#### WSR 23-23-102 PERMANENT RULES BUILDING CODE COUNCIL

[Filed November 15, 2023, 9:42 a.m., effective March 16, 2024]

Effective Date of Rule: March 16, 2024.

Purpose: Reconciling state amendments with section renumbering and model code modifications in the 2021 International Building Code/ 2021 International Existing Building Code; correcting errors and omissions.

Citation of Rules Affected by this Order: Amending 31 sections in chapter 51-50 WAC.

Statutory Authority for Adoption: RCW 19.27.031, 19.27.074. Other Authority: RCW 19.27.031, 19.27.074. Adopted under notice filed as WSR 23-14-123 on July 5, 2023. Changes Other than Editing from Proposed to Adopted Version:

WAC	Section	Change	Rationale/Discussion
51-50-008	Implementation	Implementation date is changed from October 29, 2023, to March 15, 2024.	The state building code council voted to delay implementation of all codes on September 15, 2023.
51-50-0705	Table 705.8	On line for "3 to less than 5, Unprotected, Nonsprinklered." Removed hypertext referring to footnote K.	This was done to correct a typo and to align with the International Code Council (ICC) model code text.
51-50-1110	1110.2 Exception #8	"Toileting" changed to "bathing."	This was done to correct a typo and to align with the ICC model code text.
51-50-3500	NFPA	Changes section reference from "903.2" to "903.3.2."	Corrects an error. There is no reference to NFPA in International Building Code Section 903.2.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 31, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 31, Repealed 0.

Date Adopted: October 20, 2023.

Tony Doan Council Chair

OTS-4702.6

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-008 Implementation. The International Building Code adopted under chapter 51-50 WAC shall become effective in all counties and cities of this state on ((July 1, 2023)) March 15, 2024.

AMENDATORY SECTION (Amending WSR 20-01-090, filed 12/12/19, effective 7/1/20)

#### WAC 51-50-0303 Section 303-Assembly Group A.

303.4 Assembly Group A-3. Group A-3 occupancy includes assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Amusement arcades;
- Art galleries more than 3,000 square feet (279 m<sup>2</sup>);
- Bowling alleys;
- Community halls;
- Courtrooms;
- Dance halls (not including food or drink consumption);
- Exhibition halls;
- Funeral parlors;

• Greenhouses for the conservation and exhibition of plants that provide public access;

- Gymnasiums (without spectator seating);
- Indoor swimming pools (without spectator seating);
- Indoor tennis courts (without spectator seating);
- Lecture halls;
- Libraries;
- Museums;
- Places of religious worship;
- Pool and billiard parlors;
- Waiting areas in transportation terminals.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-0403 Section 403-High-rise buildings.

((403.5.4 Smokeproof enclosures. Every required interior exit stairway serving floors more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access shall be a smokeproof enclosure in accordance with Sections 909.20 and 1023.12. Where interior exit stairways and ramps are pressurized in accordance with Section 909.20.5, the smoke control pressurization system shall comply with the requirements specified in Section 909.6.3.))

403.4.8.3 Standby power loads. The following are classified as standby power loads:

1. Ventilation and automatic fire detection equipment for smokeproof enclosures.

2. Elevators.

3. Where elevators are provided in a high-rise building for accessible means of eqress, fire service access or occupant self-evacuation, the standby power system shall also comply with Sections 1009.4, 3007 or 3008, as applicable.

4. Sump pumps required by ASME A17.1 serving pit drains at the bottom of elevator hoistways of fire service access or occupant evacuation elevators.

403.5.4 Smokeproof enclosures. Every required interior exit stairway serving floors more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access shall be a smokeproof enclosure in accordance with Sections 909.20 and 1023.12. Where interior exit stairways and ramps are pressurized in accordance with Section 909.20.5, the smoke control pressurization system shall comply with the requirements specified in Section 909.6.3.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-0412 Section 412-Aircraft-related occupancies.

412.2.2.1 Stairways. Stairways in airport traffic control towers shall be in accordance with Section 1011. Exit stairways shall be smokeproof enclosures complying with one of the alternatives provided in Section 909.20. Where interior exit stairways and ramps are pressurized in accordance with Section 909.20.5, the smoke control pressurization system shall comply with the requirements specified in Section 909.6.3. EXCEPTION: Stairways in airport traffic control towers are not required to comply with Section 1011.12.

[F] 412.7.3 Means of egress. The means of egress from heliports, helipads and helistops shall comply with the provisions of Chapter 10. Landing areas located on buildings or structures shall have two or more exits or access to exits. For landing areas less than 60 feet in length or less than 2,000 square feet  $(186 \text{ m}^2)$  in area, the second means of egress is permitted to be a fire escape, alternating tread device or ladder leading to the floor below. On Group I-2 roofs with heliports or helipads and helistops, rooftop structures enclosing exit stair enclosures or elevator shafts shall be enclosed with fire barriers and opening protectives that match the rating of their respective shaft enclosures below.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0430 Section 430—Recycled materials.

((430)) 430.1 Recyclable materials, compost, and solid waste storage. Space shall be provided for the storage of recycled materials, compost, and solid waste for all new buildings.

EXCEPTION: Group R-3 and Group U Occupancies.

The storage area shall be designed to meet the needs of the occupancy, efficiency of pickup, and be available to occupants and haulers.

<u>AMENDATORY SECTION</u> (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-0504 Section 504—Building height and number of stories.

#### Table 504.3

# Allowable Building Height in Feet Above Grade Plane<sup>a</sup>

					Тур	oe of Co	onstruc	tion					
Occupancy Classification	See Ty		pe I	Тур	e II	Type III			Type IV			Type V	
	Footnotes	Α	B	Α	B	Α	B	Α	B	С	HT	Α	B
A, B, E, F, M, S,	NS <sup>b</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
U	S	UL	180	85	75	85	75	270	180	85	85	70	60
H-1, H-2, H-3,	NS <sup>c,d</sup>	UL	160	65	55	65	55	120	90	65	65	50	40
H-5	S												
H-4	NS <sup>c,d</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	140	100	85	85	70	60
I-1 Condition 1,	NS <sup>d,e</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
I-3	S	UL	180	85	75	85	75	180	120	85	85	70	60
I-1 Condition 2,	NS <sup>d,e,f</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
I-2	Si	UL	180	85									
I-4	NS <sup>d,g</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	180	120	85	85	70	60
R <sup>h</sup>	NS <sup>d</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
	S13D	60	60	60	60	60	60	60	60	60	60	50	40
	S13R	60	60	60	60	60	60	60	60	60	60	60	60
	S	UL	180	85	75	85	75	270	180	85	85	70	60

For SI: 1 foot = 304.8 mm.

UL = Unlimited; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

a See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

b See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.

• New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.

<sup>d</sup> The NS value is only for use in evaluation of existing building height in accordance with the International Existing Building Code.

New Group 1-1 and 1-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies Condition 1, see Exception 1 of Section 903.2.6.

f New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the International Fire Code.

g For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.

h New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

i I-1, Condition 2 Assisted living facilities licensed in accordance with chapter 388-78A WAC and residential treatment facilities as licensed by Washington state under chapter 246-337 WAC shall be permitted to use the allowable height above grade plane for Group R-2 occupancies.

#### Table 504.4

# Allowable Number of Stories Above Grade Plane<sup>a,b</sup>

	Type of Construction																
Occupancy Classification	See	Туј	Type I		Type I		Туре І		I Type II Type II		e III	e III Type IV				Type V	
	Footnotes	Α	B	Α	B	Α	B	Α	B	С	HT	Α	B				
A-1	NS	UL	5	3	2	3	2	3	3	3	3	2	1				
	S	UL	6	4	3	4	3	9	6	4	4	3	2				
A-2	NS	UL	11	3	2	3	2	3	3	3	3	2	1				
	S	UL	12	4	3	4	3	18	12	6	4	3	2				

-					Тур	e of Co	onstruc	tion					
Occupancy Classification	See	Ту	pe I	Тур	e II	Тур	e III		Тур	e IV		Тур	oe V
Chussineution	Footnotes	Α	В	Α	B	Α	В	Α	B	С	HT	Α	B
A-3	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-4	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	1	1	1	UL	UL	UL
	S	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
В	NS	UL	11	5	3	5	3	5	5	5	5	3	2
	S	UL	12	6	4	6	4	18	12	9	6	4	3
Е	NS	UL	5	3	2	3	2	3	3	3	3	1	1
	S	UL	6	4	3	4	3	9	6	4	4	2	2
F-1	NS	UL	11	4	2	3	2	3	3	3	4	2	1
	S	UL	12	5	3	4	3	10	7	5	5	3	2
F-2	NS	UL	11	5	3	4	3	5	5	5	5	3	2
	S	UL	12	6	4	5	4	12	8	6	6	4	3
H-1	NS <sup>c,d</sup>	1	1	1	1	1	1	NP	NP	NP	1	1	NP
	S							1	1	1	-		
H-2	NS <sup>c,d</sup>	UL	3	2	1	2	1	1	1	1	2	1	1
	S							2	2	2	-		
Н-3	NS <sup>c,d</sup>	UL	6	4	2	4	2	3	3	3	4	2	1
	S	-						4	4	4	-		
H-4	NS <sup>c,d</sup>	UL	7	5	3	5	3	5	5	5	5	3	2
11 1	S S	UL	8	6	4	6	4	8	7	6	6	4	3
H-5	NS <sup>c,d</sup>	4	0 4	3	3	3	3	2	2	2	3	4	2
11-5			-	5	5	5	5					5	
I-1 Condition 1	S	TIT	9	4	3	4	2	3	3	3	4	3	2
I-I Condition I	NS <sup>d,e</sup>	UL		4		4	3	4	4		4		2
	S	UL	10	5	4	5	4	10	7	5	5	4	3
I-1 Condition 2	NS <sup>d,e</sup>	UL	9	4	3	4	3	3	3	3	4	3	2
	S <sup>i</sup>	UL	10	5				10	6	4			
I-2	NS <sup>d,f</sup>	UL	4	2	1	1	NP	NP	NP	NP	1	1	NP
	S	UL	5	3				7	5	1			
I-3	NS <sup>d,e</sup>	UL	4	2	1	2	1	2	2	2	2	2	1
	S	UL	5	3	2	3	2	7	5	3	3	3	2
I-4	NS <sup>d,g</sup>	UL	5	3	2	3	2	3	3	3	3	1	1
	S	UL	6	4	3	4	3	9	6	4	4	2	2
М	NS	UL	11	4	2	4	2	4	4	4	4	3	1
	S	UL	12	5	3	5	3	12	8	6	5	4	2
R-1 <sup>h</sup>	NSd	UL	11	4	4	4	4	4	4	4	4	3	2
	S13R	4	4									4	3
	S	UL	12	5	5	5	5	18	12	8	5	4	3
R-2 <sup>h</sup>	NS <sup>d</sup>	UL	12	4	4	4	4	4	4	4	4	3	2
<b>N-</b> 2 <sup></sup>	S13R	4	4	4			Т		T		Т	4	3
								10	10	0			
	S	UL	12	5	5	5	5	18	12	8	5	4	3

	Type of Construction												
Occupancy Classification	See	Type I		Type II		Type III		Type IV				Type V	
Chassification	Footnotes	Α	В	Α	B	Α	В	Α	В	С	HT	Α	В
R-3 <sup>h</sup>	NS <sup>d</sup>	UL	11	4	4	4	4	4	4	4	4	3	3
	S13D	4	4									3	3
	S13R	4	4									4	4
	S	UL	12	5	5	5	5	18	12	5	5	4	4
R-4 <sup>h</sup>	NS <sup>d</sup>	UL	11	4	4	4	4	4	4	4	4	3	2
	S13D	4	4									3	2
	S13R	4	4									4	3
	S	UL	12	5	5	5	5	18	12	5	5	4	3
S-1	NS	UL	11	4	2	3	2	4	4	4	4	3	1
	S	UL	12	5	4	4	4	10	7	5	5	4	2
S-2	NS	UL	11	5	3	4	3	4	4	4	5	4	2
	S	UL	12	6	4	5	4	12	8	5	6	5	3
U	NS	UL	5	4	2	3	2	4	4	4	4	2	1
	S	UL	6	5	3	4	3	9	6	5	5	3	2

UL = Unlimited; NP = Not permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

<sup>a</sup> See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

- b See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- e New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d The NS value is only for use in evaluation of existing building height in accordance with the International Existing Building Code.

• New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies Condition 1, see Exception 1 of Section 903.2.6.

f New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the *International Fire Code*.

g For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.

h New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

<sup>i</sup> Group I-1, Condition 2 Assisted living facilities licensed in accordance with chapter 388-78A WAC and residential treatment facilities as licensed by Washington state under chapter 246-337 WAC shall be permitted to use the allowable number of stories for Group R-2 occupancies.

504.4.1 Stair enclosure pressurization increase. For Group R-1, R-2, and I-1 Condition 2 Assisted living facilities licensed under chapter 388-78A WAC and residential treatment facilities as licensed by Washington state under chapter 246-337 WAC located in buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the maximum number of stories permitted in Section 504.4 may be increased by one provided the interior exit stairways and ramps are pressurized in accordance with Sections 909.6.3 and 909.20. Legally required standby power shall be provided in accordance with Sections 909.11 and 2702.17 for buildings constructed in compliance with this section and be connected to stairway shaft pressurization equipment, elevators and lifts used for accessible means of egress (if provided), elevator hoistway pressurization equipment (if provided) and other life safety equipment as determined by the authority having jurisdiction. For the purposes of this section, legally required standby power shall comply with 2020 NEC Section 701.12, options (C), (D), (E), (F), (H) or (J) or subsequent revised section number(s).

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-0505 Section 0505-Mezzanines and equipment platforms.

505.1 General. Mezzanines shall comply with Section 505.2. Equipment platforms shall comply with Section 505.3.

EXCEPTION: Lofts in Group R occupancy dwelling units and sleeping units shall be permitted to comply with Section ((420.13)) 420.14, subject to the limitations in Section ((420.13.1)) 420.14.1.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0509 Section 509-Incidental uses.

# Table ((<del>509</del>)) 509.1 Incidental Uses

<b>Room or Area</b>	Separation and/or Protection
Dry type transformers over 112.5 kVA and required to be in a fire resistant room per NEC (NFPA 70) Section 450.21 (B) <sup>1</sup>	1 hour or provide automatic sprinkler system

<sup>1</sup> Dry type transformers rated over 35,000 volts and oil-insulated transformers shall be installed in a transformer vault complying with NFPA 70.

(Remainder of table unchanged)

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0705 Section 705-Exterior walls.

705.2 Projections. Cornices, roof and eave overhangs, projecting floors above, exterior balconies and similar projections extending beyond the exterior wall shall conform to the requirements of this section and Section 1405. Exterior egress balconies and exterior exit stairways and ramps shall comply with Sections 1021 and 1027, respectively. Projections shall not extend any closer to the line used to determine the fire separation distance than shown in Table 705.2.

EXCEPTIONS: 1. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section for projections between the buildings. 2. Projecting floors complying with Section 705.2.4 are not required to comply with the projection limitations of Table 705.2.

705.2.5 Projecting floors. Where the fire separation distance on a lower floor is greater than the fire separation distance on the floor immediately above, the projecting floor shall have not less than the fire-resistance rating as the exterior wall above based on Table 602. The fire-resistant rating of the horizontal portion shall be continuous to the lower vertical wall.

#### Table 705.5

# Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance<sup>a,d,g,j</sup>

Fire Separation Distance = X (feet)	Type of Construction	Occupancy Group H <sup>e</sup>	Occupancy Group F-1, M, S-1 <sup>f</sup>	Occupancy Group A, B, E, F-2, I, R <sup>i</sup> , S-2, U <sup>h</sup>
X < 5 <sup>b</sup>	All	3	2	1
$5 \le X < 10$	IA, IVA	3	2	1
	Others	2	1	<u>1</u>
$10 \le X < 30$	IA, IB, IVA, IVB	2	1	1°
	IIB, VB	1	0	0
	Others	1	1	1°
$X \ge 30$	All	0	0	0

For SI: 1 foot = 304.8 mm.

a Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.

<sup>b</sup> See Section 706.1.1 for party walls.

<sup>c</sup> Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.

d The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.

e For special requirements for Group H occupancies, see Section 415.6.

f For special requirements for Group S aircraft hangars, see Section 412.3.1.

g Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.

For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.
For a Group R-3 building of Type II-B or Type V-B construction, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.

In a mixed occupancy building containing Group R-3 and Group U private garage, the exterior wall fire-resistance rating shall be as required for Group R-3.

#### Table 705.8

# Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection<sup>1</sup>

Fire Separation Distance (feet)	Degree of Opening Protection	Allowable Area <sup>a</sup>
	Unprotected, Nonsprinklered (UP, NS)	Not Permitted <sup>k</sup>
0 to less than 3 <sup>b,c,k</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	Not Permitted <sup>k</sup>
	Protected (P)	Not Permitted <sup>k</sup>
	Unprotected, Nonsprinklered (UP, NS)	Not Permitted(( <sup>k</sup> ))
3 to less than $5^{d,e}$	Unprotected, Sprinklered (UP, S) <sup>i</sup>	15%
	Protected (P)	15%
	Unprotected, Nonsprinklered (UP, NS)	10% <sup>h</sup>
5 to less than 10 <sup>e,f,j</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	25%
	Protected (P)	25%
	Unprotected, Nonsprinklered (UP, NS)	15% <sup>h</sup>
10 to less than 15 <sup>e,f,g,j</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	45%
	Protected (P)	45%
	Unprotected, Nonsprinklered (UP, NS)	25%
15 to less than 20 <sup>f,g,j</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	75%
	Protected (P)	75%
	Unprotected, Nonsprinklered (UP, NS)	45%
20 to less than 25 <sup>f,g,j</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	No Limit
	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP, NS)	70%
25 to less than 30 <sup>f,g,j</sup>	Unprotected, Sprinklered (UP, S) <sup>i</sup>	No Limit
	Protected (P)	No Limit

Fire Separation Distance (feet)	Degree of Opening Protection	Allowable Area <sup>a</sup>
	Unprotected, Nonsprinklered (UP, NS)	No Limit
30 or greater	Unprotected, Sprinklered (UP, S) <sup>i</sup>	No Limit
	Protected (P)	No Limit

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.
 a Values indicated are the percentage of the area of the exterior wall, per story.

b For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.

• For openings in a fire wall for buildings on the same lot, see Section 706.8.

d The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.

e Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.

f The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.

g The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.

h Includes buildings accessory to Group R-3.

<sup>i</sup> Not applicable to Group H-1, H-2, and H-3 occupancies.

j The area of openings in a building containing only a Group U occupancy private garage or carport with a fire separation distance of 5 feet or greater shall not be limited.

k For openings between S-2 parking garage and Group R-2 building, see Section 705.3, Exception 2.

1 In a mixed occupancy building containing Group R-3 and Group U private garage, the maximum area of exterior openings shall be as required for Group R-3.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0722 ((Section 722—Calculated fire resistance.)) Reserved.

((722.7.2.2 Exterior surfaces. Layers of Type X gypsum board serving as noncombustible protection for the outside of the exterior heavy timber walls determined in accordance with Table 722.7.1(a) shall be fastened 12 inches on center each way and 6 inches on center at all joints or ends. All panel edges shall be attached with fasteners located at least 1 inch but not more than 2 inches from the panel edge. Fasteners shall comply with one of the following:

1. Galvanized nails of minimum 12 gage with a 7/16 inch head of sufficient length to penetrate the mass timber a minimum of 1 inch.

2. Screws that comply with ASTM C1002 (Type S, Type W, or Type G) of sufficient length to penetrate the mass timber a minimum of 1 inch.))

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0903 Section 903—Automatic sprinkler systems.

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).

2. The fire area has an occupant load of 300 or more.

3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

EXCEPTION: For fixed guideway transit and passenger rail system stations, an automatic sprinkler system shall be provided in accordance with Section ((3114)) 3116.

903.2.1.6 Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2, and 300 for other Group A occupancies, the building shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

EXCEPTION: Open parking garages of Type I or Type II construction.

903.2.1.8 Nightclub. An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code.

903.2.3 Group E. An automatic sprinkler system shall be provided for fire areas containing Group E occupancies where the fire area has an occupant load of 51 or more, calculated in accordance with Table 1004.5.

EXCEPTIONS: 1. Portable school classrooms with an occupant load of 50 or less calculated in accordance with Table 1004.5, provided that the aggregate area of any cluster of portable school classrooms does not exceed 6,000 square feet (557 m<sup>2</sup>); and clusters of portable school classrooms shall be separated as required by the building code; or 2. Portable school classrooms with an occupant load from 51 through 98, calculated in accordance with Table 1004.5, and provided with two means of direct independent exterior egress from each classroom in accordance with Chapter 10, and one exit from each class room shall be accessible, provided that the aggregate area of any cluster of portable classrooms does not exceed 6,000 square feet (557 m<sup>2</sup>); and clusters of portable school classrooms shall be separated as required by the building code; or 3. Fire areas containing day care and preschool facilities with a total occupant load of 100 or less located at the level of exit discharge where every room in which care is provided has not fewer than one exit discharge door.

#### 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

EXCEPTIONS:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 Condition 1 facilities. 2. Where new construction house 16 persons receiving care, an automatic sprinkler system installed in accordance with Section 20 visite for bolistic of the permitted for Group I-1, Condition 2, assisted living facilities licensed under chapter 388-78A WAC and residential treatment facilities licensed under chapter 246-337 WAC.

3. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in additions to existing buildings where both of the following situations are true:

3.1. The addition is made to a building previously approved as Group LC or Group R-2 that houses either an assisted living facility licensed under chapter 388-78A WAC or residential treatment facility licensed under chapter 246-337 WAC. 3.2. The addition contains spaces for 16 or fewer persons receiving care.

903.2.6.1 Group I-4. An automatic sprinkler system shall be provided in fire areas containing Group I-4 occupancies where the fire area has an occupant load of 51 or more, calculated in accordance with Table 1004.5.

EXCEPTIONS: 1. An automatic sprinkler system is not required for Group I-4 day care facilities with a total occupant load of 100 or less, and located at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door. 2. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge and all floors below the level of exit discharge other than areas classified as an open parking garage.

903.2.8 Group R. An automatic fire sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

EXCEPTION: Group R-1 if all of the following conditions apply:

1. The Group R fire area is no more than 500 square feet and is used for recreational use only.

The Group R fire area is only one story.
 The Group R fire area does not include a basement.

4. The Group R fire area is no closer than 30 feet from another structure.

5. Cooking is not allowed within the Group R fire area.

6. The Group R fire area has an occupant load of no more than 8.

7. A hand held (portable) fire extinguisher is in every Group R fire area.

903.2.11 Specific building areas and hazards. In all occupancies other than Group U, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.7.

903.2.11.1.3 Basements. Where any portion of a basement is located more than 75 feet (22,860 mm) from openings required by Section 903.2.11.1, or where new walls, partitions or other similar obstructions are installed that increase the exit access travel distance to more than 75 feet, the basement shall be equipped throughout with an approved automatic sprinkler system.

903.2.11.7 Relocatable buildings within buildings. Relocatable buildings or structures located within a building with an approved fire sprinkler system shall be provided with fire sprinkler protection within the occupiable space of the building and the space underneath the relocatable building.

EXCEPTIONS: 1. Sprinkler protection is not required underneath the building when the space is separated from the adjacent space by construction resisting the passage of smoke and heat and combustible storage will not be located there. 2. If the building or structure does not have a roof or ceiling obstructing the overhead sprinklers. 3. Construction trailers and temporary offices used during new building construction prior to occupancy. 4. Movable shopping mall kiosks with a roof or canopy dimension of less than 4 feet on the smallest side.

903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18,288 mm) in height above grade plane shall be *permitted* to be installed throughout in accordance with NFPA 13R.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from the horizontal assembly creating separate buildings.

903.3.5.3 Underground portions of fire protection system water supply piping. The installation or modification of an underground water main, public or private, supplying a water-based fire protection system shall be in accordance with NFPA 24 and chapter 18.160 RCW. Piping and appurtenances downstream of the first control valve on the lateral or service line from the distribution main to one-foot above finished floor shall be approved by the fire code official. Such underground piping shall be installed by a fire sprinkler system contractor licensed in accordance with chapter 18.160 RCW and holding either a Level U or a Level 3 license. For underground piping supplying systems installed in accordance with Section 903.3.1.2, a Level 2, 3, or U licensed contractor is acceptable.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-0907 Section 907-Fire alarm and detection systems.

[F] 907.2.3 Group E. Group E occupancies shall be provided with a manual fire alarm system that initiates the occupant notification signal utilizing one of the following:

1. An emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6; or

2. A system developed as part of a safe school plan adopted in accordance with RCW 28A.320.125 or developed as part of an emergency response system consistent with the provisions of RCW 28A.320.126. The system must achieve all of the following performance standards:

2.1 The ability to broadcast voice messages or customized announcements;

2.2 Includes a feature for multiple sounds, including sounds to initiate a lock down;

2.3 The ability to deliver messages to the interior of a building, areas outside of a building as designated pursuant to the safe school plan, and to personnel;

2.4 The ability for two-way communications;

2.5 The ability for individual room calling;

2.6 The ability for a manual override;

2.7 Installation in accordance with NFPA 72;

2.8 Provide 15 minutes of battery backup for alarm and 24 hours

of battery backup for standby; and

2.9 Includes a program for annual inspection and maintenance in accordance with NFPA 72.

EXCEPTIONS:

1. A manual fire alarm system shall not be required in Group E occupancies with an occupant load of 50 or less.

2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, such as individual portable school classroom buildings; provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.

3. Where an existing approved alarm system is in place, an emergency voice/alarm system is not required in any portion of an existing Group E building undergoing any one of the following repairs, alteration or addition: 3.1 Alteration or repair to an existing building including, without limitation, alterations to rooms and systems, and/or corridor

configurations, not exceeding 35 percent of the fire area of the building (or the fire area undergoing the alteration or repair if the building is comprised of two or more fire areas); or

3.2 An addition to an existing building, not exceeding 35 percent of the fire area of the building (or the fire area to which the addition is made if the building is comprised of two or more fire areas).

4. Manual fire alarm boxes shall not be required in Group É occupancies where all of the following apply:

4.1 Interior corridors are protected by smoke detectors.

4.2 Auditoriums, cafeterias, gymnasiums and similar areas are protected by *heat detectors* or other *approved* detection devices. 4.3 Shops and laboratories involving dust or vapors are protected by heat detectors or other approved detection devices.

4.4 Manual activation is provided from a normally occupied location.

5. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:

5.1 The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

5.2 The emergency voice/alarm communication system will activate on sprinkler waterflow. 5.3 Manual activation is provided from a normally occupied location.

[F] 907.2.3.1 Sprinkler systems or detection. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

[F] 907.2.6.4 Group I-4 occupancies. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group I-4 occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

EXCEPTIONS: 1. A manual fire alarm system is not required in Group I-4 occupancies with an occupant load of 50 or less. 2. Emergency voice alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group I-4 occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.

907.2.11.1 Group R-1. Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

1. In sleeping areas.

2. In each *loft* constructed in accordance with Section 420.14.

3. In every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.

4. In each story within the sleeping unit, including basements. For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

907.2.11.2 Groups R-2, R-3, R-4, and I-1. Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4, and I-1 regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

2. In each room used for sleeping purposes.

3. In each *loft* constructed in accordance with Section 420.14.

4. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

[F] 907.5.2.1.2 Maximum sound pressure. The total sound pressure level produced by combining the ambient sound pressure level with all audible notification appliances operating shall not exceed 110 dBA at the minimum hearing distance from the audible appliance. For systems operating in public mode, the maximum sound pressure level shall not exceed 30 dBA over the average ambient sound level. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

#### 907.9 Reserved.

[F] 907.10 NICET: National Institute for Certification in Engineering Technologies.

907.10.1 Scope. This section shall apply to new and existing fire alarm systems.

907.10.2 Design review. All construction documents shall be reviewed by a NICET III in fire alarms or a licensed professional engineer (PE) in Washington prior to being submitted for permitting. The reviewing professional shall submit a stamped, signed, and dated letter; or a verification method approved by the local authority having jurisdiction indicating the system has been reviewed and meets or exceeds the design requirements of the state of Washington and the local jurisdiction. (Effective July 1, 2018.)

907.10.3 Testing/maintenance. All inspection, testing, maintenance and programing not defined as "electrical construction trade" by chapter 19.28 RCW shall be completed by a NICET II in fire alarms. (Effective July 1, 2018.)

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-1004 Section 1004-Occupant load.

# Table 1004.5 Maximum Floor Area Allowance Per Occupant

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR <sup>a</sup>
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross

# Washington State Register WSR 23-23-102

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR <sup>a</sup>
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Billiard table/game table area	50 gross
Assembly with fixed seats	See Section 1004.6
Assembly without fixed seats	
Concentrated (chairs only - not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	
Concentrated business use areas	150 gross (See Section 1004.8)
Courtrooms - Other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
Fixed guideway transit and passenger rail systems Platform Concourse/lobby	100 gross (See Section (( <del>3114</del> )) <u>3116</u> )
Group H-5 fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR <sup>a</sup>
Mall buildings - Covered and open	See Section 402.8.2
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

Floor area in square feet per occupant. а

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-1006 Section 1006-Number of exits and exit access doorways.

#### Table 1006.2.1

#### Spaces with One Exit or Exit Access Doorway

		MAXIMUM COMM	ION PATH OF EGRESS TRAV	VEL DISTANCE (feet)	
		Without Sprinkler System (feet)			
	MAXIMUM OCCUPANT	Occup	oant Load	With Sprinkler System (feet)	
OCCUPANCY	LOAD OF SPACE	OL ≤ 30	OL ((≥)) ≥ 30		
A <sup>c</sup> , E <sup>h</sup> , M	49	75	75	75 <sup>a</sup>	
В	49	100	75	100 <sup>a</sup>	
F	49	75	75	100 <sup>a</sup>	
H-1, H-2, H-3	3	NP	NP	25 <sup>b</sup>	
H-4, H-5	10	NP	NP	75 <sup>b</sup>	
I-1, I-2 <sup>d</sup> , I-4	10	NP	NP	75((b)) a	
I-3	10	NP	NP	100 <sup>a</sup>	
R-1	10	NP	NP	75 <sup>a</sup>	
R-2	20	NP	NP	125 <sup>a</sup>	
R-3 <sup>e</sup>	20	NP	NP	125 <sup>a,g</sup>	
R-4 <sup>e</sup>	20	NP	NP	125 <sup>a,g</sup>	
Sf	29	100	75	100 <sup>a</sup>	
U	49	100	75	75 <sup>a</sup>	

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

a Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
 Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.

c For a room or space used for assembly purposes having fixed seating, see Section 1029.8.

d For the travel distance limitations in Group I-2, see Section 407.4.

e The common path of egress travel distance shall only apply in a Group R-3 occupancy located in a mixed occupancy building.

- f The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.
- g For the travel distance limitations in Groups R-3 and R-4 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3, see Section 1006.2.2.6.
- h Day care facilities, rooms or spaces where care is provided for more than 10 children that are 2 1/2 years of age or less, shall have access to not less than two exits or exit access doorways.

1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

EXCEPTIONS: 1. The number of exits from foyers, lobbies, vestibules or similar spaces need not be based on cumulative occupant loads for areas The number of each of each of the spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.
 Care suites in Group I-2 occupancies complying with Section 407.4.
 Unoccupied mechanical rooms and *penthouses* are not required to comply with the common path of egress travel distance

measurement. 4. The common path of travel for fixed transit and passenger rail system stations shall be in accordance with Section 3116.

1006.2.1.1 Three or more exits or exit access doorways. Three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000.

EXCEPTION: The number of required exits for fixed transit and passenger rail systems may be reduced by one at open stations.

1006.3.4 Single exits. A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance within the portion of the building served by the single exit do not exceed the values in Table 1006.3.4(1) or 1006.3.4(2).

2. Rooms, areas and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.

3. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.

4. Groups R-3 and R-4 occupancies shall be permitted to have one exit or access to a single exit.

5. Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit from the dwelling unit provided that both of the following criteria are met:

5.1. The dwelling unit complies with Section 1006.2.1 as a space with one means of egress.

5.2. Either the exit from the dwelling unit discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit's entrance door provides access to not less than two approved independent exits.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-1101 Section 1101-General.

1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1, except those portions of ICC A117.1 amended by this section.

#### 1101.2.1 Reserved.

1101.2.2 (ICC A117.1 Section 404.2.8) Door-opening force. Fire doors and doors or gates required to be equipped with panic hardware, break away features or other factors requiring higher opening force for safety reasons shall have the minimum opening force allowable in scoping provisions adopted by the appropriate administrative authority. For other doors or gates, the force for pushing or pulling open doors or gates shall be as follows:

1. Interior hinged door: 5.0 pounds (22.2 N) maximum

2. Interior sliding or folding doors: 5.0 pounds (22.2 N) maximum 3. Exterior hinged, sliding or folding door: 10 pounds (44.4 N)

maximum.

EXCEPTION: The force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position shall not apply to panic hardware, delayed egress devices or fire-rated hardware.

#### 1101.2.3 Reserved.

1101.2.4 (ICC ANSI A117.1 603.6) Operable parts. Operable parts on drying equipment, towel or cleansing product dispensers, and disposal fixtures shall comply with Table 603.6.

1101.2.5 (ICC A117.1 Section 604.6) Flush controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309, except the maximum height above the floor shall be 44 inches. Flush controls shall be located on the open side of the water closet.

EXCEPTION: In ambulatory accessible compartments complying with Section 604.10, flush controls shall be permitted to be located on either side of the water closet.

1101.2.6 (ICC A117.1 Section 703.6.3.1) International Symbol of Accessibility. Where the International Symbol of Accessibility is required, it shall be proportioned complying with ICC A117.1 Figure 703.6.3.1. All interior and exterior signs depicting the International Symbol of Accessibility shall be white on a blue background.

1101.2.7 (ICC A117.1 Section 502.2) Vehicle space size. Car and van parking spaces shall be 96 inches (2440 mm) minimum in width.

1101.2.8 (ICC A117.1 Section 502.4.2) Access aisle width. Access aisles serving car parking spaces shall be 60 inches (1525 mm) minimum in width. Access aisles serving van parking spaces shall be 96 inches (2440 mm) minimum in width.

1101.2.9 (ICC A117.1 Section 502.7) Identification. Accessible parking spaces shall be indicated by a vertical sign. The signs shall include the International Symbol of Accessibility complying with section 703.6.3.1. Such symbol shall be white on a blue background. Signs identifying van parking spaces shall contain the designation "van accessible." The sign may include additional language such as, but not limited to, an indication of the amount of the monetary penalty defined in RCW 46.19.050 for parking in the space without a valid permit. A vertical "no parking" sign shall be erected at the head of each access aisle located adjacent to an accessible parking space. The sign may include additional language such as, but not limited to, an indication of any penalty for parking in an access aisle. Such signs shall be 60 inches (1525 mm) minimum above the floor of the parking space, measured to the bottom of the sign.

Certified on 11/30/2023 [ 17 ]

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-1108 Section 1108-Dwelling units and sleeping units.

1108.6.2.2.1 Type A units. In Group R-2 Occupancies containing more than 10 dwelling units or sleeping units, at least 5 percent, but not less than one, of the units shall be a Type A unit. All units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units, as described in Section 1108.6. Bedrooms in monasteries and convents shall be counted as *sleeping* units for the purpose of determining the number of units. Where the sleeping units are grouped into suites, only one sleeping unit in each suite shall count towards the number of required Type A units.

EXCEPTIONS: 1. The number of Type A units is permitted to be reduced in accordance with Section ((1107.7)) 1108.7. 2. Existing structures on a site shall not contribute to the total number of units on a site.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-1110 Section 1110-Other features and facilities.

1110.2 Toilet and bathing facilities. Each toilet room and bathing room shall be accessible. Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor. Except as provided for in Sections 1110.2.4 and 1110.2.5 at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be accessible.

EXCEPTIONS:

1. Toilet rooms or bathing rooms accessed only through a private office, not for common or public use and intended for use by a single occupant, shall be permitted to comply with the specific exceptions in ICC A117.1.

2. This section is not applicable to toilet and bathing rooms that serve dwelling units or sleeping units that are not required to be accessible by Section 1108.

3. Where multiple single-user all-gender toilet rooms or bathing rooms are clustered at a single location, at least 50 percent shall be accessible.

4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be accessible. 5. Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving accessible units are not required to be accessible.

6. Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirement in ICC A117.1. The sleeping units served by bariatrics toilet or bathing rooms shall not count toward the required number of accessible sleeping units.

7. Where permitted in Section ((4107)) 1108, in toilet rooms or bathrooms serving accessible units, water closets designed for assisted

8. Where permitted in Section ((1+07))  $\frac{1105}{1108}$ , in both (1+09.2.4))  $\frac{1110.2.2}{110.2.2}$ . 8. Where permitted in Section ((1+07))  $\frac{1108}{1108}$ , in bathrooms serving accessible units, showers designed for assisted ((toileting)) <u>bathing</u> shall be permitted to comply with Section ((1+09.2.5))  $\frac{1110.2.2}{110.2.3}$ .

9. Where toilet facilities are primarily for children's use, required accessible water closets, toilet compartments and lavatories shall be permitted to comply with children's provision of ICC A117.1.

1110.5.1 Minimum number. Not fewer than two drinking fountains shall be provided. One drinking fountain shall comply with the requirements for people who use a wheelchair and one drinking fountain shall comply with the requirements for standing persons.

EXCEPTIONS:

1. A single drinking fountain with two separate spouts that complies with the requirements for people who use a wheelchair and standing persons shall be permitted to be substituted for two separate drinking fountains. 2. Where drinking fountains are primarily for children's use, drinking fountains for people using wheelchairs shall be permitted to comply with the children's provisions in ICC A117.1 and drinking fountains for standing children shall be permitted to provide the spout at 30 inches (762 mm) minimum above the floor. 3. In all occupancies that require more than two drinking fountains per floor or secured area, bottle filling stations shall be allowed to be

substituted in accordance with Section 2902.5.

AMENDATORY SECTION (Amending WSR 20-21-021, filed 10/9/20, effective 11/9/20)

#### WAC 51-50-1203 Section 1203-Temperature control.

1203.1 Equipment and systems. Interior spaces intended for human occupancy shall be provided with active or passive space-heating systems capable of maintaining an indoor temperature of not less than 68°F (20°C) at a point 3 feet (914 mm) above the floor on the design heating day.

EXCEPTIONS: 1. Interior spaces where the primary purpose of the space is not associated with human comfort. 2. Group F, H, S, or U occupancies. 3. Group R-1 Occupancies not more than 500 square feet  $(46 \text{ m}^2)$ .

1203.2 Definitions. For the purposes of this section only, the following definitions apply.

designated areas are those areas designated by a county to be an urban growth area in chapter 36.70A RCW and those areas designated by the U.S. Environmental Protection Agency as being in nonattainment for particulate matter.

SUBSTANTIALLY REMODELED means any alteration or restoration of a building exceeding 60 percent of the appraised value of such building within a 12-month period. For the purpose of this section, the appraised value is the estimated cost to replace the building and structure in-kind, based on current replacement costs.

1203.3 Primary heating source. Primary heating sources in all new and substantially remodeled buildings in designated areas shall not be dependent upon wood stoves.

1203.4 Solid fuel burning devices. No new or used solid fuel burning device shall be installed in new or existing buildings unless such device is United States Environmental Protection Agency certified or exempt from certification by the United States Environmental Protection Agency and conforms with RCW ((70.94.011, 70.94.450, 70.94.453 and 70.94.457)) 70A.15.1005, 70A.15.3500, 70A.15.3510, and 70A.15.3530.

EXCEPTIONS: 1. Wood cook stoves. 2. Antique wood heaters manufactured prior to 1940.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-1208 Section 1208-((Dwelling unit size)) Interior space dimensions.

1208.3 Dwelling unit size. Dwelling units shall have a minimum of 190 square feet  $(17.7 \text{ m}^2)$  of habitable space.

1208.4 Room area. Every dwelling unit shall have not less than one room that shall have not less than 120 square feet  $(11.2 \text{ m}^2)$  of net floor area. Sleeping units and other habitable rooms of a dwelling unit shall have a net floor area of not less than 70 square feet (6.5  $m^2$ ).

EXCEPTION: Kitchens are not required to be of a minimum floor area.

1208.5 Efficiency dwelling units. Efficiency dwelling units shall conform to the requirements of the code except as modified herein:

1. The unit's habitable space shall comply with Sections 1208.1 through 1208.4.

2. The unit shall be provided with a separate closet.

3. For other than accessible, Type A and Type B dwelling units, the unit shall be provided with a kitchen sink, cooking appliance and refrigerator, each having a clear working space of not less than 30 inches (762 mm) in front. Light and ventilation conforming to this code shall be provided.

4. The unit shall be provided with a separate bathroom containing a water closet, lavatory, and bathtub or shower.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-1613 Section 1613-Earthquake loads.

1613.4 Amendments to ASCE 7. The provisions of Section 1613.4 shall be permitted as an amendment to the relevant provisions of ASCE 7. The text of ASCE 7 shall be amended as indicated in Sections 1613.4.1 through 1613.4.6.

1613.4.1 ASCE 7 Section 12.2.5.4. Amend ASCE 7 Section 12.2.5.4 as follows:

12.2.5.4 Increased structural height limit for steel eccentrically braced frames, steel special concentrically braced frames, steel buckling-restrained braced frames, steel special plate shear walls, and special reinforced concrete shear walls. The limits on height,  $h_n$ , in Table 12.2-1 are permitted to be increased from 160 ft (50 m) to 240 ft (75 m) for structures assigned to Seismic Design Categories D or E and from 100 ft (30 m) to 160 ft (50 m) for structures assigned to Seismic Design Category F, provided that the seismic force-resisting systems are limited to steel eccentrically braced frames, steel special concentrically braced frames, steel buckling-restrained braced frames, steel special plate shear walls, or special reinforced concrete cast-in-place shear walls and all of the following requirements are met:

1. The structure shall not have an extreme torsional irregularity as defined in Table 12.3-1 (horizontal structural irregularity Type 1b).

2. The steel eccentrically braced frames, steel special concentrically braced frames, steel buckling-restrained braced frames, steel special plate shear walls or special reinforced concrete shear walls in any one plane shall resist no more than 60 percent of the total seismic forces in each direction, neglecting accidental torsional effects.

3. Where floor and roof diaphragms transfer forces from the vertical seismic force-resisting elements above the diaphragm to other vertical force-resisting elements below the diaphragm, these in-plane transfer forces shall be amplified by the overstrength factor,  $\Omega_{0}$  for the design of the diaphragm flexure, shear, and collectors.

4. The earthquake force demands in foundation mat slabs, grade beams, and pile caps supporting braced frames and/or walls arranged to form a shear-resisting core shall be amplified by 2 for shear and 1.5 for flexure. The redundancy factor,  $\rho_{i}$ , applies and shall be the same as that used for the structure in accordance with Section 12.3.4.

1613.4.2 ASCE 7 Section 12.6. Amend ASCE 7 Section 12.6 and Table 12.6-1 to read as follows:

#### 12.6 ANALYSIS PROCEDURE SELECTION

12.6.1 Analysis procedure. The structural analysis required by Chapter 12 shall consist of one of the types permitted in Table 12.6-1, based on the structure's seismic design category, structural system, dynamic properties, and regularity, or with the approval of the authority having jurisdiction, an alternative generally accepted procedure is permitted to be used. The analysis procedure selected shall be completed in accordance with the requirements of the corresponding section referenced in Table 12.6-1.

# Table 12.6-1 Permitted Analytical Procedures

	Modal Response Spectrum Analysis, Section 12.9.1 or

Seismic Design Category	Structural Characteristics	Equivalent Lateral Force Procedure, Section 12.8 <sup>a</sup>	Modal Response Spectrum Analysis, Section 12.9.1, or Linear Response History Analysis, Section 12.9.2	Nonlinear Response History Procedures, Chapter 16 <sup>a</sup>
B, C	All structures	Р	Р	Р
D, E, F	Risk Category I or II buildings not exceeding two stories above the base	Р	Р	Р
	Structures of light frame construction	Р	Р	Р
	Structures with no structural irregularities and not exceeding 160 ft in structural height	Р	Р	Р
	Structures exceeding 160 ft in structural height with no structural irregularities and with T < 3.5Ts	Р	Р	Р
	Structures not exceeding 160 ft in structural height and having only horizontal irregularities of Type 2, 3, 4, or 5 in Table 12.3-1 or vertical irregularities of Type 4, 5a, or 5b in Table 12.3-2	Р	Р	Р
	All other structures $\leq$ 240 ft in height	NP	Р	Р
	All structures > 240 ft in height	NP	NP	Pc

<sup>a</sup> P: Permitted; NP: Not Permitted;  $T_{s} = S_{D1}/S_{DS}$ .

1613.4.3 ASCE 7 Section 11.2. Amend ASCE 7 Section 11.2 to include the following definition:

USGS SEISMIC DESIGN GEODATABASE: A U.S. Geological Survey (USGS) database of geocoded values of seismic design parameters and geocoded sets of multiperiod 5%-damped risk-targeted maximum considered earthquake (MCER) response spectra. The parameters obtained from this database may only be used where referenced by Section 11.4.8.1.

User Note: The USGS Seismic Design Geodatabase is intended to be accessed through a USGS Seismic Design web service that allows the user to specify the site location, by latitude and longitude, and the site class to obtain the seismic design data. The USGS web service spatial-

ly interpolates between the gridded data of the USGS geodatabase. Both the USGS geodatabase and the USGS web service can be accessed at https://doi.org/10.5066/F7NK3C76. The USGS Seismic Design Geodatabase is available at the ASCE 7 Hazard Tool https://asce7hazardtool.online/ or an approved equivalent.

1613.4.4 ASCE 7 Section 11.4.8. Amend ASCE 7 Section 11.4.8 to include the following section:

11.4.8.1 Multiperiod design response spectrum. As an alternative to the ground motion hazard analysis requirements of Section 11.4.8, and suitable for all structures other than those designated Site Class F (unless exempted in accordance with Section 20.3.1), a multiperiod design response spectrum may be developed as follows:

1. For exclusive use with the USGS Seismic Design Geodatabase in accordance with this section, the site class shall be determined per Section 20.6.

2. Where a multiperiod design response spectrum is developed in accordance with this section, the parameters  $S_M$ ,  $S_{M1}$ ,  $S_D$ ,  $S_{D1}$ , and  $T_L$  as obtained by the USGS Seismic Design Geodatabase shall be used for all applications of these parameters in this standard.

3. The  $S_S$  and  $S_1$  parameters obtained by the USGS Seismic Design Geodatabase are only permitted to be used in development of the multiperiod design response spectrum and are not permitted to be used in other applications in this standard. The mapped parameters  $S_S$  and  $S_1$ as determined by Section 11.4.2 and peak ground acceleration parameter  $PGA_M$  as determined by Section 11.8.3 shall be used for all other applications in this standard.

4. At discrete values of period, T, equal to 0.0s, 0.01s, 0.02s, 0.03s, 0.05s, 0.075s, 0.1s, 0.15s, 0.2s, 0.25s, 0.3s, 0.4s, 0.5s, 0.75s, 1.0s, 1.5s, 2.0s, 3.0s, 4.0s, 5.0s, 7.5s, and 10.0s, the 5%-damped design spectral response acceleration parameter,  $S_a$ , shall be taken as 2/3 of the multiperiod 5%-damped MCER response spectrum from the USGS Seismic Design Geodatabase for the applicable site class.

5. At each response period, T, less than 10.0s and not equal to one of the discrete values of period, T, listed in Item 4 above,  $S_a$ , shall be determined by linear interpolation between values of  $S_a$ , of Item 4 above.

6. At each response period, T, greater than 10.0s,  $S_a$  shall be taken as the value of  $S_a$  at the period of 10.0s, factored by 10/T, where the value of T is less than or equal to that of the long-period transition period,  $T_L$ , and shall be taken as the value of  $S_a$  at the period of 10.0s factored by  $10T_L/T^2$ , where the value of T is greater than that of the long-period transition period,  $T_L$ .

7. Where an MCER response spectrum is required, it shall be determined by multiplying the multiperiod design response spectrum by 1.5.

8. For use with the equivalent lateral force procedure, the spectral acceleration  $S_a$  at T shall be permitted to replace  $S_{D1}/T$  in Equation (12.8-3) and  $S_{D1}$   $T_L/T^2$  in Equation (12.8-4).

1613.4.5 ASCE 7 Section 20.6. Amend ASCE 7 Chapter 20 to include the following section:

Section 20.6 Site classification procedure for use with Section 11.4.8.1. For exclusive use in determining the multiperiod design re-

sponse spectrum and associated spectral parameters in accordance with Section 11.4.8.1, the site class shall be determined in accordance with this section. For all other applications in this standard the site class shall be determined per Section 20.1.

20.6.1 Site classification. The site soil shall be classified in accordance with Table 20.6-1 and Section 20.6.2 based on the average shear wave velocity parameter,  $\bar{\nu}_s$ , which is derived from the measured shear wave velocity profile from the ground surface to a depth of 100 ft (30 m). Where shear wave velocity is not measured, appropriate generalized correlations between shear wave velocity and standard penetration test (SPT) blow counts, cone penetration test (CPT) tip resistance, shear strength, or other geotechnical parameters shall be used to obtain an estimated shear wave velocity profile, as described in Section 20.6.3. Where site-specific data (measured shear wave velocities or other geotechnical data that can be used to estimate shear wave velocity) are available only to a maximum depth less than 100 ft (30 m), shall be estimated as described in Section 20.6.3.

Where the soil properties are not known in sufficient detail to determine the site class, the most critical site conditions of Site Class C, Site Class CD and Site Class D, as defined in Section 20.6.2, shall be used unless the authority having jurisdiction or geotechnical data determine that Site Class DE, E or F soils are present at the site. Site Classes A and B shall not be assigned to a site if there is more than 10 ft (3.1 m) of soil between the rock surface and the bottom of the spread footing or mat foundation.

20.6.2 Site class definitions. Site class types shall be assigned in accordance with the definitions provided in Table 20.6.2-1 and this section.

20.6.2.1 Soft clay Site Class E. Where a site does not qualify under the criteria for Site Class F per Section 20.3.1 and there is a total thickness of soft clay greater than 10 ft (3 m), where a soft clay layer is defined by  $s_u$ <500 psf ( $s_u$ <25 kPa),  $w \ge 40$ %, and PI > 20, it shall be classified as Site Class E. This classification is made regardless of  $\bar{v}_s$ , as computed in Section 20.4.

20.6.2.2 Site Classes C, CD, D, DE and E. The assignment of Site Class C, CD, D, DE and E soils shall be made based on the average shear wave velocity, which is derived from the site shear wave velocity profile from the ground surface to a depth of 100 ft (30 m), as described in Section 20.4.

20.6.2.3 Site Classes B and BC (medium hard and soft rock). Site Class B can only be assigned to a site on the basis of shear wave velocity measured on site. If shear wave velocity data are not available and the site condition is estimated by a geotechnical engineer, engineering geologist, or seismologist as Site Class B or BC on the basis of site geology, consisting of competent rock with moderate fracturing and weathering, the site shall be classified as Site Class BC. Softer and more highly fractured and weathered rock shall either be measured on site for shear wave velocity or classified as Site Class C.

20.6.2.4 Site Class A (hard rock). The hard rock, Site Class A, category shall be supported by shear wave velocity measurement, either on site or on profiles of the same rock type in the same formation with an equal or greater degree of weathering and fracturing. Where hard rock conditions are known to be continuous to a depth of 100 ft (30

m), surficial shear wave velocity measurements to maximum depths less than 100 ft are permitted to be extrapolated to assess  $\bar{\nu}_{s}$  .

Site Class	Ū <sub>5</sub> Calculated Using Measured or Estimated Shear Wave Velocity Profile (ft/s)
A. Hard Rock	> 5,000
B. Medium Hard Rock	> 3,000 to 5,000
BC. Soft Rock	> 2,100 to 3,000
C. Very Dense Sand or Hard Clay	> 1,450 to 2,100
CD. Dense Sand or Very Stiff Clay	> 1,000 to 1,450
D. Medium Dense Sand or Stiff Clay	> 700 to 1,000
DE. Loose Sand or Medium Stiff Clay	> 500 to 700
E. Very Loose Sand or Soft Clay	≤ 500

Table 20.6.2-1 Site Classification

20.6.3 Estimation of shear wave velocity profiles. Where measured shear wave velocity data are not available, shear wave velocity shall be estimated as a function of depth using correlations with suitable geotechnical parameters, including standard penetration test (SPT) blow counts, shear strength, overburden pressure, void ratio, or cone penetration test (CPT) tip resistance, measured at the site.

Site class based on estimated values of shall be derived using  $\bar{v}_s$ ,  $\bar{v}_s/1.3$ , and  $1.3\bar{v}_s$  when correlation models are used to derive shear wave velocities. Where correlations derived for specific local regions can be demonstrated to have greater accuracy, factors less than 1.3 can be used if approved by the authority having jurisdiction. If the different average velocities result in different site classes per Table 20.6.2-1, the most critical of the site classes for ground motion analysis at each period shall be used.

Where the available data used to establish the shear wave velocity profile extends to depths less than 100 ft (30 m) but more than 50 ft (15 m), and the site geology is such that soft layers are unlikely to be encountered between 50 and 100 ft, the shear wave velocity of the last layer in the profile shall be extended to 100 ft for the calculation of in Equation (20.4-1). Where the data does not extend to depths of 50 ft (15 m), default site classes, as described in Section 20.6.1, shall be used unless another site class can be justified on the basis of the site geology.

1613.4.6 ASCE 7 Section 21.3.1. Amend ASCE 7 Section 21.3 to include the following section:

Section 21.3.1 Alternate minimum design spectral response accelera**tions.** As an alternate approach to Section 21.3, the lower limit of  $S_a$ is permitted to be determined according to this section. The design spectral response acceleration at any period shall not be taken less than 80% of the multiperiod design response spectrum as determined by Section 11.4.8.1.

For sites classified as Site Class F requiring site-specific analysis in accordance with Section 11.4.8, the design spectral response acceleration at any period shall not be less than 80% of  $S_{\rm a}$  determined for Site Class E.

EXCEPTION: Where a different site class can be justified using the site-specific classification procedures in accordance with Section 20.6.2.2, a lower limit of 80% of  $S_a$  for the justified site class shall be permitted to be used.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-2103 Section 2103-((Mortar)) Masonry construction materials.

2103.2.4 Mortar for adhered masonry veneer. Mortar for use with adhered masonry veneer shall conform to ASTM C270 for Type N or S, or shall comply with ANSI A118.4 or A118.15 for modified dry-set cement mortar. The cementitious bond coat shall comply with ANSI A118.4 or A118.15.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-2902 Section 2902-Minimum plumbing facilities.

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number shown in Table 2902.1. Uses not shown in Table 2902.1 shall be determined individually by the building official based on the occupancy which most nearly resembles the proposed occupancy. The number of occupants shall be determined by this code. Plumbing fixtures need not be provided for unoccupied buildings or facilities.

2902.1.1.1 Private offices. Fixtures only accessible to private offices shall not be counted to determine compliance with this section.

2902.1.1.2 Urinals in men's facilities. Where urinals in men's facilities are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one quarter (25 percent) of the minimum specified.

2902.1.1.3 Urinals in all-gender facilities. Where urinals are provided in all-gender facilities, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced less than one quarter (25 percent) of the minimum specified.

2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.

4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.

5. Separate facilities shall not be required in spaces primarily used for drinking or dining with a total occupant load, including both employees and customers, of 30 or fewer.

6. Separate facilities shall not be required when all-gender facilities are provided in accordance with Section 2902.2.2.

7. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 1210.3.1. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

2902.2.2 All-gender facilities. All-gender toilet facilities, when provided, shall be in accordance with the following:

1. There is no reduction in the number of fixtures required to be provided for male and female in the type of occupancy and in the minimum number shown in Table 2902.1.

2. All-gender multiuser toilet rooms shall have water closets and urinals located in toilet compartments in accordance with ICC A117.1.

EXCEPTIONS:

3. All-gender multiuser toilet room water closet and urinal compartments shall have full-height walls and a door enclosing the fixture to ensure privacy.

4. All-gender toilet room water closet and urinal compartment doors shall be securable from within the compartment.

5. All-gender toilet rooms provided for the use of multiple occupants, the egress door from the room shall not be lockable from the inside of the room.

6. Compartments shall not be required in a single-occupant toilet room with a lockable door.

2902.3 Employee and public toilet facilities. For structures and tenant spaces intended for public utilization, customers, patrons and visitors shall be provided with public toilet facilities. Employees associated with structures and tenant spaces shall be provided with toilet facilities. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 2902 for all users. Employee toilet facilities shall be either separate or combined employee and public toilet facilities.

EXCEPTION: Public toilet facilities shall not be required for:

Parking garages where operated without parking attendants.
 Structures and tenant spaces intended for quick transactions, including takeout, pickup and drop-off, having a public access area less

than or equal to 300 square feet  $(28 \text{ m}^2)$ . 3. Fixed guideway transit and passenger rail systems constructed in accordance with Section ((3112)) 3116.

2902.3.3 Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required *public* and employee toilet facilities shall be located in each building not more than one story above or below the space required to be provided with toilet facilities, or conveniently in a building adjacent thereto on the same property, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

 The location and maximum distances of travel to required employee facilities in factory and industrial occupancies shall be permitted to exceed that required by this section, provided that the location and maximum distance of travel are *approved*.
 The location and maximum distances of travel to required public and employee facilities in Group S occupancies shall be permitted to exceed that required by this section, provided that the location and maximum distances of travel are *approved*. EXCEPTIONS:

2902.5 Drinking fountain location. Drinking fountains shall not be required to be located in individual tenant spaces provided that public drinking fountains are located within a distance of travel of 500 feet of the most remote location in the tenant space and not more than one story above or below the tenant space. Where the tenant space is in a covered or open mall, such distance shall not exceed 300 feet. Drinking fountains shall be located on an accessible route. Drinking fountains shall not be located in toilet rooms.

2902.5.1 Drinking fountain number. Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.

EXCEPTIONS: 1. Sporting facilities with concessions serving drinks shall have one drinking fountain for each 1000 occupants. 2. A drinking fountain need not be provided in a drinking or dining establishment.

2902.5.2 Multistory buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.

2902.5.3 Penal institutions. Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.

**2902.5.4 Bottle filling stations.** Bottle filling stations shall be provided in accordance with Sections 2902.5.4.1 through 2902.5.4.3. 2902.5.4.1 Group E occupancies. In Group E occupancies with an occupant load over 30, a minimum of one bottle filling station shall be provided on each floor. This bottle filling station may be integral to a drinking fountain.

2902.5.4.2 Substitution. In all occupancies that require more than two drinking fountains per floor or secured area, bottle filling stations shall be permitted to be substituted for up to 50 percent of the required number of drinking fountains.

2902.5.4.3 Accessibility. At least one of the required bottle filling stations shall be located in accordance with Section 309 of ICC A117.1.

2902.6 Small occupancies. This section is not adopted.

2902.8 Dwelling units. Dwelling units shall be provided with a kitchen sink.

2902.9 Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.

SECTION 2903-RESERVED.

SECTION 2904-RESERVED.

#### Table 2902.1

# Minimum Number of Required Plumbing Fixtures<sup>a</sup>

				Water Closets		Lavatories		Bathtubs/	
No.	Classification	Occupancy	Description	Male	Female	Male	Female	Showers	
1	Assembly	Assembly	A-1 <sup>d</sup>	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 per 200		_
		A-2 <sup>d</sup>	Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 per 75			
			Restaurants, banquet halls and food courts	1 per 75	1 per 75	1 per 200		—	
		A-3 <sup>d</sup>	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65	1 per 200		_	
			Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750		—	
			Places of worship and other religious services	1 per 150	1 per 75	1 per 200		—	
		A-4	Coliseums, arenas, skating rinks, pools, and tennis courts for indoor sporting events and activities	1 per 75 for first 1,500 and 1 per 120 for remainder exceeding 1,500	1 per 40 for first 1,520 and 1 per 60 for remainder exceeding 1,520	1 per 200	1 per 150	_	
		A-5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for first 1,500 and 1 per 120 for remainder exceeding 1,500	1 per 40 for first 1,520 and 1 per 60 for remainder exceeding 1,520	1 per 200	1 per 150	_	

(See Sections 2902.2 and 2902.3)

				Water Closets		Lavatories		Bathtubs/
No.	Classification	Occupancy	Description	Male	Female	Male	Female	Showers
2	Business	В	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for fin 50 for the rem exceeding 50	rst 50 and 1 per ainder	1 per 40 for per 80 for r exceeding 8		_
3	Educational	Ee	Educational facilities	1 per 35	1 per 25	1 per 85	1 per 50	—
4	Factory and industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembling or processing of products or materials	1 per 100		1 per 100		Check State (UPC)
5	Institutional	I-1	Residential care	1 per 10		1 per 10	1 per 10	
		I-2	Hospitals, ambulatory nursing home care recipient <sup>b</sup>	1 per room <sup>c</sup>		1 per room	1 per room <sup>c</sup>	
			Employees, other than residential care <sup>b</sup>	1 per 25		1 per 35		—
			Visitors other than residential care	1 per 75		1 per 100		—
		I-3	Prisons <sup>b</sup>	1 per cell		l per cell		1 per 15
			Reformatories, detention centers and correctional centers <sup>b</sup>	1 per 15		1 per 15		1 per 15
			Employees <sup>b</sup>	1 per 25		1 per 35		_
		I-4	Adult day care and child day care	1 per 15		1 per 15		1
6	Mercantile	М	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		_
7	Residential	R-1	Hotels, motels, boarding houses (transient)	1 per sleeping unit		1 per sleeping unit		1 per sleeping unit
	R-2		Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10		1 per 10		1 per 8
			Apartment house	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit
		R-3 One- and two-family dwellings		1 per dwelling unit		1 per 10		1 per dwelling unit
			Congregate living facilities with 16 or fewer persons	1 per 10		1 per 10		1 per 8
		R-4	Congregate living facilities with 16 or fewer persons	1 per 10		1 per 10		1 per 8
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100		1 per 100		Check State (UPC)

The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code, except with respect to Group E occupancies the provisions of note "e" shall apply. a.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted where such room is provided with direct access from each patient sleeping unit and with provisions for privacy. c.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

For Group E occupancies: The number of occupants shall be determined by using a calculation of 100 square feet gross building area per student for the minimum number of plumbing fixtures. e.

AMENDATORY SECTION (Amending WSR 20-01-090, filed 12/12/19, effective 7/1/20)

# WAC 51-50-30020 ((Reserved.)) Section 30020-Hoistway enclosures.

#### 3002.4 Elevator car to accommodate ambulance stretcher.

In buildings provided with an elevator, at least one elevator shall provide fire department emergency access to all floors served in:

1. Buildings four or more stories above or below grade plane; and 2. Any R-1, R-2, or I occupancy building regardless of the number of stories.

The elevator car shall be of a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 2134 mm) ambulance stretcher with not less than 5-inch (127 mm) radius corners, in the horizontal, open position. The elevator shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame on both the designated level and the alternate level.

EXCEPTION: Private residence elevators are not required to comply with this section.

AMENDATORY SECTION (Amending WSR 20-01-103, filed 12/13/19, effective 7/1/20)

# WAC 51-50-3006 Section 3006—((Elevators and conveying systems)) Elevator lobbies and hoistway opening protection.

3006.3 Hoistway opening protection. Where Section 3006.2 requires protection of the elevator hoistway door opening, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by fire partitions in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.2.2.1 as required for corridor walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by smoke partitions in accordance with Section 710 where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition, doors protecting openings in the smoke partitions shall comply with Sections 710.5.2.2, 710.5.2.3, and 716.2.6.1. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

3. Additional doors shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such door shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal.

4. The elevator hoistway shall be pressurized in accordance with Sections 909.6.3 and 909.21.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-3101 Section 3101-General.

3101.1 Scope. The provisions of this chapter shall govern special building construction including membrane structures, temporary structures, pedestrian walkways and tunnels, automatic vehicular gates, awnings and canopies, marquees, signs, towers, antennas, relocatable buildings, swimming pool enclosures and safety devices, solar energy systems and fixed quideway transit and passenger rail systems, public use restroom buildings on publicly owned lands in flood hazard areas, and intermodal shipping containers.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-3103 Temporary structures.

3103.1 General. The provisions of this section shall apply to structures erected for a period of less than 180 days. Special event structures, tents, umbrella structures and other membrane structures erected for a period of less than 180 days shall also comply with the International Fire Code. Those erected for a longer period of time shall comply with applicable sections of this code.

EXCEPTION: The building official may authorize unheated tents and yurts under 500 square feet (46 m<sup>2</sup>) accommodating an R-1 Occupancy for recreational use as a temporary structure and allow them to be used indefinitely.

AMENDATORY SECTION (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-3116 Section 3116-Fixed guideway transit and passenger rail systems.

3116.1 Construction. Construction of fixed guideway transit and passenger rail systems shall be in accordance with NFPA 130-2020, standard for fixed guideway transit and passenger rail systems, as modified in Section 3116.2.

3116.2 Modifications to NFPA 130.

**5.2.2.1** Building construction for stations shall be in accordance with Table 5.2.2.1 based upon station configuration.

5.2.2.2 Construction types shall conform to the requirements in IBC Chapter 6, unless otherwise exempted in this section.

# Table 5.2.2.1 Minimum Construction Requirements for New Station Structures

Station Configuration	Construction Type†
Stations erected entirely above grade and in a separate building:	
Open stations	Type IIB
Enclosed stations	Type IIA
Stations erected entirely or partially below grade:	
Open above grade portions of below grade structures*	Type IIA
Below grade portions of structures	Type IB
Below grade structures with occupant loads exceeding 1000	Type IA

\* Roofs not supporting an occupancy above are not required to have a fire resistance rating.

<sup>†</sup> Construction types are in accordance with the IBC.

5.2.4.3 Ancillary spaces. Fire resistance ratings of separations between ancillary occupancies shall be established as required for accessory occupancies and incidental uses by the IBC and in accordance with ASTM E119 and ANSI/UL 263.

5.2.5.4 Materials used as interior finish in open stations shall comply with the requirements of IBC, Chapter 8.

#### 5.3.1\* General.

**5.3.1.1** The provisions for means of eqress for a station shall comply with IBC, Chapter 10, except as herein modified.

# 5.3.2 Occupant load.

5.3.2.1 The occupant load for a station shall be based on the train load of trains simultaneously entering the station on all tracks in normal traffic direction plus the simultaneous entraining load awaiting trains.

1. The train load shall consider only one train at any one track, inside a station.

2. The basis for calculating train and entraining loads shall be the peak period ridership figures as projected for design of a new system or as updated for an operating system.

5.3.2.2\* For station(s) servicing areas such as civic centers, sports complexes, and convention centers, the peak ridership figures shall consider events that establish occupant loads not included in normal passenger loads.

5.3.2.2.1 Where station occupancy is anticipated to be greater than design capacity during a major event the operating agency shall initiate approved measures to restrict access to the station, when required by the fire code official, to ensure existing means of egress are adequate as an alternate to account for peak ridership associated with major events.

5.3.2.3 At multilevel, multiline, or multiplatform stations, occupant loads shall be determined as follows:

1. The maximum occupant load for each platform shall be considered separately for the purpose of sizing the means of egress from that platform.

2.\* Simultaneous loads shall be considered for all egress routes passing through each level of that station.

5.3.2.4 Where an area within a station is intended for use by other than passengers or employees, the following parameters shall apply:

1. The occupant load for that area shall be determined in accordance with the provisions of the IBC ((NFPA 101)) as appropriate for the use.

2. The additional occupant load shall be included in determining the required egress from that area.

3. The additional occupant load shall be permitted to be omitted from the station occupant load where the area has independent means of egress of sufficient number and capacity.

5.3.3.4 Travel distance. For open stations the maximum travel distance on the platform to a point at which a means of egress route leaves the platform shall not exceed 100 m (325 ft). For enclosed stations the travel distance to an exit shall not exceed 76 m (250 ft).

#### 5.3.5 Stairs and escalators.

5.3.5.1 Stairs and escalators permitted by Section 5.2.4.1 to be unenclosed shall be permitted to be counted as contributing to the egress capacity in stations as detailed in Sections 5.2.2 and 5.3.3.

5.3.5.2 Stairs in the means of egress shall be a minimum of 1120 mm (44 in.) wide.

5.3.5.3\* Capacity and travel speed for stairs and escalators shall be computed as follows:

1. Capacity - 0.0555 p/mm-min (1.41 p/in.-min)

2.\* Travel speed - 14.6 m/min (48 ft/min) (indicates vertical component of travel speed)

5.3.5.4 Escalators shall not account for more than one-half of the egress capacity at any one level.

5.3.5.6\* In calculating the egress capacity of escalators, the following criteria shall be met:

1. One escalator at each level shall be considered as being out of service.

2. The escalator chosen shall be the one having the most adverse effect upon egress capacity.

5.3.5.7 Where escalators are permitted as a means of egress in stations, the following criteria shall be met:

1.\* The escalators shall be constructed of noncombustible materials.

2.\* Escalators running in the direction of egress shall be permitted to remain operating.

3. Escalators running reverse to the direction of egress shall be capable of being stopped locally and remotely as follows:

a. Locally by a manual stopping device at the escalator.

b. Remotely by one of the following:

i. A manual stopping device at a remote location.

ii. As part of a preplanned evacuation response.

4.\* Where provision is made for remote stopping of escalators counted as means of egress, one of the following shall apply:

a. The stop shall be delayed until it is preceded by a minimum 15-second audible signal or warning message sounded at the escalator. b. Where escalators are equipped with the necessary controls to decelerate in a controlled manner under the full rated load, the stop shall be delayed for at least 5 seconds before beginning deceleration, and the deceleration rate shall be no greater than  $0.052 \text{ m/sec}^2$  (0.17 ft/sec<sup>2</sup>).

5. Where an audible signal or warning message is used, the following shall apply:

a. The signal or message shall have a sound intensity that is at least 15 dBA above the average ambient sound level for the entire length of the escalator.

b. The signal shall be distinct from the fire alarm signal.

c. The warning message shall meet audibility and intelligibility requirements.

#### 5.3.7\* Doors, gates, security grilles, and exit hatches.

**5.3.7.1** The egress capacity for doors and gates in a means of egress serving public areas shall be computed as follows:

1. Sixty people per minute (p/min) for single leaf doors and gates.

2.\* 0.0819 p/mm-min (2.08 p/in.-min) for bi-parting multileaf doors and gates measured for the clear width dimension.

**5.3.7.2** Gates in a means of egress shall be designed in accordance with the requirements for doors serving as a means of egress.

**5.3.7.2.1** Security grilles are allowed when designed and operated in accordance with the IBC.

**5.3.7.3** Where used, exit hatches shall comply with the requirements of Sections 6.3.3.15 through 6.3.3.17.

5.3.9\* Horizontal exits. Horizontal exits shall comply with IBC Section 1026.

#### 5.3.11 Means of egress lighting.

**5.3.11.1** Illumination of the means of egress in stations, including escalators that are considered a means of egress, shall be in accordance with IBC Section 1008.

**5.3.11.2** Means of egress, including escalators considered as means of egress, shall be provided with a system of emergency lighting in accordance with IBC Section 1008

**5.3.11.3** In addition to the requirements of Sections 5.3.11.1 and 5.3.11.2:

1. Lighting for stairs and escalators shall be designed to emphasize illumination on the top and bottom steps and landings.

2. Where newel- and comb-lighting is provided for escalator

steps, such lighting shall be on emergency power circuits.

<u>AMENDATORY SECTION</u> (Amending WSR 22-13-094, 23-12-103, and 23-20-023, filed 6/14/22, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-3314 Section 3314—Fire watch during construction.

**3314.1 Fire watch during construction.** Where required by the fire code official, a fire watch shall be provided during nonworking hours for

new construction that exceeds 40 feet (12,192 mm) in height above the lowest adjacent grade.

EXCEPTIONS: 1. New construction that is built under the IRC.

2. New construction less than 5 stories and 50,000 square feet (4645  $m^2$ ) per story.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-3500 Chapter 35-Referenced standards. Add the reference standards as follows:

Standard reference number	Title	Referenced in code section number
(( <del>ACI 561-21</del>	Assessment, Repair, and Rehabilitation of Existing Concrete Structures	4 <del>05.1.1</del> ))
ASCE/SEI 7-16	Minimum Design Loads and Associated Criteria for Buildings and Other Structures with Supplement No.1, Supplement No. 2, and Supplement No. 3.	No amendments to the referenced sections
ASCE/SEI 7-22	Minimum Design Loads and Associated Criteria for Buildings and Other Structures	1615.1
NFPA 130-20	Standard for Fixed Guideway Transit and Passenger Rail Systems	3101.1, 3116
NFPA (( <del>13-16</del> )) <u>13-19</u>	Standard for the Installation of Sprinkler Systems (except ((8.15.5.3(5)))) <u>9.3.6.3.5</u> )	403.3.3, 712.1.3.1, 903.3.1.1, (( <del>903.2</del> )) <u>903.3.2</u> , 903.3.8.2, 903.8.5, 904.13, 905.3.4, 907.6.4, 1019.3

AMENDATORY SECTION (Amending WSR 16-03-064, filed 1/19/16, effective 7/1/16)

WAC 51-50-480000 ((2015)) 2021 International Existing Building Code.

AMENDATORY SECTION (Amending WSR 16-03-064, filed 1/19/16, effective 7/1/16)

WAC 51-50-480101 Section 101-Scope and general requirements.

101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code, or as deemed necessary by the code official to mitigate an unsafe building. For the purpose of

this section, "unsafe building" is not to be construed as mere lack of compliance with the current code.

101.6 Appendices. The code official is authorized to require rehabilitation and retrofit of buildings, structures, or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted. Appendix A, Guidelines for the Seismic Retrofit of Existing Buildings, is hereby adopted as part of this code without any specific adoption by the local jurisdiction.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-480200 Section 201.3-Definitions.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the other International Codes and the Uniform Plumbing Code, such terms shall have the meanings ascribed to them in those codes.

#### 202 General definitions.

ADULT FAMILY HOME. A dwelling, licensed by the ((state of)) Washington state department of social and health services, in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services. An existing adult family home may provide services to up to eight adults upon approval from the department of social and health services in accordance with RCW 70.128.066.

SUBSTANTIAL DAMAGE. For the purpose of determining compliance with the flood provisions of this code, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the value determined by one of the following methods:

1. Values developed for property tax assessment, adjusted to the approximate market value where the land is appraised separately from the structure.

2. Through a professional appraiser using estimates of a structure's actual cash value, including depreciation and improvements.

3. The latest building valuation data published by the International Code Council.

4. Qualified estimates based on the professional judgment of the building official. However, when the ratio falls between 40 and 60 percent, the building official may require the applicant to provide a detailed list of costs.

SUBSTANTIAL IMPROVEMENT. For the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the value determined by one of the following methods:

1. Values developed for property tax assessment, adjusted to the approximate market value where the land is appraised separately from the structure.

2. Through a professional appraiser using estimates of a structure's actual cash value, including depreciation and improvements.

3. The latest building valuation data published by the International Code Council.

4. Qualified estimates based on the professional judgment of the building official. However, when the ratio falls between 40 and 60 percent, the building official may require the applicant to provide a detailed list of costs.

If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either of the following:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the code official and that is the minimum necessary to ensure safe living conditions.

2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

# WAC 51-50-480306 Section 306-((Structural)) Accessibility for existing buildings.

**306.6 Additions.** Provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 306.7.1. Limited-use/limited-application elevators installed in accordance with ASME A17.1 shall be permitted as a component of an accessible route connecting the existing construction to the addition.

306.7.1 Alterations affecting an area containing a primary function. Where an *alteration* affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. Toilet facilities and drinking fountains serving the area of primary function, including the route from the area of primary function to these facilities, shall be accessible. Priority shall be given to the improvements affecting the accessible route to the primary function area.

EXCEPTIONS:

The cumulative costs of providing the accessible route of travel, toilet facilities, and drinking fountains are not required to exceed 20 percent of the costs of the alterations affecting the area of primary function.
 This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets, and signs.

3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials. 4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of a facility.

5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.

306.7.8 Platform lifts and limited-use/limited-application elevators. Vertical and inclined platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

Limited-use/Limited-application elevators installed in accordance with ASME A17.1 shall be permitted as a component of an accessible route.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-480503 Section 503-Alterations.

503.13 Voluntary lateral force-resisting system alterations. Structural alterations that are intended exclusively to improve the lateral force resisting system and are not required by other sections of this code, shall not be required to meet the requirements of Section 1609 or 1613 of the International Building Code, provided that all of the following apply:

1. The capacity of existing structural systems to resist forces is not reduced.

2. New structural elements are detailed and connected to existing or new structural elements as required by the selected design criteria.

2.1 Where approved, new lateral force-resisting systems are permitted to be of a type designated as "Ordinary" or "Intermediate" where ASCE 7 Table 12.2-1 states these types of systems are not permitted provided that both of the following apply:

2.1.1 The selected design criteria is the International Building Code.

2.1.2 The new "Ordinary" or "Intermediate" system provides deformation compatibility with the existing lateral force-resisting system.

3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the International Building Code for new construction.

4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

503.19 Seismic requirements for alterations with increased occupant load of unreinforced masonry or hollow clay tile buildings. In addition to the requirements in Sections 503.4 through 503.11, alterations meeting all of the following conditions shall comply with the applicable requirements in Sections 503.19.1 through 503.19.4.

1. The occupant load of a building increases by more than 20 percent for occupancy groups A, I, E, R, M, B, H, or S used for storage of hazardous materials.

2. Buildings assigned to Seismic Design Category C, D, E, or F.

3. The building's structural system includes unreinforced masonry and hollow clay tile bearing walls.

Where there is a change of occupancy with the alteration, the most restrictive seismic requirements in accordance with Section 506 and this section shall apply. The cumulative effect of alterations compared with the original occupant load that have an increase in occupant load over time exceeding 20 percent shall comply with these provisions.

EXCEPTIONS:

A cumulative increase in the occupant load of less than 50 for occupancy categories A or I.
 A cumulative increase in the occupant load of less than 25 for E occupancies.
 R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.
 A cumulative increase in occupant load of less than 100 for occupancy categories M or B.
 A cumulative increase in the occupant load of less than 10 for H occupancies or S occupancies using hazardous materials.

503.19.1 Large buildings. Buildings four or more stories or buildings more than 12,000 square feet shall be required to perform seismic evaluation in accordance with ((IEBC)) Section 304.3. Any lateral resisting elements shall be required to comply with design requirements

for reduced seismic forces in accordance with Section 304.3.2 where found to be deficient.

503.19.2 Parapet bracing. Buildings with parapets constructed of unreinforced masonry where the parapet height to thickness ratio exceeds 1.5:1 shall be required to have parapets anchored, removed, or altered to resist out-of-plane seismic forces unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

503.19.3 Floor and roof wall anchors. The alteration work shall include the installation of wall anchors at the floor and roof lines unless an evaluation demonstrates compliance of existing wall anchorage. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

503.19.4 Bracing of partitions and nonstructural walls. Unreinforced masonry partitions and nonstructural walls within the alteration area and adjacent to egress paths from the alteration area shall be anchored, removed, or altered to resist out-of-plane seismic forces unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-480805 Section 805-Structural.

805.4 Voluntary lateral force-resisting system alterations. Structural alterations that are intended exclusively to improve the lateral force resisting system and are not required by other sections of this code shall not be required to meet the requirements of Section 1609 or Section 1613 of the International Building Code, provided that the following conditions are met:

1. The capacity of existing structural systems to resist forces is not reduced.

2. New structural elements are detailed and connected to existing or new structural elements as required by the selected design criteria.

2.1 Where approved, new lateral force-resisting systems are permitted to be of a type designated as "Ordinary" or "Intermediate" where ASCE 7 Table 12.2-1 states these types of systems are not permitted provided that both of the following apply:

2.1.1 The selected design criteria is the International Building Code.

2.1.2 The new "Ordinary" or "Intermediate" system provides deformation compatibility with the existing lateral force-resisting system.

3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the International Building Code for new construction.

4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

805.5 Seismic requirements for Level 2 alterations with increased occupant load of unreinforced masonry or hollow clay tile buildings. In addition to the requirements in ((IEBC)) Section 805.3, Level 2 alterations meeting all of the following conditions shall comply with the applicable requirements in Sections 805.5.1 through 805.5.4.

1. The occupant load of a building increases by more than 20 percent for occupancy groups A, I, E, R, M, B, H, or S used for storage of hazardous materials.

2. Buildings assigned to Seismic Design Category C, D, E<sub>L</sub> or F.

3. The building's structural system includes unreinforced masonry and hollow clay tile bearing walls.

Where there is a change of occupancy with the alteration, the most restrictive seismic requirements in accordance with ((IEBC)) Section 1006 and this section shall apply. The cumulative effect of alterations compared with the original occupant load that have an increase in occupant load over time exceeding 20 percent shall comply with these provisions.

EXCEPTIONS: 1. An increase in the occupant load of less than 50 for occupancy categories A or I. An increase in the occupant load of less than 25 for E occupancies.
 R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less. A. An increase in occupant load of less than 100 for occupancy categories M or B.
 A cumulative increase in the occupant load of less than 10 for H occupancies or S occupancies using hazardous materials.

805.5.1 Large buildings. Buildings four or more stories or buildings more than 12,000 square feet shall be required to perform seismic evaluation in accordance with ((IEBC)) Section 304.3. Any lateral resisting elements shall be required to comply with design requirements for reduced seismic forces in accordance with Section 304.3.2 where found to be deficient.

805.5.2 Parapet bracing. Buildings with parapets constructed of unreinforced masonry where the parapet height to thickness ratio exceeds 1.5:1 shall be required to have parapets anchored, removed or altered to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

805.5.3 Floor and roof wall anchors. The alteration shall include the installation of wall anchors at the floor and roof lines, unless an evaluation demonstrates compliance of existing wall anchorage. Use of reduced seismic forces in accordance with ((IEBC)) Section 304.3.2 shall be permitted.

805.5.4 Bracing of partitions and nonstructural walls. Unreinforced masonry partitions and nonstructural walls within the work area and adjacent to egress paths from the alteration area shall be anchored, removed or altered to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

AMENDATORY SECTION (Amending WSR 20-21-021, filed 10/9/20, effective 11/9/20)

# WAC 51-50-481009 Section 1009-Plumbing.

1009.1 Increased demand. Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the Uniform Plumbing Code, the new occupancy shall comply with the intent of the respective Uniform Plumbing Code provisions.

Only where the occupant load of the story is increased by more than 20 percent, plumbing fixtures for the story shall be provided in quantities specified in Chapter 29 of the *International Building Code*, based on the increased occupant load. EXCEPTION:

1009.2 Food-handling occupancies. If the new occupancy is a food-handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas and shall be protected in accordance with the Uniform Plumbing Code.

1009.3 Interceptor required. If the new occupancy will produce grease or oil-laden wastes, interceptors shall be provided as required in the Uniform Plumbing Code.

1009.5 Group I-2. If the occupancy group is changed to Group I-2, the plumbing system shall comply with the applicable requirements of the Uniform Plumbing Code.

AMENDATORY SECTION (Amending WSR 20-21-021, filed 10/9/20, effective 11/9/20)

#### WAC 51-50-481101 Section 1101—((Change of occupancy classification)) General.

**1101.1 Scope.** An addition to a building or structure shall comply with the International Codes and Uniform Plumbing Code as adopted for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an addition impacts the existing building or structure, that portion shall comply with this code.

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

#### WAC 51-50-481201 Section 1201-Historic buildings-General.

1201.1 Scope. This chapter is intended to provide means for the preservation of historic buildings. It is the purpose of this chapter to encourage cost-effective preservation of original or restored architectural elements and features and to provide a historic building that will result in a reasonable degree of safety, based on accepted life and fire safety practices, compared to the existing building. ((Historical)) Historic buildings shall comply with the provisions of this chapter relating to their repair, alteration, relocation and change of occupancy.

SECTION 1202-Reserved.

# <u>NEW SECTION</u>

WAC 51-50-481600 Chapter 16-Referenced standards. Add the reference standards as follows:

Certified on 11/30/2023 [ 40 ]

# Washington State Register WSR 23-23-102

Standard reference number	Title	Referenced in code section number
ACI 562-21	Assessment, Repair, and Rehabilitation of Existing Concrete Structures	405.1.1