) Foreign matter inspection;
(iv) Microbiological screening;
(v) Mycotoxin screening;
(vi) Pesticide screening; and
(vii) Residual solvent screening.
(b) Certified labs may be certified for heavy metal testing. Certified labs must comply with the guidelines for each quality control field of testing described in this chapter if they offer that testing service.
(c) Certified labs may reference samples for mycotoxin, heavy metal, or pesticide testing by subcontracting for those fields of testing.
(2) General quality control testing requirements for certified labs.
(a) Certified labs must record an acknowledgment of the receipt of samples from producers or processors. Certified labs must also verify if any unused portion of the sample is destroyed after the completion of required testing.
(b) Certified labs must report quality control test results directly to the board in the required format.
(c) Product must not be converted, transferred, or sold by the licensee until the required tests are reported to the board and the licensee.
(d) Certified labs must fail a sample if the results for any limit test are above allowable levels regardless of whether the limit test is required in the testing tables in this chapter.
(e) Certified labs must test samples on an "as is" or "as received" basis.
(f) For the purposes of this section, limits have been written to the number of significant digits that laboratories are expected to use when reporting to the board and on associated certificates of analysis.
(3) Quality control analysis and screening. The following analysis and screening are only required for samples that have not been previously tested, or that have failed quality control testing.
(a) Potency analysis.
(i) Certified labs must test and report the following cannabinoids to the board when testing for potency:
(A)

| Cannabinoid | Lower Limit of <br> Quantitation <br> $(\mathbf{m g} / \mathbf{g})$ | CAS \# |
| :--- | :---: | :---: |
| CBD | 1.0 | $13956-29-1$ |
| CBDA | 1.0 | $1244-58-2$ |
| $\Delta^{9}$-THC | 1.0 | $1972-08-3$ |
| $\Delta^{9}$-THCA | 1.0 | $23978-85-0$ |

(B) Total THC;
(C) Total CBD.
(ii) Calculating total THC and total CBD.
(A) Total THC must be calculated as follows, where $M$ is the mass or mass fraction of delta-9 THC or delta-9 THCA: M total delta-9 THC = M delta-9 THC $+(0.877 \times \mathrm{M}$ delta-9 THCA).
(B) Total CBD must be calculated as follows, where $M$ is the mass or mass fraction of $C B D$ and CBDA: $M$ total $C B D=M C B D+(0.877 \times M$ CBDA).
(iii) Regardless of analytical equipment or methodology, certified labs must accurately measure and report the acidic (THCA and CBDA) and neutral (THC and CBD) forms of the cannabinoids.
(b) Water activity testing. The sample fails quality control testing for water activity if the results exceed the following limits:
(i) Water activity rate of more than $0.65 a_{w}$ for useable ((marijuana)) cannabis;
(ii) Water activity rate of more than $0.85 a_{w}$ for solid edible products.
(c) Foreign matter screening. The sample fails quality control testing for foreign matter screening if the results exceed the following limits:
(i) Five percent of stems 3 mm or more in diameter; or
(ii) Two percent of seeds or other foreign matter; or
(iii) One insect fragment, one hair, or one mammalian excreta in sample.
(d) Microbiological screening. The sample and the related population fails quality control testing for microbiological screening if the results exceed the following limits:

| Unprocessed Plant <br> Material | Colony Forming Unit per <br> Gram (CFU/g) |
| :--- | :---: |
| Bile Tolerant Gram <br> Negative bacteria (BTGN) | $1.0 * 10^{4}$ |
| Shiga toxin-producing <br> Escherichia coli (STEC) | $<1$ |
| Salmonella spp. | $<1$ |


| Processed Plant Material | Colony Forming Unit per <br> Gram (CFU/g) |
| :--- | :---: |
| Bile Tolerant Gram <br> Negative bacteria (BTGN) | $1.0^{*} 10^{3}$ |
| Shiga toxin-producing <br> Escherichia coli (STEC) | $<1$ |
| Salmonella spp. | $<1$ |

(e) Mycotoxin screening. The sample and the related population fails quality control testing if the results exceed the following limits:

| Mycotoxin | $\boldsymbol{\mu g} / \mathbf{k g}$ | $\mathbf{C A S} \#$ |
| :---: | :---: | :---: |
| Aflatoxins (Sum of <br> Isomers) | 20. |  |
| • Aflatoxin B1 |  | $1162-65-8$ |
| • Aflatoxin B2 |  | $7220-81-7$ |
| • Aflatoxin G1 |  | $1165-39-5$ |
| • Aflatoxin G2 |  | $7241-98-7$ |
| Ochratoxin A | 20. | $303-47-9$ |

(f) Residual solvent screening. Except as otherwise provided in this subsection, a sample and the related population fails quality control testing for residual solvents if the results exceed the limits provided in the table below. Residual solvent results of more than 5,000 ppm for class three solvents, 50 ppm for class two solvents, and 2 ppm for any class one solvents as defined in United States Pharmacopoeia USP 30 Chemical Tests / <467> - Residual Solvents (USP <467>) not listed in the table below fail quality control testing. When re-
sidual solvent screening is required, certified labs must test for the solvents listed in the table below at a minimum.

| Solvent | $\mu \mathrm{g} / \mathrm{g}$ | ppm (simplified) | CAS \# |
| :---: | :---: | :---: | :---: |
| Acetone | $5.0 * 10^{3}$ | 5000 | 67-64-1 |
| Benzene | 2.0 | 2 | 71-43-2 |
| Butanes (Sum of Isomers) | $5.0 * 10^{3}$ | 5000 |  |
| - n-butane |  |  | 106-97-8 |
| - 2-methylpropane (isobutane) |  |  | 75-28-5 |
| Cyclohexane | $3.9 * 10^{3}$ | 3880 | 110-82-7 |
| Chloroform | 2.0 | 2 | 67-66-3 |
| Dichloromethane | $6.0 * 10^{2}$ | 600 | 75-09-2 |
| Ethanol | $5.0 * 10^{3}$ | 5000 | 64-17-5 |
| Ethyl acetate | $5.0 * 10^{3}$ | 5000 | 141-78-6 |
| Heptanes (Single Isomer) | $5.0 * 10^{3}$ | 5000 |  |
| - n-heptane |  |  | 142-82-5 |
| Hexanes (Sum of Isomers) | $2.9 * 10^{2}$ | 290 |  |
| - n-hexane |  |  | 110-54-3 |
| - 2-methylpentane |  |  | 107-83-5 |
| -3-methylpentane |  |  | 96-14-0 |
| -2,2-dimethylbutane |  |  | 75-83-2 |
| - 2,3-dimethylbutane |  |  | 79-29-8 |
| Isopropanol (2-propanol) | $5.0 * 10^{3}$ | 5000 | 67-63-0 |
| Methanol | $3.0 * 10^{3}$ | 3000 | 67-56-1 |
| Pentanes (Sum of Isomers) | $5.0 * 10^{3}$ | 5000 |  |
| - n-pentane |  |  | 109-66-0 |
| - methylbutane (isopentane) |  |  | 78-78-4 |
| - dimethylpropane (neopentane) |  |  | 463-82-1 |
| Propane | $5.0 * 10^{3}$ | 5000 | 74-98-6 |
| Toluene | $8.9 * 10^{2}$ | 890 | 108-88-3 |
| Xylenes (Sum of Isomers) | $2.2 * 10^{3}$ | 2170 |  |
| -1,2-dimethylbenzene (ortho-) |  |  | 95-47-6 |
| - 1,3-dimethylbenzene (meta-) |  |  | 108-38-3 |
| - 1,4-dimethylbenzene (para-) |  |  | 106-42-3 |

(g) Heavy metal screening. Heavy metal screening is required for all DOH compliant product as described in chapter 246-70 WAC. Heavy metal screening is optional for non-DOH compliant product; however, heavy metal limits provided below apply to all products. Any product exceeding the provided limits is subject to recall and destruction. The board may conduct random or investigation driven heavy metal screening for compliance. A sample and related quantity of product fail quality control testing for heavy metals if the results exceed the limits provided in the table below.

| Metal | $\boldsymbol{\mu g} / \mathbf{g}$ |
| :--- | :---: |
| Arsenic | 2.0 |
| Cadmium | 0.82 |
| Lead | 1.2 |


| Metal | $\mu \mathrm{g} / \mathbf{g}$ |
| :--- | :---: |
| Mercury | 0.40 |

(h) Pesticide screening. For purposes of pesticide screening, a sample and the related quantity of ((marijuana)) cannabis is considered to have passed if it meets the standards described in WAC 314-55-108 and applicable department of agriculture rules.
(4) Required quality control tests. The following quality control tests are required for each of the ((marijuana)) cannabis products described below. Licensees and certified labs may opt to perform additional quality control tests on the same sample.
(a) ((Marijuana)) Cannabis flower. ((Marijuana)) Cannabis flower requires the following quality control tests:

| Product | Test(s) Required |
| :--- | :--- |
| ((Marijtana)) Cannabis | 1. Water activity testing |
| flower | 2. Potency analysis |
|  | 3. Foreign matter inspection |
|  | 4. Microbiological screening |
|  | 5. Mycotoxin screening |
|  | 6. Pesticide screening |

(b) If ((marijuana)) cannabis flower will be sold as useable flower, no further testing is required.
(c) Intermediate products. Intermediate products must meet the following requirements related to quality control testing:
(i) All intermediate products must be homogenized prior to quality assurance testing;
(ii) For the purposes of this section, a batch is defined as a single run through the extraction or infusion process;
(iii) ( (Marijuana)) Cannabis mix must be chopped or ground so no particles are greater than 3 mm ; and
(iv) Intermediate products require the following quality assurance tests:

| Intermediate Product Type | Tests Required |
| :---: | :---: |
| ((Marijuana)) Cannabis mix | 1. Water activity testing <br> 2. Potency analysis <br> 3. Foreign matter inspection <br> 4. Microbiological screening <br> 5. Mycotoxin screening <br> 6. Pesticide screening |
| Concentrate or extract made with hydrocarbons (solvent based made using n-butane, isobutane, propane, heptane, or other solvents or gases approved by the board of at least $99 \%$ purity) | 1. Potency analysis <br> 2. Mycotoxin screening <br> 3. Residual solvent test <br> 4. Pesticide screening |
| Concentrate or extract made with a $\mathrm{CO}_{2}$ extractor like hash oil | 1. Potency analysis <br> 2. Mycotoxin screening <br> 3. Residual solvent test <br> 4. Pesticide screening |
| Concentrate or extract made with ethanol | 1. Potency analysis <br> 2. Mycotoxin screening <br> 3. Residual solvent test <br> 4. Pesticide screening |


| Intermediate Product <br> Type | Tests Required |
| :--- | :--- |
| Concentrate or extract <br> made with approved food <br> grade solvent | 1. Potency analysis <br> 2. Microbiological screening <br> 3. Mycotoxin screening |
|  | 4. Residual solvent test <br> 5. Pesticide screening |
| Concentrate or extract  <br> (nonsolvent) such as  <br> kief, hash, rosin, or  <br> bubble hash 1. Potency analysis <br> 2. Microbiological screening  <br> Infused cooking oil or fat 3. Mycotoxin screening <br> in solid form <br>  4. Pesticide screening |  |
|  | 2. Microbiological screening |
|  | 3. Mycotoxin screening |
| 4. Pesticide screening |  |

(d) End products. All ((marijuana, marijuana-infused)) cannabis, cannabis-infused products, ((marijuana)) cannabis concentrates, ((marijuana) ) cannabis mix packaged, and ((marijuana)) cannabis mix infused sold from a processor to a retailer require the following quality assurance tests:

| End Product Type | Tests Required |
| :--- | :--- |
| Infused solid edible | 1. Potency analysis <br> 2. Water activity testing |
| Infused liquid (like a <br> soda or tonic) | 1. Potency analysis |
| Infused topical | 1. Potency analysis |
| ((Marijuana)) Cannabis <br> mix packaged <br> rolled) | 1. Potency analysis |
| ((Marijuana)) Cannabis <br> mix infused (loose or <br> rolled) | 1. Potency analysis |
| Concentrate or <br> ((marijuana-infused)) <br> cannabis-infused product <br> for inhalation | 1. Potency analysis |

(e) End products consisting of only one intermediate product that has not been changed in any way are not subject to potency analysis.
(5) Useable flower, a batch of ((marijuana)) cannabis concentrate, or a batch of ((marijuana-infused)) cannabis-infused product may not be sold until the completion and successful passage of required quality control testing, except:
(a) Licensees may wholesale and transfer batches or quantities of ((marijuana)) cannabis flower and other material that will be extracted, and ((marijuana)) cannabis mix and nonsolvent extracts, for the purposes of further extraction prior to completing required quality control testing.
(b) Business entities with multiple locations licensed under the same UBI number may transfer ( (marijuana)) cannabis products between the licensed locations under the same UBI number prior to quality control testing.
(c) Licensees may wholesale and transfer failed batches or quantities of ((marijuana)) cannabis flower to be extracted pursuant to subsection (6) of this section, unless failed for tests that require immediate destruction.
(6) Failed test samples.
(a) Upon approval by the board, failed quantities of ((marijuana)) cannabis or batches may be used to create extracts. After processing, the extract must pass all quality control tests required in this section before it may be sold, unless failed for tests that require immediate destruction.
(b) Retesting. A producer or processor must request retesting. The board may authorize the retest to validate a failed test result on a case-by-case basis. The producer or the processor requesting the retest must pay for the cost of all retesting.
(c) Remediation. Remediation is a process or technique applied to quantities of ((marijuana)) cannabis flower, lots, or batches. Remediation may occur after the first failure, depending on the failure, or if a retest process results in a second failure. Pesticide failures may not be remediated.
(i) Producers and processors may remediate failed ((marijuana)) cannabis flower, lots, or batches so long as the remediation method does not impart any toxic or harmful substance to the useable ( (marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused) ) cannabis-infused product. Remediation solvents or methods used on the ((marijuanz)) cannabis product must be disclosed to:
(A) A licensed processor;
(B) The producer or producer/processor who transfers the ((marijuana)) cannabis products;
(C) A licensed retailer carrying ((marijuana)) cannabis products derived from the remediated ((marijuana)) cannabis flower, lot, or batch; or
(D) The consumer upon request.
(ii) The entire quantity of ((ftarijuana)) cannabis from which the failed sample(s) were deducted must be remediated.
(iii) No remediated quantity of ((marijuana)) cannabis may be sold or transported until quality control testing consistent with the requirements of this section is completed.
(iv) If a failed quantity of remediated ((marijuana)) cannabis is not remediated or reprocessed in any way after a first failure, it cannot be retested. Any subsequent certificates of analysis produced without remediation or reprocessing of the failed quantity of ((marijuana)) cannabis will not supersede the original compliance testing certificate of analysis.
(7) Referencing. Certified labs may reference samples for mycotoxins, heavy metals, and pesticides testing to other certified labs by subcontracting for those fields of testing. Labs must record all referencing to other labs on a chain-of-custody manifest that includes, but is not limited to, the following information: Lab name, certification number, transfer date, address, contact information, delivery personnel, sample ID numbers, field of testing, and receiving personnel.
(8) Certified labs are not limited in the amount of useable ((marijuana)) cannabis and ((marijuana)) cannabis products they may have on their premises at any given time, but a certified lab must have records proving all ((marijuana)) cannabis and ((marijuana-infused) ) cannabis-infused products in the certified lab's possession are held only for the testing purposes described in this chapter.
(9) A certificate of analysis issued by a certified lab for any ((marijuana)) cannabis product subject to the requirements of this chapter that has not already been transferred to a retail location expires 12 calendar months after issuance.
(10) The board, or its designee, may request that a licensee or a certified lab provide an employee of the board or their designee samples of ((marijuana)) cannabis or ((marijuana)) cannabis products, or samples of the growing medium, soil amendments, fertilizers, crop production aids, pesticides, or water for random or investigatory compliance checks. Samples may be randomly screened and used for other quality control tests deemed necessary by the board.
(11) All ((marijuana)) cannabis products produced, processed, distributed, or sold after the effective date of these rules, must comply with these rules and this chapter; however, postharvest products in the possession of or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed, or both within a reasonable period of time, determined by the board.
[Statutory Authority: RCW 69.50.345 and 69.50.348. WSR 22-06-097, S 314-55-102, filed 3/2/22, effective 4/2/22. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-102, filed 5/31/17, effective 8/31/17; WSR 16-11-110, § 314-55-102, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-102, filed 5/20/15, effective 6/20/15; WSR 14-07-116, § 314-55-102, filed 3/19/14, effective 4/19/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-102, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 22-06-097, filed 3/2/22, effective 4/2/22)

WAC 314-55-1025 Proficiency testing. (1) For the purposes of this chapter, the following definitions apply:
(a) "Field of testing" means the categories of subject matter the laboratory tests, such as pesticide, microbial, potency, residual solvent, heavy metal, mycotoxin, foreign matter, and moisture content detection.
(b) "Proficiency testing (PT)" means the analysis of samples by a laboratory obtained from providers where the composition of the sample is unknown to the laboratory performing the analysis and the results of the analysis are used in part to evaluate the laboratory's ability to produce precise and accurate results.
(c) "Proficiency testing (PT) program" means an operation offered by a provider to detect a laboratory's ability to produce valid results for a given field of testing.
(d) "Provider" means a third-party company, organization, or entity not associated with certified laboratories or a laboratory seeking certification that operates an approved PT program and provides samples for use in PT testing.
(e) "Vendor" means an organization(s) approved by the board to certify laboratories for ((marijuana)) cannabis testing, approve PT programs, and perform on-site assessments of laboratories.
(2) The board or its vendor determines the sufficiency of PTs and maintains a list of approved PT programs. Laboratories may request authorization to conduct $P T$ through other PT programs but must obtain approval for the PT program from the board or the board's vendor prior to conducting PT. The board may add the newly approved PT program to the list of approved PT programs as appropriate.
(3) As a condition of certification, laboratories must participate in $P T$ and achieve a passing score for each field of testing for which the lab will be or is certified.
(4) A laboratory must successfully complete a minimum of one round of $P T$ for each field of testing the lab seeks to be certified for and provide proof of the successful PT results prior to initial certification.
(5) (a) A certified laboratory must participate in a minimum of two rounds of PT per year for each field of testing to maintain its certification.
(b) To maintain certification, the laboratory must achieve a passing score, on an ongoing basis, in a minimum of two out of three successive rounds of PT. At least one of the scores must be from a round of PT that occurs within six months prior to the laboratory's certification renewal date.
(6) If the laboratory fails to achieve a passing score on at least 80 percent of the analytes in any proficiency test, the test is considered a failure. If the PT provider provides a pass/fail on a per analyte basis but not on the overall round of $P T$ the lab participates in, the pass/fail evaluation for each analyte will be used to evaluate whether the lab passed 80 percent of the analytes. If the PT provider does not provide individual acceptance criteria for each analyte, the following criteria will be applied to determine whether the lab achieves a passing score for the round of PT:
(a) +/- 30\% recovery from the reference value for residual solvent testing; or
(b) +/- 3 z or 3 standard deviations from the reference value for all other fields of testing.
(7) If a laboratory fails a round of PT or reports a false negative on a micro PT, the laboratory must investigate the root cause of the laboratory's performance and establish a corrective action report for each unsatisfactory analytical result. The corrective action report must be kept and maintained by the laboratory for a period of three years, available for review during an on-site assessment or inspection, and provided to the board or the board's vendor upon request.
(8) Laboratories are responsible for obtaining PT samples from vendors approved by the board or the board's vendor. Laboratories are responsible for all costs associated with obtaining PT samples and rounds of PT.
(9) The laboratory must manage, analyze and report all PT samples in the same manner as customer samples including, but not limited to, adhering to the same sample tracking, sample preparation, analysis methods, standard operating procedures, calibrations, quality control, and acceptance criteria used in testing customer samples.
(10) The laboratory must authorize the PT provider to release all results at the same time, whether pass or fail, to the laboratory and the board, or the board's vendor.
(11) The board may require the laboratory to submit raw data and all photographs of plated materials along with the report of analysis of PT samples. The laboratory must keep and maintain all raw data and all photographs of plated materials from PT for a period of three years.
(12) The board may waive proficiency tests for certain fields of testing if PT samples or PT programs are not readily available or for other valid reasons as determined by the board.
(13)(a) The board will suspend a laboratory's certification if the laboratory fails to maintain a passing score on an ongoing basis in two out of three successive $P T$ studies. The board may reinstate a laboratory's suspended certification if the laboratory successfully analyzes PT samples from the board or the board's vendor approved PT provider, so long as the supplemental PT studies are performed at least 15 days apart from the analysis date of one PT study to the analysis date of another PT study.
(b) The board will suspend a laboratory's certification if the laboratory fails two consecutive rounds of PT. The board may reinstate a laboratory's suspended certification once the laboratory conducts an investigation, provides the board a deficiency report identifying the root cause of the failed PT, and successfully analyzes PT samples from a board or board's vendor approved PT provider. The supplemental PT studies must be performed at least 15 days apart from the analysis date of one PT study to the analysis date of another PT study.
(14) If a laboratory fails to remediate and have its certification reinstated under subsection (13)(a) or (b) of this section within six months of the suspension, the laboratory must reapply for certification as if the laboratory was never certified previously.
(15) A laboratory that has its certification suspended or revoked under this section may request an administrative hearing to contest the suspension as provided in chapter 34.05 RCW.
[Statutory Authority: RCW 69.50.345 and 69.50.348. WSR 22-06-097, § 314-55-1025, filed 3/2/22, effective 4/2/22. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-1025, filed 5/31/17, effective 8/31/17.]

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

WAC 314-55-103 Good laboratory practice checklist. A third-party testing lab must be certified by the WSLCB or its vendor as meeting the WSLCB's accreditation and other requirements prior to conducting required quality assurance tests. The following checklist will be used by the WSLCB or its vendor to certify third-party testing labs:

| ORGANIZATION <br> Completed by: <br> Reviewed by: | Document <br> Reference | $\mathbf{Y}$ | $\mathbf{N}$ | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.The laboratory or the organization of which it is a part of <br> shall be an entity that can be held legally responsible. | - | - | - | - | - |
| 2.The laboratory conducting third-party testing shall have no <br> financial interest in a licensed producer or processor for <br> which testing is being conducted. | - | - | - | - | - |
| If the laboratory is part of an organization performing <br> activities other than testing, the responsibilities of key <br> personnel in the organization that have an involvement or <br> influence on the testing activities of the laboratory shall be <br> defined in order to identify potential conflicts of interest. | - | - | - | - |  |
| 3.The laboratory shall have policies and procedures to ensure <br> the protection of its client's confidential information and <br> proprietary rights, including procedures for protecting the <br> electronic storage and transmission of results. | - | - | - | - | - |


| ORGANIZATION Completed by: Reviewed by: | Document <br> Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4. In every instance where the lab references certification status they shall clearly indicate which tests they are currently certified for. | - | - | - | - | - |
| 5. The laboratory is responsible for all costs of initial certification and ongoing site assessments. | - | - | - | - | - |
| 6. The laboratory must agree to site assessments every year for the first three years to maintain certification. Beginning year four of certification, on-site assessments will occur every two years to maintain certification. | - | - | - | - | - |
| 7. The laboratory must allow WSLCB staff or their representative to conduct physical visits and check I-502 related laboratory activities at any time. | - | - | - | - | - |
| 8. The laboratory must report all test results directly into WSLCB's traceability system within twenty-four hours of completion. Labs must also record in the traceability system an acknowledgment of the receipt of samples from producers or processors and verify if any unused portion of the sample was destroyed or returned to the customer. | - | - | - | - | - |
| HUMAN RESOURCES <br> Completed by: Reviewed by: | Document Reference | Y | N | NA | Comments |
| 9a. Job descriptions for owners and all employees. A written and documented system detailing the qualifications of each member of the staff including any specific training requirements applicable to analytical methods. | - | - | - | - | - |
| b. Specialized training such as by vendors, classes granting CEUs, etc., shall be documented in each training file. | - | - | - | - | - |
| 10. Qualifications of owners and staff: CVs for staff on file. | - | - | - | - | - |
| a. Have technical management which has overall responsibility for the technical operations and the provision of the resources needed to ensure the required quality of laboratory operations. | - | - | - | - | - |
| b. Documentation that the scientific director meets the requirements of WSLCB rules. | - | - | - | - | - |
| c. Chain of command, personnel organization/flow chart, dated and signed by the laboratory director. | - | - | - | - | - |
| d. Written documentation of delegation of responsibilities in the absence of the scientific director and management staff (assigned under chapter 314-55 WAC as related to quality assurance testing). | - | - | - | - | - |
| e. Documentation of employee competency (DOC): Prior to independently analyzing samples, and on an annual, ongoing basis, testing personnel must demonstrate acceptable performance on precision, accuracy, specificity, reportable ranges, blanks, and unknown challenge samples (proficiency samples or internally generated quality controls). Dated and signed by the laboratory director. | - | - | - | - | - |
| f. The laboratory management shall ensure the competence of all who operate specific equipment, perform tests and/or calibrations, evaluate results, and sign test reports and calibration certificates. | - | - | - | - | - |
| g. When using staff who are undergoing training, appropriate supervision shall be provided. | - | - | - | - | - |
| h. Personnel performing specific tasks shall be qualified on the basis of appropriate education, training, experience and/or demonstrated skills, as necessary. | - | - | - | - | - |


| HUMAN RESOURCES Completed by: Reviewed by: | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| i. The management shall authorize specific personnel to perform particular types of sampling, test and/or calibration, to issue test reports and calibration certificates, to give opinions and interpretations and to operate particular types of equipment. | - | - | - | - | - |
| j. The laboratory shall maintain records of the relevant authorization(s), competence, educational and professional qualifications, training, skills and experience of all technical personnel, including contracted personnel. | - | - | - | - | - |
| k. Successful training (in-house courses are acceptable) in specific methodologies used in the laboratory shall be documented. | - | - | - | - | - |
| 1. Designate a quality manager (however named) who, irrespective of other duties and responsibilities, shall have defined responsibility and authority for ensuring that the quality system is implemented and followed; the quality manager shall have direct access to the highest level of management at which decisions are made on laboratory policy or resources. | - | - | - | - | - |
| m . The laboratory shall delegate responsibilities for key managerial personnel to be acted upon in cases of absence or unavailability. | - | - | - | - | - |
| n. The laboratory shall provide adequate supervision of testing staff, including trainees, by persons familiar with methods and procedures, purpose of each test and/or calibration, and with the assessment of the test or calibration results. | - | - | - | - | - |
| 11. Standard operating procedure for the following: | - | - | - | - | - |
| a. Instructions on regulatory inspection and preparedness. | - | - | - | - | - |
| b. Instruction on law enforcement interactions. | - | - | - | - | - |
| c. Information on U.S. federal laws, regulations, and policies relating to individuals employed in these operations, and the implications of these for such employees. | - | - | - | - | - |
| d. Written and documented system of employee training on hazards (physical and health) of chemicals in the workplace, including prominent location of MSDS or SDS sheets and the use of appropriate PPE. | - | - | - | - | - |
| e. Written and documented system on the competency of personnel on how to handle chemical spills and appropriate action; spill kit on-site and well-labeled, all personnel know the location and procedure. | - | - | - | - | - |
| f. Information on how employees can access medical attention for chemical or other exposures, including follow-up examinations without cost or loss of pay. | - | - | - | - | - |
| g. Biosafety at a minimum covering sterilization and disinfection procedures and sterile technique training. | - | - | - | - | - |


| STANDARD OPERATING PROCEDURES | Document <br> Reference | $\mathbf{Y}$ | $\mathbf{N}$ | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12.As appropriate, laboratory operations covered by procedures <br> shall include, but not be limited to, the following: | - | - | - | - | - |
| a. Environmental, safety and health activities; | - | - | - | - | - |
| b. Sample shipping and receipt; | - | - | - | - | - |
| c. Laboratory sample chain of custody and material control; | - | - | - | - | - |
| d. Notebooks/logbooks; | - | - | - | - | - |
| e. Sample storage; | - | - | - | - | - |
| f. $\quad$ Sample preparation; | - | - | - | - | - |


| STANDARD OPERATING PROCEDURES | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| g. Sample analysis; | - | - | - | - | - |
| h. Standard preparation and handling; | - | - | - | - | - |
| i. Postanalysis sample handling; | - | - | - | - | - |
| j. Control of standards, reagents and water quality; | - | - | - | - | - |
| k. Cleaning of glassware; | - | - | - | - | - |
| 1. Waste minimization and disposition. | - | - | - | - | - |
| 13. The following information is required for procedures as appropriate to the scope and complexity of the procedures or work requested: | - | - | - | - | - |
| a. Scope (e.g., parameters measured, range, matrix, expected precision, and accuracy); | - | - | - | - | - |
| b. Unique terminology used; | - | - | - | - | - |
| c. Summary of method; | - | - | - | - | - |
| d. Interferences/limitations; | - | - | - | - | - |
| e. Approaches to address background corrections; | - | - | - | - | - |
| f. Apparatus and instrumentation; | - | - | - | - | - |
| g. Reagents and materials; | - | - | - | - | - |
| h. Hazards and precautions; | - | - | - | - | - |
| i. Sample preparation; | - | - | - | - | - |
| j. Apparatus and instrumentation setup; | - | - | - | - | - |
| k. Data acquisition system operation; | - | - | - | - | - |
| 1. Calibration and standardization; | - | - | - | - | - |
| m. Procedural steps; | - | - | - | - | - |
| n. QC parameters and criteria; | - | - | - | - | - |
| o. Statistical methods used; | - | - | - | - | - |
| p. Calculations; | - | - | - | - | - |
| q. Assignment of uncertainty; | - | - | - | - | - |
| r. Forms used in the context of the procedure. | - | - | - | - | - |
| s. Document control with master list identifying the current revision status of documents. | - | - | - | - | - |
| FACILITIES AND EQUIPMENT | Document Reference | Y | N | NA | Comments |
| 14. Allocation of space: Adequate for number of personnel and appropriate separation of work areas. | - | - | - | - | - |
| 15. Arrangement of space. | - | - | - | - | - |
| a. Allows for appropriate work flow, sampling, lab space separate from office and break areas. | - | - | - | - | - |
| b. Employee bathroom is separate from any laboratory area. | - | - | - | - | - |
| 16. Adequate eyewash/safety showers/sink. | - | - | - | - | - |
| 17. Procurement controls. | - | - | - | - | - |
| a. The laboratory shall have procedure(s) for the selection and purchasing of services and supplies it uses that affect the quality of the tests and/or calibrations. Procedures covering reagents and laboratory consumables shall exist for the purchase, receipt, storage, and disposition of expired materials. | - | - | - | - | - |


| FACILITIES AND EQUIPMENT | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b. The laboratory shall ensure that purchased supplies and reagents and consumable materials that affect the quality of tests and/or calibrations are inspected or otherwise verified as complying with standard specifications or requirements defined in the methods for the tests and/or calibrations concerned. | - | - | - | - | - |
| i. Reagents and standards shall be inspected, dated and initialed upon receipt, and upon opening. | - | - | - | - | - |
| ii. Calibration standards and analytical reagents shall have an expiration or reevaluation date assigned. | - | - | - | - | - |
| iii. Solutions shall be adequately identified to trace back to preparation documentation. | - | - | - | - | - |
| c. Prospective suppliers shall be evaluated and selected on the basis of specified criteria. | - | - | - | - | - |
| d. Processes to ensure that approved suppliers continue to provide acceptable items and services shall be established and implemented. | - | - | - | - | - |
| 18. Subcontracting. | - | - | - | - | - |
| a. The laboratory shall advise the customer of the subcontract arrangement in writing, including the subcontractors' accreditation credentials under chapters 69.50 RCW and 314-55 WAC. | - | - | - | - | - |
| b. The laboratory shall maintain a register of all subcontractors that it uses for tests and/or calibrations and a record of the evidence of compliance with chapter 314-55 WAC for the work in question. | - | - | - | - | - |
| c. When there are indications that subcontractors knowingly supplied items or services of substandard quality, this information shall be forwarded to appropriate management for action. | - | - | - | - | - |
| 19. Utilities (items verified upon on-site inspection). | - | - | - | - | - |
| a. Electrical: | - | - | - | - | - |
| i. Outlets: Adequate, unobstructed, single-use, multiplug adaptors with surge control; | - | - | - | - | - |
| ii. Single-use extension cords; | - | - | - | - | - |
| iii. Ground fault circuit interrupters near wet areas. | - | - | - | - | - |
| b. Plumbing: | - | - | - | - | - |
| i. Appropriateness of sink usage: Separate sinks for work/ personal use; | - | - | - | - | - |
| ii. Adequate drainage from sinks or floor drains; | - | - | - | - | - |
| iii. Hot and cold running water. | - | - | - | - | - |
| c. Ventilation: | - | - | - | - | - |
| i. Areas around solvent use or storage of solvents or waste solvents; | - | - | - | - | - |
| ii. Vented hood for any microbiological analysis - Class II Type A biosafety cabinet as applicable. | - | - | - | - | - |
| iii. Fume hood with appropriate ventilation. | - | - | - | - | - |
| d. Vacuum: Appropriate utilities/traps for prevention of contamination (as applicable). | - | - | - | - | - |
| e. Shut-off controls: Located outside of the laboratory. | - | - | - | - | - |
| 20. Waste disposal: Appropriate for the type of waste and compliant with WAC 314-55-097 ((Marijtzana)) Cannabis waste disposal-Liquids and solids. | - | - | - | - | - |


| FaCilities and equipment | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21. Equipment. Equipment and/or systems requiring periodic maintenance shall be identified and records of major equipment shall include: | - | - | - | - | - |
| a. Name; | - | - | - | - | - |
| b. Serial number or unique identification from name plate; | - | - | - | - | - |
| c. Date received and placed in service; | - | - | - | - | - |
| d. Current location; | - | - | - | - | - |
| e. Condition at receipt; | - | - | - | - | - |
| f. Manufacturer's instructions; | - | - | - | - | - |
| g. Date of calibration or date of next calibration; | - | - | - | - | - |
| h. Maintenance; | - | - | - | - | - |
| i. History of malfunction. | - | - | - | - | - |
| 22. Maintenance. | - | - | - | - | - |
| a. Documented evidence of routine preventive maintenance and calibration of equipment including, but not limited to: Thermometer, pipette, analytical balances, and additional analytical equipment. | - | - | - | - | - |
| i. Calibration programs shall be established for key quantities or values of the instruments where these properties have a significant effect on the results. | - | - | - | - | - |
| ii. Before being placed into service, equipment, including equipment used for sampling, shall be calibrated or checked to establish that it meets the laboratory's specification requirements and complies with the relevant standard specifications. | - | - | - | - | - |
| iii. Equipment that has been subjected to overloading or mishandling, gives suspect results, or has been shown to be defective or outside of specified limits, shall be taken out of service. Such equipment shall be isolated to prevent its use or clearly labeled or marked as being out-of-service until it has been repaired and shown by calibration or test to perform correctly. | - | - | - | - | - |
| b. Documentation of a maintenance schedule and reviewed by the laboratory director. | - | - | - | - | - |
| i. Calibration procedures shall specify frequency of calibration checks. | - | - | - | - | - |
| ii. Instruments that are routinely calibrated shall be verified daily or prior to analyzing samples (as applicable). | - | - | - | - | - |
| iii. Acceptance criteria shall be determined, documented and used. | - | - | - | - | - |
| iv. When possible, any external calibration service (metrological laboratory) used shall be a calibration laboratory accredited to ISO/IEC 17025:2005 by a recognized accreditation body. | - | - | - | - | - |
| v. Laboratories shall demonstrate, when possible, that calibrations of critical equipment and hence the measurement results generated by that equipment, relevant to their scope of accreditation, are traceable to the SI through an unbroken chain of calibrations. | - | - | - | - | - |


| FaCILITIES AND EQUIPMENT | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| vi. External calibration services shall, wherever possible, be obtained from providers accredited to one of the following: ISO/IEC 17025, ISO Guide 34, an ILAC recognized signatory, a CIPM recognized National Metrology Institute (NMI), or a state weights and measures facility that is part of the NIST laboratory metrology program. Calibration certificates shall be endorsed by a recognized accreditation body symbol or otherwise make reference to accredited status by a specific, recognized accreditation body, or contain endorsement by the NMI. Certificates shall indicate traceability to the SI or reference standard and include the measurement result with the associated uncertainty of measurement. | - | - | - | - | - |
| vii. Where traceability to the SI is not technically possible or reasonable, the laboratory shall use certified reference materials provided by a competent supplier. | - | - | - | - | - |
| viii. Calibrations performed in-house shall be documented in a manner that demonstrates traceability via an unbroken chain of calibrations regarding the reference standard/material used, allowing for an overall uncertainty to be estimated for the in-house calibration. | - | - | - | - | - |
| ix. Calibrations shall be repeated at appropriate intervals, the length of which can be dependent on the uncertainty required, the frequency of use and verification, the manner of use, stability of the equipment, and risk of failure considerations. | - | - | - | - | - |
| x. Periodic verifications shall be performed to demonstrate the continued validity of the calibration at specified intervals between calibrations. The frequency of verifications can be dependent on the uncertainty required, the frequency of use, the manner of use, stability of the equipment, and risk of failure considerations. | - | - | - | - | - |
| c. Documentation of curative maintenance in logbook, signed and dated by laboratory director. | - | - | - | - | - |
| d. Evidence of temperature monitoring for equipment requiring specific temperature ranges. | - | - | - | - | - |
| e. Test and calibration equipment, including both hardware and software, shall be safeguarded from adjustments which would invalidate the test and/or calibration results. | - | - | - | - | - |
| f. Decontamination and cleaning procedures for: | - | - | - | - | - |
| i. Instruments; | - | - | - | - | - |
| ii. Bench space; and | - | - | - | - | - |
| iii. Ventilation hood/microbial hood. | - | - | - | - | - |
| g. Documentation of adequacy of training of personnel and responsibility for each maintenance task. | - | - | - | - | - |
| h. The organization shall describe or reference how periodic preventive and corrective maintenance of measurement or test equipment shall be performed to ensure availability and satisfactory performance of the systems. | - | - | - | - | - |
| 23. Computer systems (items verified upon on-site inspection). | - | - | - | - | - |
| a. Adequate for sample tracking. | - | - | - | - | - |
| b. Adequate for analytical equipment software. | - | - | - | - | - |
| c. Software control requirements applicable to both commercial and laboratory developed software shall be developed, documented, and implemented. | - | - | - | - | - |
| d. In addition, procedures for software control shall address the security systems for the protection of applicable software. | - | - | - | - | - |

Washington State Register, Issue 22-14
WSR 22-14-111

| FACILITIES AND EQUIPMENT | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| e. For laboratory-developed software, a copy of the original program code shall be: | - | - | - | - | - |
| i. Maintained; | - | - | - | - | - |
| ii. All changes shall include a description of the change, authorization for the change; | - | - | - | - | - |
| iii. Test data that validates the change. | - | - | - | - | - |
| f. Software shall be acceptance tested when installed, after changes, and periodically during use, as appropriate. | - | - | - | - | - |
| g. Software testing shall include performing manual calculations or checking against another software product that has been previously tested, or by analysis of standards. | - | - | - | - | - |
| h. The version and manufacturer of the software shall be documented. | - | - | - | - | - |
| i. Commercially available software may be accepted as supplied by the vendor. For vendor supplied instrument control/data analysis software, acceptance testing may be performed by the laboratory. | - | - | - | - | - |
| 24. Security. | - | - | - | - | - |
| a. Written facility security procedures during operating and nonworking hours. | - | - | - | - | - |
| b. Roles of personnel in security. | - | - | - | - | - |
| c. SOP for controlled access areas and personnel who can access. | - | - | - | - | - |
| 25. Control of records. | - | - | - | - | - |
| a. The laboratory shall establish and maintain procedures for identification, collection, indexing, access, filing, storage, maintenance and disposal of quality and technical records. | - | - | - | - | - |
| b. All records shall be legible and shall be stored and retained in such a way that they are readily retrievable in facilities that provide a suitable environment to prevent damage or deterioration and to prevent loss. | - | - | - | - | - |
| c. Records must be retained for a period of three years. | - | - | - | - | - |
| d. All records shall be held secure and in confidence. | - | - | - | - | - |
| e. The laboratory shall have procedures to protect and back-up records stored electronically and to prevent unauthorized access to or amendment of these records. | - | - | - | - | - |
| f. The laboratory shall retain records of original observations, derived data and sufficient information to establish an audit trail, calibration records, staff records and a copy of each test report or calibration certificate issued, for a defined period. | - | - | - | - | - |
| g. The records for each test or calibration shall contain sufficient information to facilitate, if possible, identification of factors affecting the uncertainty and to enable the test or calibration to be repeated under conditions as close as possible to the original. | - | - | - | - | - |
| h. The records shall include the identity of personnel responsible for the sampling, performance of each test and/or calibration and checking of results. | - | - | - | - | - |
| i. Observations, data and calculations shall be recorded at the time they are made and shall be identifiable to the specific task. | - | - | - | - | - |
| j. When mistakes occur in records, each mistake shall be lined out, not erased or made illegible or deleted, and the correct value entered alongside. | - | - | - | - | - |


| FACILITIES AND EQUIPMENT | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| k. All such alterations or corrections to records shall be signed or initialed and dated by the person making the correction. | - | - | - | - | - |
| 1. In the case of records stored electronically, equivalent measures shall be taken to avoid loss or change of original data. | - | - | - | - | - |
| m . All entries to hard copy laboratory records shall be made using indelible ink. No correction fluid may be used on original laboratory data records. | - | - | - | - | - |
| n. Laboratories shall establish and maintain a data review process beginning at sample receipt and extending through the report process. The data review process shall be an independent review, conducted by a qualified individual other than the analyst. | - | - | - | - | - |
| o. The review process shall be documented before data are reported. | - | - | - | - | - |
| 26. Storage. | - | - | - | - | - |
| a. Appropriate and adequate for sample storage over time. The laboratory shall monitor, control and record environmental conditions as required by the relevant specifications, methods and procedures or where they influence the quality of the results. Due attention shall be paid, for example, to biological sterility, dust, electromagnetic disturbances, humidity, electrical supply, temperature, and sound and vibration levels, as appropriate to the technical activities concerned. | - | - | - | - | - |
| b. Adequate storage of chemical reference standards. | - | - | - | - | - |
| c. Appropriate storage of any reagents: Fireproof cabinet, separate cabinet for storage of any acids. | - | - | - | - | - |
| d. Appropriate safe and secure storage of documents etc., archiving, retrieval of, maintenance of and security of data for a period of three years. | - | - | - | - | - |
| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| 27. Sampling/sample protocols must be consistent with chapter 314-55 WAC, written and approved by the laboratory director, and must include documented training. | - | - | - | - | - |
| a. Demonstrate adequacy of the chain-of-custody, including: Tracking upon receipt of sample including all personnel handling the sample and documenting condition of the sample through a macroscopic and foreign matter inspection. | - | - | - | - | - |
| b. Macroscopic and foreign matter inspection - Fit for purpose test. Scientifically valid testing methodology: Either AHP monograph compliant or other third-party validation. | - | - | - | - | - |
| c. Failed inspection of product: Tracking and reporting. | - | - | - | - | - |
| d. Return of failed product documentation and tracking. | - | - | - | - | - |
| e. Disposal of used/unused samples documentation. | - | - | - | - | - |
| f. Sample preparation, extraction and dilution SOP. | - | - | - | - | - |
| g. Demonstration of recovery for samples in various matrices | - | - | - | - | - |
| i. Plant material - Flower; | - | - | - | - | - |
| ii. Edibles (solid and liquid meant to be consumed orally); | - | - | - | - | - |
| iii. Topical; | - | - | - | - | - |
| iv. Concentrates. | - | - | - | - | - |
| 28. Data protocols. | - | - | - | - | - |


| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Calculations for quantification of cannabinoid content in various matrices - SOPs. | - | - | - | - | - |
| b. Determination of the range for reporting the quantity (LOD/ LOQ) data review or generation. | - | - | - | - | - |
| c. Reporting of data: Certificates of analysis (CA) - Clear and standardized format for consumer reporting. | - | - | - | - | - |
| d. Each test report shall include at least the following information, unless the laboratory has valid reasons for not doing so: | - | - | - | - | - |
| i. A title (e.g., "Test Report" or "Certificate of Analysis"); | - | - | - | - | - |
| ii. The name and address of the laboratory, and the location where the tests were carried out, if different from the address of the laboratory; | - | - | - | - | - |
| iii. Unique identification of the test report certificate (such as the serial number), and on each page an identification in order to ensure that the page is recognized as a part of the test report or calibration certificate, and a clear identification of the end of the test report or calibration certificate; | - | - | - | - | - |
| iv. The name and address of the customer; | - | - | - | - | - |
| v. Identification of the method used; | - | - | - | - | - |
| vi. A description of, the condition of, and unambiguous identification of the item(s) tested; | - | - | - | - | - |
| vii. The date of receipt of the test item(s) where this is critical to the validity and application of the results, and the date(s) of performance of the test or calibration; | - | - | - | - | - |
| viii. Reference to the sampling plan and procedures used by the laboratory or other bodies where these are relevant to the validity or application of the results; | - | - | - | - | - |
| ix. The test results with, where appropriate, the units of measurement; | - | - | - | - | - |
| x. The name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing the test report or certificate; and | - | - | - | - | - |
| xi. Where relevant, a statement to the effect that the results relate only to the items tested or calibrated. | - | - | - | - | - |
| e. Material amendments to a test report or calibration certificate after issue shall be made only in the form of a further document, or data transfer, which includes the statement: "Supplement to Test Report (or Calibration Certificate), serial number... (or as otherwise identified)," or an equivalent form of wording. | - | - | - | - | - |
| f. When it is necessary to issue a complete new test report or calibration certificate, this shall be uniquely identified and shall contain a reference to the original that it replaces. | - | - | - | - | - |
| g. If the laboratory chooses to include a reference to their I-502 certification on their test report, any test results not covered under I-502 certification shall be clearly identified on the report. | - | - | - | - | - |
| h. Documentation that the value reported in the CA is within the range and limitations of the analytical method. | - | - | - | - | - |
| i. Documentation that qualitative results (those below the LOQ but above the LOD) are reported as "trace," or with a nonspecific (numerical) designation. | - | - | - | - | - |
| j. Documentation that the methodology has the specificity for the degree of quantitation reported. Final reports are not quantitative to any tenths or hundredths of a percent. | - | - | - | - | - |


| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| k. Use of appropriate "controls": Documentation of daily use of positive and negative controls that challenge the linearity of the curve; and/or an appropriate "matrix blank" and control with documentation of the performance for each calibration run. | - | - | - | - | - |
| 29. Chemical assay procedure/methodology. | - | - | - | - | - |
| 30. Quality Control (QC): | - | - | - | - | - |
| a. Documentation of use of an appropriate internal standard for any quantitative measurements as applicable to the method. | - | - | - | - | - |
| b. Appropriate reference standards for quantification of analytes, performing and documenting a calibration curve with each analysis. | - | - | - | - | - |
| i. Reference materials shall, where possible, be traceable to SI units of measurement, or to certified reference materials. Internal reference materials shall be checked for accuracy as far as is technically and economically practicable. | - | - | - | - | - |
| ii. The laboratory shall create and follow procedures for safe handling, transport, storage and use of reference standards and reference materials in order to prevent contamination or deterioration and in order to protect their integrity. | - | - | - | - | - |
| iii. Reference materials shall have a certificate of analysis that documents traceability to a primary standard or certified reference material and associated uncertainty, when possible. When applicable, the certificate must document the specific NIST SRM® or NMI certified reference material used for traceability. | - | - | - | - | - |
| c. Demonstration of calibration curve $\mathrm{r}^{2}$ value of no less than 0.995 with a minimum of four points which bracket the expected sample concentration range. | - | - | - | - | - |
| i. The calibration curve shall be verified by preparing an independently prepared calibration standard (from neat materials) or with a standard from an independent source. Acceptance criteria for the standard calibration curve and the independent calibration verification standard shall be documented. | - | - | - | - | - |
| ii. Instrument calibration/standardization shall be verified each 24-hour period of use, or at each instrument start-up if the instrument is restarted during the 24 -hour period, by analysis of a continuing calibration verification standard. Acceptance criteria shall be documented. | - | - | - | - | - |
| iii. Calibration or working quantification ranges shall encompass the concentrations reported by the laboratory. Continuing calibration verification standards and continuing calibration blanks shall be analyzed in accordance with the specified test methods. Acceptance criteria shall be documented. | - | - | - | - | - |
| d. Assuring the quality of test results. | - | - | - | - | - |
| i. The laboratory shall have quality control procedures for monitoring the validity of tests and calibrations undertaken. | - | - | - | - | - |
| ii. The resulting data shall be recorded in such a way that trends are detectable and, where practicable, statistical techniques shall be applied to the reviewing of the results. | - | - | - | - | - |
| iii. This monitoring shall be planned and reviewed and may include, but not be limited to, the following: | - | - | - | - | - |
| A. Regular use of certified reference materials and/or internal quality control using secondary reference materials; | - | - | - | - | - |


| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B. Participation in interlaboratory comparison or proficiencytesting programs; | - | - | - | - | - |
| C. Replicate tests or calibrations using the same or different methods; | - | - | - | - | - |
| D. Retesting or recalibration of retained items; | - | - | - | - | - |
| E. Correlation of results for different characteristics of an item. | - | - | - | - | - |
| iv. Quality control data shall be analyzed and, where they are found to be outside predefined criteria, planned actions shall be taken to correct the problem and to prevent incorrect results from occurring. | - | - | - | - | - |
| v. The laboratory shall determine, where feasible, the accuracy and precision of all analyses performed. | - | - | - | - | - |
| vi. Acceptance limits for each method shall be established based on statistical evaluation of the data generated by the analysis of quality control check samples, unless specific acceptance limits are established by the method. | - | - | - | - | - |
| vii. Control charts or quality control data bases shall be used to record quality control data and compare them with acceptance limits. | - | - | - | - | - |
| viii. Procedures shall be used to monitor trends and the validity of test results. | - | - | - | - | - |
| 31. Proficiency. | - | - | - | - | - |
| a. $\begin{aligned} & \text { Participation in approved PT programs for each field of } \\ & \text { testing. }\end{aligned}$ | - | - | - | - | - |
| b. Passing PT results for two consecutive PTs. | - | - | - | - | - |
| c. Documentation of investigation for all failed PTs. | - | - | - | - | - |
| 32. Method validation: Scientifically valid testing methodology: AHP monograph compliant, other third-party validation or the current version of a standard method. The following requirements are applied to other third-party validation: | - | - | - | - | - |
| a. The laboratory shall validate nonstandard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use. | - | - | - | - | - |
| b. The validation shall be as extensive as is necessary to meet the needs of a given application or field of application. | - | - | - | - | - |
| c. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use. | - | - | - | - | - |
| d. The customer shall be informed as to the method chosen. | - | - | - | - | - |
| e. The laboratory shall confirm that it can properly operate standard methods before introducing the tests or calibrations. If the standard method changes, the confirmation shall be repeated. | - | - | - | - | - |
| f. Deviation from test and calibration methods shall occur only if the deviation has been documented, technically justified, authorized, and accepted by the customer. | - | - | - | - | - |
| g. Validation shall be documented and include the following elements as applicable: | - | - | - | - | - |
| i. Minimum acceptance criteria; | - | - | - | - | - |
| ii. Analyte specificity; | - | - | - | - | - |
| iii. Linearity; | - | - | - | - | - |
| iv. Range; | - | - | - | - | - |


|  | QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| v. | Accuracy; | - | - | - | - | - |
| vi. | Precision; | - | - | - | - | - |
| vii. | Detection limit; | - | - | - | - | - |
| viii. | Quantification limit; | - | - | - | - | - |
| ix. | Stability of samples and reagents interlaboratory precision; | - | - | - | - | - |
| x . | Analysis robustness; | - | - | - | - | - |
| xi. | Presence of QC samples; | - | - | - | - | - |
| xii. | Use of appropriate internal reference standard; | - | - | - | - | - |
| xiii. | Daily monitoring of the response of the instrument; | - | - | - | - | - |
|  | Validation shall be performed for matrix extensions for each type of product tested, including data review of recovery for: | - | - | - | - | - |
| i. | Solvent-based extract; | - | - | - | - | - |
| ii. | $\mathrm{CO}_{2}$ extraction or other "hash oil"; | - | - | - | - | - |
| iii. | Extract made with food grade ethanol; | - | - | - | - | - |
| iv. | Extract made with food grade glycerin or propylene glycol; | - | - | - | - | - |
| v. | Infused liquids; | - | - | - | - | - |
| vi. | Infused solids; | - | - | - | - | - |
| vii. | Infused topical preparations; | - | - | - | - | - |
| viii. | Other oils, butter or fats. | - | - | - | - | - |
| 33. | Estimation of uncertainty of measurement. | - | - | - | - | - |
|  | Testing laboratories shall have and shall apply procedures for estimating uncertainty of measurement. The laboratory shall at least attempt to identify all the components of uncertainty and make a reasonable estimation, and shall ensure that the form of reporting of the result does not give a wrong impression of the uncertainty. Reasonable estimation shall be based on knowledge of the performance of the method and on the measurement scope and shall make use of, for example, previous experience and validation data. | - | - | - | - | - |
|  | In those cases where a well-recognized test method specifies limits to the values of the major sources of uncertainty of measurement and specifies the form of presentation of calculated results, the laboratory is considered to have satisfied this clause by following the test method and reporting instructions. | - | - | - | - | - |
|  | When estimating the uncertainty of measurement, all uncertainty components which are of importance in the given situation shall be taken into account using appropriate methods of analysis. | - | - | - | - | - |
|  | Sources contributing to the uncertainty include, but are not necessarily limited to, the reference standards and reference materials used, methods and equipment used, environmental conditions, properties and condition of the item being tested or calibrated, and the operator. | - | - | - | - | - |
|  | Test methods are classified as either qualitative or quantitative. Qualitative tests are defined as having nonnumerical results. Although estimation of measurement uncertainty is not needed for these tests, laboratories are expected to have an understanding of the contributors to variability of the results. For quantitative tests, laboratories shall determine measurement uncertainty using appropriate statistical techniques. | - | - | - | - | - |


| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| f. Laboratories shall make independent estimations of uncertainty for tests performed on samples with significantly different matrices. | - | - | - | - | - |
| g. Laboratories are required to re-estimate measurement uncertainty when changes to their operations are made that may affect sources of uncertainty. | - | - | - | - | - |
| h. When reporting measurement uncertainty, the test report shall include the coverage factor and confidence level used in the estimations (typically $\mathrm{k}=$ approximately 2 at the $95 \%$ confidence level). | - | - | - | - | - |
| 34. Other methods. | - | - | - | - | - |
| a. Validated microbiological methods fit for purpose. | - | - | - | - | - |
| b. Microbial contaminants within limits as directed by WSLCB. | - | - | - | - | - |
| c. Moisture content testing fit for purpose. Scientifically valid testing methodology: AHP monograph compliant, or other third-party validation. | - | - | - | - | - |
| d. Solvent residuals testing fit for purpose; solvent extracted products made with class 3 or other solvents used are not to exceed 500 parts per million (PPM) per one gram of solvent based product and are to be tested. | - | - | - | - | - |
| e. Any other QA/QC methods is proven to be fit for purpose. | - | - | - | - | - |
| 35. Laboratory records. | - | - | - | - | - |
| a. Legible and in ink (or computerized system). | - | - | - | - | - |
| b. Signed and dated. | - | - | - | - | - |
| c. Changes initialed and dated. | - | - | - | - | - |
| d. Evidence of periodic review and signed by a management representative. | - | - | - | - | - |
| 36. Preventive/corrective action. | - | - | - | - | - |
| The laboratory shall establish a policy and procedure and shall designate appropriate authorities for implementing corrective action when nonconforming work or departures from the policies and procedures in the management system or technical operations are identified. | - | - | - | - | - |
| a. The procedure for corrective action shall start with an investigation to determine the root cause(s) of the problem. | - | - | - | - | - |
| b. Where corrective action is needed, the laboratory shall identify potential corrective actions. It shall select and implement the action(s) most likely to eliminate the problem and to prevent recurrence. | - | - | - | - | - |
| c. The laboratory shall document and implement any required changes resulting from corrective action investigations. | - | - | - | - | - |
| d. Any PT round that leads to the nonproficient status of a laboratory shall be addressed by the corrective action process. | - | - | - | - | - |
| e. The laboratory shall monitor the results to ensure that the corrective actions taken have been effective. | - | - | - | - | - |
| f. When improvement opportunities are identified or if preventive action is required, action plans shall be developed, implemented and monitored to reduce the likelihood of the occurrence of such nonconformities and to take advantage of the opportunities for improvement. | - | - | - | - | - |
| 37. Complaints. | - | - | - | - | - |


| QA PROGRAM AND TESTING | Document Reference | Y | N | NA | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The laboratory shall have a policy and procedure for the resolution of complaints received from customers or other parties. | - | - | - | - | - |
| b. Records shall be maintained of all complaints and of the investigations and corrective actions taken by the laboratory. | - | - | - | - | - |
| c. Test reports. | - | - | - | - | - |
| d. Each test report or calibration certificate shall include at least the following information, unless otherwise justified: | - | - | - | - | - |
| i. A title (e.g., "Test Report" or "Calibration Certificate"); | - | - | - | - | - |
| ii. The name and address of the laboratory, and the location where the tests and/or calibrations were carried out, if different from the address of the laboratory; | - | - | - | - | - |
| iii. Unique identification of the test report or calibration certificate (such as the serial number), and on each page an identification in order to ensure that the page is recognized as a part of the test report or calibration certificate, and a clear identification of the end of the test report or calibration certificate; | - | - | - | - | - |
| iv. The name and address of the customer; | - | - | - | - | - |
| v. Identification of the method used; | - | - | - | - | - |
| vi. A description of, the condition of, and unambiguous identification of the item(s) tested or calibrated; | - | - | - | - | - |
| vii. The date of receipt of the test or calibration item(s) where this is critical to the validity and application of the results, and the date(s) of performance of the test or calibration; | - | - | - | - | - |
| viii. Reference to the sampling plan and procedures used by the laboratory or other bodies where these are relevant to the validity or application of the results; | - | - | - | - | - |
| ix. The test or calibration results with, where appropriate, the units of measurement; | - | - | - | - | - |
| x. The name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing the test report or calibration certificate; and | - | - | - | - | - |
| xi. Where relevant, a statement to the effect that the results relate only to the items tested or calibrated. | - | - | - | - | - |
| 38. Periodic management review and internal audit. | - | - | - | - | - |
| a. Laboratory management shall annually review its quality system and associated procedures to evaluate continued adequacy. This review shall be documented. | - | - | - | - | - |
| b. Periodically and in accordance with a predetermined schedule perform an internal audit of laboratory operations to verify compliance to the GLP checklist. | - | - | - | - | - |

[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, $\$$
$314-55-103$, filed 5/31/17, effective $8 / 31 / 17$; WSR 16-11-110, $\$$
$314-55-103$, filed 5/18/16, effective 6/18/16; WSR 15-11-107, $\$$
$314-55-103$, filed 5/20/15, effective 6/20/15.]

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

## WAC 314-55-1035 Laboratory certification-Suspension and revocation. (1) The board may summarily suspend or revoke the certification of any lab certified under WAC 314-55-0995 for any of the following reasons:

(a) The laboratory owner or science director violates any of the requirements of chapter 314-55 WAC relating to the operations of the laboratory.
(b) The laboratory owner or science director aids, abets, or permits the violation of any provision of chapters 314-55 WAC, 69.50 RCW, 69.51A RCW, or Title 9 or 9A RCW related to the operations of the laboratory, or the laboratory owner or science director permits laboratory staff to do so.
(c) Evidence the certificate holder or owner made false statements in any material regard:
(i) On the application for certification;
(ii) In submissions to the board relating to receiving or maintaining certification; or
(iii) Regarding any testing performed or results provided to WSLCB or the ((marijuana)) cannabis licensee by the certificate holder or owner pursuant to WAC 314-55-102.
(d) The laboratory owner or science director is convicted of any crime substantially related to the qualifications or duties of that owner and related to the functions of the laboratory, including a conviction for falsifying any report of or that relates to a laboratory analysis. For purposes of this subsection, a "conviction" means a plea or finding of guilt regardless of whether the imposition of sentence is deferred or the penalty is suspended.
(e) The laboratory submits proficiency test sample results generated by another laboratory as its own.
(f) The laboratory staff denies entry to any employee of the WSLCB or WSLCB's vendor during normal business hours for an on-site assessment or inspection, as required by WAC 314-55-0995, 314-55-102, 314-55-1025, or 314-55-103.
(2) (a) The following violations are subject to the penalties as provided in (b) of this subsection:
(i) The laboratory fails to submit an acceptable corrective action report in response to a deficiency report, and failure to implement corrective action related to any deficiencies found during a laboratory assessment.
(ii) The laboratory fails to report proficiency testing results pursuant to WAC 314-55-1025.
(iii) The laboratory fails to remit certification fees within the time limit established by a certifying authority.
(iv) The laboratory fails to meet recordkeeping requirements as required by chapter 314-55 WAC unless the failure to maintain records is substantial enough to warrant a suspension or revocation under subsection (1) of this section.
(b) The penalties for the violations in (a) of this subsection are as follows:
(i) First violation: Ten-day suspension of the lab's certification or until the lab corrects the violation leading to the suspension, whichever is longer.
(ii) Second violation within a three-year period: Thirty-day suspension of laboratory certification or until the laboratory corrects the violation leading to the suspension, whichever is longer.
(iii) Third violation within a three-year period: Revocation of the lab's certification.
(3) A certified lab may also be subject to a suspension of certification related to proficiency testing requirements under WAC 314-55-1025.
(4) A laboratory that has its certification suspended or revoked under this section may request an administrative hearing to contest the suspension or revocation as provided in chapter 34.05 RCW.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 17-12-032, § 314-55-1035, filed 5/31/17, effective 8/31/17.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-104 ((Marijuana)) Cannabis processor license extraction requirements. (1) Processors are limited to the methods, equipment, solvents, gases, and mediums detailed in this section when creating ((marijuana)) cannabis extracts.
(2) Processors may use the hydrocarbons N-butane, isobutane, propane, or heptane. These solvents must be of at least ((nincty-nine)) $\underline{99}$ percent purity and a processor must use them in a professional grade closed loop extraction system designed to recover the solvents, work in an environment with proper ventilation, controlling all sources of ignition where a flammable atmosphere is or may be present.
(3) Processors may use a professional grade closed loop $\mathrm{CO}_{2}$ gas extraction system where every vessel is rated to a minimum of ( (six funded) 600 pounds per square inch. The $\mathrm{CO}_{2}$ must be of at least ((ninety-nine)) 99 percent purity.
(4) Closed loop systems for hydrocarbon or $\mathrm{CO}_{2}$ extraction systems must be commercially manufactured and bear a permanently affixed and visible serial number.
(5) Certification from a licensed engineer must be provided to the WSLCB for professional grade closed loop systems used by processors to certify that the system was commercially manufactured, safe for its intended use, and built to codes of recognized and generally accepted good engineering practices, such as:
(a) The American Society of Mechanical Engineers (ASME);
(b) American National Standards Institute (ANSI);
(c) Underwriters Laboratories (UL); or
(d) The American Society for Testing and Materials (ASTM).
(6) The certification document must contain the signature and stamp of a professional engineer and the serial number of the ex-traction unit being certified.
(7) Professional grade closed loop systems, and other equipment used must be approved for specific use or the technical report must be approved by the state building code officials prior to use per WAC 51-54A-3800.
(8) Professional closed loop systems, other equipment used, the extraction operation, and facilities must be approved for their use by
the local fire code official and meet any required fire, safety, and building code requirements specified in:
(a) Title 296 WAC;
(b) Chapters 51-51 and 51-54A WAC;
(c) National Fire Protection Association (NFPA) standards;
(d) International Building Code (IBC);
(e) International Fire Code (IFC); and
(f) Other applicable standards including following all applicable fire, safety, and building codes in processing and the handling and storage of the solvent or gas.
(9) Processors may use heat, screens, presses, steam distillation, ice water, and other methods without employing solvents or gases to create kief, hashish, bubble hash, or infused dairy butter, or oils or fats derived from natural sources, and other extracts.
(10) Under WAC 314-55-077, infused dairy butter and oils or fats derived from natural sources may be used to prepare infused edible products, but they may not be prepared as stand-alone edible products for sale.
(11) Processors may use food grade glycerin, ethanol, and propylene glycol solvents to create extracts. All ethanol must be removed from the extract in a manner to recapture the solvent and ensure that it is not vented into the atmosphere.
(12) Processors creating ((marijuana)) cannabis extracts must develop standard operating procedures, good manufacturing practices, and a training plan prior to producing extracts for the marketplace. Any person using solvents or gases in a closed looped system to create ((marijuana)) cannabis extracts must be fully trained on how to use the system, have direct access to applicable material safety data sheets and handle and store the solvents and gases safely.
(13) Parts per million for one gram of finished extract cannot exceed residual solvent or gas levels provided in WAC 314-55-102.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-104, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-104, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-104, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-104, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-104, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 20-01-172, filed 12/18/19, effective 1/1/20)

WAC 314-55-105 ((Marijuana)) Cannabis product packaging and labeling. (1) The following definitions apply to this section, unless the context clearly indicates otherwise:
(a) "Cartoon" means any drawing or other depiction of an object, person, animal, creature, or any similar caricature that meets any of the following criteria:
(i) The use of comically exaggerated features;
(ii) The attribution of human characteristics to animals, plants, or other objects;
(iii) The attribution of animal, plant, or other object characteristics to humans;
(iv) The attribution of unnatural or extra-human abilities.
(b) "Child resistant packaging" means packaging that is used to reduce the risk of poisoning in persons under the age of ((twentyөne)) 21 through the ingestion of potentially hazardous items including, but not limited to, ((marijuana)) cannabis concentrates, useable ((marijuana)) cannabis, and ((marijuana-infused)) cannabis-infused products.
(c) "Especially appealing to persons under the age of ((もwentyөne) ) 21" means a product or label that includes, but is not limited to:
(i) The use of cartoons;
(ii) Bubble-type or other cartoon-like font;
(iii) A design, brand, or name that resembles a noncannabis consumer product that is marketed to persons under the age of ((tentyөne) ) 21;
(iv) Symbols or celebrities that are commonly used to market products to persons under the age of ((twenty-one)) 21;
(v) Images of persons under the age of ((twenty-one)) 21; or
(vi) Similarities to products or words that refer to products that are commonly associated or marketed to persons under the age of ((twenty-one)) 21.
(d) "((Marijuana)) Cannabis concentrates" means products consisting wholly or in part of the resin extracted from any part of the plant Cannabis and having a THC concentration greater than ((もen)) 10 percent, consistent with RCW 69.50.101(z).
(e) "((Marijuana)) Cannabis edible" means a ((marijuana-infused)) cannabis-infused product as defined in RCW 69.50.101(ff).
(f) "((Marijuana)) Cannabis topical" or "topical" means any product containing parts of the cannabis plant that is intended for application to the body's surface including, but not limited to, lotions, ointments, salves, gels, or cream that are not intended for ingestion, inhalation, or insertion by humans or animals.
(g) "Structure and function claims" mean a description of the role of a ((marijuana)) cannabis product intended to affect normal structure and function in humans, characterized by the means by which a ((marijuana)) cannabis product acts to maintain such structure or function, or describe the general well-being from consumption of a ((marijuana)) cannabis product, consistent with the guidance provided in 21 U.S.C. Sec. 343(6).
(h) "Useable ((marijuana)) cannabis" means dried ((marijuana)) cannabis flowers consistent with RCW 69.50.101(ww). The term "useable ((marijuana)) cannabis" does not include either ((marijuana-infused)) cannabis-infused products or ((marijuana)) cannabis concentrates.
(2) ((Marijuana)) Cannabis concentrates. The following standards apply to all packaging and labeling of ((marijuana)) cannabis concentrates:
(a) Containers or packaging containing ((marijuana)) cannabis concentrates must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the ((marijuana)) cannabis concentrate.
(b) ((Marijuana)) Cannabis concentrates must be packaged:
(i) In child resistant packaging consistent with 16 C.F.R. Part 1700, Poison Prevention Packaging Act; or
(ii) In plastic that is two mil or greater in thickness, heat sealed without an easy-open tab, dimple, corner, or flap that will protect persons under the age of ((tenty-one)) 21 from accidental exposure to ((marijuana)) cannabis concentrates.
(c) ((Marijuana)) Cannabis concentrates must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(d) ((Marijuana)) Cannabis concentrate labels must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(e) ((Marijuana)) Cannabis concentrate labels must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the ((marijuana)) cannabis producer and processor;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) The net weight in ounces and grams or volume as applicable;
(iv) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC 314-55-102;
(v) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use;
(vi) If solvents were used to create concentrate or extract, a statement that discloses the type of extraction method, including in solvents or gases used to create the concentrate; and
(vii) A complete list of any other chemicals, compounds, additives, thickening agents, terpenes, or other substances used to produce or added to the concentrate or extract at any point during production. A copy of the complete list of chemicals, compounds, additives, thickening agents, terpenes, or other substances must be kept and maintained at the facility in which the ((marijuana)) cannabis concentrates are processed.
(f) ((Marijuanz)) Cannabis concentrate labels may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents that the use of ((marijuana)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((twenty-one)) 21 consuming ((marijuana)) cannabis; or
(v) Is especially appealing to persons under ((twenty-one)) 21 years of age as defined in subsection (1) (c) of this section.
(g) The following statements must be included on all ((marijua= na)) cannabis concentrate labels:
(i) "Warning - May be habit forming;"
(ii) "Unlawful outside Washington State;"
(iii) "It is illegal to operate a motor vehicle while under the influence of ((marijuana)) cannabis;"
(iv) The ((marijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(v) "Smoking is hazardous to your health."
(h) Product labeling for ((marijuana)) cannabis concentrates identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(i) Where there is one statement made under (h) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product that is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(j) Where there is more than one statement made under (h) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product that is not false or misleading, the disclaimer must state, "These statements have not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(3) ((Marijuana)) Cannabis edibles in solid form. The following standards apply to all packaging and labeling of ((marijuana)) cannabis edibles in solid form:
(a) Containers or packaging containing ((marijuana)) cannabis edibles in solid form must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the ((marijuana)) cannabis edibles in solid form.
(b) ((Marijuana)) Cannabis edibles in solid form must be packaged:
(i) In child resistant packaging consistent with 16 C.F.R. Part 1700, Poison Prevention Packaging Act; or
(ii) In plastic that is two mil or greater in thickness, heat sealed without an easy-open tab, dimple, corner, or flap that will protect persons under the age of ((twenty-one)) 21 from accidental exposure to ((marijuana)) cannabis edibles in solid form.
(c) ((Marijuana-infused)) Cannabis-infused edibles in solid form, such as capsules, lozenges, and similar products approved by the board on a case-by-case basis may be packaged loosely within a resealing outer package that is child resistant in accordance with Title 16 C.F.R. 1700 of the Poison Prevention Packaging Act.
(d) ((Marijuana)) Cannabis edibles in solid form must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(e) Labels for ((marijuana)) cannabis edibles in solid form must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(f) Labels for ((marijuana)) cannabis edibles in solid form must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the licensees that produced and processed the ((marijuana)) cannabis or ((marijuana)) cannabis products;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) The serving size and the number of servings contained within the unit. If more than one serving is in a package, the label must prominently display the serving size, the number of servings in the package and the amount of product per serving;
(iv) Net weight in ounces and grams or volume as applicable;
(v) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC 314-55-102;
(vi) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use;
(vii) A list of ingredients in descending order of predominance by weight or volume as applicable and a list of major food allergens as defined in the Food Allergen Labeling and Consumer Protection Act of 2004;
(viii) If solvents were used, a statement that discloses the type of extraction method, including any solvents, gases, or other chemicals or compounds used to produce or that were added to the extract.
(g) Labels for ((marijuana)) cannabis edibles in solid form may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents that the use of ((marijuan)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((twenty-one)) 21 consuming ((marijuanz)) cannabis, or is especially appealing to persons under ((twnty-one)) 21 years of age as defined in subsection (1)(c) of this section.
(h) The following warning statements must be included on all labels for all ((marijuana)) cannabis edibles in solid form. The following warning statements must be legible, unobscured, and visible to the consumer:
(i) "Warning - May be habit forming;"
(ii) "Unlawful outside Washington State;"
(iii) "It is illegal to operate a motor vehicle under the influence of ((marijuana)) cannabis;"
(iv) The ((fnarijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(v) "Caution: Intoxicating effects may be delayed by $2+$ hours."
(i) Product labeling for ((marijuana)) cannabis edibles in solid form identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(j) Where there is one statement made under (i) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided it is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(k) Where there is more than one statement made under (h) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided they are not false or misleading, the disclaimer must state, "These statements have not been
evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(4) ((Marijuana)) Cannabis edibles in liquid form. The following standards apply to all packaging and labeling of ((marijuana)) cannabis edibles in liquid form:
(a) Containers or packaging containing ((marijuana)) cannabis edibles in liquid form must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the ((marijuana)) cannabis edibles in liquid form.
(b) ((Marijuana)) Cannabis edibles in liquid form must be packaged:
(i) In child resistant packaging consistent with 16 C.F.R. Part 1700, Poison Prevention Packaging Act; or
(ii) In plastic that is two mil or greater in thickness, heat sealed without an easy-open tab, dimple, corner, or flap that will protect persons under the age of ((twenty-one)) 21 from accidental exposure to ((marijuana)) cannabis edibles in liquid form.
(iii) ( (Marijuana)) Cannabis edibles in liquid form that include more than one serving must be packaged with a resealable closure or cap. ((Marijuanz)) Cannabis edibles in liquid form must include a measuring device such as a measuring cup or dropper. Hash marks on the bottle or package qualify as a measuring device.
(c) ((Marijuana)) Cannabis edibles in liquid form must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(d) Labels for ((marijuana)) cannabis edibles in liquid form must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(e) Labels for ((marijuana)) cannabis edibles in liquid form must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the licensees that produced and processed the ((marijuanz)) cannabis or ((marijuana)) cannabis products;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) The serving size and the number of servings contained within the unit. If more than one serving is in a package, the label must prominently display the serving size, the number of servings in the package and the amount of product per serving;
(iv) Net weight in ounces and grams or volume as applicable;
(v) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC 314-55-102;
(vi) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use;
(vii) A list of all ingredients in descending order of predominance by weight or volume as applicable and a list of major food allergens as defined in the Food Allergen Labeling and Protections Act of 2004;
(viii) If solvents were used, a statement that discloses the type of extraction method, including any solvents, gases, or other chemicals or compounds used to produce or added to the extract.
(f) Labels for ((marijuana)) cannabis edibles in liquid form may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents the use of ((marijuana)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((twenty-one)) 21 consuming ((marijuana)) cannabis, or is especially appealing to persons under ((もwenty-one)) 21 years of age as defined in subsection (1) (c) of this section.
(g) The following warning statements must be included on all labels for all ((marijuana)) cannabis edibles in liquid form. The following warning statements must be legible, unobscured, and visible to the consumer:
(i) "Warning - May be habit forming;"
(ii) "Unlawful outside Washington State;"
(iii) "It is illegal to operate a motor vehicle under the influence of ((marijuana)) cannabis;"
(iv) The ((marijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(v) "Caution: Intoxicating effects may be delayed by 2+ hours."
(h) Product labeling for ((marijuana)) cannabis edibles in liquid form identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(i) Where there is one statement made under (h) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided it is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(j) Where there is more than one statement made under (h) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided they are not false or misleading, the disclaimer must state, "These statements have not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(5) Useable ((marijuana)) cannabis. The following standards apply to all packaging and labeling of useable ((maxijuana)) cannabis:
(a) Containers or packaging containing useable ((marijuana)) cannabis must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the useable ((marijuana)) cannabis.
(b) Useable ((marijuana)) cannabis must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(c) Useable ((marijuana)) cannabis must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(d) Labels for useable ((marijuana)) cannabis must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the licensees that produced and processed the ((marijuana)) cannabis or ((marijuana)) cannabis products;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) Net weight in ounces and grams or volume as applicable;
(iv) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC 314-55-102;
(v) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use.
(e) Labels for useable ((marijuana)) cannabis may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents the use of ((marijuan)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((twenty-one)) 21 consuming ((marijuanz)) cannabis, or is especially appealing to persons under ((twenty-one)) 21 years of age as defined in subsection (1)(c) of this section.
(f) The following warning statements must be included on all labels for all useable ((marijuana)) cannabis. The following warning statements must be legible, unobscured, and visible to the consumer:
(i) "Warning - May be habit forming;"
(ii) "Unlawful outside Washington State;"
(iii) "It is illegal to operate a motor vehicle under the influence of ((marijuana)) cannabis;"
(iv) The ((marijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(v) "Smoking is hazardous to your health."
(g) Product labeling for useable ((marijuana)) cannabis identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(h) Where there is one statement made under ( $g$ ) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided it is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(i) Where there is more than one statement made under (g) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided they are not false or
misleading, the disclaimer must state, "These statements have not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(6) ((Marijuana)) Cannabis mix. ((Marijuana)) Cannabis mix is defined in WAC 314-55-010(22) as an intermediate lot that contains multiple strains of useable ((marijuana)) cannabis and is chopped or ground so no particles are greater than 3 mm . The following standards apply to all packaging and labeling of ((marijuana)) cannabis mix:
(a) Containers or packaging containing ((marijuana)) cannabis mix must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the ((marijuana)) cannabis mix.
(b) ((Marijuana)) Cannabis mix must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(c) ((Marijuana)) Cannabis mix must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(d) Labels for ((fmarijuana)) cannabis mix must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the licensees that produced and processed the ((marijuanz)) cannabis or ((marijuanz)) cannabis products;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) Net weight in ounces and grams or volume as applicable;
(iv) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC 314-55-102;
(v) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use;
(vi) If solvents were used, a statement that discloses the type of extraction method, including any solvents, gases, or other chemicals or compounds used to produce or added to the extract;
(vii) Any other chemicals or compounds used to produce or were added to the concentrate or extract.
(e) Labels for ((marijuana)) cannabis mix form may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents the use of ((marijuana)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((twenty-one)) 21 consuming ((marijuana)) cannabis, or is especially appealing to persons under ((twenty-one)) 21 years of age as defined in subsection (1)(c) of this section.
(f) The following warning statements must be included on all labels for all ((marijuana)) cannabis mix. The following warning statements must legible, unobscured, and visible to the consumer:
(i) "Warning - May be habit forming;"
(ii) "Unlawful outside Washington State;"
(iii) "It is illegal to operate a motor vehicle under the influence of ((marijuana)) cannabis;"
(iv) The ((marijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(v) "Smoking is hazardous to your health."
(g) Product labeling for ((marijuana)) cannabis mix identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(h) Where there is one statement made under ( $g$ ) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided it is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(i) Where there is more than one statement made under (g) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided they are not false or misleading, the disclaimer must state, "These statements have not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(7) ((Marijuana)) Cannabis topicals. The following standards apply to all packaging and labeling of ((marijuana)) cannabis topicals:
(a) Containers or packaging containing a ((marijuana)) cannabis topical must protect the product from contamination. Containers or packaging must not impart any toxic or harmful substance to the ((maxijuana)) cannabis topical.
(b) ((Marijuana)) Cannabis topicals must not be labeled as organic unless permitted by the U.S. Department of Agriculture consistent with the Organic Foods Production Act.
(c) ((Marijuana)) Cannabis topicals must comply with the version of NIST Handbook 130, Uniform Packaging and Labeling regulation adopted in chapter 16-662 WAC.
(d) Labels for ((marijuana)) cannabis topicals must clearly and visibly provide all of the following information:
(i) The business or trade name and the nine digit Washington state unified business identifier (UBI) number of the licensees that produced and processed the ((marijuana)) cannabis or ((marijuana)) cannabis products;
(ii) The lot number of the product (the unique identifier number generated by the board's traceability system). This must be the same number that appears on the transport manifest;
(iii) The label must prominently display the net weight in ounces and grams or volume as applicable, and may not exceed serving and transaction limits as described in WAC 314-55-095;
(iv) Total THC (delta-9-tetrahydrocannabinol) meaning the concentration of THC and THCA, total CBD (cannabidiol) meaning the concentration of CBDA and CBD, using the formulas referenced in WAC
314-55-102;
(v) Medically and scientifically accurate and reliable information about the health and safety risks posed by ((marijuana)) cannabis use; and
(vi) A list of all ingredients in descending order of predominance by weight or volume as applicable.
(e) Labels for ((marijuana)) cannabis topicals may not contain any statement, depiction, or illustration that:
(i) Is false or misleading, consistent with guidance provided in 21 C.F.R. Sec. 101.18(a);
(ii) Promotes over consumption;
(iii) Represents the use of ((marijuana)) cannabis has curative or therapeutic effects;
(iv) Depicts a person under the age of ((もwenty-one)) 21 consuming ((marijuanz)) cannabis, or is especially appealing to persons under ((もwenty-one)) 21 years of age as defined in subsection (1)(c) of this section.
(f) The following warning statements must be included on all labels for all ((marijuana)) cannabis topicals. The following warning statements must be legible, unobscured, and visible to the consumer:
(i) "Unlawful outside Washington State;"
(ii) The ((marijuana)) cannabis universal symbol as provided in WAC 314-55-106; and
(iii) "do nот еат" in bold, capital letters.
(g) Product labeling for ((marijuana)) cannabis topicals identified as compliant ((marijuana)) cannabis product under RCW 69.50.375(4) and chapter 246-70 WAC may include:
(i) A structure or function claim describing the intended role of the product to maintain the structure or any function of the body; or
(ii) Characterization of the documented mechanism by which the product acts to maintain such structure or function, provided that the claim is truthful and not misleading.
(iii) Any statement made under this subsection may not claim to diagnose, mitigate, treat, cure, or prevent any disease.
(h) Where there is one statement made under ( $g$ ) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided it is not false or misleading, the disclaimer must state, "This statement has not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(i) Where there is more than one statement made under (g) of this subsection, or there is a warning describing the psychoactive effects of the ((marijuana)) cannabis product, provided they are not false or misleading, the disclaimer must state, "These statements have not been evaluated by the State of Washington. This product is not intended to diagnose, treat, cure, or prevent any disease."
(8) Optional label information. Optional label information includes the following: Harvest date, "best by" date, and manufactured dates.
(9) Accompanying materials. Accompanying materials must be provided with a ((marijuana)) cannabis product or made available to the consumer purchasing ((marijuana)) cannabis products.

A producer or processor must provide the following product-specific information, for as long as the product is for sale, through an internet link, web address, or $Q R$ code on the product label as follows:
(a) A statement disclosing all pesticides applied to the ((marijuana)) cannabis plants and growing medium during production of the
useable ((marijuana)) cannabis or the base ((marijuana)) cannabis used to create the concentrate or the extract added to infused products;
(b) A list disclosing all of the chemicals, compounds, additives, thickening agents, terpenes, or other substances added to any ((marijuana)) cannabis concentrate during or after production.
(10) Upon request materials. A consumer may request the name of the certified lab and quality assurance test results for any ( (marijuana)) cannabis or ((marijuana)) cannabis product. A retailer must provide the information upon request.
[Statutory Authority: RCW 69.50.342, 69.50.345 and 2019 c 393. WSR 20-01-172, § 314-55-105, filed 12/18/19, effective 1/1/20. Statutory Authority: RCW 69.50.342, 69.50.345 and 2018 c $43 \mathrm{~s} 1 . \mathrm{WSR}$ 18-11-005, § 314-55-105, filed 5/2/18, effective 1/1/19. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-105, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-105, filed 5/20/15, effective 6/20/15; WSR 14-10-044, § 314-55-105, filed 4/30/14, effective 5/31/14. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-105, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 21-05-075, filed 2/17/21, effective 3/20/21)

WAC 314-55-1055 Ingredient disclosure. (1) All licensed ((mari= juana) ) cannabis processors and producers must disclose all ingredients used in the production of ((marijuana)) cannabis concentrates for inhalation and ((marijuana-infused)) cannabis-infused extracts for inhalation.
(2) All chemicals, compounds, additives, preservatives, thickening agents, terpenes, and other substances used at any point in the production or processing of ((marijuana)) cannabis concentrates for inhalation or ((marijuana-infused)) cannabis-infused extracts for inhalation, regardless of source or origin, must be disclosed to the board as follows:
(a) On a form provided by the board and stored by the licensee, either electronically or in hard copy, and made available for inspection if requested by an employee of the board; and
(b) In a manner directed by the board including, but not limited to, submission to an email address or other online platform provided and maintained by the board.
(3) The complete list of all chemicals, compounds, additives, preservatives, thickening agents, terpenes, and other substances used at any point in the production or processing of ((marijuana)) cannabis concentrates for inhalation or ((marijuana-infused)) cannabis-infused extracts for inhalation, regardless of source or origin, that is required under subsection (2) of this section must be kept and maintained, consistent with recordkeeping requirements described in WAC 314-55-087, at the facility in which the products are processed. The list must be updated whenever there is any change in product composition.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 21-05-075, S 314-55-1055, filed 2/17/21, effective 3/20/21.]

AMENDATORY SECTION (Amending WSR 18-11-005, filed 5/2/18, effective 1/1/19)

## WAC 314-55-106 ((Marijuana)) Cannabis warning symbol require-

 ment. The following requirements are in addition to the packaging and labeling requirements provided in WAC 314-55-105.(1) ((Marijuana-infused)) Cannabis-infused products for oral ingestion sold at retail must be labeled on the principal display panel or front of the product package with the "not for kids" warning symbol ("warning symbol") created and made available in digital form to licensees without cost by the Washington poison center (WPC). The warning symbol may be found on the WPC's website.
(a) The warning symbol must be of a size so as to be legible, readily visible by the consumer, and effective to alert consumers and children that the product is not for kids, but must not be smaller than three-quarters of an inch in height by one-half of an inch in width; and
(b) The warning symbol must not be altered or cropped in any way other than to adjust the sizing for placement on the principal display panel or front of the product package, except that a licensee must use a black border around the edges of the white background of the warning symbol image when the label or packaging is also white to ensure visibility of the warning symbol.
(c) Licensees may download the digital warning symbol from the WPC and print stickers, or purchase and use a sticker made available by the WPC, in lieu of incorporating the warning symbol on the label or packaging as required under subsection (1) of this section. If a licensee elects to use a warning symbol sticker, the sticker:
(i) Must meet all requirements of (a) and (b) of this subsection; and
(ii) Must not cover or obscure in any way labeling or information required on ((marijuana)) cannabis products by WAC 314-55-105.
(2) All ((marijuana)) cannabis products sold at retail must be labeled on the principal display panel or front of the product package with the ((marijuana)) cannabis universal symbol ("universal symbol") created and made available in digital form to licensees without cost by the WSLCB. The digital file for the universal symbol is available on the WSLCB's website.
(a) The universal symbol must be of a size so as to be legible, readily visible by the consumer, and effective to alert consumers that the product is or contains ((marijuana)) cannabis, but must not be smaller than three-quarters of an inch in height by three-quarters of an inch in width;
(b) The universal symbol must not be altered or cropped in any way other than to adjust the sizing for placement on the principal display panel or front of the product package; and
(c) Licensees may download the digital universal symbol from the WSLCB's website and print stickers in lieu of incorporating the universal symbol on the label or packaging as required under (a) and (b) of this subsection. If a licensee elects to use a universal symbol sticker, the sticker:
(i) Must meet all requirements of this section; and
(ii) Must not cover or obscure in any way labeling or information required on ((marijuana)) cannabis products by WAC 314-55-105.
(3) For the purposes of this section, "principal display panel" means the portion(s) of the surface of the immediate container, or of any outer container or wrapping, which bear(s) the labeling designed
to be most prominently displayed, shown, presented, or examined under conditions of retail sale. "Immediate container" means the external container holding the ((marijuana)) cannabis product.
[Statutory Authority: RCW 69.50.342, 69.50.345 and 2018 c 43 s 1. WSR 18-11-005, § 314-55-106, filed 5/2/18, effective 1/1/19. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-23-089, § 314-55-106, filed 11/16/16, effective 2/14/17.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-107 ((Marijuana)) Cannabis product compliance. A ((marijuana)) cannabis compliant product must meet all requirements in the department of health rules found in chapter 246-70 WAC in addition to all WSLCB requirements found in chapter 314-55 WAC.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-107, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-056, filed 10/31/18, effective 12/1/18)

WAC 314-55-109 Cannabinoid additives-Requirements, restrictions, and quality assurance testing. (1) As provided in RCW 69.50.326 Licensed ((marijuana)) cannabis producers and licensed ((marijuana)) cannabis processors may use a cannabidiol (CBD) product obtained from a source not licensed under this chapter, provided the CBD product:

(a) Has a THC level of 0.3 percent or less; and
(b) Has been tested for contaminants and toxins by a testing laboratory accredited under this chapter and in accordance with testing standards established in this section.
(2) Licensed ((marijuanz)) cannabis producers and licensed ((max ijuana)) cannabis processors may use a CBD product obtained from a source not licensed under this chapter and chapter 69.50 RCW as an additive for the purpose of enhancing the CBD concentration of any product authorized for production, processing, and sale under this chapter. However, useable ((marijuana)) cannabis, except ((marijuana)) cannabis that is an intermediate product that will be converted into a ((marijuana-infused)) cannabis-infused product or a ((marijuana)) cannabis concentrate, may not be treated or otherwise adulterated in any way including the addition of a CBD product consistent with the rules of this chapter. Except as allowed under this section, CBD product additives must be lawfully produced by, or purchased from, a producer or processor licensed under this chapter. The testing requirements for CBD products derived from ((marijuana)) cannabis produced by ((marijuana)) cannabis licensees are provided in WAC 314-55-102. The testing requirements in this section are required in addition to quality assurance testing otherwise required under this chapter for ((marijuana)) cannabis products.
(3) Traceability requirements. A licensee must enter CBD products obtained from a source not licensed under this chapter into the state traceability system and keep the information in the traceability system completely up to date, consistent with ((marijuana)) cannabis and ((marijuana)) cannabis product recordkeeping and traceability requirements in WAC 314-55-083. A licensee must keep CBD products obtained from a source not licensed under this chapter labeled and quarantined in an area separate from ((marijuana)) cannabis and ((marijuana)) cannabis products under video surveillance consistent with the requirements for controlled areas in WAC 314-55-083(3) until the CBD products successfully pass quality assurance testing or are destroyed due to failure of tests as provided in this section. At no time during the quarantine period can the product be handled or moved under any circumstances, except for purposes of deducting samples as required under this section, and is subject to auditing by the WSLCB or its designee(s). CBD products obtained from a source not licensed under this chapter that fail quality assurance testing as provided in this section must not be added to any ((marijuana)) cannabis product and must be disposed of consistent with WAC 314-55-097 and the disposal logged into the traceability system consistent with WAC 314-55-083.
(4) Testing requirements. The following sample deduction and testing requirements apply to CBD products obtained from a source not licensed under this chapter. Such products must successfully pass quality assurance testing prior to being added to any ((marijuana)) cannabis product. Samples that fail quality assurance testing and the corresponding products that the samples were deducted from must be disposed of consistent with WAC 314-55-097.
(a) Sample size and deduction requirements. Licensed producers, licensed processors, certified labs, and their employees must adhere to the minimum sampling protocols as provided in this section. Samples must be deducted in a way that is most representative of the product the sample is deducted from. The minimum sample size for the testing requirements under this section for CBD products is one percent of the product as packaged by the manufacturer of the CBD product but in no case shall the sample be less than two grams. Licensees, certified labs, and their employees may not adulterate or change in any way the representative sample before the sample is tested.
(i) All samples must be collected/deducted in a sanitary environment using sanitary practices and ensure facilities are constructed, kept, and maintained in a clean and sanitary condition in accordance with rules and as prescribed by the Washington state department of agriculture under chapters 16-165 and 16-167 WAC.
(ii) Persons collecting samples must wash their hands prior to collecting a sample, wear appropriate gloves, and must use sanitary utensils and storage devices when collecting samples.
(iii) Samples must be placed in a sanitary plastic or glass container and stored in a location that prevents the propagation of pathogens and other contaminants, such as a secure, low-light, cool and dry location.
(iv) The licensee must maintain the CBD products from which the sample was deducted in a secure, low-light, cool, and dry location to prevent the products from becoming contaminated or degraded prior to the CBD products being added or incorporated into ((marijuana)) cannabis products after successful passage of testing requirements.
(v) Each quality assurance sample must be clearly marked "quality assurance sample" and be labeled with the following information:
(A) The unique identifier for the product generated by the state traceability system;
(B) The name of the certified lab receiving the sample;
(C) The license number and business or trade name of the licensee sending the sample;
(D) The date the sample was collected; and
(E) The weight of the sample.
(vi) Certified labs may retrieve samples from a ((marijuana)) cannabis licensee's licensed premises and transport the sample(s) directly to the lab. Certified labs may also return any unused portion of the sample(s).
(b) Required fields of testing.
(i) Potency testing. Potency testing is required to confirm the product is less than 0.3 percent THC, contains detectable levels of CBD, and to determine the levels of THC, THC-A, CBD, and CBD-A in the product. Synthetic cannabinoids as defined in RCW 69.50.204 are prohibited under RCW 69.50.401 and any test result that suggests the presence of a synthetic cannabinoid must be immediately reported to the WSLCB.
(A) Certified labs must test and report the following cannabinoids to the WSLCB in the state traceability system when testing for potency:
(I) THCA;
(II) THC;
(III) Total THC;
(IV) CBDA;
(V) CBD; and
(VI) Total CBD.
(B) Calculating total THC and total CBD.
(I) Total THC must be calculated as follows, where $M$ is the mass or mass fraction of delta-9 THC or delta-9 THCA: M total delta-9 THC = M delta-9 THC + (0.877 x M delta-9 THCA).
(II) Total CBD must be calculated as follows, where M is the mass or mass fraction of $C B D$ and CBDA: $M$ total $C B D=M C B D+(0.877 \mathrm{x} \mathrm{M}$ CBDA).
(C) Regardless of analytical equipment or methodology used for testing, certified labs must accurately measure and report the acidic (THCA and CBDA) and neutral (THC and CBD) forms of the cannabinoids.
(D) The following potency results fail quality assurance testing for the purposes of this section and the sample and corresponding product from which the sample was deducted must be disposed of consistent with this section and WAC 314-55-097:
(I) The CBD product tests above 0.3 percent THC;
(II) The CBD product does not contain any detectable amounts of CBD or CBD-A; and
(III) The sample test results indicate that a substance is present that is not THC, CBD, or inert substance which the THC or CBD is dissolved into.
(ii) Pesticide screening.
(A) Certified third-party labs must screen for any pesticides that are not allowed and are designated as having the potential for misuse on a list created, maintained, and periodically updated by the department of health in consultation with the Washington state department of agriculture and the WSLCB.
(B) If the WSLCB, WSDA, other designee of the WSLCB, or certified lab identifies a pesticide that is not allowed for use or application on ((marijuana)) cannabis under this chapter and is above the action
levels provided in WAC 314-55-108, that sample and corresponding product from which the sample was deducted has failed quality assurance testing. A sample that tests at or above the action levels for pesticides consistent with WAC 314-55-108 fails pesticide testing requirements for the purposes of this section. A sample and corresponding product from which the sample was deducted that fails quality assurance testing under this section must be destroyed consistent with WAC 314-55-097.
(C) Certified third-party labs must also screen for pyrethrins and piperonyl butoxide (PBO) in samples of CBD products obtained from a source not licensed under this chapter. Certified third-party labs may also screen for additional pesticides not specifically required under this section and per the DOH list, however, any sample that tests at or above the action level for any pesticide(s) as established in WAC 314-55-108 fails the testing requirements under this section and must be disposed of consistent with WAC 314-55-097.
(iii) Heavy metal screening. For the purposes of heavy metal screening, a sample fails quality assurance testing and must be disposed of consistent with WAC 314-55-097 if it meets or exceeds the following limits:

| Metal | Limit, $\mu \mathrm{g} /$ daily dose ( 5 grams) |
| :---: | :---: |
| Inorganic arsenic | 10.0 |
| Cadmium | 4.1 |
| Lead . | 6.0 |
| Mercury . . . . | 2.0 |

(iv) Residual solvents screening. Certified labs must test for the solvents listed in the table below at a minimum. Except as otherwise provided in this subsection, a sample and corresponding product from which the sample was deducted fail quality assurance testing for residual solvents and must be disposed of consistent with WAC 314-55-097 if the results meet or exceed the limits provided in the table below. Residual solvent results of more than 5,000 ppm for class three solvents, 50 ppm for class two solvents, and 2 ppm for class one solvents as defined in United States Pharmacopoeia, USP 30 Chemical Tests / <467> - Residual Solvents (USP <467>) not listed in the table below fail quality assurance testing.

| Solvent | ppm |
| :--- | :--- |
| Acetone | 5,000 |
| Benzene | 2 |
| Butanes | 5,000 |
| Cyclohexane | 3,880 |
| Chloroform | 2 |
| Dichloromethane | 600 |
| Ethyl acetate | 5,000 |
| Heptanes | 5,000 |
| Hexanes | 290 |
| Isopropanol <br> (2-propanol) | 5,000 |
| Methanol | 3,000 |
| Pentanes | 5,000 |


| Solvent | ppm |
| :--- | :--- |
| Propane | 5,000 |
| Toluene | 890 |
| Xylene* | 2,170 |

* Usually $60 \% m$-xylene, $14 \% p$-xylene, $9 \% o$-xylene with $17 \%$ ethyl benzene.
(v) Microbiological screening. The sample and corresponding product from which the sample was deducted fail quality assurance testing for microbiological screening and must be disposed of consistent with WAC 314-55-097 if the results exceed the following limits:

|  | Enterobacteria <br> (bile-tolerant <br> gram-negative <br> bacteria) | E. coli <br> (pathogenic <br> strains) and <br> Salmonella spp. |
| :--- | :---: | :--- |
| Unprocessed <br> Plant Material | $10^{4}$ | Not detected in <br> 1 g |
| Extracted or <br> Processed <br> Botanical <br> Product | $10^{3}$ | Not detected in <br> 1 g |

(vi) Mycotoxin screening. The sample and corresponding product from which the sample was deducted fail quality assurance testing for mycotoxin screening and must be disposed of consistent with WAC 314-55-097 if the results exceed the following limits:
(A) Total of Aflatoxin B1, B2, G1, G2: $20 \mu \mathrm{~g} / \mathrm{kg}$ of substance; and
(B) Ochratoxin A: $20 \mu \mathrm{~g} / \mathrm{kg}$ of substance.
(5) Test results reporting requirements. Certified labs must report all test results as required by this section into the state traceability system within ((twenty-four)) 24 hours of completion of the tests.
(6) Retesting. At the request of the producer or processor, the WSLCB may authorize a retest to validate a failed test result on a case-by-case basis. All costs of the retest will be borne by the producer or the processor requesting the retest. Potency retesting will generally not be authorized.
(7) Remediation. Producers and processors may remediate failed products so long as the remediation method does not impart any toxic or deleterious substance to the CBD products obtained from a source outside the regulated system. Remediation solvents or methods used on the product must be disclosed to a licensed processor the producer or producer/processor transfers the products to; a licensed retailer carrying ((marijuana)) cannabis products derived from the remediated product; or consumer upon request. The product(s) the failed sample(s) were deducted from must be remediated using the same remediation technique. No remediated CBD products obtained from a source outside the regulated system may be sold, transported, or used in the processing of ((marijuana)) cannabis products until the completion and successful passage of quality assurance testing as required in this section.
(8) A licensee or certified lab that violates any of the provisions of this section is subject to disciplinary action, including possible summary suspension or revocation of the producer license, processor license, producer/processor license, or lab certification.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 18-22-056, § 314-55-109, filed 10/31/18, effective 12/1/18.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-115 What method of payment can a ((marijuana)) cannabis licensee use to purchase ((marijuana)) cannabis? A ((marijuana)) cannabis licensee must pay cash for ((marijuana)) cannabis prior to or at the time of delivery. The WSLCB will recognize the following forms of payment as cash payment for the purpose of this section.
(1) Checks.
(2) Credit/debit cards, under the following provisions:
(a) The credit or debit card transaction agreement must be voluntary on the part of both licensees, and there must be no discrimination for nonparticipation in credit or debit card transactions.
(b) A sale must be initiated by an irrevocable invoice or sale order before or at the time of delivery.
(c) Both parties must bear their respective banking costs or other costs associated with the credit or debit card service.
(d) Both parties must maintain records of transactions and have the records readily available for the WSLCB review.
(e) The credit or debit card charge must be initiated by the ((marijuana)) cannabis licensee no later than the first business day following delivery.
(3) Electronic funds transfer (EFT), under the following provisions:
(a) The EFT agreement must be voluntary on the part of both the licensees, and there must be no discrimination for nonparticipation in EFT.
(b) Prior to any EFT transaction, the ((marijuana)) cannabis licensee must enter into a written agreement specifying the terms and conditions for EFT as payment for ((marijuana)) cannabis.
(c) A sale must be initiated by an irrevocable invoice or sale order before or at the time of delivery.
(d) Both parties must bear their respective banking costs or other costs associated with EFT service.
(e) Both parties must maintain records of transactions and have the records readily available for the WSLCB review.
(f) The electronic funds transfer must be initiated by the ((marijuana) ) cannabis licensee no later than the first business day following delivery and must be paid as promptly as is reasonably practical, and in no event later than five business days following delivery. Any attempt by a ((marijuana)) cannabis licensee to delay payment on EFT transactions for any period of time beyond the minimum as is reasonably practical will be considered an unlawful attempt to purchase products on credit.
(4) Prepaid accounts. Both parties must keep accurate accounting records of prepaid accounts to ensure a cash deposit is not overextended, which is considered an extension of credit.
(5) Transactions using a money transmitter, under the following provisions:
(a) The money transmitter must be licensed by and in good standing with the Washington state department of financial institutions.
(b) A sale must be initiated by an irrevocable invoice or sale order before or at the time of delivery.
(c) Both parties must bear their respective costs associated with the money transmitter service.
(d) Both parties must maintain records of transactions and have the records readily available for the WSLCB to review.
(e) The funds transfer through the money transmitter must be initiated by the ((marijuana)) cannabis licensee no later than the first business day following delivery and must be paid as promptly as is reasonably practical, and in no event later than five business days following delivery. Any attempt by a ((marijuana)) cannabis licensee to delay payment on money transmitter transactions for any period of time beyond the minimum as is reasonably practical will be considered an unlawful attempt to purchase products on credit.
(6) Any transaction reported as having nonsufficient funds (NSF) will be considered an extension of credit. If a transaction is reported as NSF:
(a) The purchaser must pay the full amount of the transaction to the seller by 3:00 p.m. on the first business day following receipt of the NSF report.
(b) Until the NSF transaction is paid:
(i) The ((marijuana)) cannabis licensee who received the NSF transaction will not deliver any ((marijuana)) cannabis to the purchaser; and
(ii) It is the responsibility of the purchaser to not receive additional ((marijuana)) cannabis from any other ((marijuana)) cannabis licensee.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-115, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-117 Use of payment services by retailers. Retail licensees may use payment services to facilitate retail sales transactions under the following conditions:
(1) The payment service provider must:
(a) If applicable, be licensed and in good standing with the Washington state department of financial institutions; and
(b) Not have any interest, as a true party of interest or financier, in a ((marijuana)) cannabis licensee.
(2) The payment service provider may charge a convenience fee to customers provided that the customer has the option of canceling the transaction when informed of the convenience fee.
(3) The retail purchase price must be calculated in U.S. dollars.
(4) The ((marijuana)) cannabis excise tax required under RCW 69.50 .535 must be collected from the customer based on the U.S. dollar purchase price.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-117, filed 10/31/18, effective 12/1/18.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-135 Discontinue ((marijuana)) cannabis sales. (1) Notification: A licensee must notify the WSLCB's enforcement and edu-
cation division in writing if the licensee plans to stop doing business for more than ((thirty)) 30 days, or if the licensee plans to permanently discontinue ((marijuana)) cannabis sales.
(2) Discontinued business: Sale of ((marijuana)) cannabis inventory and stock after discontinuance of business. Notwithstanding any other provision of Title 69 RCW or 314 WAC , a producer, processor or retail licensee who permanently discontinues business for any reason shall dispose of the salable inventory and remaining stock to a WSLCB approved licensed business at fair market value. Sales below cost are prohibited. The WSLCB shall require tax expressed as a percent of the total price of the gross sales as reported on the profit and loss statement in the last published monthly report of the WSLCB. In the event of remaining inventory after sale, the licensee shall notify the enforcement and education division of the WSLCB. The enforcement division will establish conditions for destruction or arrange for the removal of product.
(3) Assumptions: Assumption of license and purchases by licensee of certain ((marijuana)) cannabis inventory and stock. In the case of a sale of business with a license, after obtaining the approval of the WSLCB and under the supervision of a representative of the WSLCB, the licensee may sell the entire inventory at a negotiated fair market price. Sales below cost are prohibited.
(4) Evictions. A licensee must notify the WSLCB's enforcement and education division immediately in writing upon notice of eviction from a licensed premises. Conditions to temporarily relocate and secure inventory will be established by the WSLCB.
(5) Abandoned ((marijuana)) cannabis inventory or product. In the event a licensee abandons any ((marijuana)) cannabis on the premises, the property owner or their designated representative should notify the enforcement and education division of the WSLCB. The enforcement division will work with the property owner to arrange for the removal and/or destruction of product. Any sales or distribution of ((marijuana) ) cannabis by an unlicensed person is subject to the criminal provisions of Title 69 RCW.
(6) Maintaining a licensed location. ((Marijuana)) Cannabis licenses are associated with a physical location. Persons operating without a WSLCB approved licensed location to produce, process, or sell ((farijuana)) cannabis will be discontinued.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-135, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-135, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-135, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-140 Death or incapacity of a ((maxijuana)) cannabis licensee. (1) The appointed guardian, executor, administrator, trustee, or assignee must notify the WSLCB's licensing and regulation division in the event of the death, incapacity, bankruptcy, or assignment for benefit of creditors of any licensee.
(2) The WSLCB may give the appointed guardian, executor, administrator, trustee, or assignee written approval to continue ((marijua-
na)) cannabis sales on the licensed business premises for the duration of the existing license and to renew the license when it expires.
(a) The person must be a resident of the state of Washington.
(b) A criminal background check may be required.
(3) When the matter is resolved by the court, the true party (ies) of interest must apply for a ((marijuana)) cannabis license for the business.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-140, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-140, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-140, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 13-21-104, filed 10/21/13, effective 11/21/13)

WAC 314-55-145 Are ((marijuana)) cannabis license fees refundable? When a license is suspended or canceled, or the licensed business is discontinued, the unused portion of the ((marijuana)) cannabis license fee will not be refunded.
[Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-145, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-147 What hours may a ((marijuana)) cannabis retailer licensee conduct sales? A ( (marijuana)) cannabis retailer licensee may sell usable ((marijuana, marijuana)) cannabis, cannabis concentrates, ((marijuana-infused)) cannabis-infused products, and ((marijuana) ) cannabis paraphernalia between the hours of 8 a.m. and 12 a.m.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, S 314-55-147, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW $69.50 .325,69.50 .331,69.50 .342$, 69.50.345. WSR 13-21-104, § 314-55-147, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 13-21-104, filed 10/21/13, effective 11/21/13)

WAC 314-55-150 What are the forms of acceptable identification? (1) Following are the forms of identification that are acceptable to verify a person's age for the purpose of purchasing ((marijuana)) cannabis:
(a) Driver's license, instruction permit, or identification card of any state, or province of Canada, from a U.S. territory or the District of Columbia, or "identicard" issued by the Washington state department of licensing per RCW 46.20.117;
(b) United States armed forces identification card issued to active duty, reserve, and retired personnel and the personnel's dependents, which may include an embedded, digital signature in lieu of a visible signature;
(c) Passport;
(d) Merchant Marine identification card issued by the United States Coast Guard; and
(e) Enrollment card issued by the governing authority of a federally recognized Indian tribe located in Washington, if the enrollment card incorporates security features comparable to those implemented by the department of licensing for Washington driver's licenses.
(2) The identification document is not acceptable to verify age if expired.
[Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-150, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-155 Advertising requirements and promotional itemsCoupons, giveaways, etc. The following provisions apply in addition to the requirements and restrictions in RCW 69.50.369.
(1) Advertising generally. The following requirements apply to all advertising by ((marijuana)) cannabis licensees in Washington state.
(a) All ((marijuana)) cannabis advertising and labels of useable ((marijuana, marijuana)) cannabis, cannabis concentrates, and ((mari-juana-infused)) cannabis-infused products sold in the state of Washington must not contain any statement, or illustration that:
(i) Is false or misleading;
(ii) Promotes over consumption;
(iii) Represents the use of ((marijuana)) cannabis has curative or therapeutic effects;
(iv) Depicts a child or other person under legal age to consume ((marijuana)) cannabis, or includes:
(A) The use of objects, such as toys, inflatables, movie characters, cartoon characters suggesting the presence of a child, or any other depiction or image designed in any manner to be likely to be appealing to youth or especially appealing to children or other persons under legal age to consume ((marijuana)) cannabis; or
(B) Is designed in any manner that would be especially appealing to children or other persons under ((tenty-one)) 21 years of age.
(b) No ((fmarijuana)) cannabis licensee shall place or maintain, or cause to be placed or maintained, an advertisement of a ((marijuana)) cannabis business or ((marijuana)) cannabis product, including ((marijuana)) cannabis concentrates, useable ((marijuana)) cannabis, or ((marijuana-infused)) cannabis-infused product:
(i) In any form or through any medium whatsoever within ((one thousand)) 1,000 feet of the perimeter of a school grounds, playground, recreation center or facility, child care center, public park, library, or a game arcade admission to which it is not restricted to persons aged ((twenty-one)) 21 years or older unless the ((one thousand)) 1,000 minimum distance requirement has been reduced by ordi-
nance in the local jurisdiction where the licensed retailer is located and the licensed retailer is located within ((ene thousand)) 1,000 feet of a restricted location listed in this paragraph;
(ii) On or in a private vehicle, public transit vehicle, public transit shelter, bus stop, taxi stand, transportation waiting area, train station, airport, or any similar transit-related location;
(c) All advertising for ((marijuana)) cannabis businesses or ((marijuana)) cannabis products, regardless of what medium is used, must contain text stating that ((marijuana)) cannabis products may be purchased or possessed only by persons ((twenty-one)) 21 years of age or older. Examples of language that conforms to this requirement include, but are not limited to: "21+," "for use by persons 21 and over only," etc.
(d) A ((marijuana)) cannabis licensee may not engage in advertising or marketing that specifically targets persons residing out of the state of Washington.
(2) Outdoor advertising. In addition to the requirements for advertising in subsection (1) of this section, the following restrictions and requirements apply to outdoor advertising by ((marijuana)) cannabis licensees:
(a) Except for the use of billboards as authorized under RCW 69.50.369 and as provided in this section, licensed ((flarijuana)) cannabis retailers may not display any outdoor signage other than two separate signs identifying the retail outlet by the licensee's business name or trade name, stating the location of the business, and identifying the nature of the business. Both signs must be affixed to a building or permanent structure and each sign is limited to ((six= teen hundred)) 1,600 square inches.
(i) All text on outdoor signs, including billboards, is limited to text that identifies the retail outlet by the licensee's business or trade name, states the location of the business, and identifies the type or nature of the business.
(ii) No outdoor advertising signs, including billboards, may contain depictions of ((marijuana)) cannabis plants or ((marijuana)) cannabis products. Logos or artwork that do not contain depictions of ((marijuana)) cannabis plants or ((marijuana)) cannabis products as defined in this section are permissible.
(A) A depiction of a ((marijuana)) cannabis plant means an image or visual representation of a cannabis leaf, plant, or the likeness thereof that explicitly suggests or represents a cannabis leaf or plant.
(B) A depiction of a ((marijuana)) cannabis product means an image or visual representation of useable ((marijuana, marijuana-infused) ) cannabis, cannabis-infused products, or ((marijuana)) cannabis concentrates, or an image that indicates the presence of a product, such as smoke, etc.
(iii) Stating the location of the business may include information such as the physical address or location, directional information, website address, email address, or phone number of the licensed business.
(iv) Identifying the nature of the business may include information related to the operation of the business, what the business is engaged in, or the goods the business offers for sale.
(v) Double-sided signs or signs with text visible on opposite sides are permissible and count as a single sign so long as the sign is contained in or affixed to a single structure.
(b) No ((farijuana)) cannabis licensee may use or employ a commercial mascot outside of, and in proximity to, a licensed ((marijuana)) cannabis business.
(c) Outdoor advertising is prohibited on signs and placards in arenas, stadiums, shopping malls, fairs that receive state allocations, farmers markets, and video game arcades, whether any of the foregoing are open air or enclosed, but not including any such sign or placard located at an adult only facility.
(d) The restrictions in this section and RCW 69.50.369 do not apply to outdoor advertisements at the site of an event to be held at an adult only facility that is placed at such site during the period the facility or enclosed area constitutes an adult only facility, but must not be placed there more than ((fourteen)) 14 days before the event, and that does not advertise any ((marijuana)) cannabis product other than by using a brand name, such as the business or trade name or the product brand, to identify the event. Advertising at adult only facilities must not be visible from outside the adult only facility.
(e) A sign affixed to the licensed premises or in the window of a licensed premises indicating the location is open for business, closed for business, the hours of operation, that the licensed location has an ATM inside, or other similar informational signs not related to the products or services of the ((marijuana)) cannabis business are not considered advertising for the purposes of this section.
(f) "Adopt-a-Highway" signs erected by the Washington state department of transportation under a current valid sponsorship with the department of transportation are not considered advertising for the purposes of this section.
(3) Advertising placed on windows within the premises of a licensed ((marijuana)) cannabis retail store facing outward must meet the requirements for outdoor advertising as provided in RCW 69.50.369 and this section.
(4) Promotional items such as giveaways, coupons, and distribution of branded or unbranded merchandise are banned. For the purposes of this section, a "giveaway" does not include representative samples of products (edible products and topicals only) carried by a licensed retailer that are not infused with ((marijuana)) cannabis and are offered to customers on licensed ((marijuana)) cannabis retail premises for sampling purposes only.
(5) ((Marijuana)) Cannabis retail licensees holding a medical ((marijuana)) cannabis endorsement may donate product to qualifying patients or designated providers who hold a valid recognition card. Retail licensees may not advertise "free" or "donated" product.
(6) Except for outdoor advertising under subsection (2) of this section, all advertising must contain the following warnings that must be in type size at least ((ten)) 10 percent of the largest type used in the advertisement:
(a) "This product has intoxicating effects and may be habit forming.";
(b) "((Marijuana)) Cannabis can impair concentration, coordination, and judgment. Do not operate a vehicle or machinery under the influence of this drug.";
(c) "There may be health risks associated with consumption of this product."; and
(d) "For use only by adults ((twenty-one)) $\underline{21}$ and older. Keep out of the reach of children."
(7) For the purposes of this section, the following definitions apply:
(a) "Adult only facility" means:
(i) A location restricted to persons age ((twenty-one)) 21 and older by the WSLCB or classified by the WSLCB as off limits to persons under ((twenty-one)) 21 years of age; or
(ii) A venue restricted to persons age ((twenty-one)) 21 and older and where persons under ((twenty-one)) 21 years of age are prohibited from entering or remaining, including employees and volunteers.
(b) "Billboard" means a permanent off-premises sign in a fixed location used, in whole or in part, for the display of off-site commercial messages with a minimum size of five feet in height by ((eleven)) 11 feet in width.
(c) "Off-premises sign" means a sign relating, through its message and content, to a business activity, product, or service not available on the premises upon which the sign is erected.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-155, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342, 69.50.345, and 69.50.369. WSR 18-05-001, § 314-55-155, filed 2/7/18, effective 3/10/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-155, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-155, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-160 Objections to ((marijuana)) cannabis license applications. (1) How can persons, cities, counties, tribal governments, or port authorities object to the issuance of a (marijuana)) cannabis license? Per RCW 69.50.331, the WSLCB will notify cities, counties, tribal governments, and port authorities of the following types of ((marijuana)) cannabis applications. In addition to these entities, any person or group may comment in writing to the WSLCB regarding an application.

$\left.$| Type of application | Entities the WSLCB <br> will/may notify |
| :--- | :--- |
| - Applications for an |  |
| annual ((marijuana)) |  |
| cannabis license at a |  |
| new location. | Cities and counties in <br> which the premises is <br> located will be <br> notified. <br> Tribal governments <br> and port authorities in <br> which the premises is <br> located may be <br> notified. |
| - Applications to change |  |
| the class of an existing |  |
| annual ((marijuana)) |  |
| cannabis license. |  |$\quad \right\rvert\,$| -Changes of ownership <br> at existing licensed <br> premises. |
| :--- |
| Cities and counties in <br> which the premises is <br> located will be <br> notified. |


| Type of application | Entities the WSLCB <br> will/may notify |
| :--- | :--- |
|  | Tribal governments <br> and port authorities in <br> which the premises is <br> located may be <br> notified. |

(2) What will happen if a person or entity objects to a ((marijuana)) cannabis license application? When deciding whether to issue or deny a ((marijuana)) cannabis license application, the WSLCB will give substantial weight to input from governmental jurisdictions in which the premises is located based upon chronic illegal activity associated with the applicant's operations of the premises proposed to be licensed or the applicant's operation of any other licensed premises; and other persons or groups. Note: Per RCW 69.50.331, the WSLCB shall not issue a new ((marijuana)) cannabis license if any of the following are within ((one thousand)) 1,000 feet of the premises to be licensed: Any elementary or secondary schools, playgrounds, recreation centers or facilities, child care centers, public parks, public transit centers, libraries, game arcade where admission is not restricted to persons ((もwenty-one)) 21 years of age or older.
(a) If the WSLCB contemplates issuing a license over the objection of a governmental jurisdiction in which the premises is located, the government subdivision may request an adjudicative hearing under the provisions of the Administrative Procedure Act, chapter 34.05 RCW. If the WSLCB, in its discretion, grants the governmental jurisdiction(s) an adjudicative hearing, the applicant will be notified and given the opportunity to present evidence at the hearing.
(b) If the WSLCB denies a ((marijuana)) cannabis license application based on the objection from a governmental jurisdiction, the applicant(s) may either:
(i) Reapply for the license no sooner than one year from the date on the final order of denial; or
(ii) Submit a written request on a form provided by the WSLCB for an adjudicative hearing under the provisions of the Administrative Procedure Act, chapter 34.05 RCW. The request must be received within ((もwenty)) 20 days of the date the intent to deny notification was mailed.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-160, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-160, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

> WAC 314-55-165 Objections to ((marijuana)) cannabis license renewals. (1) How can local cities, counties, tribal governments, or port authorities object to the renewal of a ((marijuana)) cannabis license?
(a) The WSLCB will give governmental jurisdictions approximately ((ninety)) 90 days written notice of premises that hold annual ((marijuana)) cannabis licenses in that jurisdiction that are up for renewal.
(b) Per RCW 69.50.331, if a county, city, tribal government, or port authority wants to object to the renewal of a ((marijuana)) cannabis license in its jurisdiction, it must submit a letter to the WSLCB detailing the reason(s) for the objection and a statement of all facts on which the objections are based.
(c) The county, city, tribal government, or port authority may submit a written request to the WSLCB for an extension for good cause shown.
(d) This letter must be received by the WSLCB at least ((thirty)) 30 days before the ((marijuana)) cannabis license expires. The objection must state specific reasons and facts that show issuance of the ((marijuana)) cannabis license at the proposed location or to the applicant business how it will detrimentally impact the safety, health, or welfare of the community.
(e) If the objection is received within ((thirty)) 30 days of the expiration date or the licensee has already renewed the license, the objection will be considered as a complaint and possible license revocation may be pursued by the enforcement division.
(f) Objections from the public will be referred to the appropriate city, county, tribal government, or port authority for action under subsection (2) of this section. Upon receipt of the objection, the WSLCB's licensing and regulation division will acknowledge receipt of the objection(s) and forward to the appropriate city, county, tribal government, or port authority. Such jurisdiction may or may not, based on the public objection, request nonrenewal.
(2) What will happen if a city, county, tribal government, or port authority objects to the renewal of a ((marijuana)) cannabis license? The WSLCB will give substantial weight to a city, county, tribal government, or port authority objection to a ((marijuanz)) cannabis license renewal of a premises in its jurisdiction based upon chronic illegal activity associated with the licensee's operation of the premises. Based on the jurisdiction's input and any information in the licensing file, the WSLCB will decide to either renew the ((marijuana)) cannabis license, or to pursue nonrenewal.

| (a) WSLCB decides to <br> renew the ((marijuana) <br> cannabis | (b) WSLCB decides to <br> pursue nonrenewal of the <br> ((marijuana)) cannabis <br> (icense: |
| :--- | :--- |
| license: |  |


| (a) WSLCB decides to renew the ((marijuana)) cannabis license: | (b) WSLCB decides to pursue nonrenewal of the ((marijuana)) cannabis license: |
| :---: | :---: |
| (ii) The jurisdiction(s) may contest the renewal and request an adjudicative hearing under the provisions of the Administrative Procedure Act (chapter 34.05 RCW) by submitting a written request on a form provided by the WSLCB. The request must be received within twenty days of the date the intent to renew notification was mailed. If the WSLCB, in its discretion, grants the governmental jurisdiction(s) an adjudicative hearing, the applicant will be notified and given the opportunity to present evidence at the hearing. | (ii) The licensee may contest the nonrenewal action and request an adjudicative hearing under the provisions of the Administrative Procedure Act (chapter 34.05 RCW) by submitting a written request on a form provided by the WSLCB. The request must be received within twenty days of the date the intent to deny notification was mailed. <br> (iii) If the licensee requests a hearing, the governmental jurisdiction will be notified. <br> (iv) During the hearing and any subsequent appeal process, the licensee is issued a temporary operating permit for the ((marijuana)) cannabis license until a final decision is made. |

[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-165, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-165, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-185 WSLCB right to inspect premises or vehicles associated with a license to produce, process, sell, research, or transport ((marijuana)) cannabis. (1) The following must be available for inspection at all times by an enforcement officer of the WSLCB:
(a) All licensed premises used in the production, processing, storage, transportation, research, or sale of ((marijuana)) cannabis, useable ((marijuana, marijuana)) cannabis, cannabis concentrates, ((marijuana-infused)) cannabis-infused products, or any premises or parts of premises used or in any way connected, physically or otherwise, with the licensed business;
(b) Any vehicle assigned for the purpose of transporting ((marijuana)) cannabis, useable ((marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products at any licensed location, or while en route during transportation;
(c) Records as outlined in this chapter; and
(d) ((Marijuana)) Cannabis, useable ((marijuana)) cannabis, ((marijuana)) cannabis concentrates, or ((marijuana-infused)) canna-bis-infused products on the licensed premises for the purpose of ana-
lyzing samples (the licensee will be given a receipt for any product removed from the premises for this purpose).
(2) Every person being on a licensed premises or within a transporting vehicle, or having charge thereof, must admit an enforcement officer of the WSLCB demanding to enter therein in pursuance of this section in the execution of his/her duty, and must not obstruct or attempt to obstruct the entry of such officer, or refuse to allow an officer to examine the premises, vehicles, records, and products subject to this section of the licensee.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-185, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-185, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-200 How will the WSLCB identify ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products during checks of licensed businesses? Officers shall identify ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products during on-site inspections of licensed producers, processors, and retailers of ((marijuana)) cannabis by means of product in the traceability system, and/or by observation based on training and experience. Products that are undetermined to be ((marijuana, usable marijuana)) cannabis, useable cannabis, and ((marijuana-infused)) cannabis-infused products will be verified by the following:
(1) Officers may take a sample large enough for testing purposes;
(2) Field test kits may be used if available and appropriate for the type of product being verified; and
(3) Those samples not able to be tested with a field test kit may be tested through the Washington state toxicology or crime lab.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-200, filed 5/18/16, effective 6/18/16; WSR 14-07-116, § 314-55-200, filed 3/19/14, effective 4/19/14.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-210 Will the WSLCB seize or confiscate ((marijuana, marijuana)) cannabis, cannabis concentrates, ((usable marijuana)) useable cannabis, and ((marijuana-infused)) cannabis-infused products? The WSLCB may seize, destroy, confiscate, or place an administrative hold on ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabisinfused products under the following circumstances:
(1) During an unannounced or announced administrative search or inspection of licensed locations, areas of unlicensed locations used for business or commercial purposes, or vehicles involved in the
transportation of ((marijuana)) cannabis products, where any product was found to be in excess of product limitations set forth in WAC 314-55-075, 314-55-077, and 314-55-079.
(2) Any product not properly logged in inventory records or untraceable product required to be in the traceability system.
(3) ((Marijuana, marijuana)) Cannabis, cannabis concentrates, ((usable marijuana)) useable cannabis, and ((marijuana-infused)) can-nabis-infused product that are altered or not properly packaged and labeled in accordance with WAC 314-55-105.
(4) During a criminal investigation, officers shall follow seizure laws detailed in RCW 69.50.505 and any other applicable criminal codes.
(5) The WSLCB may destroy any ((marijuana, marijuana)) cannabis, cannabis concentrate, ((usable marijuana)) useable cannabis, and/or ((marijuana-infused)) cannabis-infused products in its possession that is not identifiable through the Washington ((marijuana)) cannabis traceability system or otherwise in a form that is not compliant with Washington's ((marijuana)) cannabis statutes or rules, chapters 69.50 RCW and 314-55 WAC.
(6) WSLCB officers may order an administrative hold of ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products to prevent destruction of evidence, diversion or other threats to public safety, while permitting a licensee to retain its inventory pending further investigation, pursuant to the following procedure:
(a) If during an investigation or inspection of a licensee, a WSLCB officer develops reasonable grounds to believe certain ( (marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products constitute evidence of acts in violation of the state laws or rules, or otherwise constitute a threat to public safety, the WSLCB officer may issue a notice of administrative hold of any such ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, or ((marijuana-infused)) cannabis-infused products. The notice of administrative hold shall provide a documented description of the ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, or ((marijuana-infused)) cannabisinfused products to be subject to the administrative hold.
(b) The licensee shall completely and physically segregate the ( (marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, and ((marijuana-infused)) cannabis-infused products subject to the administrative hold in a limited access area of the licensed premises under investigation, where it shall be safeguarded by the licensee. Pending the outcome of the investigation and any related disciplinary proceeding, the licensee is prohibited from selling, giving away, transferring, transporting, or destroying the ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, and ((marijuana-infused)) cannabis-infused products subject to the administrative hold.
(c) Nothing herein shall prevent a licensee from the continued cultivation or harvesting of the ((marijuana)) cannabis subject to the administrative hold. All ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, and ((marijuana-infused) ) cannabis-infused products subject to the administrative hold must be put into separate harvest batches from product not subject to the administrative hold.
(d) Following an investigation, the WSLCB may lift the administrative hold, order the continuation of the administrative hold, or seek a final agency order for the destruction of the ((marijuana, usa= ble maxijuana, marijuana)) cannabis, useable cannabis, cannabis concentrate, and ((marijuana-infused)) cannabis-infused products.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-210, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-210, filed 5/20/15, effective 6/20/15; WSR 14-07-116, § 314-55-210, filed 3/19/14, effective 4/19/14.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-220 What is the process once the WSLCB summarily orders ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products of a ((marijuana)) cannabis licensee to be destroyed? (1) The WSLCB may issue an order to summarily destroy ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products after the WSLCB's enforcement division has completed a preliminary staff investigation of the violation and upon a determination that immediate destruction of ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) can-nabis-infused products is necessary for the protection or preservation of the public health, safety, or welfare.
(2) Destruction of any ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products under this provision shall take effect immediately upon personal service on the licensee or employee thereof of the summary destruction order unless otherwise provided in the order.
(3) When a license has been issued a summary destruction order by the WSLCB, an adjudicative proceeding for the associated violation or other action must be promptly instituted before an administrative law judge assigned by the office of administrative hearings. If a request for an administrative hearing is timely filed by the licensee, then a hearing shall be held within ((nincty)) 90 days of the effective date of the summary destruction ordered by the WSLCB.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-220, filed 5/18/16, effective 6/18/16; WSR 14-07-116, § 314-55-220, filed 3/19/14, effective 4/19/14.]

AMENDATORY SECTION (Amending WSR 16-16-050, filed 7/27/16, effective 8/27/16)

WAC 314-55-225 ((Marijuana)) Cannabis recalls. (1) Definitions.
For the purposes of this section, the following definitions apply:
(a) "Affected product" means ( (marijuana, usable maxijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((mari-juana-infused)) cannabis-infused products subject to a recall.
(b) "Affected licensee" means a licensee whose ((marijuana, usable marijuana, marijuana) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-imfused)) cannabis-infused products are subject to a recall. More than one licensee may be an affected licensee in a recall.
(2) Exempt market withdrawals.
(a) A licensee may withdraw from the market ( (marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products by its own determination for reasons that do not pose a risk to consumers such as for aesthetic reasons or other similar deficiencies in product or packaging.
(b) If a licensee initiates a market withdrawal for a reason that does not pose a risk to consumers, the licensee must notify the WSLCB by contacting the local WSLCB enforcement officer assigned to the local area within ( (forty-eight)) 48 hours of beginning the market withdrawal. Licensees withdrawing ((marijuana, usable marijuana, marijuana) ) cannabis, useable cannabis, cannabis concentrates, or ((farijua-na-infused) ) cannabis-infused products under this subsection (2), for reasons other than risk to consumers, are exempt from the remaining requirements of this section.
(3) (a) When a recall is required. A recall is required when circumstances exist that pose a risk to consumers. Factors that contribute to a determination of a recall situation include, but are not limited to, the following:
(i) Evidence that pesticides not approved by the board are present on or in ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) can-nabis-infused products above the action levels prescribed by board rule;
(ii) Evidence that residual solvents are present on or in ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products at levels above the action levels prescribed by board rule; or
(iii) Evidence of another condition that poses a risk to consumers including, but not limited to, ingredients in ( (marijuana=in= fused) ) cannabis-infused products that are unfit for human consumption.
(b) Licensee-initiated recalls.
(i) If a licensee initiates a recall due to a condition that poses a risk to consumers and would make a recall appropriate under this subsection (3), the licensee must:
(A) Immediately notify the local WSLCB enforcement officer; and
(B) Secure, isolate, and prevent the distribution of all ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products that may have been exposed to the condition warranting the recall. The licensee is prohibited from destroying any affected product prior to notifying the ( (WSCLB [WSLCB]) ) WSLCB and coordinating with the local WSLCB officer on destruction activities.
(ii) If the WSLCB determines the licensee fails to engage in recall efforts that meet the urgency of the risk to consumers, the WSLCB may seek a board-directed recall as provided in this section depending on the circumstances.
(c) WSLCB investigation-initiated recalls.
(i) If the WSLCB determines that a recall is not appropriate after an investigation, the WSLCB enforcement division may release ad-
ministrative holds placed on ( (marijuana, usable marijuana, marijuana) ) cannabis, useable cannabis, cannabis concentrates, or ((marijua-na-infused)) cannabis-infused products as part of the investigation as appropriate, unless an administrative hold is necessary under a continuing investigation.
(ii) If the WSLCB determines that a recall is appropriate after an investigation, the WSLCB notifies the board and requests the board issue a recall. If the board issues a recall, the WSLCB notifies the affected licensee that is the source of the issue giving rise to a recall.
(d) Recall plans. All licensees must develop a recall plan within ((sixty)) 60 days of the effective date of this section that sets the procedures the licensee will follow in the event of a recall of the licensee's product or products under the licensee's control. If a licensee becomes an affected licensee as part of a recall and the affected licensee distributed affected product to consumers or to retailers, the affected licensee must immediately notify all licensees that received affected product, and issue a press release and other appropriate public notification to inform consumers of the recall and identifying information about the affected product recalled.
(i) A recall plan must include, at a minimum, the following:
(A) Designation of a member of the licensee's staff who serves as the licensee's recall coordinator;
(B) Procedures for identifying and isolating product to prevent or minimize its distribution to consumers;
(C) Procedures to retrieve and destroy product; and
(D) A communications plan to notify those affected by the recall, including:
(I) How the affected licensee will notify other licensees in possession of product subject to the recall; and
(II) The use of press releases and other appropriate notifications to ensure consumers are notified of the recall and affected product information if the affected product was distributed to consumers.
(ii) A recall must follow the procedures outlined in the recall plan unless otherwise agreed by the WSLCB and the licensee. The affected licensee must ensure recall procedures are conducted to maximize recall of affected product and minimize risks to consumers.
(e) Destruction of affected product. An affected licensee must coordinate destruction of affected product with the local WSLCB enforcement officer and allow ((WSCIB [WSLCB])) WSLCB enforcement to oversee the destruction of affected product recalled to ensure the destruction of affected product that poses risks to consumers.
(f) Recall reports and audit. The affected licensee must track the total amount of affected product and the amount of affected product returned to the affected licensee as part of the recall effort. The affected licensee must report to the WSLCB periodically on the progress of the recall efforts. The periodic reports must occur at a minimum of once a week or as otherwise specified and agreed to by the WSLCB and the affected licensee in the recall plan.
( $g$ ) Recall closure. If the WSLCB determines that the recall efforts are successful and risks to public health and safety are no longer present, the WSLCB may recommend closure of the recall to the board.
(4) Board-directed recall.
(a) Upon the recommendation by the WSLCB enforcement division, the board may issue a directed recall if:
(i) The affected licensee does not comply with a recall under subsection (3) of this section;
(ii) The affected licensee does not comply with the recall plan or recall reporting requirements under subsection (3) of this section; or
(iii) The WSLCB enforcement division determines that affected product may be diverted or is being diverted from the licensed business, or another circumstance that makes the affected licensee's destruction of the product inadvisable or a risk to consumers.
(b) If the board issues a directed recall, the WSLCB will notify consumers of the recall and all licensees that may possess product affected by the recall if notice has not yet occurred.
(c) Under a directed recall, the WSLCB enforcement division may seek an order for destruction of the affected product from the board.
(i) If the board issues an order for destruction, the WSLCB enforcement division may seize and conduct the destruction of affected product.
(ii) An order for destruction will include notice to the licensee and opportunity for hearing before destruction, unless there is evidence of an immediate danger to public health, safety, or welfare to justify an immediate order for destruction, with an opportunity for an expedited hearing after the destruction.
(d) If a destruction order is issued and the WSLCB seizes product affected by the recall and conducts the destruction of the product, the affected licensee may be responsible for reimbursing the WSLCB for costs associated with product destruction.
(e) If the board finds that an immediate danger to the public health, safety, or welfare requires immediate WSLCB action, a licensee may also be subject to summary suspension under RCW 66.08.150(4).
(5) The WSLCB will maintain a recall web page on its website of all current and closed recalls of record.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-16-050, § 314-55-225, filed 7/27/16, effective 8/27/16.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-230 What are the procedures the WSLCB will use to destroy or donate ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products to law enforcement? (1) The WSLCB may require a ((marijuana)) cannabis licensee to destroy ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products found in a licensed establishment to be in excess of product limits set forth in WAC 314-55-075, 314-55-077, and 314-55-079.
(2) Destruction of seized ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, ((marijuanainfused)) cannabis-infused products, or confiscated ((marijuana)) cannabis after case adjudication, will conform with the WSLCB evidence policies, to include the option of donating ((marijuana, usable marijuana, marijuana)) cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabis-infused products, set for destruc-
tion, to local and state law enforcement agencies for training purposes only.
(3) ((Marijuana, usable marijuana, marijuana)) Cannabis, useable cannabis, cannabis concentrates, and ((marijuana-infused)) cannabisinfused products set for destruction shall not reenter the traceability system or market place.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-230, filed 5/18/16, effective 6/18/16; WSR 14-07-116, § 315-55-230 (codified as WAC 314-55-230), filed 3/19/14, effective 4/19/14.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-310 Transportation license. (1) A transportation license allows the licensee to physically transport or deliver ( (marijuana, marijuana)) cannabis, cannabis concentrates, and ((marijuanainfused) ) cannabis-infused products between licensed ((marijuana)) cannabis businesses within Washington state. The application fee for the transportation license is ((two hundred fifty dollars)) \$250 and the annual fee is ((ene thousand three hundred dollars)) \$1,300.
(2) Applicants for the transportation license must submit the following information:
(a) Personal/criminal history forms for all true parties of interest (see WAC 314-55-035);

The criminal history background check will consist of completion of a personal/criminal history form provided by the WSLCB and submission of fingerprints to a vendor approved by the WSLCB. The applicant will be responsible for paying all fees required by the vendor for fingerprinting. These fingerprints will be submitted to the Washington state patrol and the Federal Bureau of Investigation for comparison to their criminal records. The applicant will be responsible for paying all fees required by the Washington state patrol and the Federal Bureau of Investigation.
(b) Documents showing the right to the physical location to be licensed (purchase and sale agreement or lease in the name of the applicant);
(c) Copies of the current UTC common carrier permits. All vehicles and trailers must also be permitted by UTC as common carriers;
(d) Corporate information form or limited liability information form as applicable;
(e) Proof of insurance.
(i) Licensees shall provide insurance coverage as set out in this section. The intent of the required insurance is to protect the consumer should there be any claims, suits, actions, costs, damages or expenses arising from any negligent or intentional act or omission of the licensees. Licensees shall furnish evidence in the form of a certificate of insurance satisfactory to the WSLCB that insurance, in the following kinds and minimum amounts, has been secured. Failure to provide proof of insurance, as required, may result in license cancellation.
(ii) Commercial general liability insurance: The licensee shall at all times carry and maintain commercial general liability insurance and if necessary, commercial umbrella insurance for bodily injury and
property damage arising out of licensed activities. This insurance shall cover such claims as may be caused by any act, omission, or negligence of the licensee or its officers, agents, representatives, assigns, or servants. The insurance shall also cover bodily injury, including disease, illness and death, and property damage arising out of the licensee's premises/operations, products, and personal injury. The limits of liability insurance shall not be less than ((one million dollars)) \$1,000,000.
(iii) Insurance carrier rating: The insurance required in (e)(i) of this subsection shall be issued by an insurance company authorized to do business within the state of Washington. Insurance must be placed with a carrier that has a rating of A - Class VII or better in the most recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with chapters 48.15 RCW and 284-15 WAC.
(iv) Additional insured. The state and its employees, agents, and volunteers shall be named as an additional insured on all general liability, umbrella, and excess insurance policies. All policies shall be primary over any other valid and collectable insurance.
(3) Transport manifest. A complete printed transport manifest on a form provided by the WSLCB containing all information required by the WSLCB must be kept with the product at all times.
(4) Records of transportation. Records of all transportation must be kept for a minimum of three years at the licensee's location and are subject to inspection if requested by an employee of the WSLCB or local law enforcement:
(a) Copies of transportation manifests for all deliveries;
(b) A transportation log documenting the chain of custody for each delivery to include driver(s) and vehicle(s) associated with each delivery;
(c) Bank statements and canceled checks for any accounts relating to the licensed business;
(d) Accounting and tax records related to the licensed business;
(e) Records of all financial transactions related to the licensed business, including invoices, contracts and/or agreements for services performed or received that relate to the licensed business;
(f) All employee records, to include training.
(5) Transportation of product. ((Marijuana)) Cannabis or ((marijuana)) cannabis products that are being transported must meet the following requirements:
(a) Only the transportation licensee or an employee of the transportation licensee who is at least ((tenty-one)) 21 years of age may transport product. All drivers must carry a valid Washington driver's license with the proper endorsements when operating a vehicle in the transportation of product. All passengers in the vehicle transporting ((marijuana)) cannabis or ((marijuana)) cannabis products must be employees of the transportation licensee who are at least ((twenty-one)) 21 years of age;
(b) ((Marijuana)) Cannabis or ((marijuana)) cannabis products must be in a sealed package or container approved by the WSLCB pursuant to WAC 314-55-105;
(c) Sealed packages or containers cannot be opened during transport;
(d) ((Marijuana)) Cannabis or ((marijuana)) cannabis products must be in a locked, safe and secure storage compartment that is secured to the inside body/compartment of the vehicle transporting the ((marijuana)) cannabis or ((marijuana)) cannabis products;
(e) Any vehicle transporting ((marijuana)) cannabis or ((marijuana)) cannabis products must be delivered or returned to the shipper within ((forty-cight)) 48 hours from the time of pickup;
(f) Live plants may be transported in a fully enclosed, windowless locked trailer, or in a secured area within the inside body/ compartment of a van or box truck. A secured area is defined as an area where solid or locking metal petitions, cages, or high strength shatterproof acrylic can be used to create a secure compartment in the fully enclosed van or box truck. The secure compartment in the fully enclosed van or box truck must be free of windows. Live plants may not be transported in the bed of a pickup truck, a sports utility vehicle, or passenger car.
(6) For purposes of this chapter, any vehicle assigned for the purposes of transporting ((marijuana)) cannabis, useable ((marijuana, marijuana)) cannabis, cannabis concentrates, or ((marijuana-infused)) cannabis-infused products shall be considered an extension of the licensed premises and subject to inspection by enforcement officers of the WSLCB. Vehicles assigned for transportation may be stopped and inspected by a WSLCB enforcement officer at any licensed location, or while en route during transportation.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-310, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-310, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-410 Cooperatives. (1) A cooperative may be formed by qualifying patients and/or designated providers to share responsibility for growing and processing ((marijuana)) cannabis only for the medical use of the members of the cooperative. A cooperative must meet the following criteria:
(a) All cooperative members must be at least ((もwenty-one)) 21 years of age. The designated provider of a qualifying patient under ((twenty-one)) 21 years of age may be a member of a cooperative on the qualifying patient's behalf;
(b) All cooperative members must hold valid recognition cards as defined by RCW 69.51A.010;
(c) No more than four qualifying patients or designated providers may become members of a cooperative;
(d) Qualifying patients or designated providers may only participate in one cooperative;
(e) A cooperative member may only grow plants in the cooperative and may not grow plants elsewhere;
(f) Cooperative members must participate in growing plants. Cooperative members must provide nonmonetary resources and assistance in order to participate. A monetary contribution or donation is not considered assistance;
(g) Cooperative members may grow up to the total amount of plants for which each cooperative member is authorized on his or her recognition card. At the location, the qualifying patients or designated providers may possess the amount of useable ((marijuana)) cannabis that
can be produced with the number of plants permitted, but no more than ((seventy-two)) 72 ounces;
(h) Cooperative members may not sell, donate, or otherwise provide ((marijuana, marijuana)) cannabis, cannabis concentrates, useable ((marijuana)) cannabis, or other ((marijuana-infused)) cannabis-infused products to a person who is not a member of the cooperative;
(i) A cooperative may not be located within a one mile radius of a ((marijuana)) cannabis retailer;
(j) A cooperative must be located at the domicile of one of the cooperative members. Only one cooperative may be located per property tax parcel; and
(k) To obscure public view of the premises, outdoor ((marijuana)) cannabis production must be enclosed by a sight obscure wall or fence at least eight feet high.
(2) People who wish to form a cooperative must register the location with the WSLCB. The location registered is the only location where cooperative members may grow or process ((marijuana)) cannabis. The following is required to register a cooperative:
(a) Submit a completed ((Marijuana)) Cannabis Cooperative Registration Form;
(b) Submit copies of each person's recognition card who is seeking to be part of the registered cooperative;
(c) Submit a deed, lease, rental agreement, or other document establishing ownership or control to the property where the cooperative is to be located. If the property is leased or rented, a sworn statement from the property owner granting permission to engage in a cooperative must also be submitted that includes a telephone number and address where the owner can be contacted for verification;
(d) Submit a sketch outlining the location where the ((marijuana)) cannabis is planned to be grown.
(3) WSLCB will contact the primary contact listed for each registered cooperative on an annual basis to ensure validity of recognition cards and to confirm the status, whether active or inactive, of the cooperative. If the WSLCB finds that the cooperative no longer meets the criteria required under this section, the WSLCB may not renew the cooperative registration.
(4) WSLCB may inspect a cooperative between the hours of 8:00 a.m. and 8:00 p.m. unless otherwise agreed upon by cooperative members and WSLCB staff.
(5) If a person or persons seeking to register the cooperative fails to meet the requirements of a registered cooperative as provided in this section, the WSLCB will deny the cooperative registration.
(6) If the WSLCB finds a registered cooperative violated the requirements of this section, the WSLCB will revoke the cooperative's registration.
(7) A person may request an administrative hearing to contest a denial of registration, nonrenewal, or a revocation of a cooperative's registration under this section as provided in chapter 34.05 RCW.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-410, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342, 69.50.345, 2016 c 170, 2016 c 171, and 2016 c 17. WSR 16-19-102, § 314-55-410, filed 9/21/16, effective 10/22/16. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-410, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-415 What are the recordkeeping and reporting requirements for cooperatives? (1) ((Marijuana)) Cannabis cooperatives must keep records that clearly reflect all activity, inventory, and conditions of the cooperative. The following records must be kept in a format prescribed by the WSLCB. All records must be maintained on the cooperative premises for a three-year period and must be made available for inspection if requested by an employee of the WSLCB, the department of health, the department of revenue, or local law enforcement.
(a) Cooperatives must maintain a plant log to track each ((marijuana)) cannabis plant from the time it enters the cooperative. At minimum, tracking must include:
(i) Unique plant identification numbers for each plant at the cooperative;
(ii) The date the plant was brought into the cooperative; and
(iii) The date the plant leaves the cooperative, including the reason, (e.g., harvested, destroyed, or member left the cooperative).
(b) Cooperatives must maintain a log to track all harvested plant material from time of harvest until all harvested material has been dispersed. At minimum, tracking must include:
(i) A unique identification number for each harvest;
(ii) The total dry weight of harvested material;
(iii) The date quantities are removed from the harvested material;
(iv) The amount removed from the harvested material;
(v) The reason quantities are removed from the harvested material (e.g., taken for use by qualifying patient, used for extraction, etc.); and
(vi) The current weight of the harvested material.
(c) Cooperatives must maintain a log to track all extracts produced from the time they are produced until all extracted material has been dispersed. At minimum, tracking must include:
(i) A unique identification for the extract batch;
(ii) The date the extract batch was created;
(iii) The total initial weight of the extract batch;
(iv) ID number of the harvest the material used to make the extract came from;
(v) The weight of ((marijuana)) cannabis plant material used to create the batch;
(vi) The date quantities are removed from the extract batch;
(vii) The quantity removed from the extract batch and reason; and
(viii) The current weight of the extract batch.
(2) Cooperatives must submit monthly activity report(s) to the WSLCB. The required monthly reports must be:
(a) On an electronic system designated by the WSLCB;
(b) Filed every month, including months with no activity;
(c) Submitted to the WSLCB on or before the ((ewentieth)) 20th day of each month, for the previous month. (For example, a report listing activity for the month of January is due by February 20th.);
(d) Filed separately for each cooperative; and
(e) All records must be maintained and available for review for a three-year period on licensed premises.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-415, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 18-22-055, filed 10/31/18, effective 12/1/18)

WAC 314-55-417 Sales of immature plants or clones and seeds from licensed producers to members of cooperatives, qualifying patients, and designated providers. This section details the requirements for sales of immature plants or clones and seeds by licensed producers to members of a registered cooperative, qualifying patients, and designated providers.
(1) Medical ((marijuana)) cannabis patients who enter into the medical ((marijuana)) cannabis authorization database established and maintained by the department of health, receive a recognition card, and are members of a cooperative that has been granted a registration by the Washington state liquor and cannabis board (WSLCB) may purchase immature plants or clones and seeds to be grown in the cooperative from a licensed ((marijuana)) cannabis producer.
(2) Qualifying patients and designated providers who hold a valid unexpired recognition card and have been entered into the medical ((marijuana)) cannabis authorization database established and maintained by the department of health, may purchase immature plants or clones and seeds from a licensed ((marijuana)) cannabis producer.
(3) Members of a registered cooperative, qualifying patients, and designated providers who wish to purchase immature plants or clones and seeds from a licensed producer must:
(a) Personally go to the licensed producer to complete the purchase and transfer of any ((marijuana)) cannabis plants purchased; and
(b) Provide the following information to a licensed producer:
(i) Proof of identification in the form of a state-issued identification card or other valid government-issued identification;
(ii) A valid recognition card; and
(iii) If the person purchasing immature plants or clones or seeds is a member of a registered cooperative, a copy of the letter from the WSLCB confirming the person is a member of a registered cooperative.
(4) The physical transfer of ((maxijuana)) cannabis plants between licensed producers and members of a cooperative, qualifying patients, or designated providers must take place on the premises of the licensed producer. Deliveries of ((marijuana)) cannabis plants by a licensed producer to members of a cooperative, qualifying patients, or designated providers are prohibited.
(5) Members of registered cooperatives, qualifying patients, and designated providers are limited to purchasing no more than the maximum amount that the medical ((marijuana)) cannabis patient's authorization form allows of any combination of immature plants or clones and seeds in a single sale or cumulative sales within a calendar month from a licensed producer. It is the responsibility of the member of the registered cooperative, qualifying patient, or designated provider to ensure that they possess no more than the maximum number of plants allowed under their authorization forms and as provided in chapter 69.51A RCW.
[Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-417, filed 10/31/18, effective 12/1/18.]

AMENDATORY SECTION (Amending WSR 16-11-110, filed 5/18/16, effective 6/18/16)

WAC 314-55-430 Qualifying patient or designated provider extraction requirements. (1) Qualifying patients or designated providers, including those participating in a cooperative, may extract or separate the resin from ((marijuana)) cannabis using only the following noncombustible methods:
(a) Heat, screens, presses, steam distillation, ice water, and other methods without employing combustible solvents or gases to create kief, hashish, or bubble hash;
(b) Dairy butter, cooking oils or fats derived from natural sources, or other home cooking substances;
(c) Food grade glycerin and propylene glycol solvent based extraction;
(d) $\mathrm{CO}_{2}$ may be used if used in a closed loop system as referenced in WAC 314-55-104.
(2) Only food grade substances may be used in any stage of processing.
(3) Use of combustible materials including, but not limited to, butane, isobutane, propane, heptane, and ethanol is expressly forbidden.
(4) Resins extracted or separated from ((maxijuanz)) cannabis are for the personal use of the qualifying patient or cooperative members only.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-430, filed 5/18/16, effective 6/18/16.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-505 Administrative violation notice. (1) The board may issue an administrative violation notice without issuing a notice of correction if:
(a) The licensee is not in compliance with chapters 69.50 and 69.51A RCW, this chapter, or both, and the noncompliance poses a direct or immediate threat to public health and safety;
(b) The licensee has previously been subject to an enforcement action or written notice for a violation of the same statute or rule within the same penalty category, the notice of correction for the violation has already been issued, the licensee failed to timely comply with the notice, and such notice is not subject to a pending request to the board to extend the time to achieve compliance; or
(c) The licensee has failed to respond to prior administrative violation notices or has outstanding unpaid monetary penalties; and
(d) The board can prove by a preponderance of the evidence:
(i) Diversion of ((marijuana)) cannabis product out of the regulated market or sales across state lines;
(ii) Furnishing of ((marijuana)) cannabis product to persons under ((twenty-one)) 21 years of age;
(iii) Diversion of revenue to criminal enterprises, gangs, cartels, or parties not qualified to hold a ((flaxijuana)) cannabis license based on criminal history requirements;
(iv) The commission of ((nonmarijuana-related)) noncannabis-related crimes; or
(v) Knowingly making a misrepresentation of fact to the board, an officer of the board, or an employee of the board related to conduct or action that is, or is alleged to be, any of the violations identified in (d) (i) through (iv) of this subsection.
(2) The board will prepare an administrative violation notice and mail or deliver the notice to the licensee, licensee's agent, or employee.
(3) The administrative violation notice will include:
(a) A detailed description of the alleged violation(s);
(b) The date(s) of the violation(s);
(c) The text of the specific section or subsection of rule;
(d) An outline of the licensee's resolution options as outlined in WAC 314-55-5055; and
(e) The recommended penalty as described in this chapter, and including a description of known mitigating and aggravating circumstances considered in the penalty determination.
[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-505, filed 1/22/20, effective 2/22/20. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-505, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-505, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-5055 Resolution options. (1) A licensee must respond to an administrative violation notice within ((twenty)) 20 calendar days from receipt of the notice. The response must be submitted on a form provided by the board. The licensee may:
(a) Accept the recommended penalty identified in the administrative violation notice;
(b) Request a settlement conference in writing;
(c) Request an administrative hearing in writing.
(2) (a) If a licensee does not respond to an administrative violation notice within ((twenty)) 20 calendar days of receipt of the notice, recommended penalties including, but not limited to, suspension, monetary penalties, and destruction of inventory may take effect on the ((twenty-first)) 21st day.
(b) If the recommended penalty is monetary and does not include a suspension, inventory destruction, or both, the licensee must pay a ((もwenty-five)) 25 percent late fee in addition to the recommended monetary penalty.
(i) The board must receive payment of the monetary penalty and ((もwenty-five)) 25 percent late fee no later than ((thirty)) 30 days after the administrative violation notice receipt date.
(ii) Payments received more than ((thirty)) 30 days after the administrative violation notice receipt date are subject to an additional ((twenty-five)) $\underline{25}$ percent late fee.
(iii) Licensees who do not respond to an administrative violation notice will not be eligible to renew their ((marijuana)) cannabis license.
(3) Licensees who do not pay monetary penalties for two or more administrative violation notices in a two-year period will not be eligible to renew their ((marijuana)) cannabis license.
(4) A licensee may request a settlement conference to discuss the board's issuance of an administrative violation notice issued under this chapter. The hearing officer or designee of the board will arrange the date, time, and place of the settlement conference. A settlement agreement provides that the licensee accepts the allegations contained in the administrative violation notice.
(a) The purpose of the settlement conference is to:
(i) Discuss the circumstances associated with the alleged violation(s), including aggravating or mitigating factors;
(ii) Discuss the recommended penalties; and
(iii) Attempt to reach agreement on the appropriate penalty and corrective action plan for the administrative violation notice.
(b) During a settlement conference, a licensee issued an administrative violation notice may request deferral of an administrative violation notice if all of the following criteria are met:
(i) The alleged violation is the first violation in a violation category;
(ii) The licensee has no other violation history in that penalty category within a two-year window; and
(iii) The licensee submits a plan to correct, remedy, or satisfy identified violations as described in the administrative violation notice including, but not limited to, monetary penalties.
(c) If the licensee is not issued any administrative violation notices or any other notice of noncompliance during the year following approval of the deferral of administrative violation, the record of administrative violation notice will not be considered for licensing renewal or penalty escalation.
(d) If the licensee is issued an administrative violation notice or any other notice of noncompliance at any time during the year following approval of the deferral of administrative violation, the record of the administrative violation notice will remain on the licensee's licensing history, and the original sanction for the deferred violation will be implemented based on the frame established in the settlement agreement, or ((ten)) 10 days from the date of default.
(5) The hearing officer or designee will prepare a settlement agreement. The agreement must:
(a) Include the terms of the agreement regarding an alleged violation or violations by the licensee of chapters 69.50 and 69.51A RCW, any part of chapter 314-55 WAC, and any related penalty or licensing restriction; and
(b) Be in writing and signed by the licensee or the licensee's designee and the hearing officer or designee.
(6) If a settlement agreement is entered between a licensee and a hearing officer or designee of the board at or after a settlement conference, the terms of the settlement agreement must be given substantial weight by the board.
(7) The hearing officer or designee will forward the settlement agreement to the board or designee for final approval. If the board, or designee approves the settlement agreement, a copy of the signed agreement will be sent to the licensee, and will become part of the licensing history, unless otherwise specified in this chapter.
(8) If the board, or designee, does not approve the settlement agreement, the licensee will be notified of the decision in writing. The licensee may:
(a) Renegotiate the settlement agreement with the hearing officer or designee; or
(b) Accept the originally recommended penalty; or
(c) Request a hearing on the administrative issues identified in the administrative violation notice.
(9) Monetary penalty collection. If monetary penalties are assessed as part of an administrative violation, settlement agreement, or both, licensees must submit payment to the board in a time frame established by the board, consistent with subsection (2)(a) and (b) of this section.
(a) If a licensee does not timely submit payment of any monetary fine, the board will begin collection or other appropriate action.
(b) The board will provide a notice of collection action to the licensee. The notice of collection action establishes the licensee as a debtor for purposes of debt collection.
(c) If the licensee does not respond to the notice of collection within ((thirty)) 30 days, the board may:
(i) Assess a ((twenty-five)) 25 percent late fee consistent with subsection (2) (a) of this section; and
(ii) Assign the debt to a collection agency.
[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-5055, filed 1/22/20, effective 2/22/20.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-509 Penalty structure. (1) The board determines if a penalty will be imposed. Penalties are based on the severity of the violation in the following categories:
(a) Category I: Violations of a severity that would make a license eligible for cancellation on a first offense;
(b) Category II: Violations that create a direct or immediate threat to public health, safety, or both;
(c) Category III: Violations that create a potential threat to public health, safety, or both;
(d) Category IV: Significant regulatory violations;
(e) Category V: Procedural and operational violations;
(f) Category VI: Statutory violations.
(2) For purposes of assessing penalties, only violations occurring in the two-year time period immediately preceding the date of the violation will be considered unless otherwise provided in this chapter.
(3) The board may, at its discretion, deviate from the prescribed penalties herein. Such deviations will be determined on a case-by-case basis, considering mitigating and aggravating factors.
(a) Mitigating factors may result in a waiving or lowering of fines, civil penalties, imposition of a fine in lieu of suspension, or fewer days of suspension. Mitigating factors may include demonstrated business policies and practices that may reduce risk to public health and safety.
(b) Aggravating factors may result in increased days of suspension, increased monetary penalties, cancellation, or nonrenewal of a ((marijuana)) cannabis license. Aggravating factors may include ob-
structing an investigation, business operations, behaviors, or both, that increase risk to public health and safety.
(4) For violations that occurred before the effective date of these rules, enforcement action will be based on the rules that were in effect on the date the violation occurred. Subsection (2) of this section shall apply to all enforcement actions regardless of the date the violation occurred.
[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-509, filed 1/22/20, effective 2/22/20.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-520 Category I. Violations of a severity that would make a license eligible for cancellation on a first offense. The board may not cancel a license for a single violation, unless it can prove a Category I violation by a preponderance of the evidence.

Category I
Violations of a Severity That Would Make a License Eligible for Cancellation on the First Offense

| Violation Type | 1st Violation | 2nd Violation in a Two-year Window |
| :---: | :---: | :---: |
| ((Marijuana)) Cannabis purchased from an unlicensed entity. WAC 314-55-083(4) | License cancellation |  |
| ((Marijuana)) Cannabis sold to an unlicensed, nonretail source. Illegal sales out of the licensed market place. WAC 314-55-083(4) | License cancellation |  |
| Condition of suspension violation: Failure to follow any suspension restriction while ((marijнana)) cannabis license is suspended. WAC 314-55-540 | Original penalty plus 10-day suspension with no monetary option | License cancellation |
| Transportation or storage of ((marijuana)) cannabis to or from an unlicensed source, diversion of product, or both. <br> WAC 314-55-083(4) | License cancellation |  |
| Transportation of ((marijuana)) cannabis outside of Washington state boundaries. <br> RCW 69.50 .342 (1)(k) <br> RCW 69.50.345(10) <br> WAC 314-55-310(1) | License cancellation |  |
| True party of interest (TPI). Allowing a person to exercise ownership or control if the person would not have qualified based on affiliation with a criminal enterprise as described in chapter 69.50 RCW. WAC 314-55-035(1) | License cancellation |  |
| Financier. Receiving money from a financier that was not disclosed to or approved by the board when the financier has a criminal history demonstrating an affiliation with criminal enterprises, gangs, or cartels; or the money provided by a financier originated from criminal enterprises, gangs, or cartels. <br> WAC 314-55-035(4) | License cancellation |  |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-520, filed 1/22/20, effective 2/22/20. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-520, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-520, filed

5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-520, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-521 Category II. Violations that create a direct or immediate threat to public health, safety, or both.

Category II
Violations That Create a Direct or Immediate Threat to Public Health, Safety, or Both

| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Furnishing to persons under twenty-one years of age, except as allowed in RCW 60.50.357. <br> RCW 69.50.354 <br> WAC 314-55-079(1) | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension | License cancellation |
| Conduct violations: <br> Criminal conduct: <br> Permitting or engaging in criminal conduct, or both. <br> Disorderly conduct, or apparent intoxication of a licensee or employee, or permitting on premises. <br> Title 9 RCW <br> Title 9A RCW <br> WAC 314-55-110 (4)(b) | 5-day suspension or $\$ 1,250$ monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension | License cancellation |
| Operating an unapproved $\mathrm{CO}^{2}$ or hydrocarbon extraction system. WAC 314-55-104 | $\$ 10,000$ monetary fine | License cancellation |  |  |
| Intentional use of unauthorized pesticides, soil amendments, fertilizers, other crop production aids. RCW 69.50.342 WAC 314-55-084 | Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ <br> Tier 3: \$7,500 <br> monetary fine and destruction of affected <br> ((marijuana)) <br> cannabis | Tier 1: \$7,500 <br> Tier 2: \$15,000 <br> Tier 3: \$22,500 <br> monetary fine and destruction of affected <br> ((marijutana)) <br> cannabis | License cancellation |  |
| Adulterated ((twsable marijuana)) useable cannabis with organic or nonorganic chemical or other compound. WAC 314-55-077 (5)(b) WAC 314-55-101 | Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ <br> Tier 3: \$7,500 <br> monetary fine and <br> destruction of affected <br> ((marijuana)) <br> cannabis | Tier 1: \$7,500 <br> Tier 2: $\$ 15,000$ <br> Tier 3: \$22,500 <br> monetary fine and <br> destruction of affected <br> ((marijuana)) <br> cannabis | License cancellation |  |


| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Transportation of ((marijuana)) cannabis without a manifest. WAC 314-55-085(3) WAC 314-55-096 (1) and (2) <br> WAC 314-55-105(2) WAC 314-55-310(3) | Retail/transporter: <br> $\$ 1,250$ monetary fine <br> Producer/processor: <br> Tier 1: \$1,250 <br> Tier 2: $\$ 2,500$ <br> Tier 3: \$5,000 <br> monetary fine | Retail/transporter: 5-day suspension or \$2,500 monetary option <br> Producer/processor: <br> Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ <br> Tier 3: \$10,000 <br> monetary fine | License cancellation |  |
| Obstruction: <br> Misrepresentation of fact; not permitting physical presence. WAC 314-55-185 | 10-day suspension or \$7,500 monetary option | 30-day suspension | License cancellation |  |
| Failure to use and maintain traceability, or both: Including, but not limited to, failure to maintain records for flowering plant, finished product, any postharvest product, any plant not on approved floor-plan, or not tagged, reusing identifier. WAC 314-55-083(4) | \$1,250 monetary fine | 5-day suspension or $\$ 2,500$ monetary fine | 10-day suspension or \$5,000 monetary fine | License cancellation |
| Pickup, unload, or delivery at an unauthorized location. WAC 314-55-085 (5)(f) WAC 314-55-310 | Retail/transportation: 30-day suspension <br> Producer/processor: <br> Tier 1: \$10,000 <br> Tier 2: \$20,000 <br> Tier 3: \$30,000 monetary fine | Retail/transporter: 60-day suspension <br> Producer/processor: <br> Tier 1: \$20,000 <br> Tier 2: \$40,000 <br> Tier 3: $\$ 60,000$ monetary fine | License cancellation |  |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-521, filed 1/22/20, effective 2/22/20.]

## AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-522 Category III. Violations that create a potential threat to public health, safety, or both.

Category III
Violations That Create a Potential Threat to Public Health, Safety, or Both

| Violation Type | 1st Violation | 2nd Violation in a <br> Two-year Window | 3rd Violation in a <br> Two-year Window | 4th Violation in a <br> Two-year Window |
| :--- | :--- | :---: | :---: | :---: |
| Driver transporting <br> without a valid <br> driver's license. <br> WAC 314-55-310 (5)(a) | 5-day suspension or <br> $\$ 1,250$ monetary <br> option | 10-day suspension | 30-day suspension | License cancellation |


| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Exceeding maximum serving requirements for ((marijuanainfused)) cannabisinfused products. WAC 314-55-095 (1)(a) and (b) <br> Exceeding transaction limits. <br> WAC 314-55-095 (2)(c) | \$1,250 monetary fine | Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ Tier 3: $\$ 7,500$ monetary fine | Tier 1: \$5,000 <br> Tier 2: $\$ 10,000$ <br> Tier 3: \$15,000 monetary fine | License cancellation |
| Failure to follow and maintain food processing facility requirements. RCW 69.50.342 (1)(a) and (c) <br> WAC 314-55-077 (4)(b) WAC 246-70-070 (1) and (2) | \$1,250 monetary fine | Tier 1: \$2,500 Tier 2: $\$ 5,000$ Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 <br> Tier 2: \$10,000 <br> Tier 3: \$15,000 monetary fine | Tier 1: \$10,000 <br> Tier 2: $\$ 20,000$ Tier 3: \$30,000 monetary fine |
| Failure to maintain required surveillance system. <br> WAC 314-55-083(3) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension or $\$ 15,000$ monetary option |
| Retail sales: <br> Unauthorized ((marijuana-infused)) cannabis-infused products. WAC 314-55-077 (9)(a) and (b) | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 option | 30-day suspension |
| True party of interest: Allowing a person to exercise ownership or control who has not been disclosed to the board, and would have failed for any reason. WAC 314-55-035 | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$5,000 monetary option | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: \$10,000 <br> Tier 2: \$20,000 <br> Tier 3: \$30,000 monetary fine | Retail/transporter: 60-day suspension <br> Producer/processor: <br> Tier 1: \$20,000 <br> Tier 2: $\$ 40,000$ <br> Tier 3: $\$ 60,000$ monetary fine |
| Financier. Receiving money from a financier that was not disclosed to or approved by the board when the financier or the source of funds would not have qualified for any reason. WAC 314-55-035 | 5-day suspension or $\$ 2,500$ monetary option | 10-day suspension or \$5,000 monetary option | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: $\$ 10,000$ <br> Tier 2: $\$ 20,000$ <br> Tier 3: \$30,000 monetary fine | Retail/transporter: 60-day suspension <br> Producer/processor: <br> Tier 1: \$20,000 <br> Tier 2: $\$ 40,000$ <br> Tier 3: \$60,000 monetary fine |
| Obstruction: Failure to furnish records. WAC 314-55-185 (1)(c) | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$5,000 monetary option | 30-day suspension | 60-day suspension |
| Failure to use traceability, maintain traceability, or both for quality assurance testing, including pesticide testing, potency testing, or both. WAC 314-55-083 (4)(k) | \$1,250 monetary fine | \$2,500 monetary fine | 10-day suspension or \$7,500 monetary option | 30-day suspension or \$15,000 monetary option |


| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Noncompliance with ((marijuana)) cannabis processor extraction requirements. WAC 314-55-104 | \$1,250 monetary fine | \$2,500 monetary fine | \$7,500 monetary fine | $\$ 15,000$ monetary fine |
| Sales in excess of transaction limits. WAC 314-55-095 (2)(c) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension or $\$ 15,000$ monetary option |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-522, filed 1/22/20, effective 2/22/20.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-523 Category IV. Violations that are significant regulatory violations.

Category IV
Significant Regulatory Violations

| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Noncompliance with record keeping requirements. WAC 314-55-087 | \$500 monetary fine | 5-day suspension or $\$ 1,250$ monetary fine | 10-day suspension or \$2,500 monetary option | 30-day suspension or \$7,500 monetary option |
| ((Marijuana)) <br> Cannabis illegally given away, including being sold below the cost of acquisition, true value, or both. <br> WAC 314-55-017(3) <br> WAC 314-55-018 (2)(f) <br> WAC 314-55-018(5) <br> WAC 314-55-077 <br> (11)(b) | \$500 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension or $\$ 15,000$ monetary option |
| Retail sales: Use of an unauthorized money transmitter. WAC 314-55-115(5) | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 monetary option | 30-day suspension or \$7,500 monetary option |
| Misuse or unauthorized use of ((marijuana)) cannabis license (operating outside of license class). <br> RCW 69.50.325 | 5-day suspension or $\$ 2,500$ monetary option | 10-day suspension or \$5,000 monetary option | 30-day suspension or $\$ 10,000$ monetary option | 60-day suspension or $\$ 20,000$ monetary option |
| Selling or purchasing ((marijuana)) cannabis on credit. <br> WAC 314-55-018 WAC 314-55-115 | 5-day suspension or $\$ 2,500$ monetary option | 10-day suspension or \$5,000 monetary option | 30-day suspension or $\$ 10,000$ monetary option | 60-day suspension or $\$ 20,000$ monetary option |


| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Engaging in nonretail conditional sales, prohibited practices, or both. <br> WAC 314-55-017(1) WAC 314-55-018 | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension or $\$ 15,000$ monetary option |
| Operating/floor plan: Violations of a WSLCB approved operating plan. <br> WAC 314-55-020 $(11)(a)$ | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 monetary option | 30-day suspension or \$7,500 monetary option |
| Failure to maintain required insurance. <br> WAC 314-55-082 <br> WAC 314-55-310 | \$1,250 monetary fine | 5-day suspension or $\$ 2,500$ monetary option | 10-day suspension or \$7,500 monetary option | 30-day suspension or $\$ 15,000$ monetary option |
| Unauthorized sale to a retail licensee (processor). <br> RCW 69.50.360 <br> RCW 69.50.363 <br> WAC 314-55-077 <br> WAC 314-55-083(4) | \$1,250 monetary fine | Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ Tier 3: \$10,000 monetary fine | Tier 1: \$7,500 Tier 2: \$15,000 Tier 3: \$30,000 monetary fine | Tier 1: \$15,000 Tier 2: \$30,000 Tier 3: \$60,000 monetary fine |
| Packaging and labeling. WAC 314-55-105 | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 monetary option | 30-day suspension or \$7,500 monetary option |
| Unauthorized or unapproved product storage or delivery (processor/producer). WAC 314-55-085(5) | \$1,250 monetary fine | Tier 1: \$2,500 <br> Tier 2: $\$ 5,000$ Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 Tier 2: $\$ 10,000$ Tier 3: \$15,000 monetary fine | Tier 1: \$10,000 Tier 2: \$20,000 Tier 3: \$30,000 monetary fine |
| Unauthorized or unapproved product storage or delivery (transporter). WAC 314-55-310 (5)(d) | \$1,250 monetary fine | \$2,500 monetary fine | \$5,000 monetary fine | $\$ 10,000$ monetary fine |
| Failure to meet ((marijuana)) cannabis waste disposal requirements. WAC 314-55-097 | \$1,250 monetary fine | Tier 1: \$2,500 Tier 2: \$5,000 Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 Tier 2: $\$ 10,000$ Tier 3: \$15,000 monetary fine | Tier 1: \$10,000 Tier 2: \$20,000 Tier 3: \$30,000 monetary fine |
| Sampling violations (processors/producers: Vendor, educational, and internal quality control samples). WAC 314-55-096 | \$1,250 monetary fine | Tier 1: \$2,500 Tier 2: \$5,000 Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 <br> Tier 2: \$10,000 <br> Tier 3: \$15,000 monetary fine | Tier 1: \$10,000 Tier 2: \$20,000 Tier 3: \$30,000 monetary fine |
| Sampling violations (retail). <br> WAC 314-55-096(5) <br> WAC 314-55-096(6) | \$1,250 monetary fine | Tier 1: \$2,500 Tier 2: \$5,000 Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 <br> Tier 2: \$10,000 <br> Tier 3: \$15,000 monetary fine | Tier 1: \$10,000 Tier 2: \$20,000 Tier 3: \$30,000 monetary fine |
| Failure to maintain required security alarm. <br> WAC 314-55-083(2) | \$1,250 monetary fine | \$2,500 monetary fine | \$5,000 monetary fine | $\$ 10,000$ monetary fine |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-523, filed 1/22/20, effective 2/22/20.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-524 Category V. Violations that are procedural and operational.

Category V
Procedural and Operation Violations

| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Hours of service: Sales of ((marijuana)) cannabis between 8:00 a.m. and 12:00 a.m. WAC 314-55-147 | \$500 monetary fine | 5-day suspension or \$1,250 monetary fine | 10-day suspension or \$2,500 monetary option | 30-day suspension |
| General advertising violations. <br> RCW 69.50.369 <br> WAC 314-55-155 | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$5,000 monetary option | 30-day suspension or \$10,000 monetary option |
| Engaging in conditional sales. WAC 314-55-017(2) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$5,000 monetary option | 30-day suspension or $\$ 10,000$ monetary option |
| Licensee, employee, or both failing to display identification badge. WAC 314-55-083(1) | \$250 monetary fine | 5-day suspension or $\$ 500$ monetary option | 10-day suspension or \$1,250 monetary option | 30-day suspension or \$2,500 monetary option |
| Failure to post required signs. WAC 314-55-086 | \$250 monetary fine | 5-day suspension or \$500 monetary option | 10-day suspension or \$1,250 monetary option | 30-day suspension or \$2,500 monetary option |
| Unauthorized change of business name. WAC 314-55-130 | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 monetary option | 30-day suspension or \$5,000 monetary option |
| Transporting ((marijuana)) cannabis in an unauthorized vehicle. <br> WAC 314-55-085(5) WAC 314-55-310 | \$1,250 monetary fine | Retail/transporter: 5-day suspension or \$2,500 monetary option <br> Producer/processor: <br> Tier 1: $\$ 2,500$ <br> Tier 2: \$5,000 Tier 3: $\$ 7,500$ monetary fine | Retail/transporter: 10-day suspension <br> Producer/processor: <br> Tier 1: $\$ 5,000$ <br> Tier 2: $\$ 10,000$ <br> Tier 3: \$15,000 <br> monetary fine | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: $\$ 10,000$ <br> Tier 2: \$20,000 <br> Tier 3: $\$ 30,000$ monetary fine |
| Exceeding maximum delivery time frame. WAC 314-55-085 WAC 314-55-083 (4)(d) | \$1,250 monetary fine | Retail/transporter: 5-day suspension or \$2,500 monetary option <br> Producer/processor: <br> Tier 1: $\$ 2,500$ <br> Tier 2: $\$ 5,000$ Tier 3: \$7,500 monetary fine | Retailer/Transporter: 10-day suspension <br> Producer/processor: <br> Tier 1: \$5,000 <br> Tier 2: \$10,000 <br> Tier 3: \$15,000 <br> monetary fine | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: \$10,000 <br> Tier 2: $\$ 20,000$ <br> Tier 3: \$30,000 monetary fine |
| Failure to maintain standardized scale requirements (producer/processor). WAC 314-55-099 | \$1,250 monetary fine | Tier 1: \$2,500 Tier 2: \$5,000 Tier 3: \$7,500 monetary fine | Tier 1: \$5,000 Tier 2: \$10,000 Tier 3: $\$ 15,000$ monetary fine | Tier 1: \$10,000 Tier 2: \$20,000 Tier 3: \$30,000 monetary fine |
| Unauthorized driver or passenger. WAC 314-55-310 (5)(a) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension | 30-day suspension |


| Violation Type | 1st Violation | 2nd Violation in a Two-year Window | 3rd Violation in a Two-year Window | 4th Violation in a Two-year Window |
| :---: | :---: | :---: | :---: | :---: |
| Transportation of ((marijuana)) cannabis without an accurate manifest. <br> WAC 314-55-085(3) WAC 314-55-310(3) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension | 30-day suspension |
| Load exceeding maximum delivery amount. <br> RCW 69.50.385(3) WAC 314-55-083 (4)(d) WAC 314-55-085(1) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | 10-day suspension | 30-day suspension |
| Retail sales: Accepting returns. <br> WAC 314-55-079(12) | \$500 monetary fine | 5-day suspension or \$1,250 monetary option | 10-day suspension or \$2,500 monetary option | 30-day suspension |
| Failure to use traceability, maintain traceability, or both. (e.g., failure to comply with traceability requirements for clones, seeds; illegal or folded tags; movement within a location) WAC 314-55-083(4) | 5-day suspension or \$2,500 monetary option | 10-day suspension or \$5,000 monetary option | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: \$10,000 <br> Tier 2: \$20,000 <br> Tier 3: \$30,000 monetary fine | Retail/transporter: 60-day suspension <br> Producer/processor: <br> Tier 1: \$20,000 <br> Tier 2: \$40,000 <br> Tier 3: $\$ 60,000$ monetary fine |
| True party of interest (TPI): Allowing a person not disclosed to the board who would have qualified to exercise ownership or control, or allowing a TPI previously approved by the board to provide funds without disclosure. WAC 314-55-035(XX) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | Retail/transporter: 10-day suspension or \$5,000 monetary option <br> Producer/Processor: <br> Tier 1: $\$ 5,000$ <br> Tier 2: $\$ 10,000$ <br> Tier 3: \$20,000 monetary fine | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: $\$ 10,000$ <br> Tier 2: $\$ 20,000$ <br> Tier 3: \$30,000 monetary fine |
| Financier. Receiving money from a financier previously approved by the board that was not timely disclosed to the board or that was timely disclosed to the board but the source could not be verified. <br> WAC 314-55-035(XX) | \$1,250 monetary fine | 5-day suspension or \$2,500 monetary option | Retail/transporter: 10-day suspension or \$5,000 monetary option <br> Producer/Processor: <br> Tier 1: \$5,000 <br> Tier 2: $\$ 10,000$ <br> Tier 3: \$20,000 monetary fine | Retail/transporter: 30-day suspension <br> Producer/processor: <br> Tier 1: \$10,000 <br> Tier 2: $\$ 20,000$ <br> Tier 3: \$30,000 monetary fine |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-524, filed 1/22/20, effective 2/22/20.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-525 Category VI. Statutory penalty violations.
Category VI
Statutory Penalty Violations

| Allowing a minor to <br> frequent a retail store. <br> RCW 69.50.357(2) | $\$ 1,000$ monetary fine |
| :--- | :---: |
| Allowing persons under <br> twenty-one years of age <br> to frequent a retail <br> licensed premises. <br> RCW 69.50.357 | $\$ 1,000$ monetary fine |
| Employee under legal <br> age. <br> RCW 69.50.357(2) | $\$ 1,000$ monetary fine |
| Opening or consuming <br> ((marijuana)) cannabis <br> on a licensed retail <br> premises, or both. <br> RCW 69.50.357(4) | $\$ 1,000$ monetary fine |
| Retail outlet selling <br> unauthorized products. <br> RCW 69.50.357 (1)(a) | $\$ 1,000$ monetary fine |

[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-525, filed 1/22/20, effective 2/22/20. Statutory Authority: RCW 69.50.325, 69.50.342, 69.50.345, and 69.50.369. WSR 18-22-055, § 314-55-525, filed 10/31/18, effective 12/1/18. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-525, filed 5/18/16, effective 6/18/16; WSR 15-11-107, § 314-55-525, filed 5/20/15, effective 6/20/15. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-525, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 20-03-177, filed 1/22/20, effective 2/22/20)

WAC 314-55-540 ((Marijuana)) Cannabis license suspensions. a board enforcement officer will post a suspension notice in a conspicuous place on or about the licensed premises. This notice will state that the license has been suspended by order of the board based on a violation of applicable law or rule.
(2) During the period of ((marijuana)) cannabis license suspension, the licensee and employees:
(a) Are required to comply with all applicable laws and rules;
(b) May not remove, alter, or cover the posted suspension notice, and may not permit another person to do so;
(c) May not place or permit the placement of any statement on the licensed premises indicating that the premises have been closed for any reason other than as stated in the suspension notice;
(d) May not advertise by any means that the licensed premises is closed for any reason other than as stated in the board's suspension notice.
(3) During the period of ((marijua)) cannabis license suspension a ((marijuana)) cannabis licensee:
(a) May not operate their business.
(b) May not sell, deliver, service, destroy, remove, or receive ((maxijuana)) cannabis.
[Statutory Authority: RCW 69.50.342, 69.50.345, and 2019 c 394. WSR 20-03-177, § 314-55-540, filed 1/22/20, effective 2/22/20. Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 16-11-110, § 314-55-540, filed 5/18/16, effective 6/18/16. Statutory Authority: RCW 69.50.325, 69.50.331, 69.50.342, 69.50.345. WSR 13-21-104, § 314-55-540, filed 10/21/13, effective 11/21/13.]

AMENDATORY SECTION (Amending WSR 21-05-075, filed 2/17/21, effective 3/20/21)

WAC 314-55-550 ((Marijuana)) Cannabis vapor products. (1) The purpose of this section is to:
(a) Support and further the protection of public health and prevention of youth access consistent with RCW 69.50.101(xx).
(b) Mitigate the risks to public health and youth access by prohibiting the use of any additive, solvent, ingredient, or compound in ((marijuana)) cannabis vapor product production and processing when appropriate, consistent with RCW 69.50.342 (1)(m).
(c) Mitigate the risks to public health and youth access by prohibiting any device used in conjunction with a ((marijuana)) cannabis vapor product when appropriate, consistent with RCW 69.50.342 (1)(n).
(2) Procedure for prohibited substances.
(a) The board may prohibit any type of device used in conjunction with a ((marijuana)) cannabis vapor product, and may prohibit the use of any type of additive, solvent, ingredient, or compound in the production of ((marijuana)) cannabis vapor products that may pose a risk to public health or youth access.
(b) The board may consider, following consultation with the department of health or other authority the board deems appropriate, any relevant data when determining whether a device, additive, solvent, ingredient or compound may pose a risk to public health or youth access including, but not limited to:
(i) Case report data;
(ii) Other local, state and federal agency findings, reports, etc.;
(iii) A product or substance that is the subject of a recall under WAC 314-55-225;
(iv) Any other information sourced and confirmed from reliable entities.
(c) The board may prohibit the use of a product or substance by adoption of emergency or permanent rules. The board will provide notices of rule making consistent with the requirements of chapter 34.05 RCW.
(d) The board will maintain a list of prohibited substances prohibited by permanent or emergency rules on its website.
(e) The list of prohibited substances will be reviewed on an annual basis.
(f) Prohibited substances may be removed from the list of prohibited substances if the board determines, after a review consistent with (b) (i) through (iv) of this subsection, that it no longer poses a risk to public health or youth access.
[Statutory Authority: RCW 69.50.342 and 69.50.345. WSR 21-05-075, § 314-55-550, filed 2/17/21, effective 3/20/21.]

AMENDATORY SECTION (Amending WSR 22-02-071, filed 1/5/22, effective 2/5/22)

WAC 314-55-560 Evaluation of additives, solvents, ingredients or compounds used in the production of ((marijuana)) cannabis products. (1) Purpose and scope. The purpose of this section is to establish a procedure for the board to evaluate additives, solvents, ingredients or compounds used in the production of ((marijuana)) cannabis products, as those products are defined in chapter 69.50 RCW.
(2) Definitions. For purposes of this chapter, the following definitions apply unless the context clearly states otherwise:
(a) "Additive" means any substance the use of which results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristics of any ((marijuana)) cannabis product;
(b) "Compound" means a chemical substance composed from more than one separate chemical element;
(c) "Ingredient" means something that enters into a mixture or is a component part of any combination or mixture;
(d) "((Nonmarijuana)) Noncannabis additive" means a substance or a group of substances that are derived from a source other than ((mar= ijuana) ) cannabis.
(i) "((Nonmaxijuana)) Noncannabis additive" includes, but is not limited to, purified compounds, essential oils, oleoresins, essences, or extractives, protein hydrolysates, distillates, or isolates;
(ii) "((Nonmarijuana)) Noncannabis additive" does not include plant material that is in the whole, broken, or ground form.
(e) "Solvent" means a substance capable of being used in dissolving a solute with the exception of water.
(3) Procedure.
(a) The board may prohibit the use of any additive, solvent, ingredient or compound in the production of ((marijuana)) cannabis products that may pose a risk to public health or youth access including, but not limited to:
(i) Verifiable case report data;
(ii) Other local, state and federal agency findings, reports, etc.;
(iii) A product or substance that is the subject of a recall under WAC 314-55-225;
(iv) Any other information sourced and confirmed from reliable entities.
(b) The board may prohibit the use of a product or substance by adoption of emergency or permanent rules. The board will provide notices of rule making consistent with the requirements of chapter 34.05 RCW.
(c) The board will maintain a list of prohibited substances prohibited by emergency or permanent rules on its website.
(d) The list of prohibited substances will be reviewed on at least an annual basis.
(e) Prohibited substances may be removed from the list of prohibited substances if the board determines, after a review consistent with (a) (i) through (iv) of this subsection, that it no longer poses a risk to public health or youth access.
[Statutory Authority: RCW 69.50.342 (1)(m), 69.50.345. WSR 22-02-071, § 314-55-560, filed 1/5/22, effective 2/5/22.]

AMENDATORY SECTION (Amending WSR 18-05-006, filed 2/7/18, effective 3/10/18)

WAC 314-60-015 Agency description-Contact information. (1) (a) The Washington state liquor and cannabis board (WSLCB) is an agency created to exercise the police power of the state in administering and enforcing laws and regulations relating to alcoholic beverage control (Title 66 RCW), ((marijuana)) cannabis (chapter 69.50 RCW), tobacco (chapter 70.155 RCW ), and vapor products (chapter 70.345 RCW ).
(b) The board issues licenses relating to liquor, ((marijuana)) cannabis, tobacco, and vapor products; and collects taxes imposed on liquor and ((marijuana)) cannabis.
(c) The WSLCB is responsible for enforcing laws preventing access to tobacco products by persons under the age of ( (eighteen)) 18 years (chapter 70.155 RCW ). The board enforces the tobacco tax laws and the department of revenue administers tobacco tax laws (chapters 82.24 and 82.26 RCW).
(2) The Washington state liquor and cannabis board is organized into seven divisions:
(a) Board administration;
(b) Director's office;
(c) Licensing and regulation;
(d) Enforcement and education;
(e) Finance;
(f) Information technology; and
(g) Human resources.
(3) (a) The administrative offices of the Washington state liquor and cannabis board are located at 3000 Pacific Avenue Southeast, Olympia, Washington 98504-3080.
(b) WSLCB staff is also located at enforcement offices maintained in major cities throughout the state.

Enforcement offices addresses and contact numbers are located on the WSLCB's website at www.lcb.wa.gov.
(4) An organizational chart is available from the board's public records office which illustrates the general structure of the WSLCB's operations. More information on the construct of the WSLCB is also available on the WSLCB's website at www.lcb.wa.gov.
[Statutory Authority: RCW 42.56.120, 34.05.220, 42.56.040, 66.08.030, and 66.08.050. WSR 18-05-006, § 314-60-015, filed 2/7/18, effective 3/10/18. Statutory Authority: RCW 66.08.030, 34.05.220, and 42.56.40 [42.56.040]. WSR 09-07-070, § 314-60-015, filed 3/13/09, effective 4/13/09.]


[^0]:    WAC 458-61A-211 Mere change in identity or form-Family corporations and partnerships. (1) Introduction. A transfer of real property is exempt from the real estate excise tax if it consists of a mere change in identity or form of ownership of an entity. This exemption is not limited to transfers involving corporations and partnerships, and includes transfers of trusts, estates, associations, limited liability companies and other entities. If the transfer of real property results in the grantor(s) having a different proportional interest in the property after the transfer, real estate excise tax applies.
    (2) Qualified transactions. A mere change in form or identity where no change in beneficial ownership has occurred includes, but is not limited to:

[^1]:    For SI: ${ }^{\circ} \mathrm{C}=\left[\left({ }^{\circ} \mathrm{F}\right)-32\right] / 1.8, \mathrm{~L} / \mathrm{s} \cdot \mathrm{kW}=(\mathrm{gpm} / \mathrm{hp}) /(11.83), \mathrm{COP}=(\mathrm{Btu} / \mathrm{h} \cdot \mathrm{hp}) /(2550.7)$.
    $\mathrm{db}=$ dry-bulb temperature, ${ }^{\circ} \mathrm{F}$.
    wb $=$ wet-bulb temperature, ${ }^{\circ} \mathrm{F}$.
    a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the reference year version of the test procedure.

[^2]:    1. ((Where not less than 75 percent of all the replacement air is transfer air that would otherwise be exhausted.
    2.)) UL 710 listed exhaust hoods that have a design maximum exhaust airflow rate no greater than 250 cfm per linear foot of hood that serve kitchen or kitchen/dining facilities with a total kitchen hood exhaust airflow rate less than 5000 cfm . ((3. Type II dishwasher exhaust hoods that have an exhaust airflow of 1000 efm or less.)) 2 . An energy recovery device is installed on the kitchen exhaust with a sensible heat recovery effectiveness of not less than 40 percent or not less than 50 percent of the total exhaust hood airflow.
[^3]:    4. Bears a permanent label applied by the mantufacturer that complies with all of the fellowing:
    4.1. Is made of material not adversely affected by water
    4.2. Is attached by means of nonwater soluble adhesive.
    4.3. Advises purchasers and end-users of the intended and appropriate use of the product with the following notice printed in 16.5 point $A$ rial narrow bold font: "IMPORTANT INFORMATION: This water heater is intended only for use as a part of an eleetrie thermal storage or demand respense program. It will not provide adequate hot water unless enrolled in sueh a program and activated by your utility company or another program operator. Confirm the availability of a program in your local area before purchasing or installing this product."
    $g \% / h$ is the energy consumed to replace the heat loss from the tank while on standby, expressed as a percentage of the total energy in the stored water per hour.))
[^4]:    ${ }^{\text {a }}$ Thermal efficiency $\left(E_{f}\right)$ is a minimum requirement, while standby loss is a maximum requirement. In the standby loss equation, V is the rated volume in gallons and Q is the nameplate input rate in $\mathrm{Btu} / \mathrm{h} . \mathrm{V}_{\mathrm{m}}$ is the measured volume in the tank in gallons. Standby loss for electric water heaters is in terms of $\% / \mathrm{h}$ and denoted by the term "S," and standby loss for gas and oil water heaters is in terms of Btu/h and denoted by the term "SL" Draw pattern (DP) refers to the water draw profile in the Uniform Energy Factor (UEF) test. UEF and Energy Factor (EF) are minimum requirements. In the UEF standard equations, $\mathrm{V}_{r}$ refers to the rated volume in gallons.
    b Chapter 6 contains a complete specification, including the year version, of the referenced test procedure.
    들 Electric instantaneous water heaters with input capacity $>12 \mathrm{~kW}$ and $\leq 58.6 \mathrm{~kW}$ that have either (1) a storage volume $>2 \mathrm{gal}$; or (2) is designed to provide - outlet hot water at temperatures greater than $180^{\circ} \mathrm{F}$; or (3) uses three-phase power has no efficiency standard.
    $\stackrel{\text { d }}{ }$ Gas storage water heaters with input capacity $>75,000 \mathrm{Btu} / \mathrm{h}$ and $\leq 105,000 \mathrm{Btu} / \mathrm{h}$ must comply with the requirements for the $>105,000 \mathrm{Btu} / \mathrm{h}$ if the water

    - heater either (1) has a storage volume $>120 \mathrm{gal}$; ( 2 ) is designed to provide outlet hot water at temperatures greater than $180^{\circ} \mathrm{F}$; or (3) uses three-phase power.
    e Oil storage water heaters with input capacity $>105,000 \mathrm{Btu} / \mathrm{h}$ and $\leq 140,000 \mathrm{Btu} / \mathrm{h}$ must comply with the requirements for the $>140,000 \mathrm{Btu} / \mathrm{h}$ if the water
    - heater either (1) has a storage volume $>120 \mathrm{gal}$; (2) is designed to provide outlet hot water at temperatures greater than $180^{\circ} \mathrm{F}$; or (3) uses three-phase power.
    f Water heaters or gas pool heaters in this category are regulated as consumer products by the USDOE as defined in 10 C.F.R. Part 430 .
    $\overline{\mathrm{g}}$ Storage water heaters have a ratio of input capacity (Btu/h) to tank volume (gal) $<4000$.
    $\overline{\mathrm{h}}$ Instantaneous water heaters and hot water supply boilers have an input capacity (Btu/h) divided by storage volume (gal) $\geq 4000 \mathrm{Btu} / \mathrm{h}-\mathrm{gal}$.
    ${ }_{i}^{\mathrm{i}}$ There are no minimum efficiency requirements for electric heat pump water heaters greater than 12 kW or for gas heat pump water heaters.
    j. Refer to Section C404.2.1 for additional requirements for service water heat system equipment.

[^5]:    ${ }^{h}$ Additional energy efficiency credits, up to the maximum shown in Table C406.2, shall be calculated according to Section C406.2.11.

