Chapter 194-50 WAC
WASHINGTON STATE DEPARTMENT OF COMMERCE ADOPTION AND AMENDMENT OF ASHRAE STANDARD 100, 2018

Last Update: 7/30/24

WAC

WAC 194-50-001 Foreword. *ANSI/ASHRAE/IES Standard 100-2018 Energy Efficiency in Existing Buildings* is hereby adopted by reference with the exceptions noted in this chapter of the Washington Administrative Code (WAC) updated February 7, 2024, to include *Tier 2 covered buildings* pursuant to RCW 19.27A.250, updated July 2024 to include *district energy systems* decarbonization pursuant to RCW 19.27A.260. In the event of a conflict between the standard and rules in this chapter, the provisions of this chapter apply.

ANSI/ASHRAE/IES Standard 100-2018 Energy Efficiency in Existing Buildings is adopted by the Washington state department of commerce pursuant to RCW 19.27A.200, 19.27A.210, and 19.27A.220. This standard has been adopted by reference and modified to implement the requirements for *covered buildings* as directed by the Washington state legislature. The legislature delegated the responsibility of adoption and amendment of this standard to the Washington state department of commerce.

Complying with this rule requires the user to comply with *ANSI/ASHRAE/IES Standard 100-2018* as amended by this rule. When this rule amends a section of *Standard 100*, the entire section is published in the rule. The user will need to have both documents in hand, but detailed comparison within any one section is not necessary. Simply apply the entire section as published in the rule. All other sections in *Standard 100* apply.

The Washington state administrative requirements for this standard are included in Normative Annex Z for *Tier 1 covered buildings*, Normative Annex Y for *Tier 2 covered buildings*, and Normative Annex W for *district energy system decarbonization plans*. For *building owners* that must comply with this standard, reading Normative Annex Z, Normative Annex Y, or Normative Annex W first allows the owner to put the rest of the standard in context. Multiple compliance options are available and should be reviewed prior to beginning implementation of this standard.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-001, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-001, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-001, filed 10/30/20, effective 11/30/20.]

WAC 194-50-010 ASHRAE Standard 100, 2018—Section 1—Purpose.

1.1 This standard provides criteria that will result in reduced energy consumption through improved energy efficiency and performance in existing *buildings*. In adopting this standard by rule, Washington state department of commerce shall seek to maximize reductions of greenhouse gas emissions from the *building* sector.

1.2 This standard is directed toward providing procedures and programs essential to energy efficient operation, maintenance, management, and monitoring; increasing the energy efficiency of the energy-using systems and components; upgrading the thermal performance of the *building* envelope; and promoting the use of *district energy system decarbonization plans* aligning with district energy policy in coordination with statewide *building* performance standards policies to reduce commercial and large state-owned *building* emissions.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-010, filed 7/30/24, effective 8/30/24; WSR 20-22-059, § 194-50-010, filed 10/30/20, effective 11/30/20.]

WAC 194-50-020 ASHRAE Standard 100, 2018—Section 2—Scope. This standard is mandatory for all *covered buildings* and *state campus district energy systems* located in the state of Washington. *Multifamily residential buildings* exceeding 50,000 square feet of *gross floor area*, excluding the parking garage areas, may seek early adopter incentives by voluntarily complying with the applicable *energy use intensity target* consistent with RCW 19.27A.220.

This standard applies to existing *buildings*, portions of *buildings*, and *building complexes*, including the envelope and all systems in the *building, state campus district energy systems,* and *campus district energy systems*. Owners of a *state campus district energy system* must develop a *decarbonization plan* that provides a strategy for up to 15 years for the decarbonization of the *district energy system.* Owners of a *campus district energy system* may opt-in to compliance with the standard through the alternative *decarbonization plan* compliance pathway. *Participating campuses* must comply with all of the *decarbonization plan* requirements in accordance with Normative Annex W. This standard excludes industrial and agricultural processes in *buildings* for which the energy targets do not include those processes.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-020, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-020, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-020, filed 10/30/20, effective 11/30/20.]

WAC 194-50-030 ASHRAE Standard 100, 2018—Section 3—Definitions.

3.1 General

Agricultural structure: A structure designed and constructed to house farm implements, hay, grain, poultry, livestock, or other horticultural products, and is not a place used by the public or a place of human habitation or employment where agricultural products are processed, treated, or packaged.

Applicable building codes: The Washington state building codes as adopted by the Washington state building code council, and as modified by local government amendments.

Authority having jurisdiction (AHJ): Washington state department of commerce.

Benchmarking: The practice of comparing the measured performance of a device, process, facility, or organization to itself, its peers, or established norms, with the goal of informing and motivating performance improvement. When applied to *building* energy use, *benchmarking* serves as a mechanism to measure energy performance over time, relative to other similar *buildings*.

Building owner: An individual or entity possessing title to a *building*. In the event of a land lease, the *building owner* is the entity possessing title to the *building* on leased land. Where condominium structures are subject to the standard, "*building owner*" means the owners' association.

Building tenant: A person or entity occupying or holding possession of a *building* or premises pursuant to a rental agreement.

Campus: A collection of *buildings* served by a district heating, cooling, water reuse or power system.

Campus district energy system: A *district energy system* that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to three or more *buildings* with more than 100,000 square feet of combined *conditioned space*, where the system and all *buildings* connected to the system are owned by:

(a) A single entity;

(b) A public-private partnership in which a private entity owns the systems providing heating, cooling, or heating and cooling to *buildings* owned by one public entity; or

(c) Two private entities in which one private entity owns the *buildings* connected to the system and another private entity owns the system providing heating, cooling, or heating and cooling to the *buildings*.

Certified commissioning professional: A person 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 and with experience commissioning at least two projects of similar size and of similar equipment to the current project, and at least one in the last three years. This experience includes the writing and execution of verification checks and functional test plans.

Complex: A group of *buildings* interconnected by *conditioned spaces* on *contiguous property*.

Conditional compliance: A temporary compliance method:

(a) For *Tier 1 covered buildings* used by *building owners* that demonstrates the owner has implemented energy use reduction strategies required by the standard, but has not demonstrated full compliance with the *energy use intensity target*.

(b) For *Tier 2 covered buildings* used by *building owners* that demonstrates the owner has benchmarked the *building* energy use in accordance with the standard, and provides an additional 180 days for *building owner* to demonstrate full compliance with the energy management plan (*EMP*) and operations and maintenance (*O&M*) program documentation.

Conditioned space: An area, room or space that is enclosed within the *building's* thermal envelope and is directly heated or cooled or 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. (also see, *semi-heated space*).

Connected buildings: A collection of *buildings* with shared energy meter(s) on *contiguous property*.

Contiguous property: Adjoining property under sole ownership.

Covered building: Includes *Tier 1 covered buildings* and *Tier 2 covered buildings*.

Decarbonization plan: A plan to comply with clean building performance standard in accordance with Normative Annex W.

Director: The *director* of the department of commerce or the *director's* designee.

Discounted payback: The time when the accumulated savings achieved by an investment, discounted by the appropriate discount rate, equals the initial cost of the investment.

District energy system: A system that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to *buildings*.

District energy system, campus: See *campus district energy system*.

District energy system, state campus: See *state campus district energy system*.

Energy target (EUI_t): Not adopted. See *energy use intensity target* (*EUI_t*).

Energy use intensity (EUI): A measurement that normalizes a *building's site energy* use relative to its size. A *building's energy use intensity* is calculated by dividing the total net energy consumed in one year by the *gross floor area* of the *building*, excluding the parking garage. "*Energy use intensity*" is reported as a value of a thousand British thermal units per square foot per year.

Energy use intensity target (EUI_t): The target for *net energy use intensity* of a *covered building*.

Gross floor area: The total number of square feet measured between the exterior surfaces of the enclosing fixed walls of a *building*, including all supporting functions such as offices, lobbies, restrooms,

equipment, storage areas, mechanical rooms, break rooms, and elevator shafts. *Gross floor area* does not include outside bays or docks.

Gross floor area for nonresidential buildings: Not adopted.

Gross floor area for residential buildings: Not adopted.

Grouped buildings: *Buildings* that comply at the campus-level as noted in Tables 7-2a and 7-4, Footnote #9, *campuses*, and *connected buildings*.

Lighting schedule: A list that provides a count of all *luminaires* in the *building*, lighting controls, fixture types, and product information.

More recently built buildings: *Buildings* or additions greater than 50,000 square feet in conditioned floor area permitted for construction based on the application permit date of July 1, 2016, or later. For example, *buildings* permitted to the 2015 edition of the Washington State Building Code, chapter 51-50 WAC.

Multifamily residential building: A covered multifamily *building* containing sleeping units or more than five dwelling units where occupants are primarily permanent in nature.

Net energy use: The sum of the metered and bulk fuel energy entering the *building*, minus the sum of metered energy leaving the *building* or campus. Renewable energy produced on a campus that is not attached to a *covered building* may be included. The same applies to portions of *buildings* with submetering. Bulk fuels are included using the equation in Section 5.2.2.1.

Nontarget buildings: *Buildings* with building activity type(s) without an energy target or not listed in Table 7-1 in more than 50 percent of the *gross floor area*.

Nontarget space: Space within a *building* with a building activity type without an energy target or not listed in Table 7-1.

Participating campus: A *campus* pursuing compliance through a *decarbonization plan* in accordance with Normative Annex W.

Physical occupancy: Space that is used by an owner or tenant regardless of occupant density and frequency of use. A *building* does not have *physical occupancy* and is considered unoccupied when 50 percent or more of the conditioned floor area is not leased or is otherwise vacant.

Qualified commissioning authority: Not adopted.

Qualified energy auditor: A person acting as the auditor of record having training, expertise and three years professional experience in *building* energy auditing and any one of the following:

(a) A licensed professional architect or engineer;

(b) A building energy assessment professional (BEAP) certified by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE);

(c) A certified energy auditor (CEA) certified by the Association of Energy Engineers (*AEE*).

(d) A certified energy manager (CEM) in current standing, certified by the Association of Energy Engineers (AEE).

(e) An energy management professional (EMP) certified by the Energy Management Association (EMA).

The *AHJ* may prescribe additional certifications and training to meet the minimum qualifications of a *qualified energy auditor*. When the *AHJ* prescribes such additional qualifications, it will provide notice of the determination on the agency website and will periodically update these rules to reflect additional qualifications of *qualified energy auditors*.

Qualified energy manager (QEM): An individual designated by the *building owner* who:

(a) Has two years of experience, including educational and/or professional experience, with commercial *building* operations and/or *building* energy management in addition to successful completion of clean buildings tier 2 training program as specified by the *AHJ*; or

(b) Meets the definition of a *qualified person*.

Qualified person: A person having training, expertise and three years professional experience in *building* energy use analysis and any of the following:

(a) A licensed professional architect or engineer in the state of Washington;

(b) A person with Building Operator Certification (BOC) Level II by Building Potential;

(c) A building commissioning professional certified by an ANSI/ISO/IEC 17024:2012 accredited organization;

(d) A *qualified energy auditor*;

(e) A certified energy manager (CEM) in current standing, certified by the Association of Energy Engineers (*AEE*);

(f) An energy management professional (*EMP*) certified by the Energy Management Association (EMA);

(g) A person with South Seattle College Sustainable Building Science Technology Bachelor of Applied Science degree, or as approved as equivalent by the *AHJ*.

The *AHJ* may prescribe additional certifications and training to meet the minimum qualifications of a *qualified person*. When the *AHJ* prescribes such additional qualifications, it will provide notice of the determination on the agency website and will periodically update these rules to reflect additional qualifications of *qualified persons*.

Recommissioning: An application of the commission process requirements to a project that has been delivered using the commissioning process.

Renewable natural gas: A gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, or anaerobic digesters and that is fully interchangeable with conventional natural gas.

Residential building: Not adopted.

Savings-to-investment ratio: The ratio of the total present value savings to the total present value costs of a bundle of an energy or water conservation measure estimated over the projected *useful life* of each measure. The numerator of the ratio is the present value of net savings in energy or water and nonfuel or nonwater operation and maintenance costs attributable to the proposed energy or water conservation measure. The denominator of the ratio is the present value of the net increase in investment and replacement costs less salvage value attributable to the proposed energy or water conservation measure.

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:

(a) Is heated but not cooled, and has an installed heating system output capacity greater than or equal to 3.4 Btu/(h-ft^2) but not greater than 8 Btu/(h-ft^2);

(b) Is not a walk-in cooler, walk-in freezer, refrigerated warehouse cooler or refrigerated warehouse freezer space.

Service life: See *useful life*.

Simple payback (years): The estimated incremental initial cost of an *EEM* divided by the estimated incremental annual cost savings of the measure expressed in years. The cost savings may include *energy cost* savings and incremental routine operations and maintenance costs or savings. The simple payback calculation shall be in accordance with NIST Handbook 135, Section 6.4.4, Equation 6-13.

State campus district energy system: A *district energy system* that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to five or more *buildings* with more than 100,000 square feet of combined *conditioned space*, where the system and all *buildings* connected to the system are owned by:

(a) The state of Washington; or

(b) A public-private partnership including one public *buildings owner* and one private entity.

State equipment standards: Appliance and equipment standards listed in chapter 19.260 RCW, Energy efficiency.

Tier 1 covered building: A *building* where the sum of nonresidential, hotel, motel, and dormitory floor areas exceeds 50,000 gross square feet, excluding the parking garage area.

Tier 2 covered building: A *building* where the sum of multifamily residential, nonresidential, hotel, motel, and dormitory floor areas exceeds 20,000 gross square feet, but does not exceed 50,000 gross square feet, excluding the parking garage area. *Tier 2 covered buildings* also include *multifamily residential buildings* where floor areas are equal to or exceed 50,000 gross square feet, excluding the parking garage area.

Useful life: The expected *service life* of *building* systems or equipment as published by the *AHJ*. For *EEMs* not included, the *qualified energy auditor* will be responsible for determining *useful life*. Used interchangeably with *service life*.

Weather normalized: A method for modifying the measured *building* energy use in a specific weather year to energy use under normal weather conditions.

Weather normalized energy use intensity (WNEUI): Measurement that normalizes a *building's site energy* use relative to its size based on the *buildings weather normalized site energy* use. A *building's energy use intensity* is calculated by dividing the total net *weather normalized* energy consumed in one year by the *gross floor area* of the *building*, excluding the parking garage. *Weather normalized energy use intensity* is reported as a value of 1,000 British thermal units per square foot per year.

3.2 Common abbreviations and acronyms

AEE Association of Energy Engineers.
AHJ *authority having jurisdiction*.
DDC *direct digital control*.
EEM *energy efficiency measure*.
EM *energy manager*.
EMP energy management plan.
EUI *energy use intensity*.
IRR *internal rate of return*.
LCCA life cycle cost analysis.
O&M operations and maintenance.
WSEC *Washington State Energy Code*.
WNEUI *Weather normalized energy use intensity*.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-030, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-030, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-030, filed 10/30/20, effective 11/30/20.]

WAC 194-50-040 ASHRAE Standard 100, 2018—Section 4—Compliance requirements.

4.1.1.1 A *building* or *complex* of *buildings* whose majority of *gross floor area* has activities in Table 7-1 shall comply with the requirements of Sections 4.2 and 4.3.

4.1.1.2 For *Tier 1 covered buildings*, the *qualified person* determining compliance shall:

1. Determine whether or not the *building* seeking compliance has an *energy use intensity target (EUI_t)* according to Section 7;
2. Establish the *energy use intensity target (EUI_t)* according to Section 7; and
3. Submit forms as specified in Normative Annex Z to the *AHJ*.

4.1.1.3 For *Tier 2 covered buildings*, the *qualified energy manager* submitting compliance documents shall:

1. Determine whether or not the *building* seeking compliance has an *energy use intensity target (EUI_t)* according to Section 7;
2. Establish the *energy use intensity target (EUI_t)* according to Section 7; and
3. Submit forms as specified in Normative Annex Y to the *AHJ*.

4.1.2 Residential building.

4.1.2.1 A *multifamily residential building* or *complex* of *multifamily residential buildings* shall comply with the requirements of Sections 4.2 and 4.3.

4.1.2.2 For *Tier 2 covered buildings*, the *qualified energy manager* submitting compliance documents shall:

1. Determine whether or not the *building* seeking compliance has an *energy use intensity target (EUI_t)* according to Section 7;
2. Establish the *energy use intensity target (EUI_t)* according to Section 7; and
3. Submit forms as specified in Normative Annex Y to the *AHJ*.

4.1.3 Buildings with residential and nonresidential activities – Not adopted.

4.1.4 District energy systems decarbonization.

4.1.4.1 *Participating campuses* shall comply with the requirements of Sections 4.2 and 4.3.

4.1.4.2 For *participating campuses*, the *qualified person* determining compliance shall:

1. Determine whether or not the *campus* seeking compliance has an *energy use intensity target* (EUI_t) according to Section 7;
2. Establish the *energy use intensity target* (EUI_t) according to Section 7;
3. Submit forms in accordance with Normative Annex W to the *AHJ;* and
4. Submit *decarbonization plan* as specified in Normative Annex W to the *AHJ*.

4.2.1 Operations and maintenance. The *building manager* shall comply with the operations and maintenance (*O&M*) requirements of Section 6.

4.2.1.1 For *Tier 1 covered buildings*, the *qualified person* determining compliance shall state in writing on Form A that the operating and maintenance requirements of Section 6 have been met:

1. For first-time *Tier 1 covered buildings* applicants, for the previous year.
2. For previously compliant *buildings*, since the previous validation of compliance.

4.2.1.2 For *Tier 2 covered buildings*, the *qualified energy manager* submitting compliance documents shall state in writing on Form A that the operating and maintenance requirements of Section 6 have been met:

1. For first-time *Tier 2 covered buildings* applicants, by the compliance date.
2. For previously compliant *buildings*, since the previous validation of compliance.

4.2.1.3 For *grouped buildings*, the *qualified person* determining compliance shall state in writing on Form J, that the operating and maintenance requirements of Section 6 have been met:

1. For first-time *grouped buildings* applicants, follow the compliance schedules in:
   a. Section Z3.2 for *Tier 1 covered buildings*;
   b. Section Y3.2 for *Tier 2 covered buildings*; and
   c. For *participating campuses* only by July 1, 2030, for *buildings* not covered, connected to the *district energy system*.
2. For previously compliant *grouped buildings*, since the previous validation of compliance.

4.2.1.4 For *grouped buildings*, the *qualified person* determining compliance may submit a single O&M program. The O&M program implemented for *participating campuses* through a *decarbonization plan* shall include all *campus buildings*. The O&M program implemented at a *connected building* or campus-level shall include all *covered buildings*.

4.2.2 Energy management plan. The *building manager* shall comply with the energy management plan (EMP) requirements of Section 5.

4.2.2.1 For *Tier 1 covered buildings*, the *qualified person* determining compliance shall state in writing on Form A that the EMP described in

Section 5 has been developed and is being maintained as of the date on Form A.

4.2.2.2 For *Tier 2 covered buildings*, the *qualified energy manager* submitting compliance documents shall state in writing on Form A that the EMP described in Section 5 has been developed and is being maintained as of the date on Form A.

4.2.2.3 For *grouped buildings*, the *qualified person* determining compliance shall state in writing on Form J, that the EMP described in Section 5 has been developed and is being maintained as of the date on Form J.

4.2.2.4 For *grouped buildings*, the *qualified person* determining compliance may submit a single EMP. The EMP implemented for *participating campuses* through a *decarbonization plan* shall include all *campus buildings*. The EMP implemented at a *connected building* or campus-level shall include all *covered buildings*.

4.3 Building energy use.

4.3.1 Measured EUI.

4.3.1.1 For *Tier 1 covered buildings*, the *qualified person* shall calculate the *building's* measured *energy use intensity* (*EUI*) by completing Form C according to Section 5.2.

4.3.1.2 For *Tier 2 covered buildings*, the *qualified energy manager* submitting compliance documents shall calculate the *building's* measured *energy use intensity* (*EUI*) by completing Form C according to Section 5.2.

4.3.1.3 For *grouped buildings*, the *qualified person* submitting compliance documents shall calculate the *grouped buildings'* measured *energy use intensity* (*EUI*) by completing Form C according to Section 5.2.

4.3.2 Buildings with energy targets. *Covered buildings* with energy targets must meet all the criteria for developing an energy target in Section 7.2 Determining *energy use intensity target* (EUI_t) and provide energy use data as specified by Section 5.2 Building energy monitoring. All other *buildings* shall comply with Section 4.3.3, Buildings without energy targets. *Tier 2 covered buildings* are not required to meet the target as they are exempt from Sections 4.3.2.1 through 4.3.2.3.

4.3.2.1 Building meets the energy target (EUI_t). If the *Tier 1 covered building's* measured *weather normalized energy use intensity (WNEUI)* is less than or equal to its energy target *(EUI_t)*, the *building* complies.

4.3.2.2 Tier 1 covered building does not meet the energy use intensity target (EUI_t). A *qualified energy auditor* shall complete an energy audit according to Section 8, and *EEMs* that will reduce energy use to meet the energy target shall be implemented according to Section 9. Upon completion of the implementation of all required *EEMs*, a *building* shall be granted *conditional compliance*.

Exceptions to 4.3.2.2:

1. *More recently built buildings*: For *buildings* that exceed the target developed in accordance with Section 7.2.1.1, but do not exceed the target developed in accordance with Section 7.2.1, the owner may demonstrate compliance by *recommissioning* the *building* using the ex-

isting-building commissioning process. The commissioning process consists of the following:

a. A *certified commissioning professional* shall implement the *building* commissioning process specified by the most recent edition of the Washington state energy code. The energy code commissioning process shall be modified by the *certified commissioning professional* for *recommissioning* purposes as described in ASHRAE Guideline 0.2-2015 Commissioning Process for Existing Systems and Assemblies and ASHRAE Guideline 1.2-2019 Technical Requirements for the Commissioning Process for Existing HVAC&R Systems and Assemblies.

b. Washington state energy code (*WSEC*) exceptions based on mechanical system or service water heating capacity shall not be applied when developing the scope for commissioning. For example, the 2018 *WSEC*, Section C408.1 General, the exceptions do not apply.

c. All deficiencies found during the commissioning process shall be resolved including corrections and retesting prior to submitting documentation for compliance or *conditional compliance*.

d. *Building owners* may omit capital expenditures identified by the commissioning process that are not cost-effective, as documented using the procedures in Normative Annex X.

2. No individual requirement need be met that would compromise the historical integrity of a *building* or part of a *building* designated by a government body for long-term preservation in its existing state, such as historical monuments. *EEMs* that can be implemented without modifying historical parts of the *building* shall be implemented as required by this standard. Documentation of historic significance must be provided to the *AHJ* by submitting Form G in accordance with Normative Annex Z.

4.3.2.3 Verification of compliance. Within 15 months after the completion of Section 4.3.2.2, the *weather normalized energy use intensity (WNEUI)* shall be recalculated by the *energy manager* (*EM*) from 12 consecutive months of measured energy use, and Form A shall be resubmitted to the *AHJ*. If the *building*'s post-implementation measured *EUI* is less than or equal to the energy target (EUI_t), the *building* complies with the standard. If the *building*'s post-implementation measured *EUI* is greater than the energy target (EUI_t), the *building* does not comply with the standard and the *conditional compliance* is suspended until either:

a. Additional *EEMs* have been implemented that reduce the subsequently measured *EUI* to below the energy target (EUI_t) and a new Form A is submitted to the *AHJ*; or

b. The *AHJ* revokes *conditional compliance*.

4.3.3 Buildings without energy targets.

Exception to 4.3.3: *Tier 2 covered buildings*.

4.3.3.2 Implement EEMs. The entire *optimized bundle* of *EEMs* identified shall be implemented. Upon completion of the implementation of the *optimized bundle* of *EEMs* and the energy management plan, including the operations and maintenance program, is in place as directed by Section Z4.5, a *building* shall be granted *conditional compliance* in accordance with Section 9.1.1.2.

Exception to 4.3.3.2: No individual requirement need be met that would compromise the historical integrity of a *building* or part of a *building* designated by a government body for long-term preservation in its existing state, such as historical monuments. Documentation of histor-

ic significance must be provided to the *AHJ* by submitting Form G in accordance with Normative Annex Z.

4.3.3.3 Verification of compliance for buildings with building energy monitoring in compliance with Section 5.2. If the *building* complies with Section 4.2, then within 15 months following the completion of implementation of the *optimized bundle of EEMs, building owners* with *conditional compliance* or the *qualified person* representing the *building owner* shall submit verification that measured post-implementation energy savings meet or exceed 75 percent of the energy savings projected in the energy audit report to the *AHJ*. Energy savings shall be compared at the whole-*building* consumption level in common units for electricity, fossil fuels, and other sources. If the measured post-implementation energy savings of the package of *EEMs* do not meet or exceed 75 percent of the energy savings projected in the energy audit, the *conditional compliance* is suspended until one of the following:

a. Additional cost-effective *EEMs* are implemented that reduce the subsequently measured energy savings of the package of *EEMs* so that it meets or exceeds 75 percent of the energy savings projected in the energy audit; or

b. Verification of energy savings using the methods of the *International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I,* options A through D. If the measurement and verification protocol identified any outstanding performance issues, they shall be corrected and the verification protocol shall be repeated to ensure optimal performance; or

c. The *AHJ* revokes *conditional compliance*.

4.3.3.4 Verification of compliance for buildings without building energy monitoring in compliance with Section 5.2. Verification of energy savings using the methods of the *International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I* options A through D. If the measurement and verification protocol identified any outstanding performance issues, they shall be corrected and the verification protocol shall be repeated to assure savings estimated in the original audit are realized.

4.4.1 Administrative requirements. *Building owners* shall demonstrate compliance with the standard by following the administrative requirements in Normative Annex Z for *Tier 1 covered buildings* or Normative Annex Y for *Tier 2 covered buildings*, including:

- **Z2/Y2** "*Building owner* response to notifications."
- **Z3/Y3** "Washington state reporting requirements for *building owners*."
- **Z4/Y4** "Documentation of compliance with the standard."
- **Z5/Y5** "Violations, assessment of administrative penalties, mitigation and review of penalty decisions."
- **Z6/Y6** "Compliance forms."
- **Z7/Y7** "Section 7 tables as modified by Washington state."

4.4.2 Alternative energy targets (EUI_t) - Not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-040, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-040, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-040, filed 10/30/20, effective 11/30/20.]

WAC 194-50-050 ASHRAE Standard 100, 2018—Section 5—Energy management plan.

Exception to 5.1.1 - Not adopted.

5.1.2.1 Energy accounting in accordance with Section 5.2.

5.1.2.2 In the initial year of compliance, the *building's weather normalized energy use intensity (WNEUI)* and *energy use intensity (EUI)*.

5.1.2.3 Annual updates of the *net energy use, WNEUI* and *EUI*.

5.1.2.4 Annual comparison of the net *WNEUI* and *EUI* to the energy target.

5.1.2.5 Documentation of original, current, and changes in number of occupants, weekly operating hours, or time of day scheduled for occupancy, production rates, and energy using equipment that would have caused change in the measured *WNEUI* and *EUI*.

Exceptions to 5.1.2.12:

1. *Buildings* and *grouped buildings* that meet the EUI_t.
2. *Buildings* that have implemented a utility program lighting upgrade covering 75 percent of the *building's* GFA, within the previous five years, can use the *lighting schedule* provided by the utility program.
3. *Tier 2 covered buildings.*
4. *Buildings* not meeting the definition of *covered building*.

5.1.2.13 The current lighting satisfaction survey and lighting checklist as described in Appendix D of *Performance Measurement Protocols for Commercial Buildings*[1] or as approved by the *AHJ*.

Exceptions to 5.1.2.13:

1. *Buildings* and *grouped buildings* that meet the EUI_t.
2. *Buildings* that have implemented a utility program lighting upgrade covering 75 percent of the *building's* GFA through a utility program within the previous five years.
3. *Tier 2 covered buildings.*
4. *Buildings* not meeting the definition of *covered building*.

5.1.2.14 Operations and Maintenance Plan including:

1. An operations and maintenance (*O&M*) program as defined in Section 6.
2. An *O&M* implementation plan as specified in Normative Annex L.
3. Implementation documentation as specified in L2.2.5 Documentation.

5.1.3 The *EM* shall provide access to the energy management plan to the *building* occupants annually.

5.2.1 Provide measured *net energy use* data for each *covered building*, including all forms of imported and exported energy from at least 12 consecutive months of data monitored in a period not to exceed two years prior to the efficiency audit. The net energy concept is illustrated in Figure 5-1, Table 5-1, Table 5-2 and is calculated in accordance with Section 5.2.4 as follows:

Building net energy use = (1a + 1b + 1c + 1d) − (3a + 3b + 3c + 3d + 3e)

Where 1a, 1b, 1c, and 1d are metered energy supplies that are used in the *building* (this includes bulk energy sources), and 3a, 3b,

3c, 3d, and 3e are metered energy excesses that are supplied to another *building* or grid as useful energy.

Table 5-2 Campus Energy Flow Definitions

Energy Input in to District Energy System(s)	**Energy Delivered to Buildings** (other than from District Energy System(s))	**Campus Renewable Energy Production**	**Energy Exported from Campus for Beneficial Use**
1a. Electrical	2a. Electrical	3a. Electrical	4a. Excess solar thermal
1b. Gas	2b. Gas	3b. Thermal	4b. Excess solar or wind electrical
1c. Bulk fuel	2c. Bulk fuel (coal/ biomass/propane/oil)	3c. Waste heat	4c. Excess or recovered thermal energy
			4d. Excess co-gen electrical
			4e. Excess co-gen thermal

5.2.1.1 End use deductions. Where submetered from a *building's* meter, the following end use energy consumption may be deducted from the *building's* measured *net energy use*:

1. Electric vehicle charging equipment that transfers electricity to batteries or other energy storage devices in electric vehicles.
2. Electric loads related to broadcast antennas, on-site cell phone towers or other communications equipment that is unrelated to the primary purpose of the *building*.
3. The *AHJ* may add additional end use deductions based on technological advancements.

5.2.1.2 Connected buildings. Where energy use is not monitored at the *covered building* level:

1. *Tier 1 covered buildings*: *Net energy use* data may be provided at the *connected building* level.
2. *Tier 2 covered buildings*: *Net energy use* data shall be provided at the *connected building* level.

5.2.1.3 Campuses. *Campuses* with *district energy systems* use the *campus net energy use* outlined in Table 5-2. Provide measured *net energy use* data for the *campus* including all forms of imported and exported energy from at least 12 consecutive months of data monitored in a period not to exceed two years prior to the efficiency audit. Provide measured energy on the input side of the *district energy system* and include *net energy use* data for each *covered building. Campus net energy use* is calculated as follows:

Campus net energy use = (1a + 1b + 1c + 2a + 2b + 2c) − (4a + 4b + 4c + 4d + 4e)

5.2.1.4 *Decarbonization plan*. *Participating campuses' net energy use* data shall include all *buildings* on the *campus*. Thermal energy for the *campus* shall be measured at the input side of the *district energy system*.

5.2.2 Energy use data for each type of energy imported into and exported from the *building* shall be collected from utility or energy delivery bills (that must include the quantity of energy or fuel delivered) or by monitoring local energy meters (either utility or owner-provided meters). Owner-provided energy meters shall meet the metering accuracy, tolerances and testing requirements of Title 480 WAC or WAC 51-11C-40904 (Section C409.4 of the *WSEC*).

5.2.3 Energy conversion factors. The *site energy* content of different forms of purchased energy shall be converted from the purchased unit

to the standard *site energy* unit using the conversion factors incorporated in Energy Star portfolio manager.

5.2.4 The *energy accounting system* shall be Energy Star Portfolio Manager as specified in Normative Annex Z.

5.2.4.1 - Not adopted.

5.2.4.2 - Not adopted.

5.2.4.3 - Not adopted.

Table 5-2a Site Energy Conversion Factors - Table not adopted.

Table 5-2b Primary Energy Conversion Factors - Table not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-050, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-050, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-050, filed 10/30/20, effective 11/30/20.]

WAC 194-50-060 ASHRAE Standard 100, 2018—Section 6—Operations and maintenance requirements.

6.3 Operation and maintenance (O&M) Implementation. The *O&M* program shall be implemented in accordance with Normative Annex L.

Exception to 6.3: *O&M* programs developed and implemented by the *building's* serving utility or local government and approved as equivalent or more stringent by the *AHJ* may be used as an alternative to the requirement in Section 6.3. Where local government programs are more stringent than applicable utility programs, local government programs shall be selected over utility programs.

6.6.1 When HVAC, domestic hot-water heating, or refrigeration equipment or appliances are replaced, the replacement equipment shall meet all applicable energy efficiency requirements in the federal equipment standards, *state equipment standards*, and the *applicable building code*.

Exception to 6.6.1 - Not adopted.

6.6.2.1 When lighting equipment is replaced, the replacement equipment shall meet all applicable energy efficiency requirements in the federal equipment standards, *state equipment standards* and in the *applicable building code*. Implementation of more efficient equipment shall be evaluated and included as specified for the *capital management plan*, Section 5.1.2.10.

Exception to 6.6.2.2: The existing installed lighting power may proportionally increase when the current light levels are below those recommended in the IES *Lighting Handbook* 4 or latest version of the Washington State Energy Code.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-060, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-060, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-060, filed 10/30/20, effective 11/30/20.]

WAC 194-50-070 ASHRAE Standard 100, 2018—Section 7—Energy use analysis and target requirements.

7.1 Building activity type and energy targets.

7.1.1 Building activity type. *Buildings* are divided into activity types as shown in Table 7-1 Normative Annex Z. Building activity types are defined by the *AHJ* in Table 7-4.

7.1.2 Energy targets. Energy targets for each building activity type are listed in Table 7.2a, Normative Annex Z.

7.1.3 Building operating shifts normalization factors. *Building* operating shifts normalization factors for each building activity type are listed in Table 7-3, Normative Annex Z.

7.2.1 For *Tier 1 covered buildings* the *qualified person* or for *Tier 2 covered building* the *qualified energy manager* shall determine the *energy use intensity target* (EUI_t) according to Section 7.2.2 for single-type/activity *buildings* and Section 7.2.3 for mixed-use *buildings*, and shall complete Form B.

Note: *Buildings* in *participating campuses* pursuing compliance through Normative Annex W, or at the *connected building* or campus-level shall determine the EUI_t as an area weighted aggregate of building-level EUI_t. Development of the EUI_t shall not include *nontarget buildings*.

Exceptions to 7.2.1:

1. *Tier 2 covered buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report Energy Star portfolio manager median site *EUI*.

2. EUI_t programs developed and implemented by the *building's* local government and approved as equivalent or more stringent by the *AHJ* may be used as an alternative to the requirement in Section 7.2.1.

7.2.1.1 Additional target for more recently built buildings: In addition to the requirements of section 7.2.1, *more recently built buildings* shall create a second EUI_t that is 15 percent less than the target developed for compliance with section 7.2.1. This shall be the *building* EUI_t and shall be included on Form B.

7.2.2 Energy targets for *buildings* with a single activity shall be calculated as follows:

$$(EUI_t) = S \times (EUI_{t1})$$

where (EUI_{t1}) is the *building* activity energy target value in Table 7-2a for the appropriate *building* activities/types and climate, and *S* is the *building* operating shifts normalization factor in Table 7-3.

7.2.3 Energy targets for *buildings* with multiple activities shall be determined using weighted averages of *building* activity energy target for each area with a single activity, per the following equation, and reported on Normative Annex C Form B:

$$EUI_t = (A \times S \times EUI_{t1})_1 + (A \times S \times EUI_{t1})_2 + \ldots + (A \times S \times EUI_{t1})_i + \ldots + (A \times S \times EUI_{t1})_n$$

Where:

$(A)_i$ = percentage of the *gross floor area* with single *building* activity *i*

$(EUI_{t1})_i$ = *building* activity target from Table 7-2a for space *i*

$(S)_i$ = operating shifts normalization factor from Table 7-3 for space *i*

$(A \times S \times EUI_{t1})_i$ = the weighted space *EUI* target for space *i*

Exceptions to 7.2.3: The *energy use intensity target* (EUI_t) of a *building* may be modified using the following exceptions. These exceptions shall not be applied at the *grouped building* level. To develop the EUI_t for *grouped buildings*, apply the exceptions at the building-level, then calculate the weighted average EUI_t for the *grouped buildings*. None of these exceptions may be used to change the total *gross floor area* as it applies to Normative Annex Z, Section Z3.1 Compliance schedule.

1. **Majority of building is single-use:** Spaces where more than 75 percent of the *gross floor area* has a single building activity type listed in Table 7-1 shall be reported as a single-use *building* or as a multiuse *building* in accordance with either Section 7.2.2 or Section 7.2.3.

2. **Similar building activity types:** Spaces less than 10 percent of the *gross floor area* with building activity type listed in Table 7-1 can combine their floor area with the floor area within the *building* that has a similar building activity type and similar EUI_t as determined by the *qualified person*.

3. **Nontarget spaces 10 percent:** *Nontarget spaces* in *buildings* with multiple activities can be excluded from *building* energy target calculations if the *nontarget spaces* total combined area $\Sigma A_{nontarget}$ comprise less than 10 percent of the *building gross floor area* A_{gross} and both:

a. Energy use of such space is metered separately.

b. *Nontarget spaces* comply with Sections 4.1 and 4.2.

The energy target for the remaining part of the *building* shall be calculated after deducting the floor area of the *nontarget spaces* from the *building gross floor area* (A_{gross}-$\Sigma A_{nontarget}$). *Nontarget spaces* shall be limited to the floor area occupied by the nontarget activity and shall not include supporting spaces such as corridors, common areas or other building activity types listed in Table 7-1.

4. **Nontarget spaces 50 percent:** *Nontarget spaces* in *buildings* with multiple activities can be excluded from *building* energy target calculations if the *nontarget spaces* total combined area $\Sigma A_{nontarget}$ comprise less than 50 percent of the *building gross floor area* A_{gross} and both:

a. Energy use of such space is metered separately.

b. *Nontarget spaces* comply with Sections 4.1, 4.2, 4.3.1, and 4.3.3.

The energy target for the remaining part of the *building* shall be calculated after deducting the floor area of the *nontarget spaces* from the *building gross floor area* (A_{gross}-$\Sigma A_{nontarget}$). *Nontarget spaces* shall be limited to the floor area occupied by the nontarget activity and shall not include supporting spaces such as corridors, common areas or other building activity types listed in Table 7-1.

5. **Nontarget buildings in grouped buildings:** *Nontarget buildings* within *grouped buildings* shall:

a. Be metered separately and not included in the EUI_t development.

b. *Nontarget buildings* shall comply with Sections 4.1, 4.2, 4.3.1, and 4.3.3.

The energy target for the remaining *grouped buildings* shall be calculated after deducting the floor area of the *nontarget buildings* from the *grouped building gross floor area* (A_{gross} $\Sigma A_{nontarget}$).

7.2.4 Energy targets for vacant and partially vacant buildings.

Exception to 7.2.4 Vacant and partially vacant buildings: If the *building* did not have *physical occupancy* by owner or tenant for at least 50 percent of the conditioned floor area throughout the consecutive 12-month period prior to the *building* compliance date, the *building owner* may apply for an exemption as specified in Normative Annex Z.

7.2.4.1 Vacant space – use unchanged: The energy target for vacant spaces shall be based on its prevacancy activity if the intended use of the *building* will be unchanged.

7.2.4.2 Vacant space – unconditioned: If the total floor area of a nonheated, noncooled, and nonilluminated vacant part of a *building* is smaller than 50 percent of the *gross floor area*, then it shall be excluded from the *gross floor area*, and the energy target shall be determined based on the remainder of the *building* as described in Section 7.2.3. This allowance may not be used to change the total *gross floor area* as it applies to Normative Annex Z, Z3.1 Compliance schedule.

7.2.4.3 Vacant space – conditioned: If the vacant part of a *building* is heated and/or cooled, and the *building* energy use data for a consecutive 12-month period when the *building* was occupied within two years prior to the compliance date is not available, the vacant space shall be included in the *gross floor area*, and the energy target for the vacant space shall be determined based on Section 7.2.4.1.

Table 7-1 Building Activity Types/Activities
Table 7-1 adopted as modified and published in Section Z7
Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (I-P Units)
Table 7-2a adopted as modified and published in Section Z7
Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (SI Units) - Not adopted
Table 7-2b Building Activity Source Energy Targets (EUI_{t1}) (I-P Units) - Not adopted
Table 7-2b Building Activity Source Energy Targets (EUI_{t1}) (SI Units) - Not adopted
Table 7-2c Building Activity Electricity Site Energy Use Targets ($ELUI_{t1}$) (I-P Units) - Not adopted
Table 7-2c Building Activity Electricity Site Energy Use Targets ($ELUI_{t1}$) (SI Units) - Not adopted
Table 7-2d Building Activity Fossil Fuel Site Energy Use Targets ($FEUI_{t1}$) (I-P Units) - Not adopted
Table 7-2d Building Activity Fossil Fuel Site Energy Use Targets ($FEUI_{t1}$) (SI Units) - Not adopted
Table 7-3 Building Operating Shifts Normalization Factor
Table 7-3 adopted as modified in Section Z7
Table 7-4 Building Activity Type Definitions Table

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-070, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-070, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-070, filed 10/30/20, effective 11/30/20.]

WAC 194-50-080 ASHRAE Standard 100, 2018—Section 8—Energy Audit Requirements.

8.1 The *qualified energy auditor* shall complete Form D and submit to the *authority having jurisdiction* (*AHJ*). If an energy audit is required within this section, a copy of the audit summary results shall be included in the compliance documentation in a format specified in Normative Annex Z. Compliance with this standard shall be achieved by adopting *energy efficiency measures* (*EEMs*) that collectively will reduce annual *building* energy use.

Exception to 8.1: For Level 1 audit, no Form D is required unless complying through *conditional compliance* or the *decarbonization plan* exception to Section W3.1.1(1).

8.2 Energy audit requirements for buildings without energy targets.

8.2.1 Overall process. A Level 2 energy audit (as defined in Section 8.4.2) shall be conducted for all *Tier 1 covered buildings* not having an energy target. The energy audit and the associated energy audit report shall be completed by a *qualified energy auditor* practicing within their field of competency.

Exception to 8.2.1: *Buildings* may use energy audits completed within five years prior to the *building's* compliance date, provided that the scope of the energy audit meets the requirements of this section and that there have been minimal changes to the systems within the audit scope. The energy audit must be evaluated consistent with the investment criteria in Normative Annex X.

8.2.2 The scope of the energy audit shall include the following required end uses as applicable to the *building*:

- Envelope;
- Lighting;
- Cooling;
- Heating;
- Ventilation and exhaust systems;
- Air distribution systems;
- Heating, chilled, condenser, and domestic water systems;
- Refrigeration except for food processing refrigeration;
- Power generation equipment;
- Uninterruptible power supplies and power distribution units;
- People-moving systems;
- The scope of the energy audit may include *campus district heating and/or cooling systems* when the *campus district heating and/or cooling system* serves the *building* being audited.

8.3.2 Buildings that do not meet their energy targets overall process. An energy audit shall be conducted, and an associated energy audit report shall be provided, for all *buildings* that do not meet their energy target. The energy audit shall be completed by a *qualified energy auditor* practicing within their field of competency. The energy audit shall be at an audit level specified by the *qualified energy auditor* to be sufficient to identify and evaluate the *EEMs* that, if implemented, would result in the *building* meeting its energy target. The *qualified energy auditor* may refer to the list of potential *EEMs* in Informative Annex E.

After the completion of the audit and the selection of *EEMs* to be implemented, the applicant must calculate an adjusted *energy use intensity* (*EUI*) for the *building* based on the estimated energy savings

from the selected *EEMs* and the historical energy use of the *building*. This adjusted *EUI* is then compared to the energy target for the *building*. If the adjusted *EUI* is less than the energy target, the applicant shall proceed with implementation as specified in Section 9. If the adjusted *EUI* is greater than the energy target, a more rigorous energy audit investigation is required to identify additional *EEMs*. This process is repeated until the *building's* adjusted *EUI* is less than its energy target.

Calculation of the adjusted *EUI* is shown in the following equation:

$$EUI_{adj} = (\text{Energy}_{hist} - \text{Energy}_{saved})/\text{GFA}$$

Where:

Energy_{hist} = Historical annual energy use, kBtu

Energy_{saved} = Estimated annual energy savings, kBtu

GFA = *Gross floor area*, ft^2

Following the completion of an energy audit that has identified *EEMs* sufficient to meet the *building's* energy target, the applicant shall implement those *EEMs* per the requirements of Section 9.

Exception to 8.3.2: *Buildings* may use energy audits completed within five years prior to the *building's* compliance date, provided that the scope of the energy audit meets the requirements of this section and there have been minimal changes to the systems within the audit scope. In this case, the same comparison of adjusted *EUI* to energy target shall be made by the applicant. If the *EEMs* identified in the audit are still applicable, have not been implemented, and if implemented would result in the *building* meeting its energy target, these measures shall be implemented by the facility, and the project shall follow the procedures in Section 9. If the identified *EEMs* do not result in an adjusted *EUI* less than the energy target, a new energy audit shall be conducted as described in Section 8.3.2.

8.4.1 Level 1 Audit. *Buildings* shall perform a Level 1 audit (walk-through analysis) as defined in ANSI/ASHRAE/ACCA Standard 211-2018 Standard for Commercial Building Energy Audits, Section 5.3[12].

8.4.2 Level 2 Audit. *Buildings* shall perform a Level 2 Audit (energy survey and engineering analysis) as defined in *ANSI/ASHRAE/ACCA Standard 211-2018 Standard for Commercial Building Energy Audits*, Section 5.4[12].

8.5.1 Audit results. The energy audit report shall define the actions necessary for the *building owner* to achieve the energy and cost savings that are recommended in the report.

Energy audit results shall be presented in a summary table that includes, at a minimum, an estimate of each of the following:

- A list of recommended *EEMs* that, if implemented, will either meet the energy target for the *building* if it has a target or, if it does not have an energy target, will meet the economic criteria set by the standard in Section 9.
- The estimated energy savings and peak demand savings associated with each recommended *EEM*, expressed in the cost units used on the

building owner's energy bills, and the units used for comparison with the energy target.

• The estimated (modeled) *energy cost* savings associated with each recommended *EEM*.

• The estimated cost of implementation for each recommended *EEM*. The costs of implementation shall include the required monitoring of energy savings per the requirements of Section 9.

The economic evaluation of measures are required by Normative Annex X.

8.5.2 Interactive effects. Energy savings analysis shall include *interactive effects* of all selected *EEMs*. When considering multiple *EEMs* with *interactive effects*, the order of analysis shall start with load reduction measures and proceed through distribution systems and associated equipment efficiencies and then plant and heat-rejection systems. Any *interactive effects* on equipment sizing and part load performance of equipment shall be accounted for due to reduced loads on subsequent systems.

8.5.4.1 Nonfederal facilities. The minimum financial criteria required for reporting is specified in Normative Annex X.

8.5.4.2 U.S. Federal Facilities - Not adopted.

8.5.5 End-use analysis. The energy audit shall include an end-use analysis that compares the estimated energy use of the facility after implementation of all selected *EEMs* to historical utility consumption. The intent of this requirement is to ensure that estimates of the base-case end-use energy estimates and potential energy-savings estimates in the energy audit report are reasonable.

***Informative Note*:** For example, if the audit identifies lighting retrofit opportunities, the *qualified energy auditor* shall compare the identified energy savings for those opportunities with the base-case energy use of the facility and demonstrate that they make up a reasonable fraction of the historical electricity consumption at the site.

8.5.5.2 Requirements for Level 2 Audits. The *qualified energy auditor* is required to estimate the energy use of all end uses that individually comprise more than five percent of total historical *building* energy use. The energy estimates for these end uses shall be summed and compared to historical energy consumption for the facility. The sum of the base-case end-use energy estimates must be between 90 percent and 100 percent of the historical energy use at the site.

This comparison shall be conducted separately for each fuel type, such as electricity, natural gas, or fuel oil, for which *EEMs* are identified. On-site energy sources such as solar, photovoltaic, geothermal, and wind shall be included.

Correction for historical weather for the base year versus average weather used in *baseline* estimates may be used.

The same energy use estimates that comprise the end-use analysis shall also be used as the basis for energy savings calculations. The *qualified energy auditor* shall verify that each *EEM* savings estimate is reasonable in comparison to the historical energy consumption of that end use based on energy consumption survey data or experience with similar sites.

The *qualified energy auditor* shall verify that the combined savings from multiple *EEMs* shall take into account *interactive effects* among measures.

Miscellaneous plug loads may be estimated on average equipment power density and *building* area. (See Form D in Normative Annex Z.)

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-080, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-080, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-080, filed 10/30/20, effective 11/30/20.]

WAC 194-50-090 ASHRAE Standard 100, 2018—Section 9—Implementation and verification requirements.

9.1.1 Requirements. *Buildings* that have an energy target shall comply with the requirements of Section 9.1.1.1. *Buildings* that do not have an energy target shall comply with the requirements of Section 9.1.1.2. All *buildings* shall implement an energy management plan as described in Section 5. The energy management plan shall be integrated into the *building's capital management plan* as described in Section 5. The energy management plan shall include the elements listed in Section 5.

9.1.1.1 Buildings with energy targets. For *buildings* having energy targets, *energy efficiency measures (EEMs)* identified from the energy audit shall be implemented in order to meet the *building's* energy target. Develop a written plan for maintaining the *building's energy use intensity (EUI)* at or below the energy target.

Exceptions to Section 9.1.1.1:

1. **Investment criteria EEMs:** *Buildings* may demonstrate compliance by implementing all of the *EEMs* that achieve the investment criteria in Normative Annex X.

2. **District energy system EEMs:** Implementation of *EEMs* to *district energy system(s)* in lieu of or in combination with *EEMs* implemented directly to *campus buildings* is acceptable, provided the energy audit demonstrates the energy savings from the *district energy system EEMs* will be equal to or greater than the energy saved from the *EEMs* identified for the *buildings*. Energy savings shall be measured as a reduction in Btu per year.

3. **Grouped buildings EEMs:** Implementation of *EEMs* to non-*Tier 1 covered buildings* complying at the *grouped buildings* level is acceptable, provided the energy audit demonstrates the energy savings from the *EEMs* implemented at the *grouped buildings* level will result in a *WNEUI* at or below the energy target of the *grouped buildings*.

4. **Tier 2 covered buildings:** *Tier 2 covered buildings.*

9.1.1.2 Buildings without energy targets. *Buildings* that do not have an energy target shall implement all of the *EEMs* that achieve the investment criteria in Normative Annex X.

Exceptions to 9.1.1.2:

1. **District energy system EEMs:** Implementation of *EEMs* to *district energy system(s)* in lieu of or in combination with *EEMs* implemented directly to *campus buildings* is acceptable, provided the energy audit demonstrates the energy savings from the *district energy system EEMs* will be equal to or greater than the energy saved from the *EEMs* identified for the *buildings*. Energy savings shall be measured as a reduction in Btu per year.

2. **Tier 2 covered buildings:** *Tier 2 covered buildings.*

9.1.1.2.1 - Not adopted.

9.1.1.2.2 - Not adopted.

9.1.2.1 Training of Building Staff. An ongoing written training plan shall be implemented. *Building* occupants and staff shall be trained, at a minimum, as established by the operations and maintenance (*O&M*) program defined in Section 6.

9.1.2.2 Multiple buildings. A multiple-*building* plan shall be implemented to coordinate *EEM* implementation and measurement of the *EUI* among *buildings* when complying at the *campus,* campus-level or *connected building* level.

9.1.2.3 Implementation and commissioning of EEMs. *EEMs* shall be implemented and commissioned in accordance with the Washington State Energy Code. Washington state energy code (*WSEC*) exceptions based on mechanical system or service water heating capacity shall not be applied when developing the scope for commissioning. For example, the 2018 *WSEC*, Section C408.1 General, the exceptions do not apply. The *qualified energy auditor* or *qualified person* shall review the commissioning report and certify that the *EEMs* are functioning as intended.

***Informative Note*:** For guidance on commissioning protocols, refer to ASHRAE Guideline 0.2-2015 Commissioning Process for Existing Systems and Assemblies and ASHRAE Guideline 1.2-2019 Technical Requirements for the Commissioning Process for Existing HVAC&R Systems and Assemblies.

9.1.2.4 Energy efficiency sequencing. Implementation of *EEMs* shall be prioritized to take advantage of the life cycle of *building* systems and to minimize the disruption of *building* occupants. Delayed implementation shall be evaluated using the methodology included in Normative Appendix X and reported in the energy management plan.

9.2.2 Verification of implemented EEMs for Buildings without Energy Targets. Upon implementation of *EEMs*, the affected end-use systems shall be monitored for one year to verify *EEM* energy savings. The *qualified energy auditor* or *qualified person* shall review the results of the *EEM* energy monitoring and certify that the energy savings of the package of *EEMs* meets or exceeds 75 percent of the energy savings projected in the energy audit as required. For *buildings* unable to meet the requirements of Section 5.2 Building energy monitoring, the *qualified energy auditor* or *qualified person* shall provide verification using the methods of the *International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I*[11] options A through D.

9.3 Compliance. The *qualified person* shall complete the compliance documentation as required in Normative Annex Z.

ASHRAE Standard 100, 2018—Section 10 - Not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-090, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-090, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-090, filed 10/30/20, effective 11/30/20.]

WAC 194-50-110 ASHRAE Standard 100, 2018—Section 11—References. 1. ASHRAE. 2010. *Performance Measurement Protocols for Commercial Buildings*. Atlanta: ASHRAE.

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12. *ANSI/ASHRAE/ACCA Standard 211-2018 Standard for Commercial Building Energy Audits*, Section 5.3.

13. ASHRAE Guideline 0.2-2015 Commissioning Process for Existing Systems and Assemblies.

14. ASHRAE Guideline 1.2-2018 Technical Requirements for the Commissioning Process for Existing HVAC&R Systems and Assemblies.

Normative Annex A - Not adopted.

Informative Annex B - Not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-110, filed 10/30/20, effective 11/30/20.]

WAC 194-50-120 Normative Annex C Forms. For Washington State Compliance Normative Annex C forms adopted as modified and published in Normative Annex Z, Section Z6. Compliance forms for *Tier 1 covered buildings* and Normative Annex Y, Section Y6 Compliance forms for *Tier 2 covered buildings*.

Informative Annex F Standard 100 Compliance Flow Chart - Not adopted.

[Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-120, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-120, filed 10/30/20, effective 11/30/20.]

WAC 194-50-130 Normative Annex L—Operations and maintenance implementation.

L2 Operations and maintenance program.

Each *building* system shall have an *O&M* program that, at a minimum, preserves the condition of the system and its elements in a manner that enables the system to provide the intended thermal and visual comfort, energy efficiency, and helps to achieve the intended indoor environmental quality required for the *building*.

At a minimum, the *O&M* program shall contain an inventory of equipment, systems and controls to be inspected and *maintained* and a maintenance plan describing the goals, objectives, and execution of the systems maintenance program.

L2.2.3 Inspection and maintenance tasks. Inspection and maintenance tasks for inventoried equipment, systems and controls shall be established. Inspection shall include the physical assessment of system components and may include measurement of operating parameters and data provided by sensors or a *building* management system (BMS). Maintenance tasks shall include adjustment, service, or replacement of inventoried equipment and systems. Control systems settings including, but not limited to, set points, schedules, and sequence of operations shall be inspected and *maintained*.

L2.2.4 Inspection and maintenance task frequencies. Frequency of inspection and maintenance tasks for inventoried equipment, systems, and controls shall be established. If unacceptable condition indicators or unacceptable performance is found during two consecutive inspections, the owner or owner's designated representative shall investigate and analyze possible causes. At a minimum, the following possible causes shall be investigated:

- *Poor field practices.* Review inspection documentation and/or technician execution to ensure maintenance tasks are performed correctly.
- *Insufficient time budgeted for tasks.* Review time budgeted to the technician to ensure that reasonable time has been given to perform the tasks.
- *Component repairs noted/pending/not made.* Inspect documentation to determine that repair or component replacement has been undertaken.
- *Design issues.* Determine whether underlying design issues are causing successive failures.
- *Obsolete equipment or components.* Determine whether the equipment or component has been in service beyond its *useful life*.
- *Conditions outside of the building system causing failure.* Investigate whether water leaks, vandalism, a problem in the *building* envelope, a problem with the power supplied to the *building*, or some other external factor is causing the problem.

Based on the analysis, the inspection frequency or the maintenance task shall be modified to resolve the deficiency.

If acceptable condition indicators or acceptable performance is found during three successive inspections, the inspection frequency for that task may be reduced from the existing frequency. The reduced frequency shall be based on the specific findings and shall be documented.

Frequency may be adjusted for climate related or operational reasons. Each adjusted frequency shall be documented, including the reason for the adjustment.

Informative Note: Examples include the following:

• **Cooling tower shutdown during the winter.** Inspection and maintenance may be suspended during the shutdown period.

• **A new chiller is installed and the old chiller is retained as a backup.** Inspection and maintenance of the backup unit may be adjusted to reflect fewer operating hours.

• **A new lighting fixture and lamp is installed with a much longer life expectancy.** Inspection and *lamp* replacement frequency may be extended to reflect the new device.

L2.2.5 Documentation. A minimum inspection and maintenance documentation package shall consist of the following items:

1. Listings of *building* systems and system components with associated performance criteria pertinent to the facility.

2. Inspection and maintenance tasks and the method of tracking (automated or manual).

3. Identify building systems or components operating beyond their *useful life*.

4. Sufficient record detail and verification (written or electronic) to demonstrate implementation of the maintenance plan.

The inspection and maintenance document directory shall provide easy access and be well organized and clearly identified. Emergency information shall be immediately available and shall include emergency staff and/or agency notification procedures.

Informative Annex M Guidance on Building Type Definitions - Not adopted.

Informative Annex N Addenda Description Information - Not adopted.

[Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-130, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-130, filed 10/30/20, effective 11/30/20.]

WAC 194-50-140 Normative Annex X—Investment criteria—This is a normative annex and is part of the Tier 1 covered building requirements of this standard.

X1 Demonstrating compliance with the investment criteria. *Buildings* seeking compliance using the exception to Section 9.1.1.1 or 9.1.1.2 shall demonstrate compliance with the financial investment criteria of this annex. The investment criteria shall be documented using a level 2 energy audit and by performing the life cycle cost analysis (*LCCA*) as per X2.2.

X1.1 General guidance on cost and benefits for the base case and alternative case.

The life cycle cost analysis is a process which compares the base case of the existing *building* to the alternative case that implements *EEMs* proposed by the energy audit. Total life cycle cost of each case are produced by the analysis, but the resulting cost and benefits of interest are the incremental life cycle cost difference between each case. Measures and bundles of measures demonstrating positive life cy-

cle cost compared to the base case are to be implemented in accordance with chapter 9.

The base case in the energy audit and LCCA will include all costs for energy, operations and maintenance and other related cost scheduled in the analysis period. This may include replacement of existing equipment upon failure with code compliant equipment, in the analysis period of measure life of the alternative. All these costs are captured in the base case.

The alternate case captures all cost and benefits associated with implementing additional efficiency features beyond in-kind or code minimum replacement. All costs and all benefits of implementing *EEMs* required by Section 9 should be captured by the analysis. All documented costs may be considered.

Extended implementation periods are allowed by this standard. This allows more *EEMs* to be considered at time of failure resulting in much of the cost of implementation being attributed to the base case. This requires including the implementation timing of the measure in the extended compliance period. Ultimately, this reduces the cost of the alternative case and will likely make *EEMs* that are not cost-effective as an early replacement be cost-effective as replacement upgrades.

X2 Energy audits and investment criteria pathway.

X2.1 *Buildings* qualifying under the investment criteria must complete a LCCA and implement an *optimized bundle* of *energy efficiency measures* that provide maximum energy savings without resulting in a *savings-to-investment ratio* of less than one.

Exception: *Building owners* may demonstrate compliance with this section by completing the Level 2 energy audit and implementing all *EEMs* determined to have a *simple payback* that is less than the *EEMs* expected *useful life*.

X2.2 The procedures for developing the investment criteria shall be based on ANSI/ASHRAE/ACCA Standard 211 Section 5.5.2 and Section 5.5.3 Life-Cycle Cost Analysis (LCCA) as modified by section X2. The *LCCA* shall also follow, and consider the findings of, the Level 2 Audit as defined by ANSI/ASHRAE/ACCA Standard 211 Section 5.4.

X2.3 Investment criteria chronological process.

X2.3.1 Level 2 audit. Evaluate a comprehensive list of individual *EEMs* using *simple payback* as a screening criteria. Individual *EEMs* determined to have a *simple payback* that is greater than the *EEMs useful life* may be excluded from further consideration.

Note: The simple payback calculation shall be in accordance with NIST Handbook 135, Section 6.4.4, Equation 6-13.

X2.3.2 Life cycle cost assessment. Identify an *optimized bundle* of *EEMs* that provides maximum energy savings without resulting in a *savings-to-investment ratio* of less than one. The *optimized bundle* of measures shall be implemented based on the schedule established within the energy management plan.

X2.3.2.1 Life cycle cost assessment on individual measures. Individual measures that do not meet the life cycle cost test may be excluded from the implementation plan if they are not integral to the implementation of other cost-effective measures in the bundle.

X2.3.2.2 Phased implementation. The *LCCA* and energy management plan may include phased implementation such that the *building owner* is not required to replace a system or equipment before the end of the system's or equipment's *useful life*.

X3 Included LCCA costs and savings.

X3.1 The costs and savings to be included within the life cycle cost analysis shall be based on ANSI/ASHRAE/ACCA Standard 211 Sections 5.4.8.1, 5.5.2 and 5.5.3 as modified by the following:

X3.1.1 Cost for implementation of EEM, as required by Section 9.

1. **Estimate EEM Costs** (based on Standard 211 Sections 5.4.8).

2. **Estimate the total expected cost of implementation for each practical measure.** Cost estimates shall include the following factors, as applicable:

a. Material costs;
b. Labor costs, contracted or executed by employees;
c. Design fees;
d. Construction management, contracted or executed by employees;
e. Site-specific installation factors;
f. Permits;
g. Temporary services;
h. Testing, adjusting, and balancing;
i. Utility service upgrades;
j. Verification, as required in Section 9.2.2 only;
k. Commissioning;
l. Taxes;
m. Profit;
n. Any additional adjustments that significantly impact the cost estimate of the *EEM*.

***Informative Note*:** Multiple measures affecting the same *building* systems or end uses may be combined and their costs estimated as a group. Combining costs may improve the cost-effectiveness of combined measures.

3. **Hazardous material abatement** (based on standard 211, 5.4.8.2). Estimation of hazardous material abatement costs is not required. If the possible presence of hazardous materials is apparent at the site, either through observation or as reported by others, the possible presence of the hazardous material shall be included in the report (see Standard 211 Section 6.2.5) as potentially affecting health and safety and installation costs.

4. **Cost and cost savings of recommended EEMs** (based on standard 211 Section 5.5.2).

Estimate the initial and recurring costs, *energy cost* savings, and nonenergy cost savings of each measure and each integrated group of measures. Cost estimates shall either be:

a. Obtained from a vendor at the quoted price; or
b. Based on quotations of similar projects within the last year; or
c. Based on labor cost estimates for employee labor.

5. **Life-cycle cost analysis (LCCA)** (based on standard 211 section 5.5.2). *LCCA* 7,8,9,10 of each recommended *EEM* shall be conducted for a time frame that spans, at a minimum, the life of the measure with the longest service *useful life* and shall include the following:

a. Initial costs (per Standard 211 Section 5.4.8.1);
b. Financing costs;
c. Annual *energy costs*;
d. Escalation rates as published by the *AHJ* citing the source within the energy audit report;
e. Discount rates as published by the *AHJ* citing the source within the energy audit report;

f. Tax credits and deductions;
g. Cash incentives, grants, and rebates;
h. Expected periodic replacements;
i. Estimated recurring nonenergy costs (maintenance, etc.), of each measure or set of measures. Such costs include annual maintenance and service labor costs, routine replacement of worn parts, or annual warranty fees from manufacturers;
j. Contingency funds not to exceed 5 percent of estimated *EEM* implementation cost; and
k. Water & sewer savings from *EEM*. *EEMs* that provide water and/or wastewater savings shall include the operations and maintenance savings resulting from implementation of the *EEM*.

X4 Life cycle cost analysis methodology, form and key variables.

X4.1 Life-cycle cost analysis completed for *buildings* qualifying under the investment criteria shall follow the *National Institute of Standards and Technology (NIST) Handbook 135, Life-Cycle Costing Manual for the Federal Energy Management Program* except as specified in this standard in Table X-1.

Table X-1 Life Cycle Cost Analysis Variables Independent Of NIST Handbook - 135 Methodology.

Public owner discount rate	A fixed annual rate based on the cost of borrowing through the Washington state treasurer, certificate of participation programs, the local program and the state lease-purchase program.
Private owner discount rate	Shall be the published *Wall Street Journal Prime Rate* for based on the average of the previous twelve months.
Financing	Applicants with documented costs of borrowing assuming one hundred percent of the *EEM* implementation costs are financed at an actual cost of borrowing and stated terms when the property being improved is listed as loan collateral.
Rate of inflation	A fixed annual rate, as published annually by the Washington state office of financial management.
Fuel escalation rate	Based on the most recent edition of *NIST Handbook - 135 Annual Supplement - Fuel Escalation Rates.*
Study period	Equal to the *useful life* of the longest-lived *EEM* within an *optimized bundle*. (STD 211, 5.5.3)

X4.2 Publication of analysis variables. The *AHJ* shall on an annual basis publish the public owner discount rate, private owner discount rate, rate of inflation and fuel escalation rates on the agency website.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-140, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-140, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-140, filed 10/30/20, effective 11/30/20.]

WAC 194-50-150 Normative Annex Z—Washington state Tier 1 covered buildings reporting requirements—This is a normative annex and is part of the Tier 1 covered building requirements of this standard.

Z1 Building owner notifications by the AHJ.

Z1.1 Notification to building owners of covered buildings by the AHJ. Based on records obtained from each county assessor and other available information sources, the *AHJ* must create a database of *covered*

buildings and *building owners* required to comply with the standard established in accordance with this section. The database may include *buildings* and *building complexes* presumed to meet the definition of *covered building* and multifamily *buildings* greater than 50,000 square feet in floor area.

Z1.1.1 The database will contain information about *buildings* that may be subject to compliance, their owners, and information about *multifamily residential buildings* eligible for incentives. The database will also contain information to assist tracking and reporting on *building owner* compliance, and incentive application and distribution. Commerce will create a method for tracking *building owner* notification responses. Each *building* or *building complex* will be assigned a unique *building* identifier.

Z1.2 By July 1, 2021, the *AHJ* must provide the owners of *covered buildings* with notification of compliance requirements. Notifications will be mailed to the mailing addresses county assessors have on file.

Z1.3 Failure by the *AHJ* to provide the notification in Z1.2 does not release the *building owner* of the legal obligation to comply with this law. When a *covered building* undergoes a change of ownership, it is the buyer's responsibility to contact the *AHJ* and update the *covered building's* profile.

Z1.4 By July 1, 2021, the *AHJ* must provide notifications to the *building owners* of *multifamily residential building* where the floor area exceeds 50,000 gross square feet, excluding the parking garage area.

Z2 Building owner response to notifications.

Z2.1 Correction of errors. *Building owners* are responsible for reviewing the property and *building* information provided by the *AHJ* through notification including, but not limited to, *building* or *building complex* ownership details, *gross floor area*, and other information as identified by the *building owner*.

Z2.1.1 Correction of errors documentation form. *Building owners* who are notified in error may submit a correction form to the *AHJ*. The correction form will be used to document *gross floor area* (conditioned and unconditioned) and/or *building* type. *Building owners* that submit the correction form must also submit the documentation required to demonstrate an exception as required in Section Z4.1 prior to the compliance date if applicable.

Z3 Washington state reporting requirements for building owners.

Z3.1 General compliance. The *building owner* of a *covered building* must report compliance with the standard to the *AHJ* in accordance with the compliance schedule established under Section Z3.1 and every five years thereafter. For each reporting date, the *building owner* must submit documentation to demonstrate that:

1. The *weather normalized energy use intensity* of the *covered building* measured in a period not to exceed two years prior to the compliance deadline specified in Normative Annex Z3.1 is less than or equal to the *energy use intensity target* (*buildings* that meet their energy targets); or
2. The *covered building* has met the measurement and verification requirements of Section 4.3.3.3 or Section 4.3.3.4 of the investment criteria; or

3. The *covered building* has received *conditional compliance* from the *AHJ* based on energy efficiency actions prescribed by the standard; or

4. The *covered building* is exempt from the standard by demonstrating that the *building* meets one of the criteria for an exemption.

Z3.2 Compliance schedule. The *building owner* of a *covered building* must report the *building owner's* compliance with the standard to the *AHJ* in accordance with the appropriate initial compliance date as follows and every five years thereafter.

1. For a *building* with more than 220,000 gross square feet, June 1, 2026;

2. For a *building* with more than 90,000 gross square feet but less than 220,001 gross square feet, June 1, 2027; and

3. For a *building* with more than 50,000 gross square feet but less than 90,001 gross square feet, June 1, 2028.

4. *Covered buildings* complying at a *grouped building* level shall use the compliance schedule representing the largest *covered building* or the compliance schedule can be graduated through *conditional compliance* provisions of the standard in accordance with individual *covered building* compliance schedules of Sections Z3.2, Y3.2, and W3.2. Notify the *AHJ* a minimum of 180 days prior to the largest *covered building's* compliance date when complying at a *grouped building* level to update the *covered building* profile(s) and when applicable, to apply for *conditional compliance* in accordance with Section Z4.4 or Z4.5.

Z3.2.1 Early compliance option. *Building owners* may submit for compliance to the *AHJ* beginning July 1, 2023. Energy use data for developing the net energy consumption of the *covered building* shall be measured in a period not to exceed two years prior to the submission of compliance documentation. This section expires June 1, 2028.

Z3.2.2 Application for conditional compliance. Applications for *conditional compliance* must be submitted to the *AHJ* no later than 180 days prior to the compliance date to receive *conditional compliance* approval prior to the compliance date.

Z3.2.3 Application for exemption. *Building owners* submitting an application for exemption as specified in Section Z4.1 must submit to the *AHJ* no sooner than three years prior and no later than 180 days prior to the compliance date to receive exemption approval prior to the compliance date.

Z4 Documentation of compliance with the standard. Documentation of compliance shall be submitted to the *AHJ* demonstrating the *building owner* has complied with the standard through submission of documentation in accordance with Section Z4.1, Z4.2, Z4.3, Z4.4 or Z4.5. Additional requirements for continued reporting may be required as specified in Z4.6.

Z4.1 Documentation of compliance through exemption. *Building owners* seeking approval of exemption shall submit to the *AHJ* the Z6.7 Form H, "Application for exemption certificate," documenting the following:

1. **Exemption conditions.** The *building* qualifies for one of the exemptions listed in Z4.1(2), and:

a. **Exemption verification.** Compliance with the exemption must be verified by the owner based on the *building* as it is to be occupied and operating on the compliance date;

b. **Exemption application time frame.** Applications for exemptions may be submitted no sooner than three years prior to the compliance date and submitted to the *AHJ* no later than 180 days prior to the compliance date;

c. **Exemption certificate validity.** Exemptions certificates are only valid for the current compliance review cycle.

d. **Exemption recertification.** Within six months before the compliance date, *building owners* who have received exemption approval must certify that the *building* still meets the eligibility qualifications for the exemption and that there have been no material changes to qualifying conditions. A template for acceptable declarations will be made available by the *AHJ* on the agency website.

2. **Exemptions.** *Covered buildings* are not eligible for exemption from the standards unless they meet at least one of the following criteria:

a. **Certificate of occupancy.** The *building* did not have a certificate of occupancy or temporary certificate of occupancy for a consecutive 12-month period within two years prior to the compliance date;

b. **Physical occupancy.** The *building* did not have *physical occupancy* by owner or tenant for at least 50 percent of the *conditioned floor area* throughout the consecutive 12-month period prior to the *building* compliance date. *Buildings* approved for this exemption that have a *gross floor area* with greater than 20,000 square feet of occupied floor area shall comply with *Tier 2 covered building* requirements for the occupied floor area;

c. **Unconditioned and semi-heated space.** The sum of the *building's gross floor area* minus unconditioned and *semi-heated spaces*, as defined in the Washington State Energy Code, is less than 50,000 square feet. *Buildings* approved for this exemption with *gross floor area* minus unconditioned and *semi-heated spaces*, as defined in the Washington State Energy Code, greater than 20,000 square feet shall comply with *Tier 2 covered building* requirements of this standard;

d. **Manufacturing or industrial.** More than 50 percent of the *gross floor area* of the *building* is used for manufacturing or other industrial purposes, as defined under the following use designations of the Washington state edition of the *International Building Code*:

i. Factory group F; or

ii. High hazard group H.

Aggregate *gross floor area* of spaces with nonexempt occupancy classification greater than 20,000 square feet shall comply with *Tier 2 covered building* requirements.

e. **Agricultural.** The *building* is an *agricultural structure*;

f. **Demolition.** The *building* is pending demolition; or

g. **Financial hardship.** The *building* meets at least one of the following conditions of financial hardship:

i. The *building* had arrears of property taxes or water or wastewater charges that resulted in the *building's* inclusion, within the prior two years, on a city's or county's annual tax lien sale list;

ii. The *building* has a court appointed receiver in control of the asset due to financial distress;

iii. The *building* is owned by a financial institution through default by a borrower;

iv. The *building* has been acquired by a deed in lieu of foreclosure within the previous 24 months;

v. The *building* has a senior mortgage subject to a notice of default;

vi. The *building owner* has an immediate and heavy financial need which cannot be satisfied from other reasonable available resources and which are caused by events that are beyond their control.

3. **Notification of exemption approved or denied.** After documents have been submitted and reviewed, the *AHJ* will send notification of approval or denial.

a. If the exemption is approved the *AHJ* shall notify the applicant stating the application has been approved and update the *AHJ* records for the *building*.

b. If the exemption is denied the *AHJ* shall notify the applicant stating the application has been denied and update the *AHJ* records for the *building*.

4. **Compliance required when exemption denied.** When an application for exemption is denied the *building owner* must proceed with the process to demonstrate compliance with one of the compliance options in Washington state reporting requirements for *building owners*, Z4.2-Z4.5.

Z4.2 Buildings that meet the EUI_t. *Building owners* must provide the following documentation to verify that the *building weather normalized EUI* is less than the *building* EUI_t and that the energy management plan (*EMP*) must be completed and the operations and maintenance program (*O&M*) must be implemented.

- Form A;
- Form B;
- Form C.

Z4.3 Buildings that will meet the building investment criteria prior to the compliance date. *Building owners* must provide the following documentation to verify that the *building* has implemented all *EEMs* that meet the cost-effectiveness criteria resulting from the energy audit and economic evaluation criteria from Normative Annex X. The energy management plan (*EMP*) must be completed and the operations and maintenance program (*O&M*) must be implemented and all *EEMs* must be installed and commissioned prior to the compliance date.

- Form A;
- Form B;
- Form C, except *buildings* unable to meet Section 5.2, Building energy monitoring;
- Form D;
- Form F, except *buildings* using the exception to Section X2.1.

Z4.4 Buildings that will meet the EUI_t through conditional compliance. *Building owners* must provide the following documentation to verify that the *building weather normalized EUI* is projected to be less than the *building* EUI_t at the end of the measurement and verification period and that the energy management plan (*EMP*) must be completed and the operations and maintenance program (*O&M*) must be implemented. *EEMs* required to meet the EUI_t must be installed and commissioned prior to the compliance date. Verification and completion shall be documented as required in Section Z4.6.

- Form A;
- Form B;
- Form C;
- Form D.
- Continued reporting until completion as specified in Section Z4.6.

Z4.5 Buildings that will meet the building investment criteria through conditional compliance. *Building owners* must provide the following documentation to verify that the *building* has implemented all *EEMs* that meet the cost-effectiveness criteria resulting from the energy audit and economic evaluation criteria from Normative Annex X. The energy management plan (*EMP*) must be completed and the operations and maintenance program (*O&M*) must be implemented and all *EEMs* must be installed and commissioned prior to the compliance date. Verification and completion shall be documented as required in Section Z4.6.

- Form A;
- Form B;
- Form C, except *buildings* unable to meet Section 5.2 Building Energy Monitoring;
- Form D;
- Form F, except *buildings* using the exception to Section X2.1.
- Continued reporting until completion as specified in Section Z4.6.

Z4.5.1 Phased implementation for investment criteria through conditional compliance. The *building owner* may include phased implementation of *EEMs* such that the *building owner* is not required to replace a system or equipment before the end of the system or equipment's *useful life*. System or equipment fitting this description shall be included in the energy audit and Normative Annex X - Investment criteria submission with a schedule for replacement. Phased implementation shall be documented in the energy management plan (*EMP*) and *capital management plan* required in Section 5.

Z4.6 Continued reporting until completion. Continued reporting is required as specified in Sections Z4.6.1 and Z4.6.2 until completion when: a) measurement and verification extends one year or more beyond the compliance date, or b) implementation is extended phased implementation.

Z4.6.1 Annual reporting. The following up to date reports shall be submitted to the *AHJ* annually, (date specific).

- Form A;
- Form B;
- Form C, except *buildings* unable to meet Section 5.2, Building energy.

Z4.6.2 Completion Reporting. The following up to date reports shall be submitted to the *AHJ* when all conditions of compliance have been verified and documented:

- Form A;
- Form B;
- Form C, except *buildings* unable to meet Section 5.2, Building energy monitoring. *Buildings* unable to meet Section 5.2 shall include the verification specified in Section 9.2.2 in the *building* energy management plan.

Z5 Violations, assessment of administrative penalties, mitigation and review of penalty decisions.

Z5.1 Authorization. The *AHJ* is authorized to impose administrative penalties upon *building owners* for failing to submit documentation demonstrating compliance with the requirements of this standard.

Failure to submit documentation demonstrating compliance by the scheduled reporting date will result in progressive penalties by legal notice.

Z5.2 Notice of violation and opportunity to correct (NOVC) (first notice).

Z5.2.1 Notifying owner of failure to demonstrate compliance. The *AHJ* may issue a NOVC when a *building owner* has failed to submit documentation that demonstrates compliance with this standard by the scheduled reporting date.

Z5.2.2 Issuing NOVC. A NOVC may be issued for any of the following reasons:

1. Failure to submit a compliance report in the form and manner prescribed by the *AHJ*;
2. Failure to meet an *energy use intensity target* or failure to receive *conditional compliance* approval;
3. Failure to provide accurate reporting consistent with the requirements of the standard; and
4. Failure to provide a valid exemption certificate.

Z5.2.3 Identifying failure to demonstrate compliance. The *AHJ* will identify in the NOVC which section(s) of law, code, or the standard for which the *building owner* has failed to demonstrate compliance.

Z5.2.4 Specifying time frame to remedy. The NOVC will specify the time by which the *building owner* must cure the violation by submitting documentation that demonstrates compliance with the identified section(s) of law, code, or the standard. The *AHJ* will give the *building owner* at least seven calendar days to submit such documentation.

Z5.2.5 Missing NOVC response deadline. If sufficient documentation is not submitted by the date specified in the NOVC, the *AHJ* will issue a notice of violation and intent to assess administrative penalties (NOVI) and the *building owner* will be subject to administrative penalties.

Z5.3 Notice of violation and intent to assess administrative penalties (NOVI) (second notice).

Z5.3.1 Issuing NOVI. If a *building owner* fails to respond to a NOVC by submitting documentation demonstrating compliance by the date specified in the NOVC, the *AHJ* will issue a NOVI.

Z5.3.2 Identifying failure to demonstrate compliance and assessing penalties. The *AHJ* will identify in the NOVI which section(s) of law, code, or the standard for which the *building owner* has failed to demonstrate compliance. The NOVI will also include a description of how the penalties the *AHJ* intends to assess will be calculated.

Z5.3.3 Responding to NOVI. *Building owners* must respond to a NOVI within 30 days by either:

1. Submitting an application for exemption in accordance with Section Z4.1 if applicable;
2. Submitting a noncompliance mitigation plan in accordance with Z5.7;
3. Submitting its intent to pay the penalties by using the form provided by the *AHJ*; or
4. Submitting a request for an administrative proceeding to challenge or mitigate the penalty.

Z5.3.4 Missing NOVI response deadline. If the *building owner* does not timely request a hearing or submit an application for exemption, the *building owner* waives its right to a hearing and the *director* or their designee may issue a final order assessing the penalties described in the NOVI. If the *building owner* has submitted a mitigation plan, the final order will only assess penalties from the scheduled compliance date until the date of an approval of compliance or *conditional compliance*.

Z5.3.5 Requesting hearing for denied exemption. *Building owners* who submit an application for exemption that is denied may request a hearing by submitting a request for a hearing within 30 days of issuance of the decision denying its application for exemption. If the *building owner* does not request a hearing within 30 days, the *building owner* waives its right to a hearing and the *director* or their designee may issue a final order assessing the penalties described in the NOVI.

Z5.4 Assessment of administrative penalties.

Z5.4.1 Penalties for building owners. Failure to submit documentation demonstrating compliance with the standard by the date specified in a NOVC will result in the issuance of a NOVI and the assessment of administrative penalties at an amount not to exceed $5,000 plus an amount based on the duration of any continuing violation. The additional amount for a continuing violation may not exceed a daily amount equal to one dollar per square foot of *gross floor area* per year.

a. Penalties are assessed for each compliance period.

b. The *AHJ* may by rule increase the penalty rates to adjust for the effects of inflation.

Z5.4.1.1 Submit a noncompliance mitigation plan. For *building owners* subject to a NOVI who respond within 30 days by submitting a noncompliance mitigation plan (Z5.7), fines shall be assessed on an annual basis or when the *building owner* achieves compliance or *conditional compliance*.

a. **With completion documentation.** For applicants that submit a noncompliance mitigation plan and who submit documentation demonstrating completion, daily penalties will be assessed from the scheduled compliance date to the date of approval of compliance or *conditional compliance*. The penalty will be assessed at an amount not to exceed 30 percent of $5,000 plus a daily amount equal to 20 cents per square foot of *gross floor area* per year.

b. **Without completion documentation.** For applicants that submit a noncompliance mitigation plan but have not submitted documentation demonstrating completion, if the *building* does not comply with the standard by the next compliance date, the *building owner* will be assessed the maximum penalty of $5,000 plus a daily amount equal to one dollar per square foot of *gross floor area* per year not to exceed a value greater than 18 months of accrued penalty.

Z5.4.1.2 Choose to pay the fine rather than pursuing compliance. *Building owners* may choose to respond to the NOVI by paying the maximum penalty. The *building owner* will be assessed the maximum penalty of $5,000 plus a daily amount equal to one dollar per square foot of *gross floor area* per year not to exceed a value greater than 18 months of accrued penalty.

Z5.4.2 Late fees. When assessed penalties are not paid within 180 days of the date of a final order assessing penalties, the *AHJ* may assess

further penalties. Total penalties assessed for *Tier 1 covered buildings* will not exceed $5,000 plus a daily amount equal to one dollar per square foot of *gross floor area* per year.

Z5.4.3 Interest. Interest will accrue on civil penalties pursuant to RCW 43.17.240 if and when the debt becomes past due.

Z5.5 Due date and collection of penalties.

Z5.5.1 Penalties due. Penalties shall become due and payable on the later of:

1. Thirty days after receipt of the final order imposing the penalty; or

2. The date specified in the final order imposing the penalty.

Z5.5.2 Debt collection. If a penalty has not been paid by the due date, the *AHJ* may assign the debt to a collection agency as authorized by RCW 19.16.500 or take other action to pursue collection as authorized by law. If referred to a collection agency, the *AHJ* may add a reasonable fee, payable by the debtor, to the outstanding debt for the collection agency fee.

Z5.5.3 Accumulated daily fine. For *building owners* that are implementing a noncompliance mitigation plan but have not yet complied, the *AHJ* may assess the accumulated daily fine on June 1st of each year or shortly thereafter.

Z5.6 Payment of administrative penalties.

A check or money order payable in U.S. funds to the Washington state department of commerce can be mailed to:

Washington State Department of Commerce
Re: Clean Buildings Initiative, Energy Division
P.O. Box 42525
Olympia, WA 98504-2525

Z5.7 Noncompliance mitigation plan. Owners of *covered buildings* that are out of compliance by the scheduled compliance date and have not corrected the violation by the date noted in a NOVC may reduce possible penalties by demonstrating that they are taking action to achieve compliance with the standard. To begin the process of mitigating noncompliance, a *building owner* must submit to the *AHJ* the noncompliance mitigation plan form selecting one of the following actions within 30 days of the date of a NOVI to avoid immediate issuance of penalty in accordance with Z5.4.1.

1. Compliance with the standard in accordance with Z4.2.

2. *Conditional compliance* with the standard in accordance with Z4.4.

3. *Conditional compliance* with the standard in accordance with Z4.5.

Z5.7.1 Mitigation completion. To demonstrate completion, the *building owner* shall complete all of the requirements of this standard and submit documentation as required by Section Z4.2, Z4.4 or Z4.5. After the *building owner* has demonstrated completion, the *AHJ* shall issue a final order assessing the reduced penalty as specified by Z5.4.1.1(a).

Z5.8 Administrative hearings.

Z5.8.1 Requesting a hearing. A *building owner* may request an administrative hearing after receiving an NOVI or after the denial of its application for an exemption by submitting a request within 30 days of

the date of a NOVI or the denial of a timely application for exemption. All requests must be made in writing and filed at the address specified on the NOVI. For convenience, the *AHJ* will attach a form titled request for hearing to the NOVI that may be used to request an administrative hearing.

Requests for hearing must be accompanied by the following:

1. Washington state *building* ID;
2. Submit Annex Z Forms A, B, and C.

Z5.8.2 Hearing process. The *AHJ* may refer matters to the office of administrative hearings (OAH). Administrative hearings will be conducted in accordance with chapter 34.05 WAC, Administrative Procedure Act, chapter 10-08 WAC, Model rules of procedure, and the procedural rules adopted in this chapter. In the case of a conflict between the model rules of procedure and the procedural rules adopted in this section, the procedural rules adopted in this section take precedence.

Z5.8.3 Initial orders to become final orders. Initial orders issued by the presiding officer will become final without further agency action unless, within 20 days:

1. The *director* determines that the initial order should be reviewed; or

2. A party to the proceeding files a petition for administrative review of the initial order. Upon occurrence of either event, notice shall be given to all parties to the proceeding.

Z5.8.4. Judicial review. A final order entered pursuant to this section is subject to judicial review pursuant to RCW 34.05.510 through 34.05.598.

Z5.8.5 Collected penalties. Administrative penalties collected under this section must be deposited into the low-income weatherization and structural rehabilitation assistance account created in RCW 70A.35.030.

Z6 Compliance forms. The following section replace Normative Annex C Forms in Standard 100 and provide additional forms specified by rule *Building owners* are required to submit the applicable forms and the required supporting information to demonstrate compliance with the standard. These forms replace all referenced forms in this standard. The *AHJ* will make these forms available in an electronic format for submission to the *AHJ*.

Z6.1 Compliance with Standard 100 (Form A)

Note: For *grouped buildings*, use Grouped Buildings Compliance with Standard 100 (Form J), instead of Form A.

1. *Building* identification:
   a. Washington state *building* ID;
   b. County;
   c. County parcel number(s);
   d. Portfolio manager property ID number;
   e. Property name;
   f. Parent property name;
   g. Address 1 (street);
   h. Address 2;
   i. City;
   j. State; and
   k. Postal code.
2. Contact information:
   a. *Building owner* name(s);

b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State/Province;
g. Country;
h. Postal code;
i. Telephone number;
j. Email address.
3. *Qualified person*:
a. *Qualified person* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State;
f. Postal code;
g. Telephone number;
h. Email address;
i. Licensed, certified (select all that apply):
i. Licensure; or
ii. Certifying authority.
4. *Energy manager* (if different than the *qualified person*):
a. *Energy manager* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State/Province;
f. Postal code;
g. Country;
h. Telephone number;
i. Email address.
5. This compliance report is for:
a. *Building* that meets the EUI_t;
b. *Building* that meets the *building* investment criteria prior to the compliance date;
c. *Building* that will meet the EUI_t through *conditional compliance*;
d. *Building* that will meet the *building* investment criteria through *conditional compliance*;
e. Annual reporting;
f. Completion reporting.
6. Summary data:
a. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Z6.2 Form B;

Note: *Baseline WNEUI* for *buildings* that will meet investment criteria through *conditional compliance*.

b. Measured site *EUI* (kBtu/ft^2) for the compliance year for this *building* based on Z6.3 Form C;
c. *Building* without an energy target;

Note: Predicted site *EUI* for *buildings* that will meet the EUI_t or investment criteria through *conditional compliance*.

Note: *Buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report national median site *EUI* as calculated by the Energy Star portfolio manager account and reported on Form C.

d. Measured *weather normalized* site *EUI* (kBtu/ft^2) for the compliance year based on Z6.3 Form C;
e. List the months/year of the collected data (mm/yyyy - mm/yyyy) for the compliance year for this *building* from Z6.3 Form C;

f. *Buildings* applying for *conditional compliance* through meeting the EUI_t shall submit the following based on Section Z6.4 Form D:

• *Baseline EUI*;

• Projected *EUI*;

g. *Buildings* applying for *conditional compliance* through meeting the investment criteria shall submit the following based on Section Z6.4 Form D:

• *Baseline* total kBtu;

• Projected total kBtu;

• Projected savings total kBtu;

h. *Buildings* unable to comply with Section 5.2, Building energy monitoring and complete Z6.3 Form C shall provide a reason statement.

7. Have the energy management requirements of Section 5 been met? [ ] Yes [ ] No

• Upload energy management plan as specified by the *AHJ*.

8. Have the operation and maintenance requirements of Section 6 been met? [ ] Yes [ ] No

• Upload operation and maintenance implementation documentation as specified by the *AHJ*.

9. Date the audit and economic evaluation was completed (N/A if none required).

• Upload audit reports as specified by Z6.4 Form D.

10. Have all *EEMs* required by Section 8 been implemented? [ ] Yes [ ] No

11. Have the requirements of Section 9 been completed? [ ] Yes [ ] No

12. We state that this *building* complies with ANSI/ASHRAE/IES Standard 100 as amended by the *AHJ* to conform with RCW 19.27A.210:

a. Signature of *building owner*:

• Date:

b. Signature of *qualified person*:

• Date:

c. Signature of *energy manager*:

• Date:

d. Signature of *authority having jurisdiction*:

• Conditional or final compliance:

• Date:

Z6.2 Building activity and energy use intensity target (EUI_t) (Form B). - Complete form provided by the AHJ with the following information:

1. *Building* identification:

a. Washington state *building* ID;

b. County;

c. County parcel number(s);

d. Portfolio manager property ID number;

e. Property name;

f. Parent property name;

g. Address 1 (street);

h. Address 2;

i. City;

j. State; and

k. Postal code.

2. List the *building* location climate zone, 4C or 5B. Determine the climate zone using ASHRAE climate zone as found on the map in Informative Annex G.

a. *Buildings* located in Climate Zone 5C shall use Climate Zone 4C.

b. *Buildings* located in Climate Zone 6B shall use Climate Zone 5B.

3. The *gross floor area* in square feet shall be reported as defined in Section 3.

4. If entire *building* is a *nontarget building*, a single building activity type not listed in Table 7-1, it should be listed as "*building* without target" on Z6.1 Form A. List "energy target" as "N/A" on Z6.2 Form B and Z6.2 Form B is considered complete.

5. Fill in fraction of *gross floor area* $(A)i$ for each activity. For single-activity *buildings* this is 1.0.

6. Fill in the operating shifts normalization factor $(S)i$ from Table 7-3 for each activity.

7. Fill in the activity energy target (EUI_{t1})i from Table 7-2 (or table from *AHJ*) for each activity.

8. Calculate weighted space *EUI* target $(A \times S \times EUI_{t1})i$ for each activity.

9. Add up fraction of floor area and enter sum in "Total fraction of floor area with target," and add up all weighted space *EUI* targets and enter sum as the "energy target" on Z6.2 and Z6.1 Forms B and A.

10. If more than 50 percent of *gross floor area* has no target, it should be listed as "*building* without target" on Z6.1 Form A. List "energy target" as "N/A" on Z6.2 Form B.

For single-activity *buildings* this is 1.0.

Z6.3 Energy Use Intensity Calculations (Form C). *Energy Use Intensity* Calculations shall be reported via the U.S. EPA's ENERGY STAR Portfolio Manager (www.energystar.gov/benchmark). The *energy manager* is responsible for creating Energy Star portfolio manager record for each *building*.

Exception to Z6.3: *Buildings* unable to comply with Section 5.2, Building energy monitoring shall comply at the *connected buildings* level or demonstrate compliance through Z4.3 or Z4.5.

The Energy Star portfolio manager *building* record shall be identical to the *building* activity/type, fraction floor area, operating shifts (hours of operation) and *gross floor area* of the *building* as reported on Form B. All inputs shall be up to date prior to reporting as required in Section Z4 and annually as required in Section 5.1.2.3, Annual updates of the *net energy use* and *EUI*.

Prior to submitting reports run the Energy Star portfolio manager data quality checker and make all corrections required to complete the report.

The *energy manager* shall use the EPA's Energy Star portfolio manager share properties feature and share the property data with the *AHJ* by enabling the read only access and exchange data feature.

For each report submitted under Section Z4, the *energy manager* shall create and submit a report documenting the required data fields listed (below) and other fields deemed necessary by the *AHJ* for the reporting period.

Report fields shall include:

- Portfolio manager property ID;
- Portfolio manager parent property ID;
- Property name;
- Parent property name;
- Address 1;

- Address 2;
- City;
- County;
- State/Province;
- Postal Code;
- Primary property type - Self-selected;
- Primary property type - EPA calculated;
- List of all property use types at property;
- Property GFA - Self-reported (ft^2);
- Property GFA - EPA calculated (*buildings* and parking) (ft^2);
- Property GFA - EPA calculated (*buildings*) (ft^2);
- Property GFA - EPA calculated (parking) (ft^2);
- Largest property use type;
- Largest property use type - *Gross floor area* (ft^2);
- 2nd Largest property use type;
- 2nd Largest property use - *Gross floor area* (ft^2);
- 3rd Largest property use type;
- 3rd Largest property use type - *Gross floor area* (ft^2);
- Year built;
- Occupancy;
- Property notes;
- Property data administrator;
- Property data administrator - Email;
- Last modified date - Property;
- Last modified date - Electric meters;
- Last modified date - Gas meters;
- Last modified date - Nonelectric nongas energy meters;
- Local standard ID(s) Washington state building standard;
- Data center - Energy estimates applied;
- Electricity use - Grid purchase and generated from on-site renewable systems (kWh);
- Electricity use - Grid purchase (kWh);
- Electricity use - Generated from on-site renewable systems and used on-site (kWh);
- Natural gas use (therms);
- Fuel oil #1 use (kBtu);
- Fuel oil #2 use (kBtu);
- Fuel oil #4 use (kBtu);
- Fuel oil #5 and 6 use (kBtu);
- Diesel #2 use (kBtu);
- Kerosene use (kBtu);
- Propane use (kBtu);
- District steam use (kBtu);
- District hot water use (kBtu);
- District chilled water use (kBtu);
- Coal - Anthracite use (kBtu);
- Coal - Bituminous use (kBtu);
- Coke use (kBtu);
- Wood use (kBtu);
- Other use (kBtu);
- Default values;
- Temporary values;
- Estimated data flag - Electricity (grid purchase);
- Estimated data flag - Natural gas;
- Alert - Data center does not have an IT meter;

- Alert - *Gross floor area* is 0 ft^2;
- Alert - Property has no uses;
- Data quality checker - Date run;
- Data quality checker run - ?
- Alert - Energy meter has less than 12 full calendar months of data;
- Alert - Energy meter has gaps;
- Alert - Energy meter has overlaps;
- Alert - Energy - No meters selected for metrics;
- Alert - Energy meter has single entry more than 65 days;
- Estimated values - Energy;
- Energy Star score;
- National median *site energy* use (kBtu);
- National median site *EUI* (kBtu/ft^2);
- *Site energy* use (kBtu);
- Site *EUI* (kBtu/ft^2);
- *Weather normalized site energy* use (kBtu);
- *Weather normalized* site *EUI* (kBtu/ft^2);
- *Weather normalized* site electricity (kWh);
- *Weather normalized* site electricity intensity (kWh/ft^2);
- *Weather normalized* site natural gas use (therms);
- *Weather normalized* site natural gas intensity (therms/ft^2) energy current date;
- Electricity use - Generated from on-site renewable systems (kWh);
- Electricity use - Generated from on-site renewable systems and exported (kWh);
- Electricity Use - Grid purchase and generated from on-site renewable systems (kBtu);
- Electricity use - Grid purchase (kBtu);
- Electricity use - Generated from on-site renewable systems and used on site (kBtu);
- Natural gas use (kBtu);
- Percent of total electricity generated from on-site renewable systems;
- Cooling degree days (CDD) (°F);
- Heating degree days (HDD) (°F);
- Weather station name;
- Weather station ID.

Z6.4 End-use analysis requirements. *Building owners* shall demonstrate compliance with Form D by providing the documentation required by section Z6.4.1.

Z6.4.1 Energy Audit Forms (Form D). The energy audit form shall be provided electronically by completing the energy audit form included in the U.S. Department of Energy, Energy Asset Score Tool, or an equivalent tool provided by the *AHJ*. This form shall be completed to document the energy audit, as published in ASHRAE Standard 211, *Standard for commercial building energy audits*, including *EEMs* considered but determined to have a *simple payback* that is greater than the *EEMs useful life*.

Form E - Not adopted.

Z6.5 Normative Annex X, Investment Criteria Tool (Form F).

Z6.5.1 To demonstrate compliance with the investment criteria of Normative Annex X, *building owners* shall complete and submit Form F.

Z6.5.2 Form F shall be developed by the AHJ. Form F shall be a life cycle cost evaluation tool compliant with NIST Standard 135 and capable of supporting the evaluation criteria required by Normative Annex X.

Z6.5.3 Form F shall evaluate all EEMs considered that have a *simple payback* that is less than the *EEMs useful life*.

Z6.6 Documentation of a building of historic significance (Form G).

Z6.6.1 Energy efficiency measure exemptions for historic buildings. No individual *energy efficiency measure* identified by energy efficiency audits need to be implemented if it would compromise the historical integrity of a *building* or part of a *building*. *Building owners* seeking this exception shall provide the following documentation. Certified historic *buildings* are not exempt from the other requirements of this standard.

Z6.6.2 Plan for compliance. The owner of a qualifying historic *building* shall have the plan for compliance evaluated by a qualified historic preservationist, as defined in 36 C.F.R., Part 61, identifying any energy efficiency requirement that may compromise the historic integrity of the *building* or part of the *building*. Any element of the plan identified to compromise the historic integrity of the *building* or part of the *building* shall be omitted from the compliance plan. Evidence of this evaluation must be submitted to the *AHJ* for approval.

Z6.6.3 Documentation of a historic building. *Building owners* must provide documentation to the *AHJ* that proves its historic identification or eligibility. Valid documentation from any existing programs listed below is acceptable.

1. Examples of existing programs that verify historic property include:

a. The National Register of Historic Places;

b. The Washington heritage register;

c. Properties that are identified by the department of archaeology and historic preservation (DAHP) to be eligible for listing in either one of these registers; and

d. Properties which are listed in a local register of historic places; or

2. Other documentation approved by the *AHJ*.

Z6.7 Application for Exemption Certificate (Form H).

Apply for an exemption certificate by submitting the following documentation in the form specified by the *AHJ*. The application must include:

1. *Building* identification:

a. Washington state *building* ID;

b. County;

c. County parcel number(s);

d. Portfolio manager property ID number;

e. Property name;

f. Parent property name;

g. Address 1 (street);

h. Address 2;

i. City;

j. State; and

k. Postal code.
2. Contact information:
a. *Building owner* name(s);
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State/Province;
g. Country;
h. Postal code;
i. Telephone number; and
j. Email address.
3. *Building* information:
a. Primary building activity type from Table 7-1, or a description of the *nontarget building* type;
b. *Building gross floor area*;
c. *Building* gross conditioned floor area.
4. Reason for exemption: Based on exemptions listed in Section Z4.1(2).

A list all of documents enclosed and any facts in support of this application. Provide at least two of the acceptable documents listed below:

a. Municipal or county records;
b. Documents from a *qualified person*;
c. Construction permit;
d. Certificate of occupancy or application for certificate of occupancy;
e. Demolition permit;
f. Financial statements such as statement of assets; liabilities, capital, and surplus, statement of revenue and expenses; or statement of cash flow;
g. A letter from the *building owner* stating facts and explaining financial hardships;
h. Other documentation approved by the *AHJ*.

5. Signature and statement of *building owner* stating that the authorized representative of the *building*, affirm and attest to the accuracy, truthfulness and completeness of the statements of material fact provided in this form.

Z6.8 Grouped Buildings Compliance with Standard 100 (Form J).

1. *Grouped buildings* identification:
a. Washington state *grouped buildings* ID;
b. County;
c. County parcel number(s);
d. Portfolio manager property ID number;
e. Property name;
f. Parent property name;
g. Address 1 (street);
h. Address 2;
i. City;
j. State;
k. Postal code.
2. Contact information:
a. *Grouped buildings owner* name(s);
b. Contact name;
c. Address 1 (street);
d. Address 2;

e. City;
f. State/province;
g. Country;
h. Postal code;
i. Telephone number;
j. Email address.
3. *Qualified person*:
a. *Qualified person* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State;
f. Postal code;
g. Telephone number;
h. Email address;
i. Licensed, certified (select all that apply):
i. Licensure; or
ii. Certifying authority.
4. *Energy manager* (if different than the *qualified person*):
a. *Energy manager* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State/province;
f. Postal code;
g. Country;
h. Telephone number;
i. Email address.
5. *Decarbonization plan* author, where applicable:
a. Company name;
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State;
g. Postal code;
h. Telephone number;
i. Email address.
6. This compliance report is for:
a. *Grouped buildings* that meet the EUI_t;
b. *Grouped buildings* that meet the investment criteria prior to the compliance date;
c. *Grouped buildings* that will meet the EUI_t through *conditional compliance;*
d. *Grouped buildings* that will meet the investment criteria through *conditional compliance;*
e. Annual reporting for *conditional compliance;*
f. Progress reporting for *decarbonization plan;*
g. Completion reporting.
7. Summary data:
a. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Section Z6.2 Form B;

Note: *Baseline WNEUI* for *grouped buildings* that will meet investment criteria through *conditional compliance*.

b. Measured site *EUI* (kBtu/ft^2) for the compliance year for *grouped buildings* based on Section Z6.3 Form C;

c. *Grouped buildings* without an energy target;

Notes: 1. Predicted site *EUI* for *grouped buildings* that will meet the EUI_t or investment criteria through *conditional compliance*.
2. *Grouped buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report national median site *EUI* as calculated by the Energy Star portfolio manager account and reported on Form C.

d. *Grouped buildings* measured *weather normalized* site *EUI* (kBtu/ft^2) for the compliance year based on Section Z6.3 Form C;

e. List the months/year of the collected data (mm/yyyy - mm/yyyy) for the compliance year for this *grouped buildings* from Section Z6.3 Form C;

f. *Grouped buildings* applying for *conditional compliance* through meeting the EUI_t shall submit the following based on Section Z6.4 Form D:

- *Baseline EUI*;
- Projected *EUI*;

Note: Not applicable to *decarbonization plan.*

g. *Grouped buildings* applying for *conditional compliance* through meeting the investment criteria shall submit the following based on Section Z6.4 Form D:

- *Baseline* total kBtu;
- Projected total kBtu;
- Projected savings total kBtu.

Note: Not applicable to *decarbonization plan.*

8. Have the energy management requirements of Section 5 been met in accordance with the compliance schedule outlined in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

- Upload energy management plan as specified by the *AHJ*.

9. Have the operation and maintenance requirements of Section 6 been met in accordance with the compliance schedule outlined in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

- Upload operation and maintenance implementation documentation as specified by the *AHJ*.

10. Date the audit and economic evaluation was completed (N/A if none required).

- Upload audit reports as specified by Section Z6.4 Form D.

11. Have all *EEMs* required by Section 8 been implemented? [ ] Yes [ ] No

12. Have the requirements of Section 9 been completed? [ ] Yes [ ] No

13. We state that these *grouped buildings* comply with ANSI/ASHRAE/IES Standard 100 as amended by the *AHJ* to conform with RCW 19.27A.210:

a. Signature of *grouped buildings owner*:

- Date:

b. Signature of *qualified person*:

- Date:

c. Signature of *energy manager*:

- Date:

d. Signature of *authority having jurisdiction*:

- Conditional or final compliance:
- Date:

Z7 Section 7—Tables as modified by Washington state.

Table 7-1 Building Activity Types/Activities

	Building Activity Type[1,2]			
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**	**Notes**
1	Banking/financial services	Bank Branch		
2	Banking/financial services	Financial Office		
3	Education	Adult Education		
4	Education	College/University		8,9
5	Education	K-12 School	Elementary/middle school	9
6	Education	K-12 School	High school	9
7	Education	Preschool/Daycare		
8	Education	Vocational School		
9	Education	Other - Education		
10	Entertainment/public assembly	Aquarium		
11	Entertainment/public assembly	Bar/Nightclub		
12	Entertainment/public assembly	Bowling Alley		
13	Entertainment/public assembly	Casino		
14	Entertainment/public assembly	Convention Center		
15	Entertainment/public assembly	Fitness Center/Health Club/Gym		
16	Entertainment/public assembly	Ice/Curling Rink		
17	Entertainment/public assembly	Indoor Arena		
18	Entertainment/public assembly	Movie Theater		
19	Entertainment/public assembly	Museum		
20	Entertainment/public assembly	Performing Arts		
21	Entertainment/public assembly	Race Track		
22	Entertainment/public assembly	Roller Rink		
23	Entertainment/public assembly	Social/Meeting Hall		
24	Entertainment/public assembly	Stadium (Closed)		
25	Entertainment/public assembly	Stadium (Open)		
26	Entertainment/public assembly	Swimming Pool		
27	Entertainment/public assembly	Zoo		
28	Entertainment/public assembly	Other - Entertainment/Public Assembly	Entertainment/culture	
29	Entertainment/public assembly	Other - Entertainment/Public Assembly	Library	
30	Entertainment/public assembly	Other - Entertainment/Public Assembly	Other public assembly	
31	Entertainment/public assembly	Other - Entertainment/Public Assembly	Recreation	
32	Entertainment/public assembly	Other - Entertainment/Public Assembly	Social/meeting	
33	Entertainment/public assembly	Other - Recreation		
34	Entertainment/public assembly	Other - Stadium		
35	Food sales and service	Bar/Nightclub		
36	Food sales and service	Convenience Store with Gas Station		

	Building Activity Type[1,2]			
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**	**Notes**
37	Food sales and service	Convenience Store without Gas Station		
38	Food sales and service	Fast Food Restaurant		
39	Food sales and service	Food Sales	Grocery/food market	
40	Food sales and service	Food Sales	Convenience store with gas	
41	Food sales and service	Food Sales	Convenience store	
42	Food sales and service	Food Sales	Other food sales	
43	Food sales and service	Food Service	Fast food	
44	Food sales and service	Food Service	Restaurant/cafeteria	
45	Food sales and service	Food Service	Other food service	
46	Food sales and service	Restaurant		
47	Food sales and service	Supermarket/Grocery Store		
48	Food sales and service	Wholesale Club/Supercenter		
49	Food sales and service	Other - Restaurant/Bar		
50	Healthcare	Ambulatory Surgical Center		
51	Healthcare	Hospital (General Medical & Surgical)		9
52	Healthcare	Medical Office		3
53	Healthcare	Outpatient Rehabilitation/ Physical Therapy		
54	Healthcare	Residential Care Facility		
55	Healthcare	Senior Care Community		
56	Healthcare	Urgent Care/Clinic/Other Outpatient		
57	Healthcare	Other - Specialty Hospital		
58	Lodging/residential	Barracks		
59	Lodging/residential	Hotel	Hotel	
60	Lodging/residential	Hotel	Motel or inn	
61	Lodging/residential	Multifamily Housing		
62	Lodging/residential	Prison/Incarceration		9
63	Lodging/residential	Residence Hall/Dormitory		
64	Lodging/residential	Residential Care Facility		
65	Lodging/residential	Senior Care Community		
66	Lodging/residential	Other - Lodging/Residential		
67	Mixed use	Mixed Use Property		4
68	Office	Medical Office		3
69	Office	Office	Admin/professional office	
70	Office	Office	Bank/other financial	
71	Office	Office	Government office	
72	Office	Office	Medical office (diagnostic)	3
73	Office	Office	Other office	
74	Office	Veterinary Office		
75	Office	Other - Office		
76	Public services	Courthouse		
77	Public services	Fire Station		
78	Public services	Library		

	Building Activity Type[1,2]			
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**	**Notes**
79	Public services	Mailing Center/Post Office		
80	Public services	Police Station		
81	Public services	Prison/Incarceration		9
82	Public services	Social/Meeting Hall		
83	Public services	Transportation Terminal/Station		
84	Public services	Other - Public Service		
85	Religious worship	Worship Facility		
86	Retail	Automobile Dealership		
87	Retail	Convenience Store with Gas Station		
88	Retail	Convenience Store without Gas Station		
89	Retail	Enclosed Mall		5
90	Retail	Lifestyle Center	Enclosed mall	5
91	Retail	Lifestyle Center	Other retail	
92	Retail	Lifestyle Center	Retail store	
93	Retail	Lifestyle Center		4
94	Retail	Retail Store		
95	Retail	Strip Mall		4
96	Retail	Supermarket/Grocery Store		
97	Retail	Wholesale Club/Supercenter		
98	Retail	Other - Retail/Mall	Enclosed mall	5
99	Retail	Other - Retail/Mall		4
100	Technology/science	Data Center		6
101	Technology/science	Laboratory		
102	Technology/science	Other - Technology/Science	Other service	
103	Services	Personal Services (Health/ Beauty, Dry Cleaning, etc.)		
104	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Repair shop	
105	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle service/repair shop	
106	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle storage/maintenance	
107	Services	Other - Services		
108	Utility	Energy/Power Station		7
109	Utility	Other - Utility		7
110	Warehouse/storage	Self-Storage Facility		
111	Warehouse/storage	Distribution Center		
112	Warehouse/storage	Nonrefrigerated Warehouse		
113	Warehouse/storage	Refrigerated Warehouse		

Notes: 1. Select the most specific building activity type that applies.
2. Building Activity Types are defined by *AHJ* in Table 7-4 and also include the following:
• Data center: Is an activity space designed and equipped to meet the needs of high density computing equipment, such as server racks, used for data storage and processing, including dedicated uninterruptible power supplies and cooling systems and require a constant power load of 75 kW or more. *Gross floor area* shall only include space within the *building* including raised floor computing space, server rack aisles, storage silos, control console areas, battery rooms and mechanical rooms for dedicated cooling equipment. *Gross floor area* shall not include a server closet, telecommunications equipment closet, computer training area, office, elevator, corridors, or other auxiliary space.
• Urgent care center/clinic/other outpatient office means the *buildings* used to diagnose and treat patients, usually on an unscheduled, walk-in basis, who have an injury or illness that requires immediate care but is not serious enough to warrant a visit to an emergency department. Includes facilities that provide same-day surgical, diagnostic and preventive care.

3. All medical offices considered to be diagnostic type.
4. Must use of Section 7.2.3 method for mixed use *buildings*.
5. Suggest considering use of Section 7.2.3 method for mixed use *buildings*.
6. This is a *building* or activity without an energy target. Included to provide definition only.
7. This is a *building* or activity without an energy target. This may be exempt from the standard, see Section Z4.1 2, d.
8. Laboratories as defined by the college/university building activity type where the primary activity is for teaching practical science shall use the college/university building activity type target. College/university *buildings* with research laboratory *building* activities where the primary activities are of scientific research, measurement, and experiments are performed, can utilize building activity type 101 Laboratory for an area weighted EUI_t.
9. Building activity type target developed at the campus-level. As an alternative to complying at the building-level, these *covered buildings* may comply at a campus-level with the EUI_t. "Campus-level" is an alternative reporting pathway for a collection of all *buildings* on adjoining property with a single shared primary function that act as a single property.

Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (I-P Units)

	Building Activity Type[1,2]				Climate Zone 4C	Climate Zone 5B
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**	**Notes**	**EUI_t**	**EUI_t**
1	Banking/financial services	Bank Branch			69	71
2	Banking/financial services	Financial Office			69	71
3	Education	Adult Education			49	51
4	Education	College/University		8, 9	102	102
5	Education	K-12 School	Elementary/middle school	9	49	50
6	Education	K-12 School	High school	9	48	49
7	Education	Preschool/Daycare			59	59
8	Education	Vocational School			49	51
9	Education	Other - Education			49	51
10	Entertainment/public assembly	Aquarium			55	59
11	Entertainment/public assembly	Bar/Nightclub			55	59
12	Entertainment/public assembly	Bowling Alley			73	78
13	Entertainment/public assembly	Casino			55	59
14	Entertainment/public assembly	Convention Center			50	52
15	Entertainment/public assembly	Fitness Center/Health Club/Gym			73	78
16	Entertainment/public assembly	Ice/Curling Rink			73	78
17	Entertainment/public assembly	Indoor Arena			67	70
18	Entertainment/public assembly	Movie Theater			67	70
19	Entertainment/public assembly	Museum			67	70
20	Entertainment/public assembly	Performing Arts			55	59
21	Entertainment/public assembly	Race Track			67	70
22	Entertainment/public assembly	Roller Rink			73	78
23	Entertainment/public assembly	Social/Meeting Hall			50	52

	Building Activity Type[1,2]				Climate Zone 4C	Climate Zone 5B
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	EUI_t	EUI_t
24	Entertainment/public assembly	Stadium (Closed)			67	70
25	Entertainment/public assembly	Stadium (Open)			67	70
26	Entertainment/public assembly	Swimming Pool			73	78
27	Entertainment/public assembly	Zoo			55	59
28	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Entertainment/culture		67	70
29	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Library		56	59
30	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Other public assembly		55	59
31	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Recreation		73	78
32	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Social/meeting		50	52
33	Entertainment/public assembly	Other - Recreation			73	78
34	Entertainment/public assembly	Other - Stadium			67	70
35	Food sales and service	Bar/Nightclub			361	378
36	Food sales and service	Convenience Store with Gas Station			260	269
37	Food sales and service	Convenience Store without Gas Station			244	253
38	Food sales and service	Fast Food Restaurant			427	454
39	Food sales and service	Food Sales	Grocery/food market		191	198
40	Food sales and service	Food Sales	Convenience store with gas		260	269
41	Food sales and service	Food Sales	Convenience store		244	253
42	Food sales and service	Food Sales	Other food sales		184	189
43	Food sales and service	Food Service	Fast food		427	454
44	Food sales and service	Food Service	Restaurant/cafeteria		361	378
45	Food sales and service	Food Service	Other food service		293	308
46	Food sales and service	Restaurant			361	378
47	Food sales and service	Supermarket/Grocery Store			191	198
48	Food sales and service	Wholesale Club/ Supercenter			68	75
49	Food sales and service	Other - Restaurant/Bar			361	378
50	Healthcare	Ambulatory Surgical Center			90	96
51	Healthcare	Hospital (General Medical & Surgical)*		9	215	215
52	Healthcare	Medical Office		3		

	Building Activity Type[1,2]				Climate Zone 4C	Climate Zone 5B
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	EUI_t	EUI_t
53	Healthcare	Outpatient Rehabilitation/Physical Therapy			90	96
54	Healthcare	Residential Care Facility			78	82
55	Healthcare	Senior Care Community			78	82
56	Healthcare	Urgent Care/Clinic/ Other Outpatient			90	96
57	Healthcare	Other - Specialty Hospital			196	196
58	Lodging/residential	Barracks			88	90
59	Lodging/residential	Hotel	Hotel		68	72
60	Lodging/residential	Hotel	Motel or inn		74	77
61	Lodging/residential	Multifamily Housing			32	33
62	Lodging/residential	Prison/Incarceration		9	101	106
63	Lodging/residential	Residence Hall/ Dormitory			88	90
64	Lodging/residential	Residential Care Facility			78	82
65	Lodging/residential	Senior Care Community			78	82
66	Lodging/residential	Other - Lodging/ Residential			71	74
67	Mixed use	Mixed Use Property		4		
68	Office	Medical Office		3	60	65
69	Office	Office	Admin/professional office		63	66
70	Office	Office	Bank/other financial		69	71
71	Office	Office	Government office		66	69
72	Office	Office	Medical office (diagnostic)	3	60	65
73	Office	Office	Other office		66	68
74	Office	Veterinary Office			90	96
75	Office	Other - Office			66	68
76	Public services	Courthouse			101	106
77	Public services	Fire Station			65	68
78	Public services	Library			56	59
79	Public services	Mailing Center/Post Office			51	54
80	Public services	Police Station			65	68
81	Public services	Prison/Incarceration		9	101	106
82	Public services	Social/Meeting Hall			50	52
83	Public services	Transportation Terminal/ Station			55	59
84	Public services	Other - Public Service			66	69
85	Religious worship	Worship Facility			39	42
86	Retail	Automobile Dealership			59	66
87	Retail	Convenience Store with Gas Station			260	269

	Building Activity Type[1,2]				Climate Zone 4C	Climate Zone 5B
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	EUI_t	EUI_t
88	Retail	Convenience Store without Gas Station			244	253
89	Retail	Enclosed Mall		5	58	64
90	Retail	Lifestyle Center	Enclosed mall	5	58	64
91	Retail	Lifestyle Center	Other retail		55	62
92	Retail	Lifestyle Center	Retail store		68	75
93	Retail	Lifestyle Center		4		
94	Retail	Retail Store			68	75
95	Retail	Strip Mall		4		
96	Retail	Supermarket/Grocery Store			191	198
97	Retail	Wholesale Club/ Supercenter			68	75
98	Retail	Other - Retail/Mall	Enclosed mall	5	58	64
99	Retail	Other - Retail/Mall		4		
100	Technology/science	Data Center		6		
101	Technology/science	Laboratory			237	249
102	Technology/science	Other - Technology/ Science	Other service		66	69
103	Services	Personal Services (Health/Beauty, Dry Cleaning, etc.)			66	69
104	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Repair shop		36	39
105	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle service/repair shop		60	64
106	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle storage/ maintenance		41	44
107	Services	Other - Services			66	69
108	Utility	Energy/Power Station		7		
109	Utility	Other - Utility		7		
110	Warehouse/storage	Self-Storage Facility			36	44
111	Warehouse/storage	Distribution Center			36	44
112	Warehouse/storage	Nonrefrigerated Warehouse			36	44
113	Warehouse/storage	Refrigerated Warehouse			121	126

Notes: 1. Select the most specific building activity type that applies.
2. Building Activity Types are defined by *AHJ* in Table 7-4 and also include the following:
• Data center: Is an activity space designed and equipped to meet the needs of high density computing equipment, such as server racks, used for data storage and processing, including dedicated uninterruptible power supplies and cooling systems and require a constant power load of 75 kW or more. *Gross floor area* shall only include space within the *building* including raised floor computing space, server rack aisles, storage silos, control console areas, battery rooms and mechanical rooms for dedicated cooling equipment. *Gross floor area* shall not include a server closet, telecommunications equipment closet, computer training area, office, elevator, corridors, or other auxiliary space.
• Urgent care center/clinic/other outpatient office means the *buildings* used to diagnose and treat patients, usually on an unscheduled, walk-in basis, who have an injury or illness that requires immediate care but is not serious enough to warrant a visit to an emergency department. Includes facilities that provide same-day surgical, diagnostic and preventive care.
3. All medical offices considered to be diagnostic type.
4. Must use of Section 7.2.3 method for mixed use *buildings*.
5. Suggest considering use of Section 7.2.3 method for mixed use *buildings*.
6. This is a *building* or activity without an energy target. Included to provide definition only.

7. This is a *building* or activity without an energy target. This may be exempt from the standard, see Section Z4.1 2, d.
8. Laboratories as defined by the college/university building activity type where the primary activity is for teaching practical science shall use the college/university building activity type target. College/university *buildings* with research laboratory building activities where the primary activities are of scientific research, measurement, and experiments are performed, can utilize building activity type 101 Laboratory for an area weighted EUI_t.
9. Building activity type target developed at the campus-level. As an alternative to complying at the building-level, these *covered buildings* may comply at a campus-level with the EUI_t. "Campus-level" is an alternative reporting pathway for a collection of all *buildings* on adjoining property with a single shared primary function that act as a single property.

Table 7-3 Building Operating Shifts Normalization Factor

	Building Activity Type				Weekly Hours[1,2]		
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**	**Notes**	**50 or less**	**51 to 167**	**168**
1	Banking/financial services	Bank Branch		3	0.8	1.0	1.5
2	Banking/financial services	Financial Office		3	0.8	1.0	1.5
3	Education	Adult Education		4	0.9	1.1	1.9
4	Education	College/University		4,10	0.9	1.1	1.9
5	Education	K-12 School	Elementary/middle school	4,10	0.9	1.1	1.9
6	Education	K-12 School	High school	4,10	0.9	1.1	1.9
7	Education	Preschool/Daycare		4	0.9	1.1	1.9
8	Education	Vocational School		4	0.9	1.1	1.9
9	Education	Other - Education		4	0.9	1.1	1.9
10	Entertainment/public assembly	Aquarium		4, 9	0.6	1.1	1.6
11	Entertainment/public assembly	Bar/Nightclub		4	0.6	1.1	1.6
12	Entertainment/public assembly	Bowling Alley		4	0.6	1.1	1.6
13	Entertainment/public assembly	Casino		4	0.6	1.1	1.6
14	Entertainment/public assembly	Convention Center		4	0.6	1.1	1.6
15	Entertainment/public assembly	Fitness Center/Health Club/Gym		4	0.6	1.1	1.6
16	Entertainment/public assembly	Ice/Curling Rink		4	0.6	1.1	1.6
17	Entertainment/public assembly	Indoor Arena		4	0.6	1.1	1.6
18	Entertainment/public assembly	Movie Theater		4	0.6	1.1	1.6
19	Entertainment/public assembly	Museum		4, 9	0.6	1.1	1.6
20	Entertainment/public assembly	Performing Arts		4	0.6	1.1	1.6
21	Entertainment/public assembly	Race Track		4	0.6	1.1	1.6
22	Entertainment/public assembly	Roller Rink		4	0.6	1.1	1.6
23	Entertainment/public assembly	Social/Meeting Hall		4	0.6	1.1	1.6
24	Entertainment/public assembly	Stadium (Closed)		4	0.6	1.1	1.6
25	Entertainment/public assembly	Stadium (Open)		4	0.6	1.1	1.6

	Building Activity Type				Weekly Hours[1,2]		
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	50 or less	51 to 167	168
26	Entertainment/public assembly	Swimming Pool		4	0.6	1.1	1.6
27	Entertainment/public assembly	Zoo		4, 9	0.6	1.1	1.6
28	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Entertainment/culture	4	0.6	1.1	1.6
29	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Library	4	0.6	1.1	1.6
30	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Other public assembly	4	0.6	1.1	1.6
31	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Recreation	4	0.6	1.1	1.6
32	Entertainment/public assembly	Other - Entertainment/ Public Assembly	Social/meeting	4	0.6	1.1	1.6
33	Entertainment/public assembly	Other - Recreation		4	0.6	1.1	1.6
34	Entertainment/public assembly	Other - Stadium		4	0.6	1.1	1.6
35	Food sales and service	Bar/Nightclub		4	0.6	1.1	1.5
36	Food sales and service	Convenience Store with Gas Station		4	0.5	0.9	1.3
37	Food sales and service	Convenience Store without Gas Station		4	0.5	0.9	1.3
38	Food sales and service	Fast Food Restaurant		4	0.6	1.1	1.5
39	Food sales and service	Food Sales	Grocery/food market	4	0.5	0.9	1.3
40	Food sales and service	Food Sales	Convenience store with gas	4	0.5	0.9	1.3
41	Food sales and service	Food Sales	Convenience store	4	0.5	0.9	1.3
42	Food sales and service	Food Sales	Other food sales	4	0.5	0.9	1.3
43	Food sales and service	Food Service	Fast food	4	0.6	1.1	1.5
44	Food sales and service	Food Service	Restaurant/cafeteria	4	0.6	1.1	1.5
45	Food sales and service	Food Service	Other food service	4	0.6	1.1	1.5
46	Food sales and service	Restaurant		4	0.6	1.1	1.5
47	Food sales and service	Supermarket/Grocery Store		4	0.5	0.9	1.3
48	Food sales and service	Wholesale Club/ Supercenter		4	0.6	1.0	1.5
49	Food sales and service	Other - Restaurant/Bar		4	0.6	1.1	1.5
50	Healthcare	Ambulatory Surgical Center		4,7	0.8	1.1	1.3
51	Healthcare	Hospital (General Medical & Surgical)		10	1.0	1.0	1.0
52	Healthcare	Medical Office		4,7			
53	Healthcare	Outpatient Rehabilitation/Physical Therapy		4,7	0.8	1.1	1.3
54	Healthcare	Residential Care Facility			1.0	1.0	1.0
55	Healthcare	Senior Care Community			1.0	1.0	1.0

	Building Activity Type				Weekly Hours[1,2]		
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	50 or less	51 to 167	168
56	Healthcare	Urgent Care/Clinic/ Other Outpatient		4,7	0.8	1.1	1.3
57	Healthcare	Other - Specialty Hospital			1.0	1.0	1.0
58	Lodging/residential	Barracks			1.0	1.0	1.0
59	Lodging/residential	Hotel	Hotel		1.0	1.0	1.0
60	Lodging/residential	Hotel	Motel or inn		1.0	1.0	1.0
61	Lodging/residential	Multifamily Housing			1.0	1.0	1.0
62	Lodging/residential	Prison/Incarceration		10	1.0	1.0	1.0
63	Lodging/residential	Residence Hall/ Dormitory			1.0	1.0	1.0
64	Lodging/residential	Residential Care Facility			1.0	1.0	1.0
65	Lodging/residential	Senior Care Community			1.0	1.0	1.0
66	Lodging/residential	Other - Lodging/ Residential			1.0	1.0	1.0
67	Mixed use	Mixed Use Property		6			
68	Office	Medical Office		4,7	0.8	1.1	1.3
69	Office	Office	Admin/professional office	3	0.8	1.0	1.5
70	Office	Office	Bank/other financial	3	0.8	1.0	1.5
71	Office	Office	Government office	3	0.8	1.0	1.5
72	Office	Office	Medical office (diagnostic)	4	0.8	1.1	1.3
73	Office	Office	Other office	3	0.8	1.0	1.5
74	Office	Veterinary Office		3	0.8	1.1	1.3
75	Office	Other - Office		3	0.8	1.0	1.5
76	Public services	Courthouse		4	0.8	0.8	1.1
77	Public services	Fire Station		3	0.8	0.8	1.1
78	Public services	Library		4	0.6	1.1	1.6
79	Public services	Mailing Center/Post Office		3	0.8	1.2	1.3
80	Public services	Police Station		3	0.8	0.8	1.1
81	Public services	Prison/Incarceration		10	1.0	1.0	1.0
82	Public services	Social/Meeting Hall		4	0.6	1.1	1.6
83	Public services	Transportation Terminal/Station		4	0.6	1.1	1.6
84	Public services	Other - Public Service		4	0.8	1.2	1.3
85	Religious worship	Worship Facility		5	0.9	1.7	1.7
86	Retail	Automobile Dealership		4	0.6	1.0	1.5
87	Retail	Convenience Store with Gas Station		4	0.5	0.9	1.3
88	Retail	Convenience Store without Gas Station		4	0.5	0.9	1.3
89	Retail	Enclosed Mall		4	0.6	1.0	1.5
90	Retail	Lifestyle Center	Enclosed mall	4	0.6	1.0	1.5
91	Retail	Lifestyle Center	Other retail	4	0.6	1.0	1.5

	Building Activity Type				Weekly Hours[1,2]		
No.	Portfolio Manager Types	Portfolio Manager Sub-Types	Sub-Types: Detailed	Notes	50 or less	51 to 167	168
92	Retail	Lifestyle Center	Retail store	4	0.6	1.0	1.5
93	Retail	Lifestyle Center					
94	Retail	Retail Store		4	0.6	1.0	1.5
95	Retail	Strip Mall					
96	Retail	Supermarket/Grocery Store		4	0.5	0.9	1.3
97	Retail	Wholesale Club/ Supercenter		4	0.6	1.0	1.5
98	Retail	Other - Retail/Mall	Enclosed mall	4	0.6	1.0	1.5
99	Retail	Other - Retail/Mall					
100	Technology/science	Data Center					
101	Technology/science	Laboratory		3	1.0	1.0	1.0
102	Technology/science	Other - Technology/ Science	Other service	3	0.8	1.2	1.3
103	Services	Personal Services (Health/Beauty, Dry Cleaning, etc.)		4	0.8	1.2	1.3
104	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Repair shop	4	0.8	1.2	1.3
105	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle service/repair shop	4	0.8	1.2	1.3
106	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle storage/ maintenance	4	0.8	1.2	1.3
107	Services	Other - Services		4	0.8	1.2	1.3
108	Utility	Energy/Power Station					
109	Utility	Other - Utility					
110	Warehouse/storage	Self-Storage Facility		4	0.8	1.0	1.4
111	Warehouse/storage	Distribution Center		3	0.8	1.0	1.4
112	Warehouse/storage	Nonrefrigerated Warehouse		3	0.8	1.0	1.4
113	Warehouse/storage	Refrigerated Warehouse		3,8	1.0	1.0	1.4

Notes: 1. Do not count the hours when the property is occupied only by maintenance, security, the cleaning crew, or other support personnel. Do not count the hours when the property is occupied only by maintenance staff.
2. Working hours are based on the average use over the 12-month period selected to document energy use in form C.
3. The weekly hours are the total number of hours per week where the majority of workers are present. If there are two or more shifts of workers, add the hours. When developing targets using Section 7.2.3 for mixed use *buildings*, use the hours each separate activity, the hours per week the majority of workers are present.
4. The weekly hours are the hours that be majority of the *building* is open to serve the public. When developing targets using Section 7.2.3 for mixed use *buildings*, the hours each separate activity is open to the public.
5. The weekly hours the facility is open for operation, which may include worship services, choir practice, administrative use, committee meetings, classes, or other activities.
6. Must use of Section 7.2.3 method for mixed use *buildings*.
7. Health care *buildings* may use other weekly hours if they are required to operate *building* systems additional hours to protect patient and staff safety. Provide documentation of the requirement in the energy management plan.
8. Refrigerated warehouse greater than 167 hours assumes the workers on shift are loading and/or unloading vehicles.
9. Aquariums, museums, and zoos may use other weekly hours if they are required to operate *building* systems additional hours to protect *building* contents. Provide documentation of the requirement in the energy management plan.
10. College/university, K-12 school, hospital (general medical and surgical) and prison/incarceration building activity types complying at the campus-level (footnote 9 of Tables 7-1, 7-2a, and 7-4) shall apply the campus-level shift normalization factor to the area weighted aggregate EUI_t. Include all space uses listed in the campus-level building activity type (college/university, K-12 school, hospital, prison) Table 7-4 definitions. For space uses not listed in the campus-level building activity type definitions, the specific space use may use their specific shift normalization factor.

Table 7-4 Building Activity Type Definitions Table

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
	Definitions are provided to define building activity types and the spaces within to include as *gross floor area*. Unless otherwise defined, *gross floor area* shall include all space within the *building* and not space outside the *building*, such as exterior/outside loading bays or docks, open air stairwells and breezeways and vehicle parking and parking garages. Definitions are not necessarily exclusive. For *Tier 1 covered buildings*, the *qualified person,* or for *Tier 2 covered buildings*, the *qualified energy manager* shall determine the *gross floor area* associated with each identified building activity type using industry standards guidance documents provided by the *AHJ*.				
No.	**Portfolio Manager Types**	**Portfolio Manager Sub-Types**	**Sub-Types: Detailed**		
1	Banking/ financial services	Bank Branch			Bank branch refers to a commercial banking outlet that offers banking services to walk-in customers. *Gross floor area* should include all space within the *building*, including banking areas, vaults, lobbies, atriums, kitchens used by staff, restrooms, conference rooms, storage areas, stairways, and elevator shafts.
2	Banking/ financial services	Financial Office			Financial office refers to *buildings* used for financial services such as bank headquarters and securities and brokerage firms. *Gross floor area* should include all space within the *building*, including offices, trading floors, conference rooms and auditoriums, vaults, restrooms, kitchens used by staff, lobbies, atriums, fitness areas for staff, storage areas, stairways, and elevator shafts.
3	Education	Adult Education			Adult education refers to *buildings* used primarily for providing adult students with continuing education, workforce development, or professional development outside of the college or university setting. *Gross floor area* should include all space within the *building*, including classrooms, administrative space, conference rooms, kitchens used by staff, lobbies, cafeterias, auditoriums, restrooms, stairways, atriums, elevator shafts, and storage areas.
4	Education	College/ University		8, 9	College/university refers to *buildings* used for the purpose of higher education. This includes public and private colleges and universities. *Gross floor area* should include all space within the *building*, including classrooms, libraries, laboratory classrooms, offices, cafeterias, maintenance facilities, arts facilities, athletic facilities, residential areas, storage rooms, restrooms, elevator shafts, and stairways.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
5	Education	K-12 School	Elementary/ middle school	9	K-12 school refers to *buildings* or campuses used as a school for kindergarten through 12th grade students. This does not include college or university classroom facilities/laboratories, vocational, technical, trade, adult, or continuing education schools, preschools, or day care facilities. If the school serves any of the above student populations (e.g., an elementary school that includes prekindergarten), at least 75 percent of the students must be in grades kindergarten through 12. *Gross floor area* should include all space within the *building*, including classrooms, libraries, administrative space, conference rooms, restrooms, kitchens used by staff, lobbies, cafeterias, gymnasiums, auditoriums, laboratory classrooms, portable classrooms, greenhouses, stairways, atriums, elevator shafts, small landscaping sheds, and storage areas.
6	Education	K-12 School	High School	9	
7	Education	Preschool/ Daycare			Preschool/daycare applies to *buildings* used for educational programs or daytime supervision/recreation for young children before they attend kindergarten. *Gross floor area* should include all space within the *building*, including classrooms, libraries, administrative space, conference rooms, restrooms, kitchens used by staff, lobbies, cafeterias, gymnasiums, auditoriums, stairways, elevator shafts, and storage areas.
8	Education	Vocational School			Vocational school refers to *buildings* primarily designed to teach skilled trades to students, including trade and technical schools. Typically, vocational schools are commonly post-secondary education, consisting of 1-2 years of technical/trade training. *Gross floor area* should include all space within the *building*, including classrooms, libraries, administrative space, conference rooms, restrooms, kitchens used by staff, lobbies, cafeterias, gymnasiums, auditoriums, laboratory classrooms, stairways, elevator shafts, and storage areas.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
9	Education	Other - Education			Other – Education refers to *buildings* used for religious, community, or other educational purposes that do not meet the definition of any other building activity type defined in Table 7-4 (i.e., educational purposes other than adult education, college/university, K-12 school, preschool/ daycare and vocational schools). *Gross floor area* should include all space within the *building*, including classrooms, libraries, administrative space, conference rooms, restrooms, kitchens used by staff, lobbies, cafeterias, auditoriums, laboratory classrooms, stairways, elevator shafts, and storage areas.
10	Entertainment/ public assembly	Aquarium			Aquarium refers to *buildings* used to provide aquatic habitat primarily to live animals and which may include public or private viewing areas and educational programs. *Gross floor area* should include public and restricted areas such as visitor walkways, tank space, retail areas, restaurants, restrooms, laboratories, classrooms, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
11	Entertainment/ public assembly	Bar/Nightclub			Bar/nightclub refers to *buildings* used primarily for social/entertainment purposes and is characterized by most of the revenue being generated from the sale of beverages instead of food. *Gross floor area* should include all space within the *building*, including standing/ seating areas, stage/dressing room areas, food/drink preparation or kitchen areas, retail areas, restrooms, administrative/ office space, mechanical rooms, storage areas, elevator shafts, and stairwells. Properties whose primary business revenue is generated from the sale of food should be entered using one of the restaurant building activity types, even if there is a bar.
12	Entertainment/ public assembly	Bowling Alley			Bowling alley refers to *buildings* used for public or private, recreational or professional bowling. *Gross floor area* should include all space within the *building*, including bowling lanes, concession areas, restrooms, party rooms, retail areas, administrative/office space, employee break rooms, storage areas, and mechanical rooms.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
13	Entertainment/ public assembly	Casino			Casino refers to *buildings* primarily used to conduct gambling activities including both electronic and live table games. *Gross floor area* should include all space within the *building*, including the main casino floor/gaming area, restaurants/bars, retail areas, administrative/office space, restrooms, mechanical rooms, storage areas, elevator shafts, and stairwells. If your casino is in the same *building* as a hotel, enter a separate hotel building activity type.
14	Entertainment/ public assembly	Convention Center			Convention center refers to *buildings* used primarily for large conferences, exhibitions, and similar events. Convention centers may include a diverse variety of spaces, including large exhibition halls, meeting rooms, and concession stands. *Gross floor area* should include all space within the *building*, including exhibit halls, preparation and staging areas, meeting rooms, concession stands, offices, restrooms, break rooms, security areas, elevator shafts, and stairwells. Conference facilities located within a hotel should be included along with your hotel building activity type details, rather than added as a separate convention center building activity type. Conference facilities primarily serving smaller meetings should be entered as social/meeting hall.
15	Entertainment/ public assembly	Fitness Center/ Health Club/Gym			Fitness center/health club/gym refers to *buildings* used for recreational or professional athletic training and related activities. *Gross floor area* should include all space within the *building*, including weight and cardio equipment areas, personal training areas, courts, locker rooms, restrooms, sauna and spa areas, retail areas, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
16	Entertainment/ public assembly	Ice/Curling Rink			Ice/curling rink refers to *buildings* that include one or more ice sheets used for public or private, recreational or professional skating, hockey, or ringette. *Gross floor area* should include all space within the *building*, including ice area, spectator areas, concession stands, retail areas, locker rooms, restrooms, administrative/office areas, employee break rooms, mechanical rooms, and storage areas. Larger facilities primarily serving professional or collegiate functions and with significant spectator seating (above 5,000 seats) should be entered as indoor arena.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
17	Entertainment/ public assembly	Indoor Arena			Indoor arena refers to enclosed structures used for professional or collegiate sports and entertainment events. Examples of events held in indoor arenas include basketball and hockey games, circus performances, and concerts. Indoor arenas usually have capacities of 5,000 seats or more and are often characterized by multiple concourses and concession areas. *Gross floor area* should include all space within the *building*, including court/rink space, all concourse space on which workers or guests can walk, concession areas, retail stores, restaurants, administrative/office areas, restrooms, employee break rooms, kitchens, mechanical rooms, storage areas, elevator shafts, and stairwells.
18	Entertainment/ public assembly	Movie Theater			Movie theater refers to *buildings* used for public or private film screenings. *Gross floor area* should include all space within the *building*, including seating areas, lobbies, concession stands, restrooms, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
19	Entertainment/ public assembly	Museum			Museum refers to *buildings* that display collections to outside visitors for public viewing and enjoyment and for informational/educational purposes. *Gross floor area* should include all space within the *building*, including public collection display areas, meeting rooms, classrooms, gift shops, food service areas, restrooms, administrative/office space, mechanical rooms, storage areas for collections, elevator shafts, and stairwells.
20	Entertainment/ public assembly	Performing Arts			Performing arts refers to *buildings* used for public or private artistic or musical performances. *Gross floor area* should include all space within the *building*, including seating, stage and backstage areas, food service areas, restrooms, retail areas, rehearsal studios, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
21	Entertainment/ public assembly	Race Track			Race track refers to *buildings* used primarily to hold racing events such as vehicle races, track/field races, horse races, and/or dog-races. *Gross floor area* should include all spectator viewing areas, concourse space on which workers or guests can walk, concession areas, retail stores, restaurants, restrooms, administrative/office areas, employee break rooms, mechanical rooms, storage areas, elevator shafts, and stairwells. The footprint of the race track itself should also be included in the *gross floor area*, along with the footprint of any staging areas.
22	Entertainment/ public assembly	Roller Rink			Roller rink refers to *buildings* used primarily for roller-skating, inline skating/ rollerblading, or skateboarding. *Gross floor area* should include all space within the *building*, including the rink space, concession areas, restrooms, locker rooms, retail areas, administrative/office areas, employee break rooms, mechanical rooms, and storage areas.
23	Entertainment/ public assembly	Social/Meeting Hall			Social/meeting hall refers to *buildings* primarily used for public or private gatherings. This may include community group meetings, seminars, workshops, or performances. Please note that there is another building activity type available, convention center, for large exhibition and conference facilities. *Gross floor area* should include all space within the *building*, including meeting rooms, auditoriums, food service areas, restrooms, lobbies, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
24	Entertainment/ public assembly	Stadium (Closed)			Stadium (closed) refers to structures with a permanent or retractable roof which are used primarily for professional or collegiate sports and entertainment events. Examples of events held in closed stadiums include baseball and football games, and concerts. Closed stadiums usually have capacities of 25,000 seats or more and are often characterized by multiple concourses and concession areas. *Gross floor area* should include all space within the *building(s)*, including concourse space on which workers or guests can walk, concession areas, retail stores, restaurants, administrative/office areas, restrooms, employee break rooms, kitchens, mechanical rooms, storage areas, elevator shafts, and stairwells. The footprint of the playing field should also be included in the *gross floor area*.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
25	Entertainment/ public assembly	Stadium (Open)			Stadium (open) refers to structures used primarily for professional or collegiate sports and entertainment events in which the playing field is not covered and is exposed to the outside. Examples of events held in open stadiums include baseball, football, and soccer games, and concerts. Open stadiums usually have capacities of 5,000 seats or more and are often characterized by multiple concourses and concession areas. *Gross floor area* should include all space within the *building(s),* including concourse space on which workers or guests can walk, concession areas, retail stores, restaurants, administrative/office areas, restrooms, employee break rooms, kitchens, mechanical rooms, storage areas, elevator shafts, and stairwells. The footprint of the playing field should also be included in the *gross floor area*.
26	Entertainment/ public assembly	Swimming Pool			Swimming pool refers to any heated swimming pools located inside a *building*.
27	Entertainment/ public assembly	Zoo			Zoo refers to *buildings* used primarily to provide habitat to live animals and which may include public or private viewing and educational programs. *Gross floor area* should include all space within all fully enclosed *buildings*, including habitats, visitor viewing areas, theaters, classrooms, food service areas, restrooms, retail stores, veterinary offices, exhibit space, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
28	Entertainment/ public assembly	Other - Entertainment/ Public Assembly	Entertainment/ culture		Entertainment/culture refers to *buildings* providing entertainment and/or cultural services that do not meet the definition of any other building activity type defined in Table 7-4.
29	Entertainment/ public assembly	Other - Entertainment/ Public Assembly	Library		Library refers to *buildings* used to store and manage collections of literary and artistic materials such as books, periodicals, newspapers, films, etc. that can be used for reference or lending. *Gross floor area* should include all space within the *building*, including circulation rooms, storage areas, reading/study rooms, administrative space, kitchens used by staff, lobbies, conference rooms and auditoriums, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
30	Entertainment/ public assembly	Other - Entertainment/ Public Assembly	Other public assembly		Other public assembly refers to *buildings* primarily used for entertainment or public gatherings that do not meet the definition of any other building activity type defined in Table 7-4. *Gross floor area* should include all space within the *building*, including entertainment areas, administrative areas, and supporting areas such as storage rooms, hallways, restrooms, stairways, and maintenance areas.
31	Entertainment/ public assembly	Other - Entertainment/ Public Assembly	Recreation		Recreation refers to *buildings* primarily used for recreation that do not meet the definition of any other building activity type defined in Table 7-4. *Gross floor area* should include all space within the *building*, including recreational areas, restrooms, and supporting activities such as mechanical rooms, storage areas, elevator shafts, and stairwells.
32	Entertainment/ public assembly	Other - Entertainment/ Public Assembly	Social/meeting		Social/meeting hall refers to *buildings* primarily used for public or private gatherings. This may include community group meetings, seminars, workshops, or performances. Please note that there is another building activity type available, convention center, for large exhibition and conference facilities. *Gross floor area* should include all space within the *building*, including meeting rooms, auditoriums, food service areas, restrooms, lobbies, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
33	Entertainment/ public assembly	Other - Recreation			Other - Recreation refers to *buildings* primarily used for recreation that do not meet the definition of any other building activity type defined in Table 7-4. *Gross floor area* should include all space within the *building*, including recreational areas, restrooms, and supporting activities such as mechanical rooms, storage areas, elevator shafts, and stairwells.
34	Entertainment/ public assembly	Other - Stadium			Other - Stadium refers to *buildings* primarily used for sporting events that do not meet the definition of any other building activity type defined in Table 7-4. *Gross floor area* should include all space within the *building*, including areas for athletic activity and spectator seating, restrooms, and supporting activities such as mechanical rooms, storage areas, elevator shafts, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
35	Food sales and service	Bar/Nightclub			Bar/nightclub refers to *buildings* used primarily for preparation and sale of ready-to-eat food and beverages, but with secondary purposes characterized by revenue generated from social/ entertainment services and associated sale of beverages instead of food. Examples include restaurants with lounges and nightclubs featuring entertainment together or separate from dining. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.
36	Food sales and service	Convenience Store with Gas Station			Convenience store with gas station refers to *buildings* that are colocated with gas stations and are used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items. Convenience store with gas station may include space for vehicle servicing and repair. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, storage areas, and vehicle repair areas.
37	Food sales and service	Convenience Store without Gas Station			Convenience store without gas station refers to *buildings* used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items, which are not colocated with a gas station. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, and storage areas.
38	Food sales and service	Fast Food Restaurant			Fast food restaurant, also known as quick service restaurant, refers to *buildings* used for the preparation and sale of ready-to-eat food. Fast food restaurants are characterized by a limited menu of food prepared quickly (often within a few minutes), and sometimes cooked in bulk in advance and kept hot. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
39	Food sales and service	Food Sales	Supermarket/ Grocery Store/ Food Market		Supermarket/grocery store/food market refers to *buildings* used for the retail sale of primarily food and beverage products, and which may include small amounts of preparation and sale of ready-to-eat food. *Buildings* where the primary business is the on-site preparation and sale of ready-to-eat food should use one of the restaurant building activity types. *Gross floor area* should include all space within the *building*, including the sales floor, offices, storage areas, kitchens, restrooms, staff break rooms, and stairwells.
40	Food sales and service	Food Sales	Convenience store with gas		Convenience store with gas station refers to *buildings* that are colocated with gas stations and are used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items. Convenience store with gas station may include space for vehicle servicing and repair. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, storage areas, and vehicle repair areas.
41	Food sales and service	Food Sales	Convenience store		Convenience store without gas station refers to *buildings* used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items, which are not colocated with a gas station. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, and storage areas.
42	Food sales and service	Food Sales	Other food sales		Other food sales refers to *buildings* used for the sales of food on either a retail or wholesale basis, but which do not meet the definition of supermarket/grocery store/ food market, convenience store, or convenience store with gas stations. For example, specialty food sales like a cheese shop or butcher. *Gross floor area* should include all space within the *building*, including sales areas, storage areas, offices, kitchens, restrooms, and staff break rooms.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
43	Food sales and service	Food Sales	Fast Food		Fast food restaurant, also known as quick service restaurant, refers to *buildings* used for the preparation and sale of ready-to-eat food. Fast food restaurants are characterized by a limited menu of food prepared quickly (often within a few minutes), and sometimes cooked in bulk in advance and kept hot. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.
44	Food sales and service	Food Sales	Restaurant/ cafeteria		Restaurant/cafeteria refers to *buildings* used for preparation and sale of ready-to-eat food and beverages, but which do not fit in the fast food building activity type. Examples include fast casual, casual, and fine dining restaurants. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.
45	Food sales and service	Food Sales	Other food service		Other food service refers to *buildings* used for preparation and sale of food and beverages, but which do not meet the definition of restaurant or bar/nightclub. For example, a bakery or coffee shop. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.
46	Food sales and service	Restaurant			Restaurant refers to *buildings* used for preparation and sale of ready-to-eat food and beverages, but which do not fit in the fast food building activity type. Examples include fast casual, casual, and fine dining restaurants. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, offices, restrooms, staff break rooms, and storage areas.
47	Food sales and service	Supermarket/ Grocery Store			Supermarket/grocery store refers to *buildings* used for the retail sale of primarily food and beverage products, and which may include small amounts of preparation and sale of ready-to-eat food. *Buildings* where the primary business is the on-site preparation and sale of ready-to-eat food should use one of the restaurant building activity types. *Gross floor area* should include all space within the *building*, including the sales floor, offices, storage areas, kitchens, restrooms, staff break rooms, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
48	Food sales and service	Wholesale Club/ Supercenter			Wholesale club/supercenter refers to *buildings* used to conduct the retail sale of a wide variety of merchandise, typically in bulk quantities. Merchandise may include food, clothing, office supplies, furniture, electronics, books, sporting goods, toys, and hardware. *Gross floor area* should include all space within the *building*, including the sales floor, offices, storage areas, kitchens, restrooms, staff break rooms, elevators, and stairwells.
49	Food sales and service	Other - Restaurant/Bar			Other - Restaurant/bar refers to *buildings* used for preparation and sale of ready-to-eat food and beverages, but which does not fit into the fast food restaurant, restaurant, or bar/nightclub building activity types. *Gross floor area* should include all space within the *building*, including kitchens, sales areas, dining areas, restrooms, staff break rooms, and storage areas.
50	Health care	Ambulatory Surgical Center			Ambulatory surgical centers refers to health care facilities that provide same-day surgical care, including diagnostic and preventive procedures. *Gross floor area* should include all space within the *building*, including offices, operating and recovery rooms, waiting rooms, restrooms, employee break rooms and kitchens, elevator shafts, stairways, mechanical rooms, and storage areas.
51	Health care	Hospital (General Medical & Surgical)		9	Hospital refers to a general medical and surgical hospital (including critical access hospitals and children's hospitals). These facilities provide acute care services intended to treat patients for short periods of time, including emergency medical care, physician's office services, diagnostic care, ambulatory care, surgical care, and limited specialty services such as rehabilitation and cancer care. The definition of hospital accounts for all building activity types owned by the hospital that are located within the hospital *building/complex*, including nonclinical spaces such as administrative offices, food service, retail, hotels, and power plant. *Gross floor area* should include all space within the *building* on the campus including operating rooms, bedrooms, emergency treatment areas, and medical offices, exam rooms, laboratories, lobbies, atriums, cafeterias, restrooms, stairways, corridors connecting *buildings*, storage areas, and elevator shafts.
52	Health care	Medical Office		3	All medical offices considered to be diagnostic type.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
53	Health care	Outpatient Rehabilitation/ Physical Therapy			Outpatient rehabilitation/physical therapy offices refers to *buildings* used to provide diagnosis and treatment for rehabilitation and physical therapy. *Gross floor area* should include all space within the *building*, including offices, exam rooms, waiting rooms, indoor pool areas, atriums, employee break rooms and kitchens, restrooms, elevator shafts, stairways, mechanical rooms, and storage areas.
54	Health care	Residential Care Facility			Residential care facilities refers to *buildings* that provide rehabilitative and restorative care to patients on a long-term or permanent basis. Residential care facilities treat mental health issues, substance abuse, and rehabilitation for injury, illness, and disabilities. This building activity type is intended for facilities that offer long-term residential care to residents of all ages who may need assistance with activities of daily living. If a facility is designed to provide nursing and assistance to seniors only, then the senior care community building activity type should be used. *Gross floor area* should include all space within the *building*, including individual rooms or units, wellness centers, exam rooms, community rooms, small shops or service areas for residents and visitors (e.g., hair salons, convenience stores), staff offices, lobbies, atriums, cafeterias, kitchens, restrooms, storage areas, hallways, basements, stairways, corridors between *buildings*, and elevator shafts.
55	Health care	Senior Care Community			Senior care community refers to *buildings* that house and provide care and assistance for elderly residents. *Gross floor area* should include all space within the *building*, including individual rooms or units, wellness centers, exam rooms, community rooms, small shops or service areas for residents and visitors (e.g., hair salons, convenience stores), staff offices, lobbies, atriums, cafeterias, kitchens, restrooms, storage areas, hallways, basements, stairways, corridors between *buildings*, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
56	Health care	Urgent Care/ Clinic/Other Outpatient			Urgent care center/clinic/other outpatient office refers to *buildings* used to diagnose and treat patients, usually on an unscheduled, walk-in basis, who have an injury or illness that requires immediate care but is not serious enough to warrant a visit to an emergency department. Includes facilities that provide same-day surgical, diagnostic and preventive care. *Gross floor area* should include all space within the *building*, including offices, exam rooms, waiting rooms, atriums, employee break rooms and kitchens, restrooms, elevator shafts, stairways, mechanical rooms, and storage areas.
57	Health care	Other - Specialty Hospital			Other/specialty hospitals refers to long-term acute care hospitals, inpatient rehabilitation facilities, including cancer centers and psychiatric and substance abuse hospitals/facilities. *Gross floor area* should include all space within the *building/complex*, including medical offices, patient rooms, laboratories, lobbies, atriums, cafeterias, restrooms, stairways, corridors connecting *buildings*, storage areas, and elevator shafts.
58	Lodging/ residential	Barracks			Barracks refers to *residential buildings* associated with military facilities or educational institutions, which offer multiple accommodations for long-term residents. *Gross floor area* should include all space within the *building*, including bedrooms, common areas, food service facilities, restrooms, laundry facilities, meeting spaces, exercise rooms, health club/spas, lobbies, elevator shafts, storage areas, and stairways.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
59	Lodging/ residential	Hotel	Hotel		Hotel refers to *buildings* renting overnight accommodations on a room/suite and nightly basis, and typically include a bath/ shower and other facilities in guest rooms. Hotel properties typically have daily services available to guests including housekeeping/laundry and a front desk/ concierge. Hotel does not apply to properties where more than 50 percent of the floor area is occupied by fractional ownership units such as condominiums or vacation timeshares, or to private residences that are rented out on a daily or weekly basis. Hotel properties should be majority-owned by a single entity and have rooms available on a nightly basis. Condominiums or time shares should select the multifamily housing building activity type. *Gross floor area* should include all interior space within the *building*, including guestrooms, halls, lobbies, atriums, food preparation and restaurant space, conference and banquet space, fitness centers/spas, laundry facilities, elevator shafts, stairways, mechanical rooms, storage areas, restrooms, employee break rooms, and back-of-house offices.
60	Lodging/ residential	Hotel	Motel or inn		Motel is a hotel like lodging where most rooms are entered from the exterior. *Gross floor area* should include all interior space within the *building*, including guestrooms, halls, lobbies, atriums, food preparation and restaurant space, conference and banquet space, fitness centers/spas, laundry facilities, elevator shafts, stairways, mechanical rooms, storage areas, restrooms, employee break rooms, and back-of-house offices.
61	Lodging/ residential	Multifamily Housing			Multifamily housing refers to a covered multifamily *building* containing sleeping units or more than five dwelling units where occupants are primarily permanent in nature. *Gross floor area* should include management offices or other spaces that may not contain living units. *Gross floor area* should include all interior space within the *building*, including living space in each unit (including occupied and unoccupied units), interior common areas (e.g., lobbies, offices, community rooms, common kitchens, fitness rooms), hallways, stairwells, elevator shafts, connecting corridors between *buildings*, storage areas, restrooms, and mechanical space such as a boiler room.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
62	Lodging/ residential	Prison/ Incarceration		9	Prison/incarceration refers to federal, state, local, or private-sector *buildings* used for the detention of persons awaiting trial or convicted of crimes. *Gross floor area* should include all space within the *building*, including holding cells, cafeterias, administrative spaces, kitchens, lobbies, atriums, conference rooms and auditoriums, fitness areas, storage areas, restrooms, stairways, and elevator shafts.
63	Lodging/ residential	Residence Hall/ Dormitory			Residence hall/dormitory refers to *buildings* associated with educational institutions or military facilities, which offer multiple accommodations for long-term residents. *Gross floor area* should include all space within the *building*, including bedrooms, common areas, food service facilities, restrooms, laundry facilities, meeting spaces, exercise rooms, health club/spas, lobbies, elevator shafts, storage areas, and stairways.
64	Lodging/ residential	Residential Care Facility			Residential care facilities refers to *buildings* that provide rehabilitative and restorative care to patients on a long-term or permanent basis. Residential care facilities treat mental health issues, substance abuse, and rehabilitation for injury, illness, and disabilities. This building activity type is intended for facilities that offer long-term residential care to residents of all ages who may need assistance with activities of daily living. If a facility is designed to provide nursing and assistance to seniors only, then the senior care community building activity type should be used. *Gross floor area* should include all space within the *building*, including individual rooms or units, wellness centers, exam rooms, community rooms, small shops or service areas for residents and visitors (e.g., hair salons, convenience stores), staff offices, lobbies, atriums, cafeterias, kitchens, restrooms, storage areas, hallways, basements, stairways, corridors between *buildings*, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
65	Lodging/ residential	Senior Care Community			Senior care community refers to *buildings* that house and provide care and assistance for elderly residents. *Gross floor area* should include all space within the *building*, including individual rooms or units, wellness centers, exam rooms, community rooms, small shops or service areas for residents and visitors (e.g., hair salons, convenience stores), staff offices, lobbies, atriums, cafeterias, kitchens, restrooms, storage areas, hallways, basements, stairways, corridors between *buildings*, and elevator shafts. A community with only independent living should benchmark under the multifamily building activity type.
66	Lodging/ residential	Other - Lodging/ Residential			Other - Lodging/residential refers to *buildings* used for residential purposes other than those described in the available building activity types in this table (i.e., residential other than multifamily residential, single family home, senior care community, residence hall/dormitory, barracks, prison/incarceration, or hotel). *Gross floor area* should include all space within the *building*, including living areas, common areas, and administrative space, kitchens used by staff, lobbies, waiting areas, cafeterias, restrooms, stairways, atriums, elevator shafts, and storage areas.
67	Mixed use	Mixed Use Property		4	Must use of Section 7.2.3 method for mixed use *buildings*, area weighted EUI_t based on building activity types.
68	Office	Medical Office		3	Medical office refers to *buildings* used to provide diagnosis and treatment for medical, dental, or psychiatric outpatient care. *Gross floor area* should include all space within the *building*, including offices, exam rooms, laboratories, lobbies, atriums, conference rooms and auditoriums, employee break rooms and kitchens, restrooms, elevator shafts, stairways, mechanical rooms, and storage areas. If you have restaurants, retail (pharmacy), or services (dry cleaners) within the medical office, you should most likely include this square footage and energy in the medical office building activity type.
69	Office	Office	Admin/ professional office		Administrative/professional office refers to *buildings* used for the conduct of commercial business activities. *Gross floor area* should include all space within the *building*, including offices, conference rooms and auditoriums, kitchens used by staff, lobbies, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
70	Office	Office	Bank/other financial		Financial office refers to *buildings* used for financial services such as bank headquarters and securities and brokerage firms. *Gross floor area* should include all space within the *building*, including offices, trading floors, conference rooms and auditoriums, vaults, kitchens used by staff, lobbies, atriums, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.
71	Office	Office	Government office		Government office is an office used by employees of federal, state, county, or city governments. *Gross floor area* should include all space within the *building*, including offices, conference rooms and auditoriums, kitchens used by staff, lobbies, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.
72	Office	Office	Medical office (diagnostic)	3	Medical office refers to *buildings* used to provide diagnosis and treatment for medical, dental, or psychiatric outpatient care. *Gross floor area* should include all space within the *building*, including offices, exam rooms, laboratories, lobbies, atriums, conference rooms and auditoriums, employee break rooms and kitchens, restrooms, elevator shafts, stairways, mechanical rooms, and storage areas.
73	Office	Office	Other office		Other office is an office that does not meet the definition of any of the other office building activity type defined in Table 7-4.
74	Office	Veterinary Office			Veterinary office refers to *buildings* used for the medical care and treatment of animals. *Gross floor area* should include all space within the *building*, including offices, exam rooms, waiting rooms, atriums, employee break rooms and kitchens, restrooms, elevator shafts, stairways, mechanical rooms, and storage areas.
75	Office	Other - Office			Other office is an office that does not meet the definition of any of the other office building activity type defined in Table 7-4.
76	Public services	Courthouse			Courthouse refers to *buildings* used for federal, state, or local courts, and associated administrative office space. *Gross floor area* should include all space within the *building*, including temporary holding cells, chambers, kitchens used by staff, lobbies, atriums, conference rooms and auditoriums, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
77	Public services	Fire Station			Fire station refers to *buildings* used to provide emergency response services associated with fires. Fire stations may be staffed by either volunteer or full-time paid firefighters. *Gross floor area* should include all space within the *building*, including office areas, vehicle storage areas, residential areas (if applicable), storage areas, break rooms, restrooms, kitchens, elevator shafts, and stairwells.
78	Public services	Library			Library refers to *buildings* used to store and manage collections of literary and artistic materials such as books, periodicals, newspapers, films, etc. that can be used for reference or lending. *Gross floor area* should include all space within the *building*, including circulation rooms, storage areas, reading/study rooms, administrative space, kitchens used by staff, lobbies, conference rooms and auditoriums, fitness areas for staff, restrooms, storage areas, stairways, and elevator shafts.
79	Public services	Mailing Center/ Post Office			Mailing center/post office refers to *buildings* used as retail establishments dedicated to mail and mailing supplies. This includes U.S. Post Offices, in addition to private retailers that offer priority mail services and mailing supplies. *Gross floor area* should include all space within the *building*, including retail counters, administrative space, kitchens used by staff, restrooms, lobbies, conference rooms, storage areas, stairways, and mechanical rooms.
80	Public services	Police Station			Police station applies to *buildings* used for federal, state, or local police forces and their associated office space. *Gross floor area* should include all space within the *building*, including offices, temporary holding cells, kitchens used by staff, restrooms, lobbies, atriums, conference rooms and auditoriums, fitness areas for staff, storage areas, stairways, and elevator shafts.
81	Public services	Prison/ Incarceration		9	Prison/incarceration refers to federal, state, local, or private-sector *buildings* used for the detention of persons awaiting trial or convicted of crimes. *Gross floor area* should include all space within the *building*, including holding cells, cafeterias, administrative spaces, kitchens, restrooms, lobbies, atriums, conference rooms and auditoriums, fitness areas, storage areas, stairways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
82	Public services	Social/Meeting Hall			Social/meeting hall refers to *buildings* primarily used for public or private gatherings. This may include community group meetings, seminars, workshops, or performances. Please note that there is another building activity type available, convention center, for large exhibition and conference facilities. *Gross floor area* should include all space within the *building*, including meeting rooms, auditoriums, food service areas, restrooms, lobbies, administrative/office space, mechanical rooms, storage areas, elevator shafts, and stairwells.
83	Public services	Transportation Terminal/Station			Transportation terminal/station applies to *buildings* used primarily for accessing public or private transportation. This includes train stations, bus stations, airports, and seaports. These terminals include areas for ticket purchases, and embarkation/disembarkation, and may also include public waiting areas with restaurants and other concessions. *Gross floor area* should include all space within the *building*, including boarding areas, waiting areas, administrative space, kitchens used by staff, restrooms, lobbies, restaurants, cafeterias, stairways, atriums, elevator shafts, and storage areas.
84	Public services	Other - Public Service			Other - Public service refers to *buildings* used by public-sector organizations to provide public services other than those described in the available building activity types in this table (i.e., services other than offices, courthouses, drinking water treatment and distribution plants, fire stations, libraries, mailing centers or post offices, police stations, prisons or incarceration facilities, social or meeting halls, transportation terminals or stations, or wastewater treatment plants). *Gross floor area* should include all space within the *building*, including administrative space, kitchens used by staff, restrooms, lobbies, waiting areas, cafeterias, stairways, atriums, elevator shafts, landscaping sheds, and storage areas.
85	Religious worship	Worship Facility			Worship facility refers to *buildings* that are used as places of worship. This includes churches, temples, mosques, synagogues, meetinghouses, or any other *buildings* that primarily function as a place of religious worship. *Gross floor area* should include all areas inside the *building* that includes the primary worship area, including food preparation, community rooms, classrooms, and supporting areas such as restrooms, storage areas, hallways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
86	Retail	Automobile Dealership			Automobile dealership refers to *buildings* used for the sale of new or used cars and light trucks. *Gross floor area* should include all space within the *building*, including sales floors, offices, conference rooms, vehicle service centers, parts storage areas, waiting rooms, staff break rooms, restrooms, hallways, and stairwells.
87	Retail	Convenience Store with Gas Station			Convenience store with gas station refers to *buildings* that are colocated with gas stations and are used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items. Convenience store with gas station may include space for vehicle servicing and repair. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, storage areas, and vehicle repair areas.
88	Retail	Convenience Store without Gas Station			Convenience store without gas station refers to *buildings* used for the sale of a limited range of items such as groceries, toiletries, newspapers, soft drinks, tobacco products, and other everyday items, which are not colocated with a gas station. *Gross floor area* should include all space within the *building*, including sales floors, offices, restrooms, staff break rooms, and storage areas.
89	Retail	Enclosed Mall		5	Enclosed mall refers to *buildings* that house multiple stores, often "anchored" by one or more department stores, and with interior walkways. Most stores will not have entrances accessible from outside, with the exception of the "anchor" stores. *Gross floor area* should include all space within the *building*, including retail stores, offices, food courts, restaurants, storage areas, restrooms, staff break rooms, atriums, walkways, stairwells, and mechanical rooms.
90	Retail	Lifestyle Center	Enclosed mall	5	Enclosed mall refers to *buildings* that house multiple stores, often "anchored" by one or more department stores, and with interior walkways. Most stores will not have entrances accessible from outside, with the exception of the "anchor" stores. *Gross floor area* should include all space within the *building*, including retail stores, offices, food courts, restaurants, storage areas, restrooms, staff break rooms, atriums, walkways, stairwells, and mechanical rooms.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
91	Retail	Lifestyle Center	Other retail		Other - Retail refers to a mixed-use commercial development that includes retail stores and leisure amenities that do not meet the definition of lifestyle center - retail store. *Gross floor area* should include all space within the *building*, including retail stores, offices, food courts, restaurants, residential areas, storage areas, restrooms, staff break rooms, walkways, stairwells, and mechanical areas.
92	Retail	Lifestyle Center	Retail store		Lifestyle center refers to a mixed-use commercial development that includes retail stores and leisure amenities, where individual retail stores typically contain an entrance accessible from the outside and are not connected by internal walkways. Lifestyle centers have an open-air design, unlike traditional enclosed malls, and often include landscaped pedestrian areas, as well as streets and vehicle parking. *Gross floor area* should include all space within the *building*, including retail stores, offices, food courts, restaurants, residential areas, storage areas, restrooms, staff break rooms, walkways, stairwells, and mechanical areas.
93	Retail	Lifestyle Center		4	Must use of Section 7.2.3 method for mixed use *buildings*.
94	Retail	Retail Store			Retail store refers to individual stores used to conduct the retail sale of nonfood consumer goods such as clothing, books, toys, sporting goods, office supplies, hardware, and electronics. *Buildings* containing multiple stores should be classified as enclosed mall, lifestyle center, or strip mall. *Gross floor area* should include all space within the *building*, including sales areas, storage areas, offices, restrooms, staff break rooms, elevators, and stairwells.
95	Retail	Strip Mall		4	Strip mall refers to *buildings* comprising more than one retail store, restaurant, or other business, in an open-air configuration where each establishment has an exterior entrance to the public and there are no internal walkways. *Gross floor area* should include all space within the *building*, including retail stores, offices, restaurants, storage areas, restrooms, staff break rooms, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
96	Retail	Supermarket/ Grocery Store			Supermarket/grocery store refers to *buildings* used for the retail sale of primarily food and beverage products, and which may include small amounts of preparation and sale of ready-to-eat food. *Buildings* where the primary business is the on-site preparation and sale of ready-to-eat food should use one of the restaurant building activity types. *Gross floor area* should include all space within the *building*, including the sales floor, offices, storage areas, kitchens, restrooms, staff break rooms, and stairwells.
97	Retail	Wholesale Club/ Supercenter			Wholesale club/supercenter refers to *buildings* used to conduct the retail sale of a wide variety of merchandise, typically in bulk quantities. Merchandise may include food, clothing, office supplies, furniture, electronics, books, sporting goods, toys, and hardware. *Gross floor area* should include all space within the *building*, including the sales floor, offices, storage areas, kitchens, restrooms, staff break rooms, elevators, and stairwells.
98	Retail	Other - Retail/ Mall	Enclosed mall	5	Enclosed mall refers to *buildings* that house multiple stores, often "anchored" by one or more department stores, and with interior walkways. Most stores will not have entrances accessible from outside, with the exception of the "anchor" stores. *Gross floor area* should include all space within the *building*, including retail stores, offices, food courts, restaurants, storage areas, restrooms, staff break rooms, atriums, walkways, stairwells, and mechanical rooms.
99	Retail	Other - Retail/ Mall		4	Must use of Section 7.2.3 method for mixed use *buildings*.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
100	Technology/ science	Data Center		6	Data center refers to an activity space or *buildings* specifically designed and equipped to meet the needs of high density computing equipment, such as server racks, used for data storage and processing, including dedicated uninterruptible power supplies and cooling systems and require a constant power load of 75 kW or more. *Gross floor area* shall only include space within the *building*, including raised floor computing space, server rack aisles, storage silos, control console areas, battery rooms and mechanical rooms for dedicated cooling equipment. *Gross floor area* shall not include a server closet, telecommunications equipment closet, computer training area, office, elevator, corridors, or other auxiliary space. This is a *building* or activity without an energy target. Included to provide definition only.
101	Technology/ science	Laboratory			Laboratory refers to *buildings* that provide controlled conditions in which scientific research, measurement, and experiments are performed or practical science is taught. *Gross floor area* should include all space within the *building*, including workstations/hoods, offices, conference rooms, restrooms, storage areas, decontamination rooms, mechanical rooms, elevator shafts, and stairwells.
102	Technology/ science	Other - Technology/ Science	Other service		Other - Technology/science refers to *buildings* used for science and technology related services other than laboratories and data centers. *Gross floor area* should include all space within the *building*, including areas with the main business activity, production areas, administrative offices, restrooms, employee break areas, stairways, atriums, elevator shafts, and storage areas.
103	Services	Personal Services (Health/Beauty, Dry Cleaning, etc.)			Personal services refers to *buildings* used to sell services rather than physical goods. Examples include dry cleaners, salons, spas, etc. *Gross floor area* should include all space within the *building*, including sales floors, offices, storage areas, restrooms, staff break rooms, walkways, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
104	Services	Repair Services (Vehicle, Shoe,Locksmith, etc.)	Repair shop		Repair services refers to *buildings* in which repair service is provided other than vehicle repair or maintenance. Examples include vehicle service or repair shops, shoe repair, jewelry repair, locksmiths, etc. *Gross floor area* should include all space within the *building*, including sales floors, repair areas, workshops, offices, parts storage areas, waiting rooms, restrooms, staff break rooms, hallways, and stairwells.
105	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle service/ repair shop		Vehicle service/repair shop refers to *buildings* in which vehicle repair service is provided. Examples include vehicle mechanical repair, body and paint shops, muffler, brake and tire shops. *Gross floor area* should include all space within the *building*, including sales floors, repair areas, workshops, offices, parts storage areas, waiting rooms, restrooms, staff break rooms, hallways, and stairwells.
106	Services	Repair Services (Vehicle, Shoe, Locksmith, etc.)	Vehicle storage/ maintenance		Repair services - Vehicle storage/ maintenance refers to *buildings* in which vehicle storage or maintenance service is provided. Examples include warehousing of vehicles and maintenance services such as vehicle washing/detailing. *Gross floor area* should include all space within the *building*, including sales floors, maintenance areas, repair areas, workshops, offices, storage areas, waiting rooms, restrooms, staff break rooms, hallways, and stairwells.
107	Services	Other - Services			Other - Services refers to *buildings* in which primarily services are offered, but which does not fit into the personal services or repair services building activity type. Examples include kennels, photo processing shops, etc. *Gross floor area* should include all space within the *building*, including sales floors, offices, storage areas, restrooms, staff break rooms, walkways, and stairwells.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
108	Utility	Energy/Power Station		7	Energy/power station applies to *buildings* containing machinery and/or associated equipment for generating electricity or district heat (steam, hot water, or chilled water) from a raw fuel, including fossil fuel power plants, traditional district heat power plants, combined heat and power plants, nuclear reactors, hydroelectric dams, or facilities associated with a solar or wind farm. *Gross floor area* should include all space within the *building*, including power generation areas (boilers, turbines, etc.), administrative space, cooling towers, kitchens used by staff, restrooms, lobbies, meeting rooms, cafeterias, stairways, elevator shafts, and storage areas (which may include fossil fuel storage tanks or bins). This is a *building* or activity without an energy target. This may be exempt from the standard, see Section Z4.1 2, d.
109	Utility	Other - Utility		7	Other - Utility applies to *buildings* used by a utility for some purpose other than general office or energy/power generation. This may include utility transfer stations or maintenance facilities. Note that an administrative office occupied by a utility should be entered as office, and a power or energy generation plant should be entered as energy/power station. *Gross floor area* should include all space within the *building*, including administrative space, maintenance and equipment areas, generator rooms, kitchens used by staff, restrooms, lobbies, meeting rooms, stairways, elevator shafts, and storage areas. This is a *building* or activity without an energy target. This may be exempt from the standard, see Section Z4.1 2, d.
110	Warehouse/ storage	Self-Storage Facility			Self-storage facility refers to *buildings* that are used for private storage. Typically, a single self-storage facility will contain a variety of individual units that are rented out for the purpose of storing personal belongings. *Gross floor area* should include all space within the *building*, including individual storage units, administrative offices, security and maintenance areas, mechanical rooms, hallways, stairways, and elevator shafts.

	Building Activity Type[1,2]			Notes	Clean Buildings Performance Standard Definitions
111	Warehouse/ storage	Distribution Center			Distribution center refers to unrefrigerated *buildings* that are used for the temporary storage and redistribution of goods, manufactured products, merchandise or raw materials. *Buildings* that are used primarily for assembling, modifying, manufacturing, or growing goods, products, merchandise or raw material should be classified as manufacturing facility. *Gross floor area* should include all space within the *building*, including space designed to store nonperishable goods and merchandise, offices, lobbies, stairways, restrooms, equipment storage areas, and elevator shafts.
112	Warehouse/ storage	Nonrefrigerated Warehouse			Nonrefrigerated warehouse refers to unrefrigerated *buildings* that are used to store goods, manufactured products, merchandise or raw materials. *Buildings* that are used primarily for assembling, modifying, manufacturing, or growing goods, products, merchandise or raw material should be classified as manufacturing facility. *Gross floor area* should include all space within the *building*, including the main storage rooms, administrative offices, lobbies, stairways, restrooms, equipment storage areas, and elevator shafts.
113	Warehouse/ storage	Refrigerated Warehouse			Refrigerated warehouse refers to refrigerated *buildings* that are used to store or redistribute perishable goods or merchandise under refrigeration at temperatures below 50 degrees Fahrenheit (10 degrees Celsius). *Buildings* that are used primarily for assembling, modifying, manufacturing, or growing goods, products, merchandise or raw material should be classified as manufacturing facility. *Gross floor area* should include all space within the *building*, which includes temperature controlled areas, administrative offices, lobbies, stairways, restrooms, equipment storage areas, and elevator shafts.

Notes:
1. Select the most specific building activity type that applies.
2. Building activity types are defined by *AHJ* in Table 7-4.
3. All medical offices considered to be diagnostic type.
4. Must use of Section 7.2.3 method for mixed use *buildings*.
5. Suggest considering use of Section 7.2.3 method for mixed use *buildings*.
6. This is a *building* or activity without an energy target. Included to provide definition only.
7. This is a *building* or activity without an energy target. This may be exempt from the standard, see Section Z4.1 2, d.
8. Laboratories as defined by the college/university building activity type where the primary activity is for teaching practical science shall use the college/university building activity type target. College/university *buildings* with research laboratory *building* activities where the primary activities are of scientific research, measurement, and experiments are performed, can utilize building activity type 101 laboratory for an area weighted EUI_t.
9. Building activity type target developed at the campus-level. As an alternative to complying at the building-level, these *covered buildings* may comply at a campus-level with the EUI_t. "Campus-level" is an alternative reporting pathway for a collection of all *buildings* on adjoining property with a single shared primary function that act as a single property.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-150, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210

and 19.27A.250. WSR 24-03-033, § 194-50-150, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 23-13-081, § 194-50-150, filed 6/15/23, effective 7/16/23; WSR 20-22-059, § 194-50-150, filed 10/30/20, effective 11/30/20.]

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

WAC 194-50-160 Normative Annex Y—Washington state Tier 2 covered buildings reporting requirements—This is a normative annex and is part of the Tier 2 covered building requirements of this standard.

Y1 Building owner notifications by the AHJ.

Y1.1 Notification to building owners of covered buildings by the AHJ. Based on records obtained from each county assessor and other available information sources, the *AHJ* must create a database of *covered buildings* and *building owners* required to comply with the standard established in accordance with this section. The database may include *buildings* and *building complexes* presumed to meet the definition of *covered building* and *multifamily residential buildings* greater than 20,000 square feet in floor area.

Y1.1.1 The database will contain information about *buildings* that may be subject to compliance and their owners. The database will also contain information to assist tracking and reporting on *building owner* compliance, and incentive application and distribution. Commerce will create a method for tracking *building owner* notification responses. Each *building* or *building complex* will be assigned a unique *building* identifier.

Y1.2 By July 1, 2025, the *AHJ* must provide the owners of *covered buildings* with notification of compliance requirements.

Y1.3 Failure by the *AHJ* to provide the notification in Section Y1.2 does not release the *building owner* of the legal obligation to comply with this law. When a *covered building* undergoes a change of ownership, it is the buyer's responsibility to contact the *AHJ* and update the *covered building's* profile.

Y2 Building owner response to notifications.

Y2.1 Correction of errors. *Building owners* are responsible for reviewing the property and *building* information provided by the *AHJ* through notification including, but not limited to, *building* or *building complex* ownership details, *gross floor area*, and other information as identified by the *building owner*.

Y2.1.1 Correction of errors documentation. *Building owners* who are notified in error may submit a correction to the *AHJ*. The correction will be used to document *gross floor area* (conditioned and unconditioned) and/or *building* type.

Y3 Washington state reporting requirements for building owners.

Y3.1 General compliance. The *building owner* of a *Tier 2 covered building* must report compliance with the standard to the *AHJ* in accordance with the compliance schedule established under Section Y3.2 and every five years thereafter. For each reporting date, the *building owner* must submit documentation to demonstrate that

1. The *weather normalized energy use intensity* of the *Tier 2 covered building* measured in a period not to exceed two years prior to

the compliance deadline specified in Normative Annex Y, Section Y3.1 compared to the *energy use intensity target*; and has developed and is maintaining an energy management plan (*EMP*) in accordance with Section 5, including an operations and maintenance program (*O&M*) in accordance with Section 6; or

2. The *covered building* has received *Tier 2 covered building conditional compliance* from the *AHJ*; or

3. The *covered building* is exempt from the standard by demonstrating that the *building* meets one of the criteria for an exemption.

Y3.2 Compliance schedule. The *building owner* of a *Tier 2 covered building* must report the *building owner*'s compliance with the standard to the *AHJ* in accordance with the appropriate initial compliance date as follows and every five years thereafter.

1. For a *building* with more than 20,000 gross square feet but less than 50,001 gross square feet and all *multifamily residential buildings* more than 20,000 gross square feet: July 1, 2027.

2. *Covered buildings* complying at a *grouped building* level shall use the compliance schedule representing the largest *covered building* or the compliance schedule can be graduated through the *conditional compliance* provisions of the standard in accordance with individual *covered buildings* compliance schedules of Sections Z3.2, Y3.2, and W3.2. Notify the *AHJ* a minimum of 180 days prior to the largest *covered building's* compliance date when complying at a *grouped building* level to update the *covered building* profile(s) and when applicable, to apply for *conditional compliance* in accordance with Section Z4.4 or Z4.5.

Y3.2.1 Early compliance option. *Building owners* may submit for compliance to the *AHJ* beginning July 1, 2025. Energy use data for developing the net energy consumption of the *covered building* shall be measured in a period not to exceed two years prior to the submission of compliance documentation. This section expires June 1, 2027.

Y3.2.2 Application for Tier 2 covered building conditional compliance. Applications for *Tier 2 covered building conditional compliance* must be submitted to the *AHJ* prior to the compliance date to receive *Tier 2 covered building conditional compliance* approval.

1. *Tier 2 covered building conditional compliance* is valid for the *EMP* and *O&M* requirements of the standard.

2. *Benchmarking* is required and shall be reported in application for *Tier 2 covered building conditional compliance*. Approved applications will receive a revised compliance date of 180 days. Application for *Tier 2 covered building conditional compliance* is limited to one application per compliance cycle.

Y3.2.3 Application for exemption. *Building owners* submitting an application for exemption as specified in Section Y4.1 must submit to the *AHJ* no sooner than two years prior and no later than 180 days prior to the compliance date to receive exemption approval prior to the compliance date.

Y4 Documentation of compliance with the standard. Documentation of compliance shall be submitted to the *AHJ* demonstrating the *building owner* has complied with the standard through submission of documentation in accordance with Section Y4.1, Y4.2 or Y4.3.

Y4.1 Documentation of compliance through exemption. *Building owners* seeking approval of exemption shall submit to the *AHJ* Section Y6.7

Form H, "Application for Exemption Certificate," documenting the following:

1. **Exemption conditions.** The *building* qualifies for one of the exemptions listed in Y4.1(2), and:

a. **Exemption verification.** Compliance with the exemption must be verified by the owner based on the *building* as it is to be occupied and operating on the compliance date.

b. **Exemption application time frame.** Applications for exemptions may be submitted no sooner than two years prior to the compliance date and submitted to the *AHJ* no later than 180 days prior to the compliance date.

c. **Exemption certificate validity.** Exemptions certificates are only valid for the current compliance review cycle.

2. **Exemptions.** *Covered buildings* are not eligible for exemption from the standards unless they meet at least one of the following criteria:

a. **Certificate of occupancy.** The *building* did not have a certificate of occupancy or temporary certificate of occupancy for a consecutive 12-month period within two years prior to the compliance date.

b. **Physical occupancy.** The *building* did not have *physical occupancy* by owner or tenant for at least 50 percent of the conditioned floor area throughout the consecutive 12-month period prior to the *building* compliance date.

c. **Floor area.** The sum of the *building's gross floor area* minus unconditioned and *semi-heated spaces*, as defined in the Washington State Energy Code, is less than 20,000 square feet.

d. **Manufacturing or industrial.** More than 50 percent of the *gross floor area* of the *building* is used for manufacturing or other industrial purposes, as defined under the following use designations of the Washington state edition of the International Building Code:

i. Factory group F; or

ii. High hazard group H.

e. **Agricultural.** The *building* is an *agricultural structure*.

f. **Demolition.** The *building* is pending demolition.

g. **Financial hardship.** The *building* meets at least one of the following conditions of financial hardship:

i. The *building* had arrears of property taxes or water or wastewater charges that resulted in the *building's* inclusion, within the prior two years, on a city or county's annual tax lien sale list.

ii. The *building* has a court-appointed receiver in control of the asset due to financial distress.

iii. The *building* is owned by a financial institution through default by a borrower.

iv. The *building* has been acquired by a deed in lieu of foreclosure within the previous 24 months.

v. The *building* has a senior mortgage subject to a notice of default.

vi. The *building owner* has an immediate and heavy financial need that cannot be satisfied from other reasonable available resources and that is caused by events that are beyond their control.

3. **Notification of exemption approved or denied.** After documents have been submitted and reviewed, the *AHJ* will send notification of approval or denial.

a. If the exemption is approved, the *AHJ* shall notify the applicant stating the application has been approved and update the *AHJ* records for the *building*.

b. If the exemption is denied, the *AHJ* shall notify the applicant stating the application has been denied and update the *AHJ* records for the *building*.

i. **Requesting hearing for denied exemption.** See Section Y5.7 Administrative hearings.

4. **Compliance required when exemption denied.** When an application for exemption is denied, the *building owner* must proceed with the process to demonstrate compliance with one of the compliance options in Washington state reporting requirements for *building owners* in Sections Y4.2 through Y4.5.

Y4.2 Benchmarking. *Building owners* must provide the following documentation to verify that the *building weather normalized EUI* is compared to the *building* EUI_t and that the energy management plan (*EMP*), including the operations and maintenance program (*O&M*) is complete and being implemented.

1.Form A;

2.Form B; except *buildings* unable to meet Section 7.2, Determining Energy Target (EUI_t);

3.Form C.

Y4.3 Buildings approved for Tier 2 covered building conditional compliance. *Building owners* seeking approval of *Tier 2 covered building conditional compliance* for the energy management plan (*EMP*), including the operations and maintenance (*O&M*) program shall submit to the *AHJ Tier 2 covered building conditional compliance* application along with the following documentation:

1. Form A;
2. Form B;
3. Form C.

Once *Tier 2 covered building conditional compliance* is approved:

4. Documentation to verify that the *EMP* and *O&M* is complete and being implemented must be submitted to the *AHJ* by the revised compliance date.

Y5. Violations, assessment of administrative penalties and review of penalty decisions.

Y5.1 Authorization. The *AHJ* is authorized to impose administrative penalties on *building owners* for failing to submit documentation demonstrating compliance with the requirements of this standard. Failure to submit documentation demonstrating compliance by the scheduled reporting date will result in penalties by legal notice.

Y5.2 Notice of violation, opportunity to correct, and intent to assess penalties (NOVCI).

Y5.2.1 Notifying owner of failure to demonstrate compliance. The *AHJ* may issue a NOVCI when a *building owner* has failed to submit documentation that demonstrates compliance with this standard by the scheduled reporting date.

Y5.2.2 Issuing NOVCI. A NOVCI may be issued for any of the following reasons:

1. Failure to submit a compliance report in the form and manner prescribed by the *AHJ*.

2. Failure to submit compliance report by the revised compliance date after receiving *Tier 2 covered building conditional compliance* approval.

3. Failure to provide accurate reporting consistent with the requirements of the standard.

4. Failure to provide a valid exemption certificate.

Y5.2.3 Identifying failure to demonstrate compliance. The *AHJ* will identify in the NOVCI the section(s) of law, code, or the standard for which the *building owner* has failed to demonstrate compliance.

Y5.2.4 Specifying time frame to remedy. The NOVCI will specify the time by which the *building owner* must cure the violation by submitting documentation that demonstrates compliance with the identified section(s) of law, code, or the standard. The *AHJ* will give the *building owner* at least 30 calendar days to submit such documentation.

Y5.3 Response to NOVCI.

Y5.3.1 Responding to NOVCI. *Building owners* must respond to a NOVCI within 30 days by meeting one of the following:

1. **Compliance:** Submitting a compliance report in the form and manner prescribed by the *AHJ*.

2. **Exemption:** Submitting an application for exemption in accordance with Section Y4.1 Documentation of compliance through exemption, if applicable;

3. **Tier 2 Covered building conditional compliance:** Submitting a *Tier 2 covered building conditional compliance* application in accordance with Section Y4.3 Buildings approved for Tier 2 covered building conditional compliance;

4. **Pay penalties:** Submitting their intent to pay the penalties by using the form provided by the *AHJ*; or

5. **Request hearing:** Submitting a request for an administrative hearing to challenge or mitigate the penalty in accordance with Section Y5.7 Administrative hearings.

Y5.3.2 Missing NOVCI response deadline. If the *building owner* does not respond within 30 days in accordance with Section Y5.3.1 Responding to the NOVCI, the *building owner* waives their right to a hearing, and the *director* or their designee may issue a final order assessing the penalties described in the NOVCI.

Y5.4 Assessment of administrative penalties.

Y5.4.1 Penalties for building owners. Failure to submit documentation demonstrating compliance with the standard by the date specified in a NOVCI will result in the assessment of administrative penalties at an amount not to exceed $0.30 per square foot of *gross floor area*.

Y5.4.1.1 Penalties for building owners pursuing relief. For *building owners* subject to a NOVCI who respond within 30 days:

1. **With documentation demonstrating compliance or successful challenges.** For *building owners* that submit documentation demonstrating compliance or are successful in their challenges:

a. Fines shall be waived.

b. *Building owners* may be eligible to apply for early adopter incentive program.

2. **Without compliance documentation or unsuccessful challenges.** For *building owners* that have not submitted documentation demonstrating compliance by deadline or *Tier 2 covered building conditional compliance* deadline, or have an unsuccessful challenge:

a. The Tier 2 *building owner* will be assessed the maximum penalty of amount equal to $0.30 per square foot of *gross floor area*.

b. *Building owners* may not be eligible to apply for early adopter incentive program.

c. The *AHJ* may by rule increase the penalty rates to adjust for the effects of inflation.

Y5.4.1.2 Building owners that choose to pay the fine rather than pursuing compliance. *Building owners* may choose to respond to the NOVCI by paying the maximum penalty.

1. The Tier 2 *building owner* will be assessed the maximum penalty of $0.30 per square foot of *gross floor area.*

2. *Building owners* may not be eligible to apply for early adopter incentive program.

3. Penalties are assessed for each compliance period.

Y5.4.2 Interest. Interest will accrue on civil penalties pursuant to RCW 43.17.240 if and when the debt becomes past due.

Y5.5 Due date and collection of penalties.

Y5.5.1 Penalties due. Penalties shall become due and payable on the later of:

1. Thirty days after receipt of the final order imposing the penalty; or

2. The date specified in the final order imposing the penalty.

Y5.5.2 Debt collection. If a penalty has not been paid by the due date, the *AHJ* may assign the debt to a collection agency as authorized by RCW 19.16.500 or take other action to pursue collection as authorized by law. If referred to a collection agency, the *AHJ* may add a reasonable fee, payable by the debtor, to the outstanding debt for the collection agency fee.

Y5.6 Payment of administrative penalties. Penalties will be payable in U.S. funds to the Washington state department of commerce, as specified by the *AHJ*.

Y5.7 Administrative hearings.

Y5.7.1 Requesting a hearing. A *building owner* may request an administrative hearing after receiving a NOVCI or after the denial of their application for an exemption by submitting a request within 30 days of the date of a NOVCI or the denial of a timely application for exemption. All requests must be made in writing and filed at the address specified on the NOVCI. For convenience, the *AHJ* will attach a form titled "Request for Hearing" to the NOVCI that may be used to request an administrative hearing. Requests for hearing must be accompanied by the following:

1. Washington state *building* ID;

2. Submitted Annex Y Forms A, B, and C.

Y5.7.2 Hearing process. The *AHJ* may refer matters to the office of administrative hearings (OAH). Administrative hearings will be conducted in accordance with chapter 34.05 WAC, Administrative Procedure Act, chapter 10-08 WAC, Model rules of procedure, and the procedural rules adopted in this chapter. In the case of a conflict between the model rules of procedure and the procedural rules adopted in this section, the procedural rules adopted in this section take precedence.

Y5.7.3 Initial orders to become final orders. Initial orders issued by the presiding officer will become final without further agency action unless, within 20 days,

1. The *director* determines that the initial order should be reviewed; or

2. A party to the proceeding files a petition for administrative review of the initial order.

Upon occurrence of either event, notice shall be given to all parties to the proceeding.

Y5.7.4 Judicial review. A final order entered pursuant to this section is subject to judicial review pursuant to RCW 34.05.510 through 34.05.598.

Y5.7.5 Collected penalties. Administrative penalties collected under this section must be deposited into the low-income weatherization and structural rehabilitation assistance account created in RCW 70A.35.030 and reinvested into the clean buildings program, where feasible, to support compliance with the standard.

Y6 Compliance forms. The following sections replace Standard 100, Normative Annex C, "Reporting Forms," and provide additional forms specified by rule. *Building owners* are required to submit the applicable forms and the required supporting information to demonstrate compliance with the standard. These forms replace all referenced forms in this standard. The *AHJ* will make these forms available in an electronic format for submission to the *AHJ*.

Y6.1 Compliance with Standard 100 (Form A).

Note: For *grouped buildings*, use Grouped Buildings Compliance with Standard 100 (Form J), instead of Form A.

1. *Building* identification:
a. Washington state *building* ID;
b. County;
c. County parcel number(s);
d. Portfolio manager property ID number;
e. Property name;
f. Parent property name;
g. Address 1 (street);
h. Address 2;
i. City;
j. State;
k. Postal code.
2. Contact information:
a. *Building owner* name(s);
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State/province;
g. Country;
h. Postal code;
i. Telephone number;
j. Email address.
3. *Qualified person* (if applicable):
a. *Qualified person* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State;
f. Postal code;
g. Telephone number;

h. Email address;
i. Licensed, certified (select all that apply):
i. Licensure; or
ii. Certifying authority.
4. *Qualified energy manager* (if not the *qualified person*):
a. *Qualified energy manager* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State/province;
f. Postal code;
g. Country;
h. Telephone number;
i. Email address;
j. *Qualified energy manager* certification number.
5. *Energy manager* (if different than the *qualified person or qualified energy manager*):
a. *Energy manager* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State/province;
f. Postal code;
g. Country;
h. Telephone number;
i. Email address.
6. Summary data:
a. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Section Y6.2 Form B;

Note: *Buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report national median site *EUI* target as calculated by the Energy Star portfolio manager account and reported on Form C.

b. Measured site *EUI* (kBtu/ft^2) for the compliance year for this *building* based on Section Y6.3 Form C;
c. Measured *weather normalized* site *EUI* (kBtu/ft^2) for the compliance year based on Section Y6.3 Form C;
d. List the months/year of the collected data (mm/yyyy - mm/yyyy) for the compliance year for this *building* from Section Y6.3 Form C;
e. *Buildings* unable to comply with Section 5.2, building energy monitoring, and complete Section Y6.3 Form C, shall provide a reason statement.
7. Have the energy management requirements of Section 5 been met? [ ] Yes [ ] No
• Upload energy management plan as specified by the *AHJ*.
8. Have the operation and maintenance requirements of Section 6 been met? [ ] Yes [ ] No
• Upload operation and maintenance implementation documentation as specified by the *AHJ*.
9. Date the audit and economic evaluation was completed (N/A if none required)
• Upload audit reports as specified by Section Y6.4 Form D.
10. We state that this *building* complies with ANSI/ASHRAE/IES Standard 100 as amended by the *AHJ* to conform with RCW 19.27A.210:
a. Signature of *building owner*:
• Date:
b. Signature of *qualified energy manager* or *qualified person*:
• Date:

c. Signature of *energy manager*:
• Date:
d. Signature of *authority having jurisdiction*:
• Conditional or final compliance:
• Date:

Y6.2 Building activity and energy use intensity target (EUI_t) (Form B). Complete form provided by the *AHJ* with the following information:

1. *Building* identification:
a. Washington state *building* ID;
b. County;
c. County parcel number(s);
d. Portfolio manager property ID number;
e. Property name;
f. Parent property name;
g. Address 1 (street);
h. Address 2;
i. City;
j. State;
k Postal code.

2. List the *building* location climate zone, 4C or 5B. Determine the climate zone using the ASHRAE climate zone map located in Informative Annex G.

a. *Buildings* located in Climate Zone 5C shall use Climate Zone 4C.

b. *Buildings* located in Climate Zone 6B shall use Climate Zone 5B.

3. The *gross floor area* in square feet shall be reported as defined in Section 3.

4. If entire *building* is a *nontarget building*, a single building activity type not listed in Table 7-1, it should be listed as "*building* without target" on Section Y6.1 Form A. List "energy target" as "N/A" on Section Y6.2 Form B, and Section Y6.2 Form B is considered complete.

5. Fill in fraction of *gross floor area* $(A)_i$ for each activity. For single-activity *buildings* this is 1.0.

6. Fill in the operating shifts normalization factor $(S)_i$ from Table 7-3 for each activity.

7. Fill in the activity energy target $(EUI_{t1})_i$ from Table 7-2 (or table from *AHJ*) for each activity.

8. Calculate weighted space *EUI* target $(A \times S \times EUI_{t1})_i$ for each activity.

9. Add up fraction of floor area and enter sum in "Total fraction of floor area with target," and add up all weighted space *EUI* targets and enter sum as the "energy target" on Sections Y6.2 and Y6.1 Forms B and A.

10. If more than 50 percent of *gross floor area* has no target, it should be listed as "*building* without target" on Section Y6.1 Form A. List "energy target" as "N/A" on Section Y6.2 Form B. For single-activity *buildings* this is 1.0.

Y6.3 Energy use intensity calculations (Form C). *Energy use intensity* calculations shall be reported via the U.S. EPA's ENERGY STAR portfolio manager (www.energystar.gov/benchmark). The *energy manager* is responsible for creating Energy Star portfolio manager record for each *building*.

Exception to Y6.3: *Buildings* unable to comply with Section 5.2, building energy monitoring shall demonstrate compliance at the *connected buildings* level.

The Energy Star portfolio manager *building* record shall be identical to the *building* activity/type, fraction floor area, operating shifts (hours of operation), and *gross floor area* of the *building* as reported on Form B. All inputs shall be up to date prior to reporting as required in Section Y4, and annually as required in Section 5.1.2.3.

Prior to submitting reports, run the Energy Star portfolio manager data quality checker and make all corrections required to complete the report.

The *energy manager* shall use the EPA's Energy Star portfolio manager share properties feature and share the property data with the *AHJ* by enabling the read-only access and exchange data feature.

For each report submitted under Section Y4, the *energy manager* shall create and submit a report documenting the required data fields listed (below) and other fields deemed necessary by the *AHJ* for the reporting period.

Report fields shall include the following:

- Portfolio manager property ID;
- Portfolio manager parent property ID;
- Property name;
- Parent property name;
- Address 1;
- Address 2;
- City;
- County;
- State/Province;
- Postal Code;
- Primary property type - Self-selected;
- Primary property type - EPA calculated;
- List of all property use types at property;
- Property GFA - Self-reported (ft^2);
- Property GFA - EPA calculated (*buildings* and parking) (ft^2);
- Property GFA - EPA calculated (*buildings*)(ft^2);
- Property GFA - EPA calculated (parking)(ft^2);
- Largest property use type;
- Largest property use type - *Gross floor area* (ft^2);
- 2nd Largest property use type;
- 2nd Largest property use - *Gross floor area* (ft^2);
- 3rd Largest property use type;
- 3rd Largest property use type - *Gross floor area* (ft^2);
- Year built;
- Occupancy;
- Property notes;
- Property data administrator;
- Property data administrator - Email;
- Last modified date - Property;
- Last modified date - Electric meters;
- Last modified date - Gas meters;
- Last modified date - Nonelectric nongas energy meters;
- Local standard ID(s) Washington state building standard;
- Data center - Energy estimates applied;

• Electricity use - Grid purchase and generated from on-site renewable systems (kWh);
• Electricity use - Grid purchase (kWh);
• Electricity use - Generated from on-site renewable systems and used on-site (kWh);
• Natural gas use (therms);
• Fuel oil #1 use (kBtu);
• Fuel oil #2 use (kBtu);
• Fuel oil #4 use (kBtu);
• Fuel oil #5 and #6 use (kBtu);
• Diesel #2 use (kBtu);
• Kerosene use (kBtu);
• Propane use (kBtu);
• District steam use (kBtu);
• District hot water use (kBtu);
• District chilled water use (kBtu);
• Coal - Anthracite use (kBtu);
• Coal - Bituminous use (kBtu);
• Coke use (kBtu);
• Wood use (kBtu);
• Other use (kBtu);
• Default values;
• Temporary values;
• Estimated data flag - Electricity (grid purchase);
• Estimated data flag - Natural gas;
• Alert - Data center does not have an IT meter;
• Alert - *Gross floor area* is 0 ft^2;
• Alert - Property has no uses;
• Data quality checker - Date run;
• Data quality checker run - ?;
• Alert - Energy meter has less than 12 full calendar months of data;
• Alert - Energy meter has gaps;
• Alert - Energy meter has overlaps;
• Alert - Energy - No meters selected for metrics;
• Alert - Energy meter has single entry more than 65 days;
• Estimated values - Energy;
• Energy Star score;
• National median *site energy* use (kBtu);
• *Site energy* use (kBtu);
• Site *EUI* (kBtu/ft^2);
• *Weather normalized site energy* use (kBtu);
• *Weather normalized* site *EUI* (kBtu/ft^2);
• *Weather normalized* site electricity (kWh);
• *Weather normalized* site electricity intensity (kWh/ft^2);
• *Weather normalized* site natural gas use (therms);
• *Weather normalized* site natural gas intensity (therms/ft^2) energy current date;
• Electricity use - Generated from on-site renewable systems (kWh);
• Electricity use - Generated from on-site renewable systems and exported (kWh);
• Electricity Use - Grid purchase and generated from on-site renewable systems (kBtu);
• Electricity use - Grid purchase (kBtu);

• Electricity use - Generated from on-site renewable systems and used on site (kBtu);
• Natural gas use (kBtu);
• Percent of total electricity generated from on-site renewable systems;
• Cooling degree days (CDD) (°F);
• Heating degree days (HDD) (°F);
• Weather station name;
• Weather station ID.

Y6.4 Energy Audit Forms (Form D). Not applicable for *Tier 2 covered buildings*.

Form E. Not adopted.

Y6.5 Normative Annex X, Investment Criteria Tool (Form F). Not applicable for *Tier 2 covered buildings*.

Y6.6 Documentation of a building of historic significance (Form G). Not applicable for *Tier 2 covered buildings*.

Y6.7 Application for exemption certificate (Form H). Apply for an exemption certificate by submitting the following documentation in the form specified by the *AHJ*. The application must include the following:

1. *Building* identification:
a. Washington state *building* ID;
b. County;
c. County parcel number(s);
d. Portfolio manager property ID number;
e. Property name;
f. Parent property name;
g. Address 1 (street);
h. Address 2;
i. City;
j. State;
k. Postal code.
2. Contact information:
a. *Building owner* name(s);
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State/Province;
g. Country;
h. Postal code;
i. Telephone number;
j. Email address.
3. *Building* information:
a. Primary *building* activity type from Table 7-1, or a description of the *nontarget building* type;
b. *Building gross floor area*;
c. *Building* gross conditioned floor area.
4. Reason for exemption: Based on exemptions listed in Section Y4.1(b). A list all of documents enclosed and any facts in support of this application. Provide at least two of the acceptable documents listed below:
a. Municipal or county records;
b. Documents from a *qualified person*;
c. Construction permit;

d. Certificate of occupancy or application for certificate of occupancy;

e. Demolition permit;

f. Financial statements such as statement of assets; liabilities, capital, and surplus, statement of revenue and expenses; or statement of cash flow;

g. A letter from the *building owner* stating facts and explaining financial hardships;

h. Other documentation approved by the *AHJ*.

5. Signature and statement of *building owner* stating that the authorized representative of the *building* affirm and attest to the accuracy, truthfulness, and completeness of the statements of material fact provided in this form.

Y6.8 Grouped Buildings Compliance with Standard 100 (Form J).

1. *Grouped buildings* identification:

a. Washington state *grouped buildings* ID;

b. County;

c. County parcel number(s);

d. Portfolio manager property ID number;

e. Property name;

f. Parent property name;

g. Address 1 (street);

h. Address 2;

i. City;

j. State;

k. Postal code.

2. Contact information:

a. *Grouped buildings owner* name(s);

b. Contact name;

c. Address 1 (street);

d. Address 2;

e. City;

f. State/province;

g. Country;

h. Postal code;

i. Telephone number;

j. Email address.

3. *Qualified person*:

a. *Qualified person* name;

b. Address 1 (street);

c. Address 2;

d. City;

e. State;

f. Postal code;

g. Telephone number;

h. Email address;

i. Licensed, certified (select all that apply):

i. Licensure; or

ii. Certifying authority.

4. *Energy manager* (if different than the *qualified person*):

a. *Energy manager* name;

b. Address 1 (street);

c. Address 2;

d. City;

e. State/province;

f. Postal code;

g. Country;
h. Telephone number;
i. Email address.
5. *Decarbonization plan* author, where applicable:
a. Company name;
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State;
g. Postal code;
h. Telephone number;
i. Email address.
6. This compliance report is for:
a. *Grouped buildings* that meet the EUI_t;
b. *Grouped buildings* that meet the investment criteria prior to the compliance date;
c. *Grouped buildings* that will meet the EUI_t through *conditional compliance*;
d. *Grouped buildings* that will meet the investment criteria through *conditional compliance*;
e. Annual reporting for *conditional compliance*;
f. Progress reporting for *decarbonization plan*;
g. Completion reporting.
7. Summary data:
a. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Section Z6.2 Form B;

Note: *Baseline WNEUI* for *grouped buildings* that will meet investment criteria through *conditional compliance*.

b. Measured site *EUI* (kBtu/ft^2) for the compliance year for *grouped buildings* based on Section Z6.3 Form C;
c. *Grouped buildings* without an energy target;

Notes: 1. Predicted site *EUI* for *grouped buildings* that will meet the EUI_t or investment criteria through *conditional compliance*.
2. *Grouped buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report national median site *EUI* as calculated by the Energy Star portfolio manager account and reported on Form C.

d. *Grouped buildings* measured *weather normalized* site *EUI* (kBtu/ft^2) for the compliance year based on Section Z6.3 Form C;
e. List the months/year of the collected data (mm/yyyy - mm/yyyy) for the compliance year for this *grouped buildings* from Section Z6.3 Form C;
f. *Grouped buildings* applying for *conditional compliance* through meeting the EUI_t shall submit the following based on Section Z6.4 Form D:
- *Baseline EUI*;
- Projected *EUI*;

Note: Not applicable to *decarbonization plan.*

g. *Grouped buildings* applying for *conditional compliance* through meeting the investment criteria shall submit the following based on Section Z6.4 Form D:
- *Baseline* total kBtu;
- Projected total kBtu;
- Projected savings total kBtu;

Note: Not applicable to *decarbonization plan.*

8. Have the energy management requirements of Section 5 been met in accordance with the compliance schedule outlined in Section Z3.2

for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

• Upload energy management plan as specified by the *AHJ*.

9. Have the operation and maintenance requirements of Section 6 been met in accordance with the compliance schedule outlined in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

• Upload operation and maintenance implementation documentation as specified by the *AHJ*.

10. Date the audit and economic evaluation was completed (N/A if none required).

• Upload audit reports as specified by Section Z6.4 Form D.

11. Have all *EEMs* required by Section 8 been implemented? [ ] Yes [ ] No

12. Have the requirements of Section 9 been completed? [ ] Yes [ ] No

13. We state that these *grouped buildings* comply with ANSI/ASHRAE/IES Standard 100 as amended by the *AHJ* to conform with RCW 19.27A.210:

a. Signature of *grouped buildings owner*:

• Date:

b. Signature of *qualified energy manager* or *qualified person*:

• Date:

c. Signature of *energy manager*:

• Date:

d. Signature of *authority having jurisdiction*:

• Conditional or final compliance:

• Date:

Y7. Section 7—Tables as modified by Washington state.

See Normative Annex Z – Washington State Reporting Requirements for:

- **Table 7-1 Building Activity Types/Activities**
- **Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (I-P Units)**
- **Table 7-3 Building Operating Shifts Normalization Factor**
- **Table 7-4 Building Activity Type Definitions Table**

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-160, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-160, filed 1/8/24, effective 2/8/24.]

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

WAC 194-50-170 Normative Annex W—Washington state participating campus district energy system decarbonization plan general compliance and reporting requirements—This is a normative annex and is part of the district energy systems decarbonization requirements of this standard.

W1. Building owner notifications to the AHJ.

W1.1 Notification to the AHJ by participating campus owners with a district energy system. By June 30, 2024, owner or owner's designated representative of a *state campus district energy system* shall notify the *AHJ* that they are developing a *decarbonization plan*. Designated representatives of a *campus district energy system* may submit to the *AHJ* a request to opt-in to the *decarbonization plan* process. *Participating campuses* must comply with all of the *decarbonization plan* requirements in accordance with Normative Annex W.

Provide the following information to the *AHJ*:

For *participating campus*:

- State agency name or owner organization name;
- Agency or owner organization mailing address;
- *Campus* name;
- *Campus* owner name;
- Main point of contact: Name, email, phone;
- *District energy system* utility name and whether they are publicly or privately owned.

For each *building* connected to the *district energy system*:

- *Building* name and associated *gross floor area* (*GFA*);
- Address;
- Parcel number;
- Commerce *building* ID – where applicable.

W2. AHJ reporting.

W2.1 Summary report. The *AHJ* must provide a summary report on the *decarbonization plans* required to decarbonize *district energy systems* in accordance with the clean buildings performance standard (CBPS) and Normative Annex W to the Governor and the appropriate committees of the legislature by December 1, 2025. The *AHJ's* report may include *campuses* that fail to submit a *decarbonization plan* or fail to comply with the requirements, including the implementation schedule defined within the plan.

W3. Washington state reporting requirements for participating campus district energy systems.

W3.1 General compliance.

W3.1.1 District energy system decarbonization plan requirements: By June 30, 2025, the owner of a *participating campus* must develop a *district energy system decarbonization plan* to provide a strategy for up to 15 years and submit it to the *AHJ*. The *AHJ* may approve a *decarbonization plan* that is based on an implementation schedule longer than 15 years.

The *decarbonization plan* must include:

1. **Decarbonization:** Mechanisms to replace fossil fuels in the *district energy system* heating plants to provide 100 percent of the *campus* design load, including a schedule for replacement:

a. A *campus* with a *district energy system* providing cooling only shall evaluate:

i. Addition of a *district energy system* heating plant, in compliance with Normative Annex W;

ii. Mechanisms to replace fossil fuels of the heating systems at the building-level;

b. A *campus* with a *district energy system* providing cooling only may extend compliance schedule in accordance with Section W3.2, where decarbonization of the *campus* heating system is pursued in accordance with Section W3.1.1(1)(a);

Exceptions to W3.1.1(1):

1. Fossil fuel or electric resistance sources may account for a maximum of 10 percent of:

a. A *district energy system* heating plant's annual output; or

b. Building-level heating system output when complying in accordance with Section W3.1.1(1)(b).

2. Decommissioning of the *district energy system* heating plant is an acceptable alternative if a life cycle cost analysis demonstrates implementation of decarbonized heating systems at the building-level saves more energy and is more cost-effective over the life of the measure, in accordance with Normative Annex X. If decarbonizing by decommissioning the *district energy system* heating plant, provide the following:

a. *Decarbonization plan* representing implementation of decarbonized heating systems at the building-level in lieu of decarbonization of the *district energy system's* heating plant, in accordance with Normative Annex W.

b. Life cycle cost analysis (LCCA), evaluating implementation of decarbonized heating systems at the building-level vs. decarbonization of the *district energy system* heating plant, in accordance with Normative Annex W.

c. Evaluation of potential beneficial and cost-effective use of existing distribution system.

2. **Waste heat and cooling:** An evaluation of possible options to partner with nearby sources and uses of waste heat and cooling;

3. **Expansion:** An examination of opportunities to add *buildings* or other facilities to the *district energy system* once it is decarbonized, a strategy to incentivize growth of a decarbonized system, and requirements for facilities joining the system;

4. **CBPS performance metric:** An evaluation, prioritization, and scheduled plan for meeting the requirements of Sections 4.1 and 4.3 for the *campus*.

a. When a *decarbonization plan* is fully implemented, the *campus* shall meet the requirements of Section 4.3.

5. **CBPS EMP and O&M program:** Compliance with the requirements of Section 4.2 in accordance with the compliance schedule of Z3.2, Y3.2, and W3.2 as applicable for all *buildings* connected to the *campus*. The requirements of Section 4.2 shall apply to all *buildings* connected to the *campus*.

W3.1.2 Recommended district energy system decarbonization plan considerations: *Participating campuses* are encouraged to include the following considerations in a *decarbonization plan*:

1. Distribution network upgrades;

2. On-site energy storage facilities;

3. Space cooling for residential facilities;

4. Labor and workforce, including state registered apprenticeship utilization;

5. Options for public-private partnerships;

6. Incorporation of industrial symbiosis projects or networks as described in chapter 308, Laws of 2021.

W3.1.3 Utility engagement: *Participating campuses* must consult with the electric utility and the natural gas utility serving the site of the system during *decarbonization plan* development.

W3.2 Compliance Schedule. *Participating campuses* must:

1. **Develop decarbonization plan:** Begin developing a *decarbonization plan* by June 30, 2024, in accordance with the reporting requirements of Section W1.1.

2. **Final decarbonization plan:** Submit a final *decarbonization plan* to the *AHJ* by June 30, 2025, in accordance with the reporting requirements of Sections W3.1.1 and W4.1.

3. **Energy management plan and operations and maintenance program:** Submit EMP and O&M in accordance with compliance schedule in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and by July 1, 2030, for *buildings* not covered, connected to the *district energy system*.

4. **Decarbonization plan progress reports:** Every five years after June 30, 2025, until full implementation of the *decarbonization plan* and compliance with the standard has been met, *decarbonization plans* must be resubmitted by July 1st, along with a progress report including revisions to the implementation of the *decarbonization plan*, to the *AHJ* in accordance with Section W4.2. A *campus* with a *district energy system* providing cooling only, which does not decarbonize their heating systems, is required to submit completion reporting in lieu of progress reporting by July 1, 2030.

5. **Completion reporting:** Upon full implementation of *decarbonization plan* and compliance with the standard, submit completion report by July 1, 2040, or the alternatively approved *decarbonization plan* completion date to the *AHJ*, in accordance with Sections W4.3 through W4.5, as applicable. A *campus* with a *district energy system* providing cooling only, which does not decarbonize their heating systems, shall submit completion reporting by July 1, 2030, or the alternatively approved *decarbonization plan* completion date to the *AHJ*, in accordance with Sections W4.3 through W4.5, as applicable.

W3.2.1 Decarbonization plan review and evaluation: Upon submittal to the *AHJ*, *decarbonization plans* will be reviewed and approved by the *AHJ* in accordance with Normative Annex W. The *AHJ* may ask for a *decarbonization plan* to be revised and resubmitted if it does not meet standards as determined by the *AHJ*.

W4. Performance standard compliance reporting through decarbonization plan.

W4.1 Decarbonization plan reporting. *Participating campus* owners must provide a final *decarbonization plan*.

- *Decarbonization plan*;
- Form J;
- Form K;
- Form B;
- Form C;
- Form D, as applicable;
- Form F, as applicable.

W4.2 Decarbonization plan progress reporting. *Participating campus* owners must provide status updates and revised *decarbonization plans* until *decarbonization plan* is fully implemented. A minimum of one energy management plan (EMP) must be completed and the operations and maintenance program (O&M) must be implemented for the *campus*.

- Revised *decarbonization plan*;
  - Status updates;
  - Identify any revisions to *decarbonization plan*;
- Form J;
- Form K;

- Form B;
- Form C;
- Form D, as applicable and if revised;
- Form F, as applicable and if revised.

W4.3 Documentation of exempt buildings connected to a district energy system. There are no exemptions for a whole *campus*. *Participating campus* owners seeking approval of *building* exemption shall submit to the *AHJ* Form H, "Application for Exemption Certificate," in accordance with Section Z6.7 for *Tier 1 covered buildings* or Section Y6.7 for *Tier 2 covered buildings*.

W4.4 Campus that meets the EUI_t through the decarbonization plan. *Participating campus* owners must provide the following documentation to verify that the *campus weather normalized EUI* is less than the *campus* EUI_t and that a minimum of one energy management plan (EMP) must be completed and the operations and maintenance program (O&M) must be implemented for the *campus*.

- *Decarbonization plan*;
- Form J;
- Form K;
- Form B;
- Form C;
- Form F, when complying with the *decarbonization plan* through decommissioning in accordance with Section W3.1.1 Exception 2.

W4.5 Campus that meets the investment criteria through the decarbonization plan. *Participating campus* owners must provide the following documentation to verify that the *campus* has implemented all *EEMs* that meet the cost-effectiveness criteria resulting from the energy audit and economic evaluation criteria from Normative Annex X. The cost-effectiveness criteria does not apply to the decarbonization of the *district energy system* heating plant. The energy management plan (EMP) must be completed and the operations and maintenance program (O&M) must be implemented for the *campus*, and all *EEMs* must be installed and commissioned, prior to the approved *decarbonization plan* implementation schedule.

- *Decarbonization plan*;
- Form J;
- Form K;
- Form B;
- Form C;
- Form D;
- Form F.

W5. Assessment of administrative penalties.

W5.1 Issuing NOVC. The *AHJ* may issue a NOVC in accordance with Sections Z5 and Y5, when a *building owner* has failed to submit a *decarbonization plan*, approved by the *AHJ*, and has not met the requirements of this standard. Approved *decarbonization plans* extend Normative Annexes Z and Y compliance deadlines to the schedule specified in the approved *decarbonization plan*. Progress reporting submitted in accordance with Section W4.2, is required to maintain deadline extension and avoid penalty.

W6. Compliance forms.

W6.1 Grouped Buildings Compliance with Standard 100 (Form J).

Note: Grouped Buildings Compliance with Standard 100 (Form J) is used instead of Form A for *grouped buildings*.

1. *Grouped buildings* identification:
a. Washington state *grouped buildings* ID;
b. County;
c. County parcel number(s);
d. Portfolio manager property ID number;
e. Property name;
f. Parent property name;
g. Address 1 (street);
h. Address 2;
i. City;
j. State;
k. Postal code.
2. Contact information:
a. *Grouped buildings owner* name(s);
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State/province;
g. Country;
h. Postal code;
i. Telephone number;
j. Email address.
3. *Qualified person*:
a. *Qualified person* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State;
f. Postal code;
g. Telephone number;
h. Email address;
i. Licensed, certified (select all that apply):
i. Licensure; or
ii. Certifying authority.
4. *Energy manager* (if different than the *qualified person*):
a. *Energy manager* name;
b. Address 1 (street);
c. Address 2;
d. City;
e. State/province;
f. Postal code;
g. Country;
h. Telephone number;
i. Email address.
5. *Decarbonization plan* author, where applicable:
a. Company name;
b. Contact name;
c. Address 1 (street);
d. Address 2;
e. City;
f. State;
g. Postal code;
h. Telephone number;
i. Email address.
6. This compliance report is for:

a. *Grouped buildings* that meets the EUI_t;

b. *Grouped buildings* that meets the investment criteria prior to the compliance date;

c. *Grouped buildings* that will meet the EUI_t through *conditional compliance*;

d. *Grouped buildings* that will meet the investment criteria through *conditional compliance*;

e. Annual reporting for *conditional compliance*;

f. Progress reporting for *decarbonization plan*;

g. Completion reporting.

7. Summary data:

a. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Section Z6.2 Form B;

Note: *Baseline WNEUI* for *grouped buildings* that will meet investment criteria through *conditional compliance*.

b. Measured site *EUI* (kBtu/ft^2) for the compliance year for *grouped buildings* based on Section Z6.3 Form C;

c. *Grouped buildings* without an energy target;

Notes: 1. Predicted site *EUI* for *grouped buildings* that will meet the EUI_t or investment criteria through *conditional compliance*.
2. *Grouped buildings* unable to develop EUI_t in accordance with Section 7.2.2 or 7.2.3 of this standard shall report national median site *EUI* as calculated by the Energy Star portfolio manager account and reported on Form C.

d. *Grouped buildings* measured *weather normalized* site *EUI* (kBtu/ft^2) for the compliance year based on Section Z6.3 Form C;

e. List the months/year of the collected data (mm/yyyy - mm/yyyy) for the compliance year for this *grouped buildings* from Section Z6.3 Form C;

f. *Grouped buildings* applying for *conditional compliance* through meeting the EUI_t shall submit the following based on Section Z6.4 Form D:

- *Baseline EUI*;
- Projected *EUI*;

Note: Not applicable to *decarbonization plan*.

g. *Grouped buildings* applying for *conditional compliance* through meeting the investment criteria shall submit the following based on Section Z6.4 Form D:

- *Baseline* total kBtu;
- Projected total kBtu;
- Projected savings total kBtu;

Note: Not applicable to *decarbonization plan*.

8. Have the energy management requirements of Section 5 been met in accordance with the compliance schedule outlined in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

- Upload energy management plan as specified by the *AHJ*.

9. Have the operation and maintenance requirements of Section 6 been met in accordance with the compliance schedule outlined in Section Z3.2 for *Tier 1 covered buildings*, Section Y3.2 for *Tier 2 covered buildings*, and for *campuses* participating in the *decarbonization plan* by July 1, 2030, for *buildings* not covered, but connected to the *district energy system*? [ ] Yes [ ] No

- Upload operation and maintenance implementation documentation as specified by the *AHJ*.

10. Date the audit and economic evaluation was completed (N/A if none required).

• Upload audit reports as specified by Section Z6.4 Form D.

11. Have all *EEMs* required by Section 8 been implemented? [ ] Yes [ ] No

12. Have the requirements of Section 9 been completed? [ ] Yes [ ] No

13. We state that these *grouped buildings* comply with ANSI/ASHRAE/IES Standard 100 as amended by the *AHJ* to conform with RCW 19.27A.210:

a. Signature of *grouped buildings owner*:

• Date:

b. Signature of *qualified person*:

• Date:

c. Signature of *energy manager*:

• Date:

d. Signature of *authority having jurisdiction*:

• Conditional or final compliance:

• Date:

W6.2 Building activity and energy use intensity target (EUI_t) (Form B). See Section Z6.2.

W6.3 Energy use intensity calculations (Form C). See Section Z6.3.

W6.4 End use analysis requirements. *Building owners* shall demonstrate compliance with Form D by providing the documentation required by Section Z6.4.1 for all *Tier 1 covered buildings* of *campuses* pursuing compliance through the investment criteria.

W6.5 Normative Annex X, "Investment Criteria," Tool (Form F). See Section Z6.5 for all *Tier 1 covered buildings* of *campuses* pursuing compliance through the investment criteria.

W6.6 Documentation of a building of historic significance (Form G). See Section Z6.6.

W6.7 Application for exemption certificate (Form H). See Section Z6.7 for *Tier 1 covered buildings* or Section Y6.7 for *Tier 2 covered buildings*.

W6.8 Decarbonization plan reporting requirements (decarbonization plan content outline) (Form K).

1. **This decarbonization plan report is for:**

a. Final *decarbonization plan* submittal [ ] Yes [ ] No

b. Progress reporting [ ] Yes [ ] No

c. Completion reporting [ ] Yes [ ] No

2. **Decarbonization project scope of work:**

a. Summary of existing *district energy system* and *campus* layout including:

i. List of all *buildings* served by the *district energy system*;

ii. List of all *buildings* served by the *district energy system* heating and/or cooling plant, peak load;

iii. Description of current *district energy system* including, but not limited to, heating and cooling system type(s), configuration(s), output capacity(ies), thermal distribution loop(s);

iv. Energy monitoring (*benchmarking*):

• Identification of current *benchmarking* configuration:

- *Campus* [ ] Yes [ ] No

- *Connected building* [ ] Yes [ ] No

- Campus-level [ ] Yes [ ] No

v. *Energy use intensity target* (EUI_t) (kBtu/ft^2/yr) based on completed Section Z6.2;

Form B Note: *Baseline WNEUI* for *decarbonization plans* that will meet investment criteria through *conditional compliance*.

vi. Measured site *EUI* (kBtu/ft^2) for the identified *benchmarking* configuration at time of *decarbonization plan* submittal based on Section Z6.3 Form C;

b. Proposed decarbonized *district energy system* and *campus* layout including:

i. List of all *buildings* to be served by the *district energy system*;

ii. List of all *buildings* to be served by the *district energy system* heating plant, peak load;

iii. List of all *buildings* to be served by the *district energy system* cooling plant, peak load;

iv. Description of proposed *district energy system* including, but not limited to, heating and cooling system type(s), configuration(s), output capacity(ies), thermal distribution loop(s);

• An inventory and evaluation of possible options to partner with nearby sources and uses of waste heat and cooling;

• An inventory and evaluation of expanding *district energy system* to other *buildings*;

v. Identification of heating plant backup type, fuel source, capacity;

vi. Identification of proposed *energy efficiency measures* (*EEMs*) required to meet the requirements of the standard;

c. Proposed *building* performance metric:

i. Compliance pathway:

• EUI_t [ ] Yes [ ] No

• Investment criteria – (include within progress report) [ ] Yes [ ] No

- Plans for Level 2 energy audit, on *Tier 1 covered buildings*
- Plans for LCCA

ii. Energy monitoring (*benchmarking*):

• Identification of proposed *benchmarking* configuration:

- *Campus* [ ] Yes [ ] No
- *Connected building* [ ] Yes [ ] No
- Campus-level [ ] Yes [ ] No

• Proposed *energy use intensity target* (EUI_t) (kBtu/ft^2/yr) developed in accordance with the standard;

• Projected site *EUI* (kBtu/ft^2) for the identified *benchmarking* configuration after implementation of *decarbonization plan* based on Section Z6.3 Form C;

• Form D documenting proposed *energy efficiency measures* (*EEMs*);

• Form F documenting the life cycle cost analysis if pursuing the investment criteria of the standard;

d. Proposed metering configuration:

i. Shall include metering to measure *district energy system* heating and/or cooling plant input to individual *buildings*;

ii. Shall be configured in a manner to measure proposed *benchmarking* configuration;

iii. Shall include independent end use metering of *district energy system* backup heating plant.

3. **Recommended district energy system decarbonization plan considerations:** *Participating campuses* are encouraged to include the following considerations in a *decarbonization plan*:

a. Distribution network upgrades;

b. On-site energy storage facilities;

c. Space cooling for residential facilities;

d. Labor and workforce, including state registered apprenticeship utilization;

e. Options for public-private partnerships;

f. Incorporation of industrial symbiosis projects or networks as described in chapter 308, Laws of 2021.

4. **Utility engagement:** Narrative of steps taken including the date range of communications, for *participating campuses* consultation with the electric utility and the natural gas utility serving the site of the system during *decarbonization plan* development.

5. **Proposed project timeline shall provide implementation details and dates for:**

a. Energy management plan and operations and maintenance program, implemented in accordance with Section W3.1.1(5);

b. *Energy efficiency measures* (*EEMs*) required to meet the standard;

c. All phases of *district energy system decarbonization plan*;

i. *Decarbonization plan* shall determine implementation schedule, project timeline, compliance schedule;

6. **Other considerations:**

a. Communication engagement including, but not limited to, occupants, utilities, funders, and public;

b. Are funding mechanisms in place? [ ] Yes [ ] No

c. Are there cost projections in place? [ ] Yes [ ] No

i. What are your current/updated estimated costs? _____

ii. What are your current expended costs? _____

d. Changes to plan required to meet changes in codes, laws, and standards including any future reductions in EUI_t.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-170, filed 7/30/24, effective 8/30/24.]

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