PROPOSED RULE MAKING

CR-102 (June 2024)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER
STATE OF WASHINGTON
FILED

DATE: May 05, 2026
TIME: 10:56 AM

WSR 26-10-068

Agency: State Building Code Council

☒ **Original Notice**

☐ **Supplemental Notice to WSR** _____

☐ **Continuance of WSR** _____

☒ **Preproposal Statement of Inquiry was filed as WSR** 24-11-127 **; or**

☐ **Expedited Rule Making--Proposed notice was filed as WSR** _____**; or**

☐ **Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or**

☐ **Proposal is exempt under RCW** _____**.**

Title of rule and other identifying information: (describe subject) WAC 51-50, Adoption and amendment of the 2024 International Building Code and 2024 International Existing Building Code.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
June 10, 2026: Olympia June 12, 2026: Spokane Valley	10:00 a.m. -5:00 p.m.	1500 Jefferson St. SE, Olympia WA 98504 Rm #2208 2426 N Discovery Pl, Spokane Valley, WA 99216 Rm #109	

Date of intended adoption: August 28, 2026 (Note: This is **NOT** the **effective** date)

Submit written comments to:	**Assistance for persons with disabilities:**
Name State Building Code Council	Contact State Building Code Council Staff
Address 1500 Jefferson St SE, Olympia WA 98504	Phone
Email sbcc@des.wa.gov	Fax
Fax	TTY
Other	Email sbcc@des.wa.gov
Beginning (date and time) May 6, 2026, 12:00 p.m.	Other
By (date and time) June 12, 2026, 11:59 p.m.	By (date) June 1, 2026, 11:59 p.m.

Purpose of the proposal and its anticipated effects, including any changes in existing rules: The proposed rule adopts the 2024 editions of the International Building Code and International Existing Building Code, published by the International Code Council, with state amendments to incorporate proposed changes as adopted by the Washington State Building Code Council. The rules will provide increased clarity and life safety measures for building construction in Washington State.

WAC	Section	Changes in 2024	Rationale/Discussion	Proposal Log Number
51-50-0107	IBC 107.2	Deletes State Amendment to the Section	Movement of language from 107.2.9 makes the amendment no longer necessary.	24-GP1-093-R1
	IBC 107.2.9	Moves Language from 2021 107.2.9 to 2024 1603.1.5.1	Relocating the amendment makes it more likely to be noticed by both structural engineers and structural plan reviewers	24-GP1-093-R1
51-50-0200	Automobile Parking Space	Adds New Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	Automatic Load Management System (ALMS)	Adds New Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4

51-50-0200	Carbon Monoxide Source	New Amendment modifies new Carbon monoxide Source definition of 24 code to align with 2027 IFC Revisions.	Clarifies CO requirement application.	24-GP1-071-R4
	Carbon Monoxide Source, Direct			
	Corbon Monoxide Source, Indirect			
	Child Care, Family Home	Changes the number of children allowed in a family home childcare use from 12 to 16.	Change aligns IBC with amendments to the IRC	24-GP1-127
	Custodial Care	Removes existing amendment	Model code language is identical to existing amendment	Existing Amendments Report
	Efficiency Dwelling Unit	Removes existing amendment	Model code language is identical to existing amendment	Existing Amendments Report
	Electric Vehicle (EV)	Adds New Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	Electric Vehicle Capable Space (EV Capable Space)	Modifies Definition “Electric Vehicle(EV) Capable Parking Space (EV Capable Space)” to “Electric Vehicle Capable Space (EV Capable Space)”	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	Electric Vehicle (EV) Charger	Removes Definition	Replaced by Electric Vehicle Supply Equipment definition	24-BFRW-EV-R4
	Electric Vehicle (EV) Charging Station	Removes Definition	Replaced by Electric Vehicle Supply Equipment definition	24-BFRW-EV-R4
	Electric Vehicle Ready Space (EV Ready Space)	Modifies Definition: “Electric Vehicle(EV) Ready Parking Space” to “Electric Vehicle Ready Space (EV Ready Space)	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	Electric Vehicle Supply Equipment (EVSE)	Modifies Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	Electric Vehicle Supply Equipment Installed Space (EVSE Space)	Adds New Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	High-Rise Building	Changes Occupied to Occupiable.	Change aligns amendment language with changes across model code.	24-GP1-128-R1
	Limited Verbal or Physical Assistance	Removes existing amendment	Model code language is identical to existing amendment	Existing Amendments Report
	Raceway	Adds New Definition	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4

51-50-0200	Temporary Event	Adds new amendment to a new definition of the 2024 IBC. Removes the words “public occupancy” from the term “Public occupancy temporary structure”.	amendment clarifies that public occupancy temporary structures are not the only temporary structures that exist and align the code with common understanding.	24-GP1-054-R1
51-50-0305	IBC 305.2.4	Changes the number of children allowed in a family home childcare use from 12 to 16.	Change aligns IBC with amendments to the IRC	24-GP1-132-R1
51-50-0308	IBC 308.5.5	Changes the number of children allowed in a family home childcare use from 12 to 16.	Change aligns IBC with amendments to the IRC	24-GP1-129-R1
51-50-0310	IBC 310.3	Removes Existing Amendment	Model Code Language no regulatory difference compared to state amendment.	Existing Amendments Report
51-50-0412	IBC 412.7.3	Adds metric measure for 60ft “(18,288 mm)”	Change is editorial	24-GP1-130-R1
51-50-0420	IBC 420.2	Adds language “walls separating dwelling units from sleeping units in the same building”	Clarifies code section and its application.	24-GP1-131-R1
51-50-0429	IBC 429.1	Changes use of defined terms to correlate changes made to definitions	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	IBC T429.2	For all other Group R occupancies EV Ready Space Requirements changed from 25% to 10%. EV Capable Space Requirements changes from 10% to 40%	Cleans up defined term usage and alters the amount of EV Ready and EV Capable spaces required.	24-BFRW-EV-R4
	IBC 429.2.1	Changes use of defined terms to correlate changes made to definitions	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	IBC 429.2.2	Change the language related to raceways required for EV Capable Space.	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	IBC 429.3	Changes use of defined terms to correlate changes made to definitions	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
	IBC 429.4	Changes use of defined terms to correlate changes made to definitions	Clarifies application of electric vehicle charging provisions	24-BFRW-EV-R4
51-50-0503	IBC 503.1.4.1	Removes Existing Amendment	Model code language is the same as existing amendment.	Existing Amendments Report
	IBC 503.1.4.2	Changes Occupied to Occupiable	Correlates changes in model code language terminology.	Existing Amendments Report
51-50-0504	IBC T 504.3	New Amendment Allows R-2 and R-3 Occupancies to be built to 4 stories without needing to change sprinkler from 13D to 13R.	3D Systems do not have a height or story restriction.	24-GP1-091-R5
	IBC T 504.4	New Amendment Allows R-2 and R-3 Occupancies to be built to 4 stories without needing to change sprinkler from 13D to 13R.	3D Systems do not have a height or story restriction.	24-GP1-091-R5
	IBC 504.4.1	Update to existing amendment	corrects errors and omissions.	24-GP1-114-R3
51-50-0508	IBC 508.1.1	Removes Existing Amendment	Model code language is identical to existing amendment	Existing Amendments Report
51-50-0510	IBC 510.2	Removes Existing Amendment	Model code language is identical to existing amendment	Existing Amendments Report
51-50-0602	IBC 602	Removes Existing Amendments	Model code language is identical to existing amendment	Existing Amendments Report
51-50-0704	IBC 704.6.1	Removes Existing Amendment	Model code language is identical to existing amendment	Existing Amendments Report
51-50-07070	IBC 707.3.13	Adds New language to model code.	New language correlates existing IFC requirement into the IBC.	24-GP1-085
51-50-0717	IBC 717.2.3	New Amendments: provide several options for shutdown of static dampers.	This is consistent with IMC requirements for shutdown of other systems.	24-GP1-115-R6
	IBC 717.6.2.1.1			
	IBC 717.6.2.1.2			
51-50-0711	IBC 711.2.4.7	Adds New language to model code.	New language correlates existing IFC requirement into the IBC.	24-GP1-086
51-50-0903	IBC 903.3.1.3	New Amendment Allows R-2 and R-3 Occupancies to be built to 4 stories without needing to change sprinkler from 13D to 13R.	13D Systems do not have a height or story restriction.	24-GP1-091-R5

51-50-0907	IBC 907.2.23	New amendment: adding thermal imaging systems to detection systems allowed for energy storage system locations.	Adds an option to system type and corrects pointer to IFC	24-GP1-117-R2
	IBC 907.9	Removes existing WAC language	WAC language reserving code sections is not needed	Existing Amendments Report
51-50-0909	IBC 909.12.2	New amendment: Provides additional options for smoke control system circuits.	From F139-24 of the 2027 I-Codes	24-GP1-074
	IBC 909.21.12	Removes existing amendment	Amendment not needed. Other Hoistway venting amendments removed in previous code cycle	Existing Amendments Report
51-50-0915	IBC 915	Rewrites entire Section including existing amendments to align with 2027 proposed language	Clarifies application of requirements.	24-GP1-071-R4
51-50-1006	IBC 1006.3.4	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-1008	IBC 1008.2.1	Adds new amendment clarifying where illumination measurements should be taken.	Enhances safety by improving the visibility of stairs. Provides greater consistency in application and enforcement.	24-GP1-062-R1
51-50-1009	IBC 1009.8	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
	IBC 1009.8.1	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-1013	IBC 1013.6.1.1	Adds a new section to the model code	Provides an option to use an internationally standardized pictogram sign	24-GP1-119-R3
51-50-1014	IBC 1014.2.2	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-1015	IBC 1015.2	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-1101	IBC 1101.2.1 & 1101.2.3	Removes existing WAC language	WAC language reserving code sections is not needed	Existing Amendments Report
	IBC 1101.2	Section Renumbered	Editorial to align with other changes in the section	Existing Amendments Report
51-50-1106	IBC 1106.3.1	Adds new section to the model code	Clarifies that the number of required accessible parking spaces for residents of R-2, R-3, and R-4 housing developments is to be calculated separately for each parking facility	24-GP1-061
51-50-1107	IBC 1107.2	For Accessible EV charging requirements pointer to Section 429	Clarifies EV Charging requirements.	24-GP1-037-R1
51-50-1110	IBC 1110.2	Removes existing amendment	Model Code language is identical	Existing Amendments Report
51-50-1110	IBC 1110.7.1	Moves amendments from 1110.5.1 to 1110.7.1	Editorial: change places unique amendments in appropriate location within 2024 model code.	Editorial
51-50-1208	IBC 1208	Modifies existing amendments to reduce required dwelling unit size	Reduces dwelling unit size as directed by HB 2071 from the 2024 Legislature.	IBC TAG Dwelling Unit Size Proposal
51-50-1402	IBC 1402.2	Incorporates language changes from the model code into the existing amendment	Language changes add clarity and align amendment with model code update	24-GP1-125-R1
51-50-1603	IBC 1603.1.3	New Amendment, requires site elevation data to be included in construction documents.	Allows review by both the Engineer of Record and The Authority having jurisdiction to review elevation differences	24-GP1-063-R2
51-50-1603	IBC 1603.1.5.1	Moves Language from 2021 107.2.9 to 2024 1603.1.5.1	Relocating the amendment makes it more likely to be noticed by both structural engineers and structural plan reviewers	24-GP1-093-R1
51-50-1604	IBC T 1604.5	New amendment reverses a model code change that places all I-2 facilities in Risk Category IV.	Model code change would bring a significant cost impact	24-GP1-067

51-50-1604	IBC 1604.5.1	New amendment. Removes term “life safety systems” from model code language.	“Life safety components” has been revised to align better with existing defined terms in Chapter 2. It is now replaced by a more detailed list: life safety systems, designated seismic systems, emergency power systems, and emergency and egress lighting systems.	24-GP1-051
51-50-1608	IBC 1608.1 and 1608.2	New Amendment, requires site elevation data to be included in construction documents.	Allows review by both the Engineer of Record and The Authority having jurisdiction to review elevation differences	24-GP1-063-R2
51-50-1609	IBC 1609.3	Assigns wind speeds and boundaries for a special wind region in western WA.	Special Wind Region boundaries and basic wind speed magnitudes have been determined with up-to-date climatic data and advanced analysis techniques per ASCE 7-22 Section 26.5.3. This will increase clarity across jurisdictions in the special wind region.	24-GP1-004-R1
51-50-1613	IBC 1613.7.1	Moves amendments from 1613.4 to 1613.7.	Editorial: change places unique amendments in appropriate location within 2024 model code.	Editorial
	IBC 1613.4.2	Removes State amendment	ASCE7-16 T12.6-1 is removed in ASCE7-22. Amendment no longer needed because ASCE 7-22 is adopted into the model code	24-GP1-047
	IBC 1613.4.3	Removes State amendment	Amendments necessary to use ASCE 7-22 no longer needed because ASCE 7-22 is now a referenced standard.	24-GP1-043
	IBC 1613.4.4	Removes State amendment	Amendments necessary to use ASCE 7-22 no longer needed because ASCE 7-22 is now a referenced standard.	24-GP1-043
	IBC 1613.4.5	Removes State amendment	Amendments necessary to use ASCE 7-22 no longer needed because ASCE 7-22 is now a referenced standard.	24-GP1-043
	IBC 1613.4.6	Removes State amendment	Amendments necessary to use ASCE 7-22 no longer needed because ASCE 7-22 is now a referenced standard.	24-GP1-043
51-51-1615	IBC 1615.1	Removes reference to specific ASCE 7 version	Update for consistency with ASCE 7-22 instead of ASCE7-16	24-GP1-120
	IBC 1615.2.3	Changes “potential” to “design” in Tsunami Design Zone Map definition	Update for consistency with ASCE 7-22 instead of ASCE7-16	24-GP1-120
	IBC 1615.2.5	Updates amendment to ASCE 7 Section 6.5.1	Update for consistency with ASCE 7-22 instead of ASCE7-16	24-GP1-120
	IBC 1615.2.12	Cleans up reference to items 1(b) and 1(c)	Update for consistency with ASCE 7-22 instead of ASCE7-16	24-GP1-120
51-50-1705	IBC 1705.13.6	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-1901	IBC 1901.2	New Amendment: Modifying ACI 318-19	ACI 318-19 introduced significant changes to the seismic design of new concrete structures. These changes have led to issues that are currently being revised in ACI 318-25. Change avoids changes to construction practice that would only be in effect a short time.	24-GP1-034-R2
51-50-1905	IBC 1905.1	New amendment: updates references in alignment with WA amendments in section 1905.8 and 1905.9	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8	New amendment: points to all ACI 318-19 modifications in 1905.8	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8.1	New amendment: Amending ACI 318-19 Section 2.2	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8.2	New amendment: Amending ACI 318-19 Section 18.10.3	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8.3	New amendment: Amending ACI 318-19 Section 18.10.4	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8.4	New amendment: Amending ACI 318-19 Section 18.10.6	See Rationale for 1901.2	24-GP1-034-R2
	IBC 1905.8.5	New amendment: Amending ACI 318-19 Section 21.2.4.1	See Rationale for 1901.2	24-GP1-034-R2

51-50-1905	IBC 1905.9	New amendment: points to all ACI 318-19 modifications in 1905.9	ACI 318-19 introduced significant changes to the one-way shear design of new concrete structures. These changes have led to issues that are currently being revised in ACI 318-25. Change allows use of 2025 edition for one way shear design.	24-GP1-035
	IBC 1905.9.1	New amendment: Amending ACI 318-19 Section 11.4.1.5	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.2	New amendment: Amending ACI 318-19 Section 13.1.1	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.3	New amendment: Amending ACI 318-19 Section 13.2.6.2	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.4	New amendment: Amending ACI 318-19 Section 13.3.6.1	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.5	New amendment: Amending ACI 318-19 Section 13.3.7	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.6	New amendment: Amending ACI 318-19 Section 13.4.6.6	See Rationale for 1905.9	24-GP1-035
	IBC 1905.9.7	New amendment: Amending ACI 318-19 Section 22.5.5.1.1	See Rationale for 1905.9	24-GP1-035
51-50-2303	IBC 2303.1.4 and 2303.1.4.1	New amendment: Aligns Mechanical and visual grading strength minimums.	Allows use of underutilized wood species in CLT products utilizing mechanical grading technologies.	24-GP1-094-R3
51-50-2304	IBC 2304.10.1	Incorporates the ANSI/AWC 2022 FDS for Wood Construction as an approved engineering analysis method for determining the required protection time of mass timber connections.	Amendment offers a standardized reference method for designers, while still allowing for other analysis methods.	24-GP1-050-R1
51-50-2308	IBC 2308.6.1	New Amendment: corrects the editorial inconsistencies in the reorganized code provisions for cutting, notching and boring	enhance the clarity of the requirements	24-GP1-052
	IBC 2308.6.3	New Amendment: See 2308.6.1	enhance the clarity of the requirements	24-GP1-052
51-50-2405	IBC 2405.3	Removes Existing Amendment	Model language is not identical, but has same regulatory effect as amendment language	Existing Amendments Report
51-50-2902	IBC T 2902.1	Table revised	Revision incorporates new model code format and existing amendments to the table.	24-GP1-060
	IBC 2902.5	Adds bottle filling station requirements	Amendment made in response to HB 1085 from 2023 Legislative Session.	24-GP1-133-R2
	IBC 2902.5.1	Adds pointer to drinking fountain accessibility requirements	Clarifies Code Requirements	24-GP1-064
	IBC 2902.5.1, 2902.5.2, and 2902.5.3	Adds bottle filling station requirements	Amendment made in response to HB 1085 from 2023 Legislative Session.	24-GP1-133-R2
	IBC 2902.8	Remove amendment section	Requirement is added into Table 2902.1 Revisions	24-GP1-060
51-50-3006	IBC 3006.3	Adds option for protection of elevator hoistway doors	Maintains existing amendment and incorporates model code changes.	Existing Amendments Report
51-51-3102	IBC 3102.7	New Amendment deletes an incomplete list of loads and points to Ch 16	3102 applies to permanent membrane structures pointing to Ch16 includes all loads to be considered for permanent structures.	24-GP1-056
51-50-3103	IBC 3103.1	deletes unnecessary text, aligns timeframes with scoping sections for temporary and membrane structures and adds exception for temporary structures erected within enclosed existing structures	Clarifies Code Requirements	24-GP1-057 24-GP1-134
	IBC 3103.6	New amendment language changes removing Public Occupancy from before temporary structure	Allows reduced design loading for all temporary structures not only public occupancy temporary structures	24-GP1-055

51-50-3103	IBC 3103.6.1	Adds exception for temporary structures erected within enclosed existing structures and changes language removing Public Occupancy from before temporary structure	Reduces design requirements for unnecessary environmental loads also allows reduced design loading for all temporary structures not only public occupancy temporary structures	24-GP1-055 24-GP1-057 24-GP1-058
	IBC 3103.6.1.1	New amendment language changes removing Public Occupancy from before temporary structure	Allows reduced design loading for all temporary structures not only public occupancy temporary structures	24-GP1-055
	T 3103.6.1.1	New amendment language changes table title removing Public Occupancy from before temporary structure	Allows reduced design loading for all temporary structures not only public occupancy temporary structures	24-GP1-055
	3103.6.1.2	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC T 3103.6.1.2	New amendment language changes table title removing Public Occupancy from before temporary structure	Allows reduced design loading for all temporary structures not only public occupancy temporary structures	24-GP1-055
	IBC 3103.6.1.3	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.6.1.4	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.6.1.5	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.6.1.6	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.6.2	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.6.4	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
	IBC 3103.7	See 3103.6.1.1	See 3103.6.1.1	24-GP1-055
51-50-3115	IBC 3115	Moved Content from 3116	Model code renumbered	Existing Amendments Report
51-50-3116	IBC 3116	Content moved to 3115	Model code renumbered	Existing Amendments Report
51-50-3500	ANSI/AWC FDS-2024	New Amendment adds Fire Design Specification (FDS) for Wood Construction to referenced standards	See Rationale for 2304.10.1	24-GP1-050-R1
	ASCE/SEI 7-22	New Amendment incorporating Supplements #1 and #2	Supplements contain clarifications and also expand FHA from 100yr to 500yr for Risk Categories II, III, and IV to improve structural performance.	24-GP1-053
	ASTM D6570	New Amendment adds ASTM D6570	See Rationale for Section 2303.1.4	
	IAPMO UPC-24	New Amendment adds 2024 Uniform Plumbing Code to referenced standards	Clarifies UPC not IPC adopted in referenced standards section.	24-GP1-126
	ICC IPC-24	New Amendment removes 2024 International Plumbing Code from referenced standards	Clarifies UPC not IPC adopted in referenced standards section.	24-GP1-126
	ISO 7010:2019	New Amendment adds an ISO Standard to the referenced Standards	Provides an option to use an internationally standardized pictogram sign	24-GP1-119-R3
51-50-4700	NA	Changed to Reserved	Moves Appendix P to Appendix Q to align with new model code content.	Editorial
51-50-480000	2021 International Existing Building Code	All of the WAC language in 51-50-48xxxx moved to 51-50-62xxxx.	Reorganized to make room for new WA state appendices.	Editorial
51-50-5200	IBC Appendix Q	Moves Appendix P to Appendix Q and adjust WAC numbering from 4700 to 5200.	Editorial to align with new model code content	Editorial
51-50-5300	IBC Appendix R	New amendment adding Appendix R	Gives AHJs option to adopt visitability standards already established in ANSI/ICC A117.1	24-GP1-003-R2
51-50-5400	IBC Appendix S Option 1	New amendment adding Appendix S with three compliance pathways. Product Compliance, Whole Building LCA or Building Reuse	when adopted by a jurisdiction, would require reporting on the embodied carbon emissions associated with proposed projects over 50,000 or 100,000 square feet and supports Washington's goal to reduce its greenhouse gas (GHG) emissions by 95% by 2050.	24-GP1-118-R4

51-50-5400	IBC Appendix S Option 2	New amendment adding Appendix S with one compliance pathway. Whole Building LCA	when adopted by a jurisdiction, would require reporting on the embodied carbon emissions associated with proposed projects over 50,000 or 100,000 square feet and supports Washington's goal to reduce its greenhouse gas (GHG) emissions by 95% by 2050.	24-GP1-118-R4-WBLCA
51-50-5500	IBC Appendix T	New Washington Appendix	Single Exit Appendix created to respond to SB 5491 of the 2023 Legislature	Single Exit TAG Proposal
51-50-5600	IBC Appendix U	New Washington Appendix	Temporary Emergency Shelters Appendix created to respond to SB 5553 of the 2023 Legislature	IBC TAG Proposal
51-50-620000	2024 International Existing Building Code	All of the WAC language in 51-50-48xxxx moved to 51-50-62xxxx.	Reorganized to make room for new WA state appendices.	Editorial
51-50-620306	IEBC 306.6 and 306.7.1	Removes Existing Amendment	Model code language is identical	Existing Amendments Report
51-50-6280401	IEBC 401.2 and 401.4	Removes State amendments from this section.	Improves clarity of the section	24-GP1-092-R2
51-50-620405	IEBC 405	Existing Amendments removed	Model code language is identical	Existing Amendments Report
51-50-620502	IEBC 502.1.1	New Amendment	Clarifies assignment of risk categories.	24-GP1-049-R1
	IEBC 502.1.1.1	New Amendment	Clarifies assignment of risk categories.	24-GP1-049-R1
51-50-620503	IEBC 503.13	Maintains existing amendment	Incorporates new model code language	Existing Amendments Report
51-50-620809	IEBC 809.1	Adds reference to WSEC-R to existing amendment	Clarifies compliance with applicable WA State energy codes	24-GP1-075-R1
51-50-620904	IEBC 904.1.3	New Amendment	Correlates language in the IBC and IFC	24-GP1-076-R1
51-50-620907	IEBC 907.1	Adds reference to WSEC-R to existing amendment	Clarifies compliance with applicable WA State energy codes	24-GP1-077-R1
51-50-6201002	IEBC 1002.3	Adds exception to existing amendment	Maintains existing amendment language and adds new model code language.	24-GP1-078-R1
51-50-621101	IEBC 1101.3	New Amendment	Clarifies assignment of risk categories.	24-GP1-049-R1
	IEBC 1101.3.1	New Amendment	Clarifies assignment of risk categories.	24-GP1-049-R1
51-50-621500	IEBC 1503	Section moved from 1501 to 1503	Re-numbered to align with model code reorganization	Existing Amendments Report
51-50-621600	IEBC Ch 16	Existing Amendments removed	Model code language is identical	Existing Amendments Report

Reasons supporting proposal: RCW 19.27.031; RCW 19.27.074 and RCW 19.27.540

Statutory authority for adoption: RCW 19.27.031; RCW 19.27.074 and RCW 19.27.540

Statute being implemented: RCW 19.27.031; RCW 19.27.074 and RCW 19.27.540

Is rule necessary because of a:

Federal Law? ☐ Yes ☒ No

Federal Court Decision? ☐ Yes ☒ No

State Court Decision? ☐ Yes ☒ No

If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: NONE

Name of proponent: (person or organization) State Building Code Council

Type of proponent: ☐ Private. ☐ Public. ☒ Governmental.

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting	Dustin Curb	1500 Jefferson St. SE, Olympia, WA 98504	360-972-4158
Implementation	Dustin Curb	1500 Jefferson St. SE, Olympia, WA 98504	360-972-4158
Enforcement Authority	Local Jurisdictions Having		

Is a school district fiscal impact statement required under RCW 28A.305.135? ☐ Yes ☒ No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name
Address
Phone
Fax
TTY
Email
Other

Is a cost-benefit analysis required under RCW 34.05.328?

☒ Yes: A preliminary cost-benefit analysis may be obtained by contacting:

Name Dustin Curb
Address 1500 Jefferson St. SE, Olympia, WA 98504
Phone 360-972-4158
Fax
TTY
Email dustin.curb@des.wa.gov
Other The Preliminary Cost Benefit Analysis is posted online here: https://sbcc.wa.gov/sites/default/files/2026-05/Econmic%20Impact%20IBCIEBC%20Master%20V2_1.pdf

☐ No: Please explain:

Regulatory Fairness Act and Small Business Economic Impact Statement

Note: The Governor's Office for Regulatory Innovation and Assistance (ORIA) provides support in completing this part.

(1) Identification of exemptions:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). For additional information on exemptions, consult the exemption guide published by ORIA. Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☒ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

- ☐ RCW 34.05.310 (4)(b) (Internal government operations)
- ☒ RCW 34.05.310 (4)(c) (Incorporation by reference)
- ☒ RCW 34.05.310 (4)(d) (Correct or clarify language)
- ☐ RCW 34.05.310 (4)(e) (Dictated by statute)
- ☐ RCW 34.05.310 (4)(f) (Set or adjust fees)
- ☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(4). (Does not affect small businesses).

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.

Explanation of how the above exemption(s) applies to the proposed rule: There are significant changes to the model code with economic impact. However, the model code changes are exempt under RCW 19.85.025(3) and RCW 34.05.310 (4)(c), and are not part of this report.

(2) Scope of exemptions: *Check one.*

☐ The rule proposal: Is fully exempt. *(Skip section 3.)* Exemptions identified above apply to all portions of the rule proposal.

☒ The rule proposal: Is partially exempt. *(Complete section 3.)* The exemptions identified above apply to portions of the rule proposal, but less than the entire rule proposal. Provide details here (consider using this template from ORIA): Changes are analyzed at an individual proposal level. All proposals are included in the analysis. Changes that occur in the 2024 version of the model code as compared to the 2021 version are not included and are exempt.

☐ The rule proposal: Is not exempt. *(Complete section 3.)* No exemptions were identified above.

(3) Small business economic impact statement: *Complete this section if any portion is not exempt.*

If any portion of the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency's minor cost analysis and how the agency determined the proposed rule did not impose more-than-minor costs. _____

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses and a small business economic impact statement is required. Insert the required small business economic impact statement here:
Please see the posted preliminary Cost Benefit Analysis. (https://sbcc.wa.gov/sites/default/files/2026-05/Econmic%20Impact%20IBCIEBC%20Master%20V2_1.pdf) There are costs imposed by the proposed rule, but the costs do not impact small businesses disproportionately. The rule will not affect the distribution of impacted work. The rules do not affect employment, reporting or record keeping.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name Dustin Curb
Address 1500 Jefferson St. SE, Olympia, WA 98504
Phone 360-972-4158
Fax
TTY
Email dustin.curb@des.wa.gov
Other

Date: 5/4/2026	**Signature:**
Name: Todd Beyreuther	
Title: SBCC Chair	

Chapter 51-50 WAC
STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE ((~~2021~~)) 2024 EDITION OF THE INTERNATIONAL BUILDING CODE

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 51-50-003 International Building Code. The ((~~2021~~)) 2024 edition of the *International Building Code*, including Appendix E and S, published by the International Code Council is hereby adopted by reference with the exceptions noted in this chapter of the Washington Administrative Code. Appendix R may be adopted by any local government upon notification of the council. Appendix T developed by the state of Washington is included in the adoption of the International Building Code.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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 ((~~March 15, 2024~~)) May 3, 2027.

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 51-50-0107 ((~~Section 107 Construction documents.~~)) Reserved.

((~~**107.2 Construction documents.** Construction documents shall be in accordance with Sections 107.2.1 through 107.2.9.~~

~~**107.2.9 Nonstructural components.** Construction documents shall indicate if structural support and anchoring documentation for nonstructural components is part of the design submittal or a deferred submittal. The construction documents for nonstructural components shall at a minimum identify the following:~~

~~1. All nonstructural components required by ASCE 7 Section 13.1.3 to have an importance factor of, Ip, of 1.5.~~

~~2. All mechanical equipment, fire sprinkler equipment, electrical equipment, and other nonstructural components required by ASCE 7 Section 13.1.3 Item 1 to be operational following a seismic event that require designated seismic systems per ASCE 7 Section 13.2.2 and special inspections per Section 1705.13.4.~~))

AMENDATORY SECTION (Amending WSR 26-07-066, filed 3/17/26, effective 4/17/26)

WAC 51-50-0200 Chapter 2—Definitions.

SECTION 202—DEFINITIONS.

ADULT FAMILY HOME. A dwelling, licensed by the state of Washington 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.

ASSISTED LIVING FACILITY. A home or other institution, licensed by the state of Washington, providing housing, basic services and assuming general responsibility for the safety and well-being of residents under chapters 18.20 RCW and 388-78A WAC. These facilities may provide care to residents with symptoms consistent with dementia requiring additional security measures.

AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS). A system designed to manage electrical load across ((~~one or more EV Ready parking~~)) EVSE spaces.

AUTOMOBILE PARKING SPACE. A space within a building or private or public parking lot, exclusive of driveways, ramps, columns, office and work areas, for the parking of an automobile.

BOTTLE FILLING STATION. A plumbing fixture connected to the potable water distribution system and sanitary drainage system that is designed and intended for filling personal use drinking water bottles or containers not less than 10 inches (254 mm) in height. Such fixtures can be separate from or integral to a drinking fountain and can incorporate a water filter and a cooling system for chilling the drinking water.

CARBON MONOXIDE SOURCE. A combustion process that has the potential to produce carbon monoxide as a product of combustion under normal or abnormal conditions. Carbon monoxide sources include, but are not limited to, solid-, liquid-, or gas-fueled appliances, equipment, devices, or systems, such as fireplaces, furnaces, heaters, boilers, cooking equipment, and vehicles with internal combustion engines.

CARBON MONOXIDE SOURCE, DIRECT. A permanently installed carbon monoxide source that is located in an interior space.

CARBON MONOXIDE SOURCE, FORCED-INDIRECT. A carbon monoxide source connected to an interior space by a forced air supply duct.

CHILD CARE. The care of children during any period of a 24-hour day.

CHILD CARE, FAMILY HOME. A child care facility, licensed by Washington state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of 16 or fewer children, including children who reside at the home.

CLIMATE ZONE. A geographical region that has been assigned climatic criteria as specified in the Washington State Energy Code.

CLUSTER. Clusters are multiple *portable school classrooms* separated by less than the requirements of the building code for separate buildings.

COMPOST. Biodegradable solid wastes that are separated for composting such as food waste, food soiled paper, and yard waste.

((~~**CUSTODIAL CARE.** Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities, and other tasks of daily living. Custodial care includes persons receiving care who have the ability to respond to emergency situations and may receive limited verbal or physical assistance. These care recipients may evacuate at a slower rate and/or who have mental and psychiatric complications.~~

~~**EFFICIENCY DWELLING UNIT.** A dwelling unit where all permanent provisions for living, sleeping, eating and cooking are contained in a single room.~~))

DWELLING UNIT, EFFICIENCY. Not adopted.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, electric vehicle supply equipment (EVSE), a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current.

ELECTRIC VEHICLE ((~~(EV)~~)) CAPABLE ((~~PARKING~~)) SPACE (EV CAPABLE SPACE). A designated automobile parking space that is provided with a ((~~conduit, electrical panel and load capacity to support~~)) raceway and electrical distribution equipment space necessary for the future installation of ((~~EV charging equipment~~)) an EVSE.

((~~**ELECTRIC VEHICLE (EV) CHARGER.** Off-board charging equipment used to charge electric vehicles.~~

~~**ELECTRIC VEHICLE (EV) CHARGING STATION.** EV Ready parking space with installed EV charger.~~))

ELECTRIC VEHICLE ((~~(EV)~~)) READY ((~~PARKING~~)) SPACE (EV READY SPACE). ((~~A~~)) An automobile parking space that is provided with a ((~~receptacle outlet allowing charging of electric vehicles~~)) branch circuit and an outlet, junction box, or receptacle that will support an installed EVSE.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). ((~~The conductors~~)) Equipment for plug-in power transfer, including the ungrounded, grounded, and equipment grounding conductors((~~, and the~~));; electric vehicle connectors((~~,~~));; attachment plugs((~~,~~));; any personnel protection system((~~,~~));; and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE SPACE). An automobile parking space that is provided with a dedicated EVSE connection.

HIGH-RISE BUILDING. A building with an occupied floor, located more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access. For the purposes of this definition, an ((~~occupied~~)) occupiable roof with an occupant load of 50 or more is considered to be an occupied floor.

HOSPICE CARE CENTER. A building or portion thereof used on a 24-hour basis for the provision of hospice services to terminally ill inpatients.

((~~**LIMITED VERBAL OR PHYSICAL ASSISTANCE.** Persons who, because of age, physical limitations, cognitive limitations, treatment or chemical dependency, and may not independently recognize, respond, or evacuate without limited verbal or physical assistance during an emergency situation. Verbal assistance includes prompting, giving, and repeating instructions. Physical assistance includes assistance with transfers to walking aids or mobility devices and assistance with egress.~~))

LOFT. A space on an intermediate level or levels between the floor and ceiling of a Group R occupancy dwelling or sleeping unit, open on one or more sides to the room in which the loft is located, and in accordance with Section 420.14.

NIGHTCLUB. An A-2 Occupancy in which the aggregate area of concentrated use of unfixed chairs and standing space that is specifically designated and primarily used for dancing or viewing performers exceeds 350 square feet, excluding adjacent lobby areas. "Nightclub" does not include theaters with fixed seating, banquet halls, or lodge halls.

PORTABLE SCHOOL CLASSROOM. A prefabricated structure consisting of one or more rooms with direct exterior egress from the classroom(s). The structure is transportable in one or more sections and is designed to be used as an educational space with or without a permanent foundation. The structure shall be capable of being demounted and relocated to other locations as needs arise.

RACEWAY. An enclosed channel designed expressly for holding wires, cables, or busbars.

RECYCLED MATERIALS. Those solid wastes that are separated for recycling or reuse, such as papers, metals, and glass.

RESIDENTIAL SLEEPING SUITES. A unit that provides multiple rooms or spaces for up to five residents, includes provisions for sleeping and can include provisions for living, eating, sanitation, and kitchen facilities.

SMALL BUSINESS. Any business entity (including a sole proprietorship, corporation, partnership or other legal entity) which is owned and operated independently from all other businesses, which has the purpose of making a profit, and which has 50 or fewer employees.

STAGED EVACUATION. A method of emergency response, that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves moving or holding certain occupants at temporary locations for a brief period of time before evacuating the building. This response is used by ambulatory surgery facilities and assisted living facilities to protect the health and safety of fragile occupants and residents.

TEMPORARY EVENT. A single use during the *service life* of a *temporary structure* at a given location that includes its installation, inspection, use and occupancy, and dismantling.

AMENDATORY SECTION (Amending WSR 23-22-115, filed 10/31/23, effective 3/15/24)

WAC 51-50-0310 Section 310—Residential Group R.

((~~**310.3 Residential Group R-2.** Residential occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:~~

~~Apartment houses~~

~~*Congregate living facilities* (nontransient) with more than 16 occupants~~

~~Boarding houses (nontransient)~~

~~Convents~~

~~*Dormitories*~~

~~Fraternities and sororities~~

~~Monasteries~~

~~Hotels (nontransient)~~

~~*Live/work units*~~

~~Motels (nontransient)~~

~~Vacation timeshare properties~~))

310.4.3 Adult family homes, family home child care. Adult family homes and family home child care facilities that are within a single-family home are permitted to comply with the *International Residential Code*.

310.4.4 Foster family care homes. Foster family care homes licensed by Washington state are permitted to comply with the *International Residential Code*, as an accessory use to a dwelling, for six or fewer children including those of the resident family.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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 (18,288 mm) in length or less than 2,000 square feet (186 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 23-22-115, filed 10/31/23, effective 3/15/24)

WAC 51-50-0420 Section 420—Groups I-1, R-1, R-2, R-3, and R-4.

420.2 Separation walls. Walls separating dwelling units in the same building, walls separating sleeping units in the same building, walls separating *dwelling units* from *sleeping units* in the same *building*, and walls separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as fire partitions in accordance with Section 708. Buildings containing multiple sleeping units with common use or central kitchens shall not be classified as a single dwelling.

420.12 Adult family homes. This section shall apply to all newly constructed adult family homes and all existing single-family homes being converted to adult family homes. This section shall not apply to those adult family homes licensed by the state of Washington department of social and health services prior to July 1, 2001.

420.12.1 Sleeping room classification. Each sleeping room in an adult family home shall be classified as one of the following:

1. Type S - Where the means of egress contains stairs, elevators or platform lifts.
2. Type NS1 - Where one means of egress is at grade level or a ramp constructed in accordance with Section 1012 is provided.
3. Type NS2 - Where two means of egress are at grade level or ramps constructed in accordance with Section 1012 are provided.

420.12.2 Types of locking devices and door activation. All bedrooms and bathroom doors shall be openable from the outside when locked.

Every closet door shall be readily openable from the inside.

Operable parts of door handles, pulls, latches, locks and other devices installed in adult family homes shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. Pocket doors shall have graspable hardware available when in the closed or open position.

The force required to activate operable parts shall be 5.0 pounds (22.2 N) maximum. Required exit door(s) shall have no additional locking devices. Required exit door hardware shall unlock inside and outside mechanisms when exiting the building allowing reentry into the adult family home without the use of a key, tool or special knowledge.

420.12.3 Smoke and carbon monoxide alarm requirements. Alarms shall be installed in such a manner so that the detection device warning is audible from all areas of the dwelling upon activation of a single alarm.

420.12.4 Escape windows and doors. Every sleeping room shall be provided with emergency escape and rescue windows as required by Section 1031. No alternatives to the sill height such as steps, raised platforms or other devices placed by the openings will be approved as meeting this requirement.

420.12.5 Grab bar general requirements. Where facilities are designated for use by adult family home clients, grab bars for water closets, bathtubs and shower stalls shall be installed according to ICC A117.1.

420.12.6 Shower stalls. Where provided to meet the requirements for bathing facilities, the minimum size of shower stalls for an adult family home shall be 30 inches deep by 48 inches (760 mm by 1220 mm) long.

420.13 Licensed care cooking facilities. In Group I-1, Condition 2 assisted living facilities licensed under chapter 388-78A WAC and residential treatment facilities licensed under chapter 246-337 WAC, rooms or spaces that contain a cooking facility with domestic cooking appliances shall be permitted to be open to the corridor where all of the following criteria are met:

1. The number of care recipients housed in the smoke compartment is not greater than 30.
2. The number of care recipients served by the cooking facility is not greater than 30.
3. Only one cooking facility area is permitted in a smoke compartment.
4. The types of domestic cooking appliances permitted are limited to ovens, cooktops, ranges, warmers and microwaves.
5. The corridor is a clearly identified space delineated by construction or floor pattern, material or color.
6. The space containing the domestic cooking facility shall be arranged so as not to obstruct access to the required exit.
7. A domestic cooking hood installed and constructed in accordance with Section 505 of the *International Mechanical Code* is provided over the cooktop or range.
8. The domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. Preengineered automatic extinguishing systems shall be tested in accordance with UL 300A and *listed* and *labeled* for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's instructions.
9. A manual actuation device for the hood suppression system shall be installed in accordance with Sections 904.13.1 and 904.13.2.
10. An interlock device shall be provided such that upon activation of the hood suppression system, the power or fuel supply to the cooktop or range will be turned off.
11. A shut-off for the fuel and electrical power supply to the cooking equipment shall be provided in a location that is accessible only to staff.
12. A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes.
13. A portable fire extinguisher shall be installed in accordance with Section 906 of the *International Fire Code*.

420.14 Lofts. Where provided in Group R occupancies, *lofts* shall comply with this code as modified by Sections 420.14.1 through 420.14.5. *Lofts* constructed in compliance with this section shall be considered a portion of the story below. Such *lofts* shall not contribute to either the building area or number of stories as regulated by Section 503.1. The loft floor area shall be included in determining the *fire area*.

EXCEPTION: *Lofts* need not comply with Section 420.14 where they meet any of the following conditions:
1. The *loft* has a maximum depth of less than 3 feet (914 mm).
2. The *loft* has a floor area of less than 35 square feet (3.3 m^2).
3. The *loft* is not provided with a permanent means of egress.

420.14.1 Loft limitations. *Lofts* shall comply with the following conditions:

1. The *loft* floor area shall be less than 70 square feet (6.5 m^2).

2. The *loft* ceiling height shall not exceed 7 feet (2134 mm) for more than one-half of the *loft* floor area.

The provisions of Sections 420.14.2 through 420.14.5 shall not apply to *lofts* that do not comply with Items 1 and 2.

420.14.2 Loft ceiling height. The ceiling height below a *loft* shall not be less than 7 feet (2134 mm). The ceiling height above the finished floor of the *loft* shall not be less than 3 feet (914 mm). Portions of the *loft* with a sloped ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not contribute to the *loft* floor area.

420.14.3 Loft area. The aggregate area of all *lofts* and *mezzanines* within a room shall comply with Section 505.2.1.

EXCEPTION: The area of a single *loft* shall not be greater than two-thirds of the area of the room in which it is located, provided that no other *lofts* or *mezzanines* are open to the room in which the *loft* is located.

420.14.4 Permanent egress for lofts. Where a permanent means of egress is provided for *lofts*, the means of egress shall comply with Chapter 10 as modified by Section 420.14.4.1.

420.14.4.1 Ceiling height at loft means of egress. A minimum ceiling height of 3 feet shall be provided for the entire width of the means of egress from the *loft*.

420.14.5 Smoke alarms. Single- or multiple-station smoke alarms shall be installed in all *lofts* in accordance with Section 907.2.11.1 or 907.2.11.2.

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 51-50-0429 Section 429—Electric vehicle charging infrastructure.

429.1 General. The provisions of this section shall apply to the construction of new *buildings* and accessory structures, including parking lots and parking garages.

Electric vehicle supply equipment (*EVSE*) shall be installed in accordance with applicable requirements of chapter 19.28 RCW and the National Electrical Code, Article 625.

EXCEPTION: *Electric vehicle* charging infrastructure is not required if any of the following conditions are met:
1. There is no public utility or commercial power supply.
2. *Dwelling units* without garages or other on-site parking.

429.2 Electric vehicle (EV) charging infrastructure. Buildings and accessory structures shall be provided with ((~~EV charging stations, EV-Ready parking spaces, and EV-capable parking~~)) *EVSE spaces, EV Ready spaces, and EV Capable spaces* in accordance with Table 429.2. Calculations shall be rounded up to the nearest whole number. Where a *building* contains more than one occupancy, the *electric vehicle* charging infrastructure percentages of Table 429.2 shall be applied to the number of spaces ((~~required~~)) provided for each occupancy.

EXCEPTIONS: 1. Except for Group A, Group E, and Group M occupancies, on-site parking with less than 10 parking spaces shall not be required to comply with Section 429.2.
2. Group A, Group E, and Group M occupancies shall comply with one of the following, whichever is greater:
2.1. The provisions of Section 429.2 shall apply only to designated employee parking spaces.
2.2. One of each 200 parking spaces or fraction thereof shall be an *EV Ready space*. One of each 200 parking spaces or fraction thereof shall be an ((~~EV Charging Station~~)) *EVSE space*.

Table 429.2
Electric Vehicle Charging Infrastructure

Occupancy	Number of ((~~EV Charging Stations~~)) EVSE Spaces	Number of EV-Ready ((~~Parking~~)) Spaces	Number of EV-Capable ((~~Parking~~)) Spaces
Group A, B, E, F, H, I, M, and S occupancies	10% of total ((~~parking~~)) spaces	10% of total ((~~parking~~)) spaces	10% of total ((~~parking~~)) spaces
Group R occupancies			
Buildings that do not contain more than two dwelling units	Not required	One for each *dwelling unit*	Not required
Dwelling units with private garages	Not required	One for each *dwelling unit*	Not required
All other Group R occupancies	10% of total ((~~parking~~)) spaces	((~~25%~~)) 10% of total ((~~parking~~)) spaces	((~~10%~~)) 40% of total ((~~parking~~)) spaces

429.2.1 ((~~EV charging stations~~)) EVSE spaces and EV-Ready ((~~parking~~)) spaces. A minimum of 40-ampere dedicated 208/240-volt branch circuit shall be installed for each ((~~EV Ready parking space and each EV Charging Station~~)) *EVSE space* and each *EV Ready space*. The branch circuits shall terminate at a receptacle outlet or ((~~EV charger~~)) EVSE in close proximity to the proposed location of the ((~~EV Ready parking space or the EV Charging Station~~)) *EVSE space* or *EV Ready space*.

429.2.2 EV-Capable ((~~parking~~)) spaces. A listed *raceway* capable of accommodating a minimum of 40-ampere dedicated 208/240-volt branch circuit shall be installed for each *EV-Capable* ((~~parking~~)) *space*. ((~~The~~)) A continuous *raceway* shall ((~~terminate into a cabinet, box or other enclosure in~~)) be installed between an enclosure, end cap, or outlet located within close proximity ((~~to the proposed location~~)) of the *EV-Capable* ((~~parking~~)) *space* and *future or existing panelboard* or *switchboard location(s)*. *Raceways* and related components that are planned to be installed underground, and in enclosed, inaccessible or concealed areas and spaces, shall be installed at the time of original construction.

429.3 Electrical room(s) and equipment. Electrical room(s) ((~~and/or~~)) or areas for dedicated electrical equipment shall be sized to accommodate the requirements of Section ((~~429~~)) 429.2.1 through 429.2.2.

The electrical service and the electrical system, including any on-site distribution transformer(s), shall have sufficient capacity to simultaneously charge all *EVs* at all required ((~~EV Charging Stations, EV Ready parking spaces, and EV-Capable parking~~)) *EVSE spaces* and *EV Ready spaces* at a minimum of 40-amperes each.

EXCEPTION: *Automatic Load Management System* (*ALMS*) may be used to adjust the maximum electrical capacity required for the ((~~EV-Ready and EV-Capable parking~~)) EVSE spaces and EV Ready spaces. The *ALMS* must be designed to allocate charging capacity among multiple future ((~~EV Charging Stations~~)) EVSE spaces at a minimum of 16 amperes per ((~~EV charger~~)) EVSE.

429.4 Electric vehicle charging infrastructure for accessible parking spaces. Ten percent of the accessible parking spaces, rounded to the next whole number, shall be ((~~EV Charging Stations~~)) *EVSE spaces*. An additional 10 percent of the accessible parking spaces, rounded to the next whole number, shall be *EV Ready spaces*. Not fewer than one for each type of ((~~EV charging~~)) EVSE system shall be accessible.

The *electric vehicle* charging infrastructure may also serve adjacent parking spaces not designated as accessible parking. A maximum of 10 percent of the accessible parking spaces, rounded to the next whole number, are allowed to be included in the total number of *electric vehicle* parking spaces required under Section 429.2.

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 51-50-0503 Section 503—General building height and area limitations.

((~~**503.1.4.1 Enclosure of occupied roof areas.** Elements or structures enclosing the occupied roof areas shall not extend more than 48 inches (1220 mm) above the surface of the occupied roof.~~

~~EXCEPTIONS: 1. Penthouses constructed in accordance with Section 1511.2 and towers, domes, spires, and cupolas constructed in accordance with Section 1511.5.~~
~~2. High rise buildings.~~))

503.1.4.2 Guards. ((~~Occupied~~)) Occupiable roofs shall have guards in accordance with Section 1015.2.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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

Table 504.3
Allowable Building Height in Feet Above Grade Plane[a]

Occupancy Classification	See Footnotes	Type of Construction											
		Type I		Type II		Type III		Type IV				Type V	
		A	B	A	B	A	B	A	B	C	HT	A	B
A, B, E, F, M, S, U	NS[b]	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	270	180	85	85	70	60
H-1, H-2, H-3, H-5	NS[c,d]	UL	160	65	55	65	55	120	90	65	65	50	40
	S												
H-4	NS[c,d]	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, I-3	NS[d,e]	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
I-1 Condition 2, I-2	NS[d,e,f]	UL	160	65	55	65	55	65	65	65	65	50	40
	S[i]	UL	180	85									
I-4	NS[d,g]	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

Occupancy Classification	See Footnotes	Type of Construction											
		Type I		Type II		Type III		Type IV				Type V	
		A	B	A	B	A	B	A	B	C	HT	A	B
R[h]	NS[d]	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.

c 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.

e 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.

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.

j For one- and two-family dwellings and *townhouse units*, the height shall be permitted to be increased to 60 feet.

Table 504.4
Allowable Number of Stories Above Grade Plane[a,b]

Occupancy Classification	See Footnotes	Type of Construction											
		Type I		Type II		Type III		Type IV				Type V	
		A	B	A	B	A	B	A	B	C	HT	A	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
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
B	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
E	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[c,d]	1	1	1	1	1	1	NP	NP	NP	1	1	NP
	S							1	1	1			
H-2	NS[c,d]	UL	3	2	1	2	1	1	1	1	2	1	1
	S							2	2	2			

Occupancy Classification	See Footnotes	Type of Construction											
		Type I		Type II		Type III		Type IV				Type V	
		A	B	A	B	A	B	A	B	C	HT	A	B
H-3	NS[c,d]	UL	6	4	2	4	2	3	3	3	4	2	1
	S							4	4	4			
H-4	NS[c,d]	UL	7	5	3	5	3	5	5	5	5	3	2
	S	UL	8	6	4	6	4	8	7	6	6	4	3
H-5	NS[c,d]	4	4	3	3	3	3	2	2	2	3	3	2
	S							3	3	3			
I-1 Condition 1	NS[d,e]	UL	9	4	3	4	3	4	4	4	4	3	2
	S	UL	10	5	4	5	4	10	7	5	5	4	3
I-1 Condition 2	NS[d,e]	UL	9	4	3	4	3	3	3	3	4	3	2
	S[i]	UL	10	5				10	6	4			
I-2	NS[d,f]	UL	4	2	1	1	NP	NP	NP	NP	1	1	NP
	S	UL	5	3				7	5	1			
I-3	NS[d,e]	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[d,g]	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
M	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[h]	NS[d]	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[h]	NS[d]	UL	11	4	4	4	4	4	4	4	4	3	2
	S13R	4	4	4								4	3
	S	UL	12	5	5	5	5	18	12	8	5	4	3
R-3[h]	NS[d]	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[h]	NS[d]	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.

[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.

[c] 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.

[e] 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.

[i] 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.

[j] For one- and two-family dwellings and *townhouse units*, the number of stories above grade plane shall be permitted to be increased to 4.

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 as *smokeproof enclosures* 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~~)) Section 2702 for buildings constructed in compliance with this section and be connected to ((~~stairway shaft pressurization~~)) *smokeproof enclosure* ventilating equipment in accordance with Sections 909.20.6.2 and 2702.2.17, elevators and lifts used for accessible means of egress (if provided) in accordance with Sections 1009.4.1 and 2702.2.2, elevator hoistway pressurization equipment (if provided) in accordance with Sections 909.21.5 and 2702.2.17 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).~~)) NFPA 70 Section 701.12(A), 701.12(B), 701.12(C) and one or more of the following system types from NFPA 70 Section 701.12:

1. Generator Set.
2. Stored-Energy Power Supply Systems (SEPSS).
3. Separate Service.
4. Microgrid Systems.

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 51-50-0508 ((~~Section 508 Mixed use and occupancy.~~)) Reserved.

((~~**508.5.1 Limitations.** The following shall apply to live/work areas:~~

~~1. The live/work unit is permitted to be not greater than 3,000 square feet (279 m) in area.~~

~~2. The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit.~~

~~3. The nonresidential area function shall be limited to the first or main floor only of the live/work unit.~~))

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 51-50-0510 ((Section 510—Special provisions.)) Reserved.

((**510.2 Horizontal building separation allowance.** A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction where the following conditions are met:

1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than three hours. Where vertical offsets are provided as part of a *horizontal* assembly, the vertical offset and the structure supporting the vertical offset shall have a *fire-resistance rating* of not less than three hours.

2. The building below, including the *horizontal assembly*, is of Type IA construction.

3. *Shaft*, *stairway*, *ramp* and escalator enclosures through the *horizontal assembly* shall have not less than a two-hour *fire-resistance rating* with opening protective in accordance with Section 716.

EXCEPTION: Where the enclosure walls below the *horizontal assembly* have not less than a three-hour *fire-resistance rating* with opening protectives in accordance with Section 716, the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating* provided that the following conditions are met:
1. The building above the *horizontal assembly* is not required to be of Type I construction.
2. The enclosure connects fewer than four *stories;* and
3. The enclosure opening protective above the *horizontal assembly* have a *fire protection rating* of not less than 1 hour.

4. Interior exit stairways located within the Type IA building are permitted to be of combustible materials where both of the following requirements are met:

4.1. The building above the Type IA building is of Type III, IV, or V construction.

4.2. The stairway located in the Type IA building is enclosed by 3-hour fire-resistance-rated construction with opening protectives in accordance with Section 716.

5. The building or buildings above the horizontal assembly shall be permitted to have Group A, B, M, R, or S occupancies.

6. The building below the horizontal assembly shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.

7. The maximum building height in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the grade plane.))

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 51-50-0602 ((Section 602—Construction classification.)) Reserved.

((**602.4.2.2.2 Protected area.** Interior faces of mass timber elements, including the inside face of exterior mass timber walls and mass timber roofs, shall be protected in accordance with Section 602.4.2.2.1.

EXCEPTIONS: Unprotected portions of mass timber ceilings and walls complying with Section 602.4.2.2.4 and the following:

1. Unprotected portions of mass timber ceilings and walls complying with one of the following:
1.1. Unprotected portions of mass timber ceilings, including attached beams, shall be permitted and shall be limited to an area less than or equal to 100 percent of the floor area in any dwelling unit or fire area.
1.2. Unprotected portions of mass timber walls, including attached columns, shall be permitted and shall be limited to an area less than or equal to 40 percent of the floor area in any dwelling unit or fire area.
1.3. Unprotected portions of both walls and ceilings of mass timber, including attached columns and beams, in any dwelling unit or fire area shall be permitted in accordance with Section 602.4.2.2.3.
2. Mass timber columns and beams that are not an integral portion of walls or ceilings, respectively, shall be permitted to be unprotected without restriction of either aggregate area or separation from one another.

602.4.2.2.4 Separation distance between unprotected mass timber elements. In each dwelling unit or fire area, unprotected portions of mass timber walls and ceilings shall be not less than 15 feet from unprotected portions of other walls measured horizontally along the floor.

602.4.2.3 Floors. The floor assembly shall contain a noncombustible material not less than 1 inch in thickness above the mass timber. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. Except where unprotected *mass timber* ceilings are permitted in Section 602.4.2.2.2, the underside of floor assemblies shall be protected in accordance with Section 602.4.1.2.

602.4.4.3 Concealed spaces. Concealed spaces shall not contain combustible materials other than building elements and electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the *International Mechanical Code*. Concealed spaces shall comply with applicable provisions of Section 718. Concealed spaces shall be protected in accordance with one or more of the following:

1. The building shall be sprinklered throughout in accordance with Section 903.3.1.1 and automatic sprinklers shall also be provided in the concealed space.

2. The concealed space shall be completely filled with noncombustible insulation.

3. Combustible surfaces within the concealed space shall be fully sheathed with not less than 5/8-inch Type X gypsum board.

EXCEPTION: Concealed spaces within interior walls and partitions with a 1-hour or greater fire-resistance rating complying with Section 2304.11.2.2 shall not require additional protection.))

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 51-50-0704 ((Section 704—Fire-resistance rating of structural members.)) Reserved.

((**704.6.1 Secondary (nonstructural) attachments to structural members.** Where primary and secondary structural steel members require fire protection, any additional structural steel members having direct connection to the primary structural frame or secondary structural members shall be protected with the same *fire-resistive* material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 inches (305 mm), or shall be applied to the entire length where the attachment is less than 12 inches (305 mm) long. Where an attachment is hollow and the ends are open, the *fire-resistive* material and thickness

~~shall be applied to both exterior and interior of the hollow steel attachment.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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[a,d,g,j]

Fire Separation Distance = X (feet)	Type of Construction	Occupancy Group H[e]	Occupancy Group F-1, M, S-1[f]	Occupancy Group A, B, E, F-2, I, R[i], S-2, U[h]
X < 5[b]	All	3	2	1
5 ≤ X < 10	IA, IVA	3	2	1
	Others	2	1	1
10 ≤ X < 30	IA, IB, IVA, IVB	2	1	1[c]
	IIB, VB	1	0	0
	Others	1	1	1[c]
X ≥ 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.
b See Section 706.1.1 for party walls.
c 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.
h 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.
i 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.
j 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~~)) 705.9

Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection[l]

Fire Separation Distance (feet)	Degree of Opening Protection	Allowable Area[a]
0 to less than 3[b,c,k]	Unprotected, Nonsprinklered (UP, NS)	Not Permitted[k]
	Unprotected, Sprinklered (UP, S)[i]	Not Permitted[k]
	Protected (P)	Not Permitted[k]
3 to less than 5[d,e]	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S)[i]	15%
	Protected (P)	15%
5 to less than 10[e,f,j]	Unprotected, Nonsprinklered (UP, NS)	10%[h]
	Unprotected, Sprinklered (UP, S)[i]	25%
	Protected (P)	25%
10 to less than 15[e,f,g,j]	Unprotected, Nonsprinklered (UP, NS)	15%[h]
	Unprotected, Sprinklered (UP, S)[i]	45%
	Protected (P)	45%
15 to less than 20[f,g,j]	Unprotected, Nonsprinklered (UP, NS)	25%
	Unprotected, Sprinklered (UP, S)[i]	75%
	Protected (P)	75%
20 to less than 25[f,g,j]	Unprotected, Nonsprinklered (UP, NS)	45%
	Unprotected, Sprinklered (UP, S)[i]	No Limit
	Protected (P)	No Limit
25 to less than 30[f,g,j]	Unprotected, Nonsprinklered (UP, NS)	70%
	Unprotected, Sprinklered (UP, S)[i]	No Limit
	Protected (P)	No Limit
30 or greater	Unprotected, Nonsprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S)[i]	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.

c 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.

i 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.

l 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 51-50-07070 ((~~Reserved.~~)) Section 707—Fire barriers.

707.3.13 Energy storage systems. Where required by the *International Fire Code*, the *fire barrier* separating energy storage systems from other spaces in the *building* shall have a minimum two-hour *fire-resistance* rating.

NEW SECTION

WAC 51-50-0711 Section 711—Floor and roof assemblies.

711.2.4.7 Energy storage systems. Where required by the *International Fire Code*, the *horizontal assembly* separating energy storage systems from the remainder of the *building*, shall have a minimum two-hour *fire-resistance* rating.

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 51-50-0717 ((~~Reserved.~~)) Ducts and air transfer openings.

717.2.3 Static dampers. *Fire dampers* and *ceiling radiation dampers* that are listed for use in static systems shall be installed only in heating, ventilation, and air-conditioning systems that are automatically shut down in the event of a fire. See Section 717.6.2.1.2 for shut down requirements of systems with static *ceiling radiation dampers*.

717.6.2.1.1 Dynamic systems. Only *ceiling radiation dampers labeled* for use in dynamic systems shall be installed in heating, ventilation, and air-conditioning systems that do not automatically shut down during a fire.

EXCEPTION: *Ceiling radiation dampers* tested and *listed* in combination with specific fan models shall not be required to be *labeled* for dynamic systems.

717.6.2.1.2 Static systems. Static *ceiling radiation dampers* shall only be installed in systems that are automatically shut down in the event of a fire by one of the following control operations:

1. Duct smoke detection: Upon activation, the duct smoke detectors shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of *appliances* used in the system. Duct smoke detectors shall be provided in the return, exhaust, or relief airstream, duct smoke detectors shall comply with UL 268A, and shall be installed in accordance with *International Mechanical Code* Section 606.3.

2. Area smoke detection: Upon activation, the area smoke detectors shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of *appliances* used in the system. Area smoke detectors shall be provided in all portions of the building serviced by the air distribution system. Area smoke detectors shall be connected to a fire alarm system in accordance with the *International Fire Code* and comply with *International Mechanical Code* Section 606.4.1.

3. Dwelling unit area smoke detection: For air distribution systems that serve only one dwelling unit, the area smoke detection system within the dwelling unit will be used for shut down in the event of a fire. Upon activation, the dwelling unit area smoke detector shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of *appliances* and smoke detector used in the system. Area smoke detectors shall be connected to a fire alarm system in accordance with the *International Fire Code* and comply with *International Mechanical Code* Section 606.4.1.

4. Fire sprinkler waterflow: Upon activation, the fire sprinkler waterflow alarm device shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of the *appliances* used in the system. The fire sprinkler waterflow switch shall be connected to a *fire alarm system* in accordance with the *International Fire Code*.

5. Duct heat sensor: Duct heat sensor is an acceptable means of shut down for systems with return or exhaust design capacity of 500 CFM (0.24 m^3/s) or less. Upon activation, the duct heat sensors shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of *appliances* used in the system. Duct heat sensors shall be provided in the return, exhaust, or relief airstream and shall have an activation temperature that is approximately 50°F (28°C) above the normal temperature within the duct system, but not less than 125°F (52°C) and not greater than 200°F (93°C).

EXCEPTION: Fire sprinkler coverage: Where the building is provided with an automatic fire sprinkler system and where fire sprinklers are located in each space where a static *ceiling radiation damper* is installed, the associated heating, ventilation, and air-conditioning system is not required to be automatically shut down in the event of a fire. The system shall have a return or exhaust capacity of less than 2,000 CFM (0.90 m^3/s). Each space shall have fire sprinklers installed and shall not utilize the allowable sprinkler omission locations for Group R dwelling unit and sleeping unit bathrooms permitted by *International Fire Code* Section 903.3.1.1.2. Fire sprinklers in each space where a static *ceiling radiation damper* is installed shall be quick-response type with a temperature rating of 135°F (57°C) or 155°F (68°C).

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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^2).
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 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^2); 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^2); 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 903.3.1.2 shall be 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.
2. The Group R fire area is only one story.
3. 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.

903.3.1.3 NFPA 13D sprinkler systems. *Automatic sprinkler systems* installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and *townhouse units* shall be permitted to be installed throughout in accordance with NFPA 13D.

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 23-23-102, filed 11/15/23, effective 3/16/24)

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 E 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] 907.2.23 Energy storage systems. An automatic smoke detection system, thermal imaging detection system, or radiant-energy detection system shall be installed in rooms, areas, and walk-in units containing energy storage systems as required in Section 1207.6 of the *International Fire Code*.

[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 20-21-021, filed 10/9/20, effective 11/9/20)

WAC 51-50-0909 Section 909—Smoke control systems.

((~~**909.21.12 Hoistway venting.** Hoistway venting need not be provided for pressurized elevator shafts.~~))

909.12.2 Wiring. In addition to meeting requirements of NFPA 70, all wiring, regardless of voltage used for circuits supplying detection and control functions, shall be protected using one of the following methods:

1. Fully enclosed within continuous raceways.

2. Cables used for survivability of required critical circuits shall be listed in accordance with UL 2196 and shall have a fire-resistance rating of not less than one hour.

3. Electrical circuit protective systems shall have a fire-resistance rating of not less than one hour. Electrical circuit protective systems shall be installed in accordance with their listing requirements.

4. Construction having a fire-resistance rating of not less than one hour.

5. The cable is encased in a minimum of 2 inches (51 mm) of concrete.

909.21.13 Machine rooms. Elevator machine rooms shall be pressurized in accordance with this section unless separated from the hoistway shaft by construction in accordance with Section 707.

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 51-50-0913 Section 913—Fire pumps.

913.2.1 Protection of fire pump rooms and access. Fire pumps shall be located in rooms that are separated from all other areas of the building by 2-hour fire barriers constructed in accordance with Section 707 or 2-hour *horizontal assemblies* constructed in accordance with Section 711, or both. Fire pump rooms not directly *accessible* from the outside shall be *accessible* through an enclosed passageway from an interior exit stairway or exterior exit. The enclosed passageway shall have a *fire-resistance rating* not less than the *fire-resistance rating* of the fire pump room (see NFPA 20 Section 4.14.2.1.2).

EXCEPTIONS: 1. In other than *high-rise buildings*, separation by 1-hour *fire barriers* constructed in accordance with Section 707 or 1-hour *horizontal assemblies* constructed in accordance with Section 711, or both, shall be permitted in *buildings* equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

2. Separation is not required for fire pumps physically separated in accordance with NFPA 20.

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 51-50-0915 Section 915—Carbon monoxide detection.

915.1 General. Carbon monoxide (CO) detection shall be installed in new buildings in accordance with Section 915.2. Carbon monoxide detection shall be installed in existing buildings in accordance with Chapter 11 of the *International Fire Code*.

EXCEPTION: Carbon monoxide detection is not required in Group S, Group F, and Group U occupancies that are not normally occupied.

915.1.1 Not adopted.

915.2 Where required. Carbon monoxide detection shall be provided in ((~~Group I and R occupancies and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist~~)) interior spaces, other than dwelling units or sleeping units, that are exposed to a carbon monoxide source in accordance with Sections 915.2.1 through 915.2.3. Carbon monoxide detection for dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in accordance with Section 915.2.4.

((~~EXCEPTIONS: 1. R-2 occupancies, with the exception of R-2 college dormitories, are required to install carbon monoxide detectors without exception. 2. Sleeping units or dwelling units in I and R-1 occupancies and R-2 college dormitories, hotel, DOC prisons and work releases and DSHS licensed boarding home and residential treatment facility occupancies which do not themselves contain a fuel-burning appliance, a fuel-burning fireplace, or have an attached garage, need not be provided with carbon monoxide alarms provided that they comply with the exceptions of 915.1.4.~~

~~**915.2.3 Group E occupancies.** When required by Section 915.1 in new buildings, or by Chapter 11 of the *International Fire Code*, carbon monoxide detection shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed by school personnel.~~

~~EXCEPTIONS: 1. Carbon monoxide alarm signals shall not be required to be automatically transmitted to an on-site location that is staffed by school personnel in Group E occupancies with an occupant load of 50 or less.~~
~~2. Carbon monoxide alarm signals shall not be required to be automatically transmitted to an on-site location that is staffed by school personnel in Group E occupancies where an exception contained in Section 915.1 applies, or in Group E occupancies where signals are transmitted to an off-site service monitored by a third party, such as a service that monitors fire protection systems in the building.~~))

915.2.1 Interior spaces with direct carbon monoxide sources. In all occupancies, interior spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection located in close proximity to the direct carbon monoxide source and in accordance with Section 915.3.

EXCEPTION: Where environmental conditions in an enclosed space are incompatible with carbon monoxide detection devices, carbon monoxide detection shall be provided in an approved adjacent location.

915.2.2 Interior spaces adjacent to a space containing a carbon monoxide source. In Groups A, B, E, I, M, and R occupancies, interior spaces that are separated from and adjacent to an enclosed parking garage or an interior space that contains a direct carbon monoxide source shall be provided with carbon monoxide detection if there are communicating openings between the spaces. Detection devices shall be located in close proximity to communicating openings on the side that is furthest from the carbon monoxide source and in accordance with Section 915.3.

EXCEPTIONS: 1. Where communicating openings between the space containing a direct carbon monoxide source and the adjacent space are permanently sealed airtight, carbon monoxide detection is not required for the adjacent space.
2. Where the fire code official determines that the volume or configuration of the adjacent interior space is such that dilution or geometry would diminish the effectiveness of carbon monoxide detection devices located in such spaces, detection devices additional to those required by Section 915.2.1 shall be located on the side of communicating openings that is closest to the carbon monoxide source.

915.2.3 Interior spaces with forced-indirect carbon monoxide sources. In all occupancies, interior spaces with a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with either of the following:

1. Detection in each space with a forced-indirect carbon monoxide source, located in accordance with Section 915.3.

2. Detection only in the first space served by the main duct leaving the forced-indirect carbon monoxide source, located in accordance with Section 915.3, with an audible and visual alarm signal provided at an approved location.

915.2.4 Dwelling units and sleeping units. Carbon monoxide detection for dwelling units and sleeping units shall comply with Sections 915.2.4.1 and 915.2.4.2.

915.2.4.1 Direct carbon monoxide sources. Where a direct carbon monoxide source is located in a bedroom or sleeping room, or a bathroom attached to either, carbon monoxide detection shall be installed in the bedroom or sleeping room. Where carbon monoxide detection is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed outside of each separate sleeping area in close proximity to bedrooms or sleeping rooms for either of the following conditions:

1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed garage.

2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of bedrooms or sleeping rooms.

915.2.4.2 Forced-indirect carbon monoxide sources. Bedrooms or sleeping rooms in dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with Section 915.2.4.1 or 915.2.3.

915.2.5 Not adopted.

915.2.6 Not adopted.

915.3 Location of detection devices. Carbon monoxide detection devices shall be installed in accordance with manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide detection in air ducts or plenums shall not be permitted as an alternative to required detection locations.

915.3.1 Not adopted.

915.3.2 Not adopted.

915.3.3 Not adopted.

915.3.4 Not adopted.

915.4 Permissible detection devices. Carbon monoxide detection shall be provided by a carbon monoxide detection system complying with Section 915.4.2 unless carbon monoxide alarms are permitted by Section 915.4.1.

915.4.1 Carbon monoxide alarms. Carbon monoxide alarms complying with Sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon monoxide detection system in both of the following:

1. Dwelling units and sleeping units.

2. Locations other than dwelling units or sleeping units, where approved, provided that the manufacturer's instructions do not prohibit installation in locations other than dwelling units or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a normally unoccupied location is annunciated by an audible and visual signal in an approved location.

915.4.1.1 Power source. In buildings with a wired power source, carbon monoxide alarms shall receive their primary power from a permanent connection to building wiring, with no disconnecting means other than for overcurrent protection, and shall be provided with a battery back-

up. In buildings without a wired power source, carbon monoxide alarms shall be battery powered.

EXCEPTION: For existing buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted to remain in service. When replaced, replacement with battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted.

915.4.1.2 Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms shall also be listed in accordance with UL 217.

915.4.1.3 Interconnection. Where more than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms to signal an alarm condition.

915.4.2 Carbon monoxide detection systems. Carbon monoxide detection systems shall be installed in accordance with NFPA 72.

915.4.2.1 Fire alarm system integration. Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to the fire alarm system. Where a building fire alarm system or a combination fire alarm system is not installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to a carbon monoxide detection system complying with NFPA 72.

915.4.2.2 Listings. Carbon monoxide detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke detectors shall be listed in accordance with UL 268 and UL 2075.

915.4.2.3 Alarm notification. For other than Group E occupancies, activation of a carbon monoxide detector shall initiate alarm notification in accordance with any of the following:

1. An audible and visible alarm notification throughout the building and at the control unit.
2. Where specified in an approved fire safety plan, an audible and visible alarm in the signaling zone where the carbon monoxide has been detected and other signaling zones specified in the fire safety plan, and at the control unit.
3. Where a sounder base is provided for each detector, an audible alarm at the activated carbon monoxide detector and an audible and visible alarm at the control unit.

For Group E occupancies having an occupant load of more than 50, alarm notification, including an audible and visible alarm, shall be provided in an on-site location staffed by school personnel or in accordance with the notification requirements for other occupancies.

915.4.3 Not Adopted.

915.4.4 Not Adopted.

915.5 Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with the *International Fire Code*.

915.5.1 Not adopted.

915.5.2 Not adopted.

915.5.3 Not adopted.

915.5.4 Not adopted.

915.5.5 Not adopted.

915.6 Not adopted.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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

OCCUPANCY	MAXIMUM OCCUPANT LOAD OF SPACE	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)		
		Without Sprinkler System (feet)		With Sprinkler System (feet)
		Occupant Load		
		OL ≤ 30	OL > 30	
A[c], E[h], M	49	75	75	75[a]
B	49	100	75	100[a]
F	49	75	75	100[a]
H-1, H-2, H-3	3	NP	NP	25[b]
H-4, H-5	10	NP	NP	75[b]
I-1, I-2[d], I-4	10	NP	NP	75[a]
I-3	10	NP	NP	100[a]
R-1	10	NP	NP	75[a]
R-2	20	NP	NP	125[a]
R-3[e]	20	NP	NP	125[a,g]
R-4[e]	20	NP	NP	125[a,g]
S[f]	29	100	75	100[a]
U	49	100	75	75[a]

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.

[b] 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 discharging through such spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.
2. Care suites in Group I-2 occupancies complying with Section 407.4.
3. 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*.

6. Group R-2 apartment houses complying with Appendix T shall be permitted to have a single exit.

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

WAC 51-50-1008 Section 1008—Means of egress illumination.

1008.2.1 Illumination level under normal power. The means of egress illumination level shall be not less than 1 footcandle (11 lux) at the walking surface. Along exit access stairways, exit stairways, and at their required landings, the illumination level shall not be less than 10 footcandles (108 lux) at the walking surface when the stairway is in use. Illumination levels on stairways shall be measured at the nosing of landings, and treads at a horizontal distance 12 inches (305 mm) to 14 inches (356 mm) from the stair side of each handrail.

EXCEPTION: For auditoriums, theaters, concert or opera halls, and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances by one of the following methods, provided that the required illumination is automatically restored upon activation of a premises' fire alarm system:
1. Externally illuminated walking surfaces shall be permitted to be illuminated to not less than 0.2 footcandle (2.15 lux).
2. Steps, landings, and the sides of ramps shall be permitted to be marked with self-luminous materials in accordance with Sections 1025.2.1, 1025.2.2, and 1025.2.4 by systems listed in accordance with UL 1994.

1008.2.3 Exit discharge. This subsection not adopted.

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 51-50-1009 Section 1009—Accessible means of egress.

1009.1 Accessible means of egress required. *Accessible means of egress* shall comply with this section. *Accessible* spaces shall be provided with not less than one *accessible means of egress*. Where more than one *means of egress* is required by Section 1006.2 or 1006.3 from any *accessible* space, each *accessible* portion of the space shall be served by not less than two *accessible means of egress*.

EXCEPTIONS:
1. *Accessible means of egress* are not required to be provided in existing buildings.
2. One accessible *means of egress* is required from an *accessible mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.
3. In assembly areas with ramped *aisles* or stepped *aisles*, one accessible *means of egress* is permitted where the *common path of egress travel* is *accessible* and meets the requirements in Section 1030.8.
4. In parking garages, accessible means of egress are not required to serve parking areas that do not contain accessible parking spaces.

((~~**1009.8 Two-way communication.** A two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator or bank of elevators on each *accessible* floor that is one or more stories above or below the *level of exit discharge*.~~

~~EXCEPTIONS:~~
~~1. Two-way communication systems are not required at the landing serving each elevator or bank of elevators where the two-way communication system is provided within *areas of refuge* in accordance with Section 1009.6.5.~~
~~2. Two-way communication systems are not required on floors provided with *ramps* that provide a direct path of egress travel to grade or the level of exit discharge conforming to the provisions of Section 1012.~~
~~3. Two-way communication systems are not required at the landings serving only service elevators that are not designated as part of the accessible *means of egress* or serve as part of the required *accessible route* into a facility.~~
~~4. Two-way communication systems are not required at the landings serving only freight elevators.~~
~~5. Two-way communication systems are not required at the landing serving a private residence elevator.~~
~~6. Two-way communication systems are not required in Group I-2 or I-3 facilities.~~

~~**1009.8.1 System requirements.** Two-way communication systems shall provide communication between each required location and the *fire command center* or a central control point location *approved* by the fire department. Where the central control point is not a *constantly attended location*, a two-way communication system shall have a timed automatic telephone dial-out capability that provides two-way communication with an approved supervising station. The two-way communication system shall include both audible and visible signals. The two-way communication system shall have a battery backup or an approved alternate source of power that is capable of 90 minutes use upon failure of the normal power source.~~))

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 51-50-10100 Section 1010—Doors, gates, and turnstiles.

1010.2.4 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint.

2. Approved, listed locks without delayed egress shall be permitted in Group I-1 condition 2 assisted living facilities licensed by the state of Washington, provided that:

2.1. The clinical needs of one or more patients require specialized security measures for their safety.

2.2. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2.3. The doors unlock upon loss of electrical power controlling the lock or lock mechanism.

2.4. The lock shall be capable of being deactivated by a signal from a switch located in an approved location.

2.5. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.

3. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side, provided:

3.1. The locking device is readily distinguishable as locked.

3.2. A readily visible and durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

3.3. The use of the key-operated locking device is revocable by the building official for due cause.

4. Where *egress* doors are used in pairs, *approved* automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.

5. Doors from individual *dwelling* or *sleeping units* of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or a tool.

6. *Fire doors* after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.

7. Doors serving roofs not intended to be occupied shall be permitted to be locked preventing entry to the building from the roof.

8. Other than *egress* courts, where occupants must *egress* from an exterior space through the building for *means of egress*, *exit access* doors shall be permitted to be equipped with an approved locking device where installed and operated in accordance with all of the following:

8.1. The maximum occupant load shall be posted where required by Section 1004.9. Such signage shall be permanently affixed inside the building and shall be posted in a conspicuous space near all the exit access doorways.

8.2. A weatherproof telephone or two-way communication system installed in accordance with Sections 1009.8.1 and 1009.8.2 shall be located adjacent to not less than one required exit access door on the exterior side.

8.3. The egress door locking device is readily distinguishable as locked and shall be a key-operated locking device.

8.4. A clear window or glazed door opening, not less than 5 square feet (0.46 m^2) in area, shall be provided at each exit access door to determine if there are occupants using the outdoor area.

8.5. A readily visible durable sign shall be posted on the interior side on or adjacent to each locked required exit access door serving the exterior area stating: THIS DOOR TO REMAIN UNLOCKED WHEN THE OUTDOOR AREA IS OCCUPIED. The letters on the sign shall be not less than 1 inch high on a contrasting background.

8.6. The *occupant load* of the occupied exterior *area* shall not exceed 300 occupants in accordance with Section 1004.

9. Locking devices are permitted on doors to balconies, decks or other exterior spaces serving individual dwelling or sleeping units.

10. Locking devices are permitted on doors to balconies, decks or other exterior spaces of 250 square feet or less, serving a private office space.

((~~1010.2.14~~)) 1010.2.13 Controlled egress doors in Groups I-1 and I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1 or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

1. The door locks shall unlock on actuation of the *automatic sprinkler system* or automatic smoke detection system.

2. The doors locks shall unlock on loss of power controlling the lock or lock mechanism.

3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the *fire command center*, a nursing station or other approved location. The switch shall directly break power to the lock.

4. A building occupant shall not be required to pass through more than one door equipped with a controlled *egress* locking system before entering an *exit*.

5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.

6. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door. All clinical staff shall have the keys, codes or other means necessary to operate the locking systems.

7. Emergency lighting shall be provided at the door.

8. The door locking system units shall be listed in accordance with UL 294.

EXCEPTIONS:
1. Items 1 through 4, and 6, shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric or cognitive treatment area, provided that all clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
2. Items 1 through 4, and 6, shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.

1010.3.4.1 Fixed transit and passenger rail systems. In fixed transit and passenger rail system stations, horizontal and vertical security grilles are permitted at station entrances as a component in the means of egress when the station is under constant supervision by on-site security personnel and an exit door with panic hardware that swings in the direction of egress, with a minimum clear width of 32 inches, provided within 10 feet of the gate. The security grilles shall remain secured in the full-open position during the period of occupancy by the general public.

NEW SECTION

WAC 51-50-1013 Section 1013—Exit signs.

1013.6.1.1 Pictorial exit sign option. Exit signs shall either meet the lettering requirements of Section 1013.6.1, have the pictogram for an emergency exit in accordance with ISO 7010, or both.

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 51-50-1014 Section 1014—Handrails.

1014.2 Height and location. Handrails serving flights of stairways, ramps, stepped aisles, and ramped aisles shall comply with the provisions of Sections 1014.2.1 and 1014.2.2.

1014.2.1 Height. *Handrail* height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34 inches (864 mm) and not more than 38 inches (965 mm). Handrail height of alternating tread devices and ships ladders, measured above tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 34 inches (864 mm).

EXCEPTIONS:
1. Where *handrail* fittings or bendings are used to provide continuous transition between flights, the fittings or bendings shall be permitted to exceed the maximum height.
2. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are associated with a Group R-3 occupancy or associated with individual *dwelling units* in Group R-2 occupancies; where *handrail* fittings or bendings are used to provide continuous transition between flights, transition at *winder* treads, transition from *handrail* to guard, or where used at the start of a *flight*, the *handrail* height at the fittings or bendings shall be permitted to exceed the maximum height.
3. *Handrails* on top of a *guard* where permitted along stepped *aisles* and ramped *aisles* in accordance with Section 1030.16.

((~~**1014.2.2 Lateral location.** Handrails located outward from the edge of the walking surface of flights of stairways, ramps, stepped aisles, and ramped aisles shall be located within 6 inches (152.4 mm) measured horizontally from the edge of the walking surface. Handrails projecting into the width of the walking surface shall comply with Section 1014.8.~~

~~**1014.8**~~)) **1014.9 Projections.** On ramps and on ramped aisles that are part of an accessible route, the clear width between handrails shall be 36 inches (914 mm) minimum. Projections into the required width of stepped and ramped aisles, flights of stairways and ramps at each side shall not exceed 4.5 inches (114 mm) at or below the handrail height. Projections into the required width shall not be limited above the minimum headroom height required in Section 1011.3. Projections due to intermediate handrails shall not constitute a reduction in the egress width. Where a pair of intermediate handrails are provided within the stairway width without a walking surface between the pair of intermediate handrails and the distance between the pair of intermediate handrails is greater than 6 inches (152 mm), the available egress width shall be reduced by the distance between the closest edges of each such intermediate pair of handrails that is greater than 6 inches (152 mm).

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 51-50-1015 Section 1015—Guards.

((~~**1015.2 Where required.** *Guards* shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, lofts in accordance with Section 420.14, aisles, stairs, ramps and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. *Guards* shall be provided at the perimeter of the occupied portions of an occupied roof. *Guards* shall be adequate in strength and attachment in accordance with Section 1607.9.~~

~~EXCEPTION:~~ ~~*Guards* are not required for the following locations:~~
~~1. On the loading side of loading docks or piers.~~
~~2. On the audience side of stages and raised platforms, including stairs leading up to the stage and raised platforms.~~
~~3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.~~
~~4. At vertical openings in the performance area of stages and platforms.~~
~~5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.~~
~~6. Along vehicle service pits not accessible to the public.~~
~~7. In assembly seating areas at cross aisles in accordance with Section 1030.17.2.~~
~~8. On the loading side of station platforms on fixed guideway transit or passenger rail stations.~~
~~9. Portions of an occupied roof located less than 30 inches measured vertically to adjacent unoccupied roof areas when approved guards are present at the perimeter of the roof.~~
~~10. At an occupied portion of an occupied roof where a barrier approved by the building official is provided.~~))

1015.3 Height. Required guards shall be not less than 42 inches (1067 mm) high, measured vertically as follows:

1. From the adjacent walking surfaces.

2. On *stairways* and stepped *aisles*, from the line connecting the leading edges of the tread nosings.

3. On *ramps* and ramped *aisles*, from the ramp surface at the *guard*.

EXCEPTIONS:
1. For occupancies in Group R-3 not more than three stories above grade in height and within individual *dwelling units* in occupancies in Group R-2 not more than three stories above grade in height with separate *means of egress*, required *guards* shall be not less than 36 inches (914 mm) in height measured vertically above the adjacent walking surfaces.
2. For occupancies in Group R-3, and within individual *dwelling units* in occupancies in Group R-2, *guards* on the open sides of *stairs* shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
3. For occupancies in Group R-3, and within individual *dwelling units* in occupancies in Group R-2, where the top of the *guard* serves as a *handrail* on the open sides of *stairs*, the top of the *guard* shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
4. In areas with ceiling heights of 7 feet (2134 mm) or less in *lofts* constructed in accordance with Section 420.14, *guards* shall not be less than 36 inches (914 mm) in height or one-half of the clear height from the *loft* floor to the *loft* ceiling, whichever is less.
5. The *guard* height in assembly seating areas shall comply with Section 1030.17 as applicable.
6. Along *alternating tread devices* and ships ladders, *guards* where the top rail serves as a *handrail* shall have height not less than 30 inches (762 mm) and not more than 34 inches (864 mm), measured vertically from the leading edge of the device tread nosing.
7. In Group F occupancies where *exit access stairways* serve fewer than three stories and such *stairways* are not open to the public, and where the top of the *guard* also serves as a *handrail*, the top of the *guard* shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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~~)) **1101.2.2 (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~~)) 1101.2.3 (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~~)) 1101.2.4 (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~~)) 1101.2.5 (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~~)) 1101.2.6 (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~~)) 1101.2.7 (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.

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 51-50-1106 Section 1106—Parking and passenger loading facilities.

1106.3.1 Parking for other than residents. In parking facilities serving Groups R-2, R-3, and R-4 occupancies, where parking spaces are provided for persons other than residents, parking for such spaces shall be provided in accordance with Table 1106.22.

1106.7 Location. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance. In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility. Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. Wherever practical, the accessible route shall not cross lanes of vehicular traffic. Where crossing traffic lanes is necessary, the route shall be designated and marked as a crosswalk.

EXCEPTION: 1. In multilevel parking structures, van accessible parking spaces are permitted on one level.
2. Accessible parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee and user convenience.

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 51-50-1107 Section 1107—Motor vehicle related facilities.

1107.2 Electrical vehicle charging stations. Electrical vehicle charging stations shall ((~~comply with Sections 1107.2.1 and 1107.2.2~~)) be provided in accordance with Section 429.4.

EXCEPTION: Electrical vehicle charging stations ((~~provided to serve Group R-3 occupancies~~)) used exclusively by buses, trucks, other delivery vehicles, law enforcement vehicles and motor pools are not required to comply with this section.

((~~**1107.2.1 Number of accessible vehicle spaces.** See Section 429.4.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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 1108, in toilet rooms or bathrooms serving accessible units, water closets designed for assisted toileting shall be permitted to comply with Section 1110.2.2.~~
~~8. Where permitted in Section 1108, in bathrooms serving accessible units, showers designed for assisted bathing shall be permitted to comply with Section 1110.2.3.~~
~~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**~~**))** **1110.7.1 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 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-1208 Section 1208—Interior space dimensions.

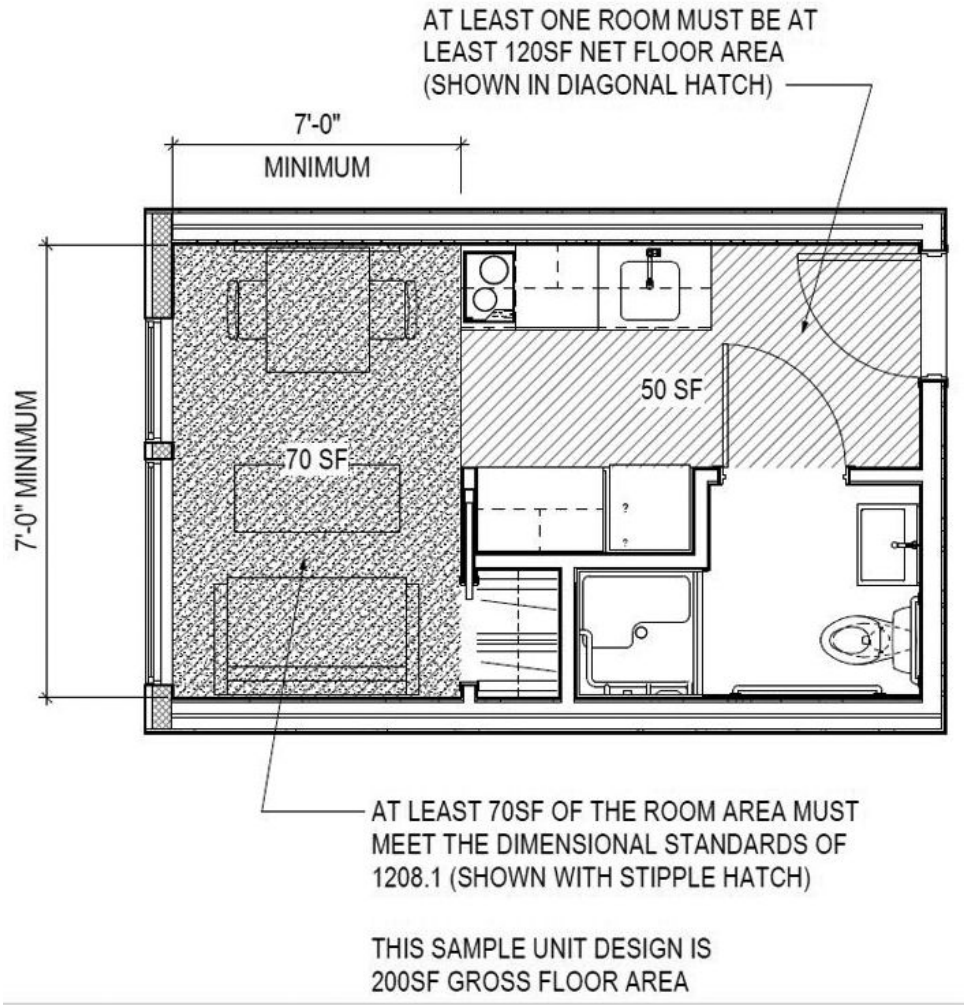
1208.1 Minimum room widths. Habitable spaces, other than a kitchen, shall be not less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a clear passageway of not less than 30 inches (762 mm) between counter fronts and appliances or counter fronts and walls.

1208.3 Dwelling unit size. ((~~Dwelling units shall have a minimum of 190 square feet (17.7 m^2) of habitable space.~~)) Not adopted.

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 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.

Figure 1208.4



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.~~)) Not adopted.

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 51-50-1402 Section 1402—Performance requirements.

1402.2 Weather protection. ((~~Exterior walls shall provide the building~~)) Building shall be provided with a weather-resistant *exterior wall* ((~~envelope~~)) *assembly*. ((~~The exterior wall envelope shall include flashing as described in Section 1404.4.~~)) The *exterior wall* ((~~envelope~~)) *assembly* shall be designed and constructed in such a manner as to prevent the accumulation of water within the *exterior wall assembly* by providing a ((~~water-resistant~~)) *water-resitive barrier* behind the exterior *veneer*, as described in Section 1403.2, and a means for draining water that enters the assembly to the exterior. An air space cavity is not required under the exterior cladding for an exterior wall clad with lapped or panel siding made of plywood, engineered wood, hardboard, or fiber cement, where permitted by manufacturers installation instructions. Protection against condensation in the exterior wall assembly shall be provided in accordance with Section 1404.3.

EXCEPTIONS:
1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry walls designed in accordance with Chapters 19 and 21, respectively.
2. Compliance with the requirements for a means of drainage, and the requirements of Sections 1403.2 and 1404.4, shall not be required for an exterior wall envelope that has been demonstrated through testing to resist wind-driven rain, including joints, penetrations and intersections with dissimilar materials, in accordance with ASTM E 331 under the following conditions:
The *exterior wall* design shall be considered to resist wind-driven rain where the results of testing, in accordance with ASTM E331, indicate that water did not penetrate control joints in the exterior wall, joints at the perimeter of openings or intersections of terminations with dissimilar materials.
2.1 Exterior wall envelope test assemblies shall include not fewer than one opening, one control joint, one wall/eave interface and one wall sill. All tested openings and penetrations shall be representative of the intended end-use configuration.
2.2 Exterior wall envelope test assemblies shall be not less than 4 feet by 8 feet (1219 mm by 2438 mm) in size.
2.3 Exterior wall envelope assemblies shall be tested at a minimum differential pressure of 6.24 pounds per square foot (psf) (0.297 kN/m^2).
2.4 Exterior wall envelope assemblies shall be subjected to a minimum test exposure duration of 2 hours. ((~~The exterior wall envelope design shall be considered to resist wind-driven rain where the results of testing indicate that water did not penetrate control joints in the exterior wall envelope, joints at the perimeter of openings or intersections of terminations with dissimilar materials.~~))
3. Exterior insulation and finish systems (EIFS) complying with Section 1407.4.1.

NEW SECTION

WAC 51-50-1603 Section 1603—Construction documents.

1603.1.3 Roof snow load data. The ground snow *load*, *Pg*, shall be indicated. In areas where the ground snow *load*, *Pg*, exceeds 15 pounds per square foot (psf) (0.72 kN/m^2), the following additional information shall also be provided, regardless of whether snow *loads* govern the design of the roof:

1. Flat-roof snow *load*, *pf*.
2. Snow exposure factor, *Ce*.
3. *Risk category*.
4. Thermal factor, *Ct*.
5. Slope factor(s), *Cs*.
6. Drift surcharge load(s), *pd*, where the sum of *pd* and *pf* exceeds 30 psf (1.44 kN/m^2).
7. Width of snow drift(s), *w*.
8. Winter wind parameter for snow drift, *W2*.
9. Site elevation above sea level and mapped elevation from the ASCE 7 Hazards Tool or equivalent Geodatabase.

1603.1.5.1 Nonstructural components. Construction documents shall indicate if structural support and anchoring documentation for nonstructural components is part of the design submittal or a deferred submittal. The construction documents for nonstructural components shall at a minimum identify the following:

1. All nonstructural components required by ASCE 7 Section 13.1.3 to have an importance factor of *ip*, 1.5.

2. All mechanical equipment, fire sprinkler equipment, electrical equipment, and other nonstructural components required by ASCE 7 Section 13.1.3 item 1 to be operational following a seismic event that require designated seismic systems per ASCE 7 Section 13.2.2 and special inspections per Section 1705.13.4.

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 51-50-1604 ((~~Reserved.~~)) General design requirements.

Table 1604.5
Risk Category of Buildings and Other Structures

Risk Category	Nature of Occupancy
I	(no change)
II	(no change)
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure including, but not limited to: • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of the public assembly spaces of greater than 2,500. • Buildings and other structures containing Group E or Group I-4 occupancies or combination thereof, with an occupant load greater than 250. • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • Group I-2, Condition 1 occupancies with 50 or more care recipients. • Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities. • Group I-3, Condition 1 occupancies. • Any other occupancy with an occupant load greater than 5,000.[a] • Power-generating stations, with individual power units rated 75 MW_{AC}(megawatts, alternating current) or greater, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: • Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the *International Fire Code*; and • Are sufficient to pose a threat to the public if released.[b]
IV	Buildings and other structures designated as essential facilities, and buildings where loss of function represents a substantial hazard to occupants or users including, but not limited to: • Group I-2, Condition 2 occupancies having emergency surgery or emergency treatment facilities. • Ambulatory care facilities having emergency surgery or emergency treatment facilities. • Group I-3 occupancies other than Condition 1.

Risk Category	Nature of Occupancy
	• Fire, rescue, ambulance, and police stations and emergency vehicle garages. • Designated earthquake, hurricane, or other emergency shelters. • Designated emergency preparedness, communications and operations centers, and other facilities required for emergency response. • Public utility facilities providing power generation, potable water treatment, or wastewater treatment. • Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures. • Buildings and other structures containing quantities of highly toxic materials that: • Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the *International Fire Code*; and • Are sufficient to pose a threat to the public if released.[b] • Aviation control towers, air traffic control centers and emergency aircraft hangars. • Buildings and other structures having critical national defense functions. • Water storage facilities and pump structures required to maintain water pressure for fire suppression.

1604.5.1 Multiple occupancies. Where a building or structure is occupied by two or more occupancies not included in the same *risk category*, it shall be assigned the classification of the highest *risk category* corresponding to the various occupancies. Where buildings or structures have two or more portions that are structurally separated, each portion shall be separately classified. Where a separated portion of a building or structure provides required access to, required egress from or shares *designated seismic systems*, *emergency power systems*, or emergency and egress lighting systems with another portion having a higher *risk category*, or provides required electrical, communications, mechanical, plumbing, or conveying support to another portion assigned *Risk Category IV*, both portions shall be assigned to the higher *risk category*.

NEW SECTION

WAC 51-50-1608 Section 1608—Snow loads.

1608.1 General. Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall be not less than that determined by Section 1607.

EXCEPTIONS: 1. Temporary structures complying with Section 3103.6.1.1.
2. For risk category I and II buildings located in sites west of the Cascade Mountain Range, where site elevation is less than 700 feet and the flat roof snow load, Pf, is 35 PSF or less, snow drift requirements of ASCE 7 Sections 7.7 - Snow Drift on Low Roofs (Aerodynamic Shade) and 7.8 - Roof Projects and Parapets shall not be required.

1608.2 Ground snow loads. The ground snow *loads* to be used in determining the design snow *loads* for roofs shall be determined in accordance with the reliability-targeted (strength-based) ground snow load values in Chapter 7 of ASCE 7 or Figures 1608.2(1) through 1608.2(4) for the contiguous United States and Table 1608.2 for Alaska. Site-specific case studies shall be determined in accordance with Chapter 7 of ASCE 7 and shall be *approved* by the *building official*. Snow loads are zero for Hawaii, except in mountainous regions as *approved* by the *building official*. Substantiating data for ground snow load shall be submitted to the *building official* where site elevation above sea level and the mapped elevation from the ASCE 7 Hazards Tool, or the

equivalent Geodatabase used, differ by more the maximum of both of the following:

1. 10% of the site elevation above sea level.
2. 300 feet.

EXCEPTION: Elevation differences of less than 100 feet.

AMENDATORY SECTION (Amending WSR 13-04-067, filed 2/1/13, effective 7/1/13)

WAC 51-50-1609 Section 1609—((~~Reserved~~)) Wind loads.

1609.3 Basic wind speed. The *basic wind speed*, V, in mph, for the determination of the wind *loads* shall be determined by Figures 1609.3(1) through 1609.3(4).

The *basic wind speed*, V, for use in the design of *Risk Category I buildings* and *structures* shall be obtained from Figure 1609.3(1).

The *basic wind speed*, V, for use in the design of *Risk Category II buildings* and *structures* shall be obtained from Figure 1609.3(2).

The *basic wind speed*, V, for use in the design of *Risk Category III buildings* and *structures* shall be obtained from Figure 1609.3(3).

The special wind region in Washington state shall be determined as shown in Figure 1609.3(5). The basic wind speed, V, in the special wind region shall be obtained from Table 1609.3.2.

Figure 1609.3(5)
Special Wind Region Boundaries in Washington State

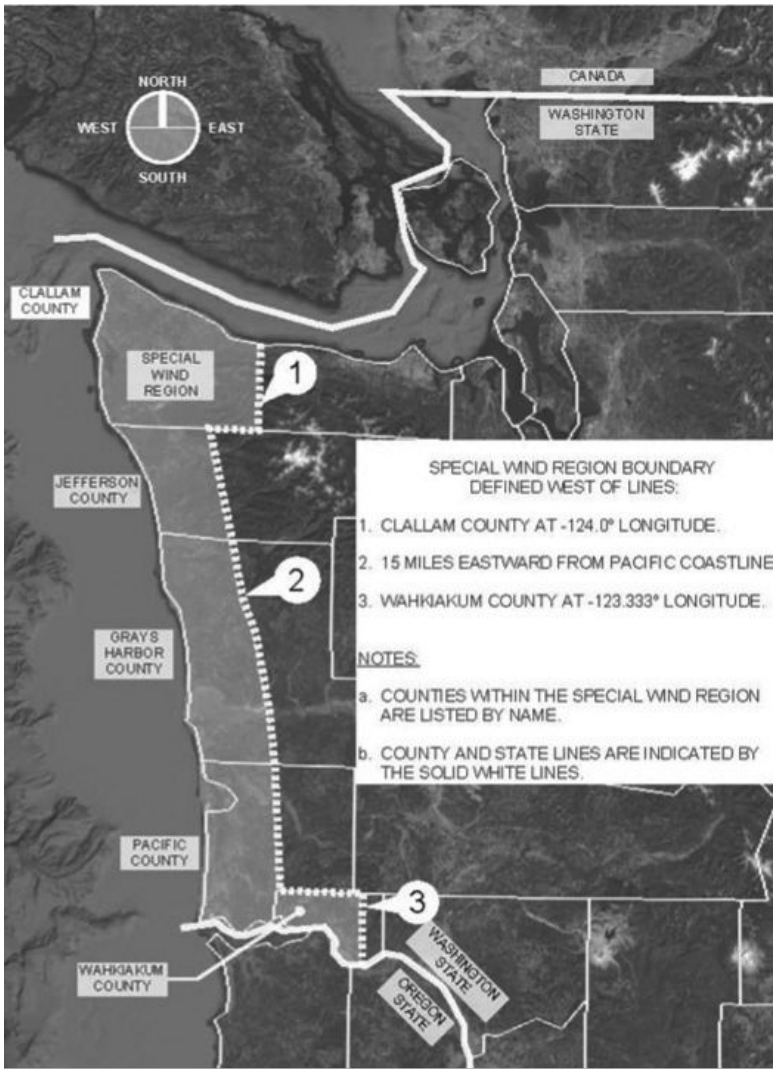


Table 1609.3.2
Basic Wind Speeds in the Washington State Special Wind Region

Risk Category (MRI)	Basic Wind Speed V mph (m/sec)
I (100 years)	115 (51)
II (700 years)	120 (54)
III (1700 years)	130 (58)
IV (3000 years)	140 (63)

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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

((~~1613.4~~)) 1613.7 Amendments to ASCE 7. The provisions of Section ((~~1613.4~~)) 1613.7 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~~)) 1613.7.1 through 1613.7.2.

((~~1613.4.1~~)) 1613.7.1 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, Ω_o 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, ρ, 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**~~

Seismic Design Category	Structural Characteristics	Equivalent Lateral Force Procedure, Section 12.8[a]	Modal Response Spectrum Analysis, Section 12.9.1, or Linear Response History Analysis, Section 12.9.2	Nonlinear Response History Procedures, Chapter 16[a]
B, C	All structures	P	P	P
D, E, F	Risk Category I or II buildings not exceeding two stories above the base	P	P	P
	Structures of light frame construction	P	P	P
	Structures with no structural irregularities and not exceeding 160 ft in structural height	P	P	P
	Structures exceeding 160 ft in structural height with no structural irregularities and with $T < 3.5T_S$	P	P	P
	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	P	P	P
	All other structures ≤ 240 ft in height	NP	P	P
	All structures > 240 ft in height	NP	NP	P[c]

a 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 spatially 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 response 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, $\bar{v}_s$, 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), $w \geq 40\%$, 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 $\bar{v}_s$.

Table 20.6.2-1 Site Classification

Site Class	$\bar{v}_s$ 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

Site Class	$\bar{v}_s$ Calculated Using Measured or Estimated Shear Wave Velocity Profile (ft/s)
E. Very Loose Sand or Soft Clay	≤ 500

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 accelerations. 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_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 51-50-1615 Tsunami loads.

1615.1 General. The design and construction of Risk Category III and IV buildings and structures located in the Tsunami Design Zones shall be in accordance with Chapter 6 of ASCE ((~~7-22~~)) 7, except as modified by this code. ((~~Wherever ASCE 7 is referenced herein, it shall refer~~

~~to ASCE 7-22, within the extent of ASCE 7 Chapter 6 and WAC 51-50-1615.~~))

EXCEPTION: *Temporary structures* complying with Section 3103.6.1.6.

USER NOTE: The intent of the Washington state amendments to ASCE 7 Chapter 6 (Tsunami Loads and Effects) is to require use of the Washington Tsunami Design Zone maps to determine inundation limits, i.e., when a site is within a tsunami design zone. The Washington state department of natural resources has parameters for tsunami inundation depth and flow velocity available for all of Washington's coastal waters and tidally influenced riverine systems (WA-TDZ). These parameters are required to be used in lieu of ASCE Tsunami Design Geodatabase, and as a basis for comparison in the probabilistic tsunami hazard analysis in this chapter.

1615.2 Modifications to ASCE 7. The text of Chapter 6 of ASCE 7 shall be modified as indicated in this section.

1615.2.1 ASCE 7 Section 6.1.1. Replace the third paragraph of ASCE 7 Section 6.1.1 with the following and remove the associated exception:

The Tsunami Design Zone shall be determined using the Washington Tsunami Design Zone maps (WA-TDZ). The WA-TDZ maps are available at https://www.dnr.wa.gov/wa-tdz.

1615.2.2 ASCE 7 Section 6.1.1. Add new fifth paragraph and user note to ASCE 7 Section 6.1.1 to read as follows:

Whenever a Tsunami Design Zone or Fig. 6.1-1 is referenced in ASCE 7 Chapter 6, the WA-TDZ maps shall be used.

USER NOTE: Tsunami design zone and design parameters may be obtained from the Washington state department of natural resources. See https://www.dnr.wa.gov/wa-tdz.

1615.2.3 ASCE 7 Section 6.2. Modify ASCE 7 Section 6.2 definitions to read as follows:

ASCE TSUNAMI DESIGN GEODATABASE: Not Adopted.

USER NOTE: The ASCE tsunami design geodatabase is not adopted for design purposes in Washington state.

MAXIMUM CONSIDERED TSUNAMI: A probabilistic tsunami having a two percent probability of being exceeded in a 50-year period or a 2,475-year mean recurrence, or a deterministic assessment considering the maximum tsunami that can reasonably be expected to affect a site.

TSUNAMI DESIGN ZONE MAP: The Washington Tsunami Design Zone maps (WA-TDZ) designating the ((~~potential~~)) design horizontal inundation limit of the Maximum Considered Tsunami found at www.dnr.wa.gov/wa-tdz.

1615.2.4 ASCE 7 Section 6.2. Add new definitions to ASCE 7 Section 6.2 to read as follows:

WASHINGTON TSUNAMI DESIGN ZONE MAP (WA-TDZ): The Washington department of natural resources maps of potential tsunami inundation limits for the Maximum Considered Tsunami, designated as follows:

Columbia River	DOGAMI SP-51 (L1 scenario) adopted by WA DNR
Outer Coast and Strait area	MS 2022-01
Port Townsend	MS 2018-03 (partially superseded by MS 2022-01)
Puget Sound	MS 2021-01 (revised 2022)
San Juan Islands	MS 2016-01 (partially superseded on its eastern edge by MS 2021-01)
Southern Washington Coast	MS 2018-01

The Washington state department of natural resources geodatabase of design parameters for tsunami inundation depth, flow velocity, off-

shore tsunami amplitude, predominant period, and tsunami design zone maps for a maximum considered tsunami is available at the Washington TDZ website (https://www.dnr.wa.gov/wa-tdz).

1615.2.5 ASCE 7 Section 6.5.1. ((~~Add new second paragraph to~~)) Replace the first paragraph and modify the second paragraph of ASCE 7 Section 6.5.1 to read as follows:

6.5.1 Tsunami Risk Category II and III buildings and other structures. The Maximum Considered Tsunami inundation depth and tsunami flow velocity characteristics at a Tsunami Risk Category II or III building or other structure shall be determined by the WA-TDZ maps. Those parameters shall be used as the Maximum Considered Tsunami inundation depth and tsunami flow velocity characteristics in lieu of the Energy Grade Line Analysis in Section 6.6.

The site-specific Probabilistic Tsunami Hazard Analysis (PTHA) in Section 6.7 shall be permitted as an alternate to the values found on the WA-TDZ maps. Site-specific velocities determined by PTHA shall be subject to the limitation in Section 6.7.6.8.

((~~**1615.2.6 ASCE 7 Section 6.5.1.1.** Modify the first paragraph of ASCE 7 Section 6.5.1.1 to read as follows:~~

~~**6.5.1.1 Runup evaluation for areas where no map values are given.** For Tsunami Risk Category II and III buildings and other structures where no mapped inundation limit is shown in the Tsunami Design Zone map, the ratio of tsunami runup elevation above Mean High Water Level to Offshore Tsunami Amplitude, R/HT, shall be permitted to be determined using the surf similarity parameter ξ100, according to Eqs. (6.5-2a, b, c, d, or e) and Fig. 6.5-1.~~))

1615.2.7 ASCE 7 Section 6.5.2. Modify the paragraph and the exception, to read as follows:

6.5.2 Tsunami Risk Category IV buildings and other structures. A site-specific Probabilistic Tsunami Hazard Analysis (PTHA) shall be performed for Tsunami Risk Category IV buildings and other structures. Site-specific velocities determined by site-specific PTHA determined to be less than the design flow velocities determined from the WA-TDZ maps shall be subject to the limitation in Section 6.7.6.8. Site-specific velocities determined to be greater than the WA-TDZ map velocities shall be used.

EXCEPTION: For structures other than Tsunami Vertical Evacuation Refuge Structures, a site-specific Probabilistic Tsunami Hazard Analysis need not be performed where the inundation depth determined from the WA-TDZ maps is determined to be less than 12 ft (3.66 m) at any point within the location of the Tsunami Risk Category IV structure.

1615.2.8 ASCE 7 Section 6.6.1. Replace ASCE 7 Section 6.6.1 to read as follows:

6.6.1 Maximum inundation depth and flow velocities. The maximum inundation depths and flow velocities associated with the stages of tsunami flooding are determined by the WA-TDZ maps. Flow velocity for design purposes shall not be taken as less than 10 ft/s (3.0 m/s) and need not be taken as greater than the lesser of $1.5(gh_{max})^{1/2}$ and 50 ft/s (15.2 m/s).

1615.2.9 ASCE 7 Section 6.7. Replace ASCE 7 Section 6.7 with the following and add a user note:

When required by Section 6.5, the inundation depths and flow velocities shall be determined by site-specific inundation studies complying with the requirements of this section. Site-specific analyses shall use an integrated generation, propagation, and inundation model

that replicates the given offshore tsunami waveform amplitude and period from the seismic sources given in Section 6.7.2.

USER NOTE: WA-TDZ maps are based on an integrated generation, propagation, and inundation model replicating waveforms from the seismic sources specific to Washington state. See https://www.dnr.wa.gov/wa-tdz.

1615.2.10 ASCE 7 Table 6.7-2. Modify ASCE 7 Table 6.7-2 to read as follows:

Table 6.7-2 Maximum Moment Magnitude

Subduction Zone	Moment Magnitude M_{Wmax}
Alaskan-Aleutian	9.2
Cascadia	9.0
Chile-Peru	9.5
Izu-Bonin-Mariana	9.0
Kamchatka-Kurile and Japan Trench	9.4

1615.2.11 ASCE 7 Section 6.7.5.1. Modify ASCE 7 Section 6.7.5.1 Item 4, Item 5, and Item 6 to read as follows:

6.7.5.1 Offshore tsunami amplitude for distant seismic sources. Offshore tsunami amplitude shall be probabilistically determined in accordance with the following:

4. The extent of offshore tsunami amplitude points considered for the site shall include the following:

(a) For outer coast sites, the extent shall include points within at least 40 mi (64.4 km) but not exceeding 50 mi (80.5 km) of projected length along the coastline, centered on the site within a tolerance of plus or minus 6 mi (9.7 km);

(b) Reserved;

(c) For sites within bays or inland waterways (such as the Strait of Juan de Fuca), the designated center of the computed offshore tsunami amplitude points shall be taken offshore of the mouth of the bay or waterway centered in accordance with criteria (a) above;

(d) For island locations where the projected width of the island is less than 40 mi (64.4 km), it shall be permitted to consider the extent of offshore tsunami amplitude points corresponding to the projected width of the island. Shorter extents of offshore tsunami amplitude points shall be permitted for island locations, but shall not be less than 10 mi (16.1 km);

(e) In addition to the above, the tsunami source development and inundation modeling are subject to an independent peer review by a tsunami modeler approved by the Authority Having Jurisdiction, who shall present a written report to the Authority Having Jurisdiction as to the hazard consistency of the modeling with the requirements of Section 6.7.

5. The mean value of the computed offshore tsunami wave amplitudes shall be not less than 100 percent of the mean value for the coinciding offshore tsunami amplitude data given by the WA-TDZ maps.

6. The individual values of the computed offshore tsunami wave amplitude shall be not less than 80 percent of the coinciding offshore tsunami amplitude values given by the WA-TDZ maps.

1615.2.12 ASCE 7 Section 6.7.5.3. Modify ASCE 7 Section ((~~6.7.5.3.1~~)) 6.7.5.3 Items 1(b) and (c) to read as follows:

(b) The mean value of the computed offshore tsunami amplitudes is at least 85 percent of the mean value for the coinciding offshore tsunami amplitude data of the WA-TDZ maps.

(c) The values of the computed offshore tsunami wave amplitude are not less than 75 percent of the coinciding offshore tsunami amplitude values of the WA-TDZ maps.

1615.2.13 ASCE 7 Section 6.7.6.2. Modify ASCE 7 Section 6.7.6.2 and add a user note to read as follows:

6.7.6.2 Seismic subsidence before tsunami arrival. Where the seismic source is a local earthquake event, the Maximum Considered Tsunami inundation shall be determined for an overall elevation subsidence value directly computed for the seismic source mechanism.

USER NOTE: WA-TDZ maps include computed subsidence and uplift (where applicable) in the inundation results. See https://www.dnr.wa.gov/watdz.

1615.2.14 ASCE 7 Figure 6.7-3. Remove Figure 6.7-3 and the associated note.

1615.2.15 ASCE 7 Section 6.8.9. Modify the first sentence of ASCE 7 Section 6.8.9 to read as follows:

6.8.9 Seismic effects on the foundations preceding maximum considered tsunami. Where designated in the Tsunami Design Zone map as a site subject to a tsunami from a local earthquake, the structure shall be designed for the preceding coseismic effects.

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 51-50-1705 ((~~Section 1705—Required special inspections and tests.~~)) Reserved.

((~~**1705.13.6 Plumbing, mechanical and electrical components.** Periodic special inspection of plumbing, mechanical and electrical components shall be required for the following:~~

~~1. Anchorage of electrical equipment for emergency and standby power systems in structures assigned to Seismic Design Category C, D, E or F.~~

~~2. Anchorage of other electrical equipment in structures assigned to Seismic Design Category E or F.~~

~~3. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F.~~

~~4. Installation and anchorage of ductwork designed to carry hazardous materials in structures assigned to Seismic Design Category C, D, E or F.~~

~~5. Installation and anchorage of vibration isolation systems in structures assigned to Seismic Design Category C, D, E or F where the approved construction documents require a nominal clearance of .25 inch (6.4 mm) or less between the equipment support frame and restraint.~~

~~6. Installation of mechanical and electrical equipment, including ductwork, piping systems and their structural supports, where automatic fire sprinkler systems are installed in Risk Category IV structures~~

~~assigned to Seismic Design Category C, D, E or F to verify one of the following:~~

~~6.1. Minimum clearances have been provided as required by Section 13.2.3 ASCE/SEI 7.~~

~~6.2. A nominal clearance of not less than 3 inches (76 mm) has been provided between automatic sprinkler system drops and sprigs and: Structural members not used collectively or independently to support the sprinklers; equipment attached to the building structure; and other systems' piping.~~

~~Where flexible sprinkler hose fittings are used, special inspection of minimum clearances is not required.~~))

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 51-50-1901 ((~~Reserved.~~)) General.

1901.2 Plain and reinforced concrete. Structural concrete shall be designed and constructed in accordance with the requirements of this chapter and ACI 318 as supplemented and amended in Section 1905 of this code.

AMENDATORY SECTION (Amending 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 51-50-1905 ((~~Reserved.~~)) Supplements and modifications to ACI 318.

1905.1 General. The text of ACI 318 shall be supplemented as indicated in Sections 1905.2 through 1905.7 and modified as indicated in Sections 1905.8 and 1905.9.

1905.8 Amendments to ACI 318. The text of ACI 318 shall be permitted to be amended as indicated in Sections 1905.8.1 through 1905.8.5.

1905.8.1 ACI 318 Section 2.2. Amend ACI 318 Section 2.2 as follows:

E_h = Effect of horizontal earthquake-induced forces.

h_n = Structural height from the base to the highest level of the seismic force-resisting system of the structure, ft, where the base is the level at which the horizontal earthquake ground motions are considered to be imparted to the structure.

V_{uEh} = Factored shear force from load combinations including primary load E, considering only horizontal earthquake load effect E_h.

Ω_v = Overstrength factor to account for wall flexural overstrength at the wall critical section.

1905.8.2 ACI 318 Section 18.10.3. Amend ACI 318 Section 18.10.3 as follows:

18.10.3 Design forces.

18.10.3.1 Design shear forces for horizontal wall segments, including coupling beams, shall be in accordance with 18.10.7.

18.10.3.1.1 Not adopted.

18.10.3.1.2 Not adopted.

Table 18.10.3.1.2 Not adopted.

18.10.3.1.3 Not adopted.

18.10.3.2 Design shear forces for wall piers shall be in accordance with 18.10.8.

18.10.3.3 Design shear forces for parts of walls not covered by 18.10.3.1 or 18.10.3.2 shall be in accordance with the requirements of 18.10.3.3.1 through 18.10.3.3.5.

18.10.3.3.1 If the wall design actions are determined in accordance with nonlinear dynamic analysis procedures satisfying Appendix A, design shear forces shall be as determined in Appendix A.

18.10.3.3.2 If V_{uEh} is determined by linear analysis procedures of the general building code, it shall be amplified by the product $\Omega_v\omega_v$, where W_v and w_v are defined in 18.10.3.3.3 through 18.10.3.3.5.

18.10.3.3.3 Ω_v and ω_v shall be in accordance with Table 18.10.3.3.3. Alternatively, it shall be permitted to calculate $\Omega_v = M_{pr}/M_u$ at the critical section for flexure, where M_{pr} is calculated for axial force that includes the effects of E and the expected gravity loads, with expected gravity loads in accordance with ASCE 7, Section 16.3.2.

Table 18.10.3.3.3 Factors W_v and w_v

Condition	Ω_v	Ω_v
$h_{wcs}/l_w \le 1.0$	1.0	1.0
$1.0 < h_{wsc}/l_w < 2.0$	Linear interpolation permitted between 1.0 and 1.5	
$h_{wcs}/l_w \ge 2.0$	1.5	$0.8 + 0.09h_n^{1/3}$

18.10.3.3.4 If the general building code includes provisions to account for overstrength of the seismic-force-resisting system, it shall be permitted to take $\Omega_v\Omega_v$ equal to Ω_0.

18.10.3.3.5 If $\Omega_v\omega_v = \Omega_0$, it shall be permitted to take the redundancy factor contained in the general building code equal to 1.0 for determination of V_{uEh}.

1905.8.3 ACI 318 Section 18.10.4. Amend ACI 318 Section 18.10.4 as follows:

18.10.4.1 V_n shall be calculated by

$V_n = (\alpha_c\lambda\sqrt{f'_c} + \rho_t f_{yt})A_{cv}$ (18.10.4.1)

where:

$\alpha_c = 3$ for $h_w/\ell_w \le 1.5$

$\alpha_c = 2$ for $h_w/\ell_w \ge 2.0$

It shall be permitted to linearly interpolate the value of α_c between 3 and 2 for $1.5 < h_w/\ell_w < 2.0$. The value of f'_c used in Equation 18.10.4.1 and in 18.10.4.4 and 18.10.4.5 shall not exceed 12,000 psi.

18.10.4.6 Not adopted.

1905.8.4 ACI 318 Section 18.10.6. Amend ACI 318 Section 18.10.6 as follows:

18.10.6.4 If special boundary elements are required by 18.10.6.2 or 18.10.6.3, (a) through (k) shall be satisfied:

<18.10.6.4 (a) through (e) unchanged>

(f) Spacing h_x between laterally supported longitudinal bars around the perimeter of the boundary element shall not exceed the

lesser of 14 in. and (2/3)b. Lateral support shall be provided by a seismic hook of a crosstie or corner of a hoop. Unless (i) or (ii) is satisfied, the length of the hoop legs shall not exceed $2b_c$, and adjacent hoops shall overlap at least the lesser of 6 in. and (2/3)b:

$$b \geq \sqrt{l_w c/40}$$

(i) ——— and $\delta_u/h_{wcs} \leq 0.012$

(ii) A flange is provided within depth c with a total width at least $2b_w$ and a thickness t_f at least $b_w/2$

<18.10.6.4 (g) through (h) unchanged>

(i) For a distance above and below the critical section specified in 18.10.6.2(b), web vertical reinforcement shall have lateral support provided by the corner of a hoop or by a crosstie with seismic hooks at each end. Hoops and crossties shall have a vertical spacing not to exceed 12 in. and diameter satisfying 25.7.2.2. Alternatively, it shall be permitted to use crossties with a 90-degree hook at the other end, with the crossties alternated end for end along the length and height of the web if vertical spacing of crossties does not exceed 9 inches.

<18.10.6.4 (j) through (k) unchanged>

18.10.6.5 Where special boundary elements are not required by Section 18.10.6.2 or 18.10.6.3, (a) and (b) shall be satisfied:

(a) Except where V_u in the plane of the wall is less than $\lambda\sqrt{f'_c}A_{cv}$, horizontal reinforcement terminating at the edges of structural walls without boundary elements shall have a standard hook engaging the edge reinforcement or the edge reinforcement shall be enclosed in U-stirrups having the same size and spacing as, and spliced to, the horizontal reinforcement.

(b) If the maximum longitudinal reinforcement ratio at the wall boundary exceeds $400/f_y$, boundary transverse reinforcement shall satisfy 18.7.5.2(a) through (e) over the length calculated in accordance with 18.10.6.4(a). At corners where a wall web and flange intersect, boundary transverse reinforcement shall extend into the web and the flange at least 12 in. The vertical spacing of transverse reinforcement at the wall boundary shall be in accordance with Table 18.10.6.5(b).

1905.8.5 ACI 318 Section 21.2.4.1. Amend ACI 318 Section 21.2.4.1 as follows:

21.2.4.1 For any member designed to resist E, except for walls where $\Omega_v \geq 1.5$, ϕ for shear shall be 0.60 if the nominal shear strength of the member is less than the shear corresponding to the development of the nominal moment strength of the member. The nominal moment strength shall be the maximum value calculated considering factored axial loads from load combinations that include E.

1905.9 Amendments to ACI 318. The text of ACI 318 shall be permitted to be amended as indicated in Sections 1905.9.1 through 1905.9.7.

1905.9.1 ACI 318 Section 11.4.1.5. Amend ACI 318 Chapter 11 to include the following section:

11.4.1.5 Design of basement walls to resist out-of-plane lateral earth pressure shall be in accordance with the applicable provisions of Chapter 13.

1905.9.2 ACI 318 Section 13.1.1. Amend ACI 318 Section 13.1.1 as follows:

13.1.1 This chapter shall apply to the design of nonprestressed and prestressed foundations, including shallow foundations (a) through (e), deep foundations (f) through (i), cantilever retaining walls (j) and (k), and basement walls (l):

(a) Strip footings.
(b) Isolated footings.
(c) Combined footings.
(d) Mat foundations.
(e) Grade beams.
(f) Pile caps.
(g) Piles.
(h) Drilled piers.
(i) Caissons.
(j) Cantilever retaining walls.
(k) Counterfort and buttressed cantilever retaining walls.
(l) Basement walls.

1905.9.3 ACI 318 Section 13.2.6.2. Amend ACI 318 Section 13.2.6.2 as follows:

13.2.6.2 For shallow foundation members continuously supported by soil and designed based on the assumption of rigid behavior of the shallow member, (a) and (b) shall be permitted:

(a) For one-way shear strength, calculate V_c as:

$$V_c = 2\ \lambda\sqrt{f'_c}b_w d \qquad \text{(Eq.13.2.6.2.a)}$$

(b) For two-way shear strength, the size effect factor, λ_s, specified in 22.6, shall be taken equal to 1.0.

1905.9.4 ACI 318 Section 13.3.6.1. Insert ACI 318 Section 13.3.6.1 as follows:

13.3.6.1 The stem of a cantilever retaining wall shall be designed as a one-way slab in accordance with the applicable provisions of Chapter 7.

13.3.6.1.1 It shall be permitted to calculate V_c for cantilever retaining walls as:

$$V_c = 2\lambda\sqrt{f'_c}b_w d$$

1905.9.5 ACI 318 Section 13.3.7. Insert ACI 318 Section 13.3.7 as follows:

13.3.7 Basement walls.

13.3.7.1 The design of basement walls to resist out-of-plane lateral earth pressure shall satisfy (a) through (d):

(a) Basement walls shall be designed as one-way slabs in accordance with the applicable provisions of Chapter 7 or as two-way slabs in accordance with the applicable provisions of Chapter 8.

(b) Basement walls shall be designed to resist hydrostatic pressure, if applicable.

(c) It shall be permitted to calculate the one-way shear strength of concrete as $V_c = 2\lambda\sqrt{f'_c}b_w d$

(d) Basement walls shall satisfy the applicable provisions of Chapter 18.

13.3.7.2 For loads other than out-of-plane lateral earth pressure, basement walls shall satisfy the applicable provisions of Chapter 11.

1905.9.6 ACI 318 Section 13.4.6.6. Insert ACI 318 Section 13.4.6.6 as follows:

13.4.6.6 For pile caps with piles spaced at 4 pile diameters or less, and for mat foundations with piles spaced at 5 pile diameters or less, (a) and (b) shall be permitted:

(a) For one-way shear strength, calculate V_c as:

$$V_c = 2\lambda\sqrt{f'_c}b_w d$$

(b) For two-way shear strength, calculate V_c as specified in 22.6, with the size effect factor, λ_s, taken equal to 1.0.

1905.9.7 ACI 318 Section 22.5.5.1.1. Amend ACI 318 Section 22.5.5.1.1 as follows:

22.5.5.1.1 V_c shall not be taken greater than $5\lambda\sqrt{f'_c}b_w d$. V_c need not be taken less than $\lambda\sqrt{f'_c}b_w d$ except in cases (a) or (b):

(a) Elements subjected to net axial tension.

(b) If Section 18.6.5.2 or 18.7.6.2.1 apply.

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 51-50-2303 Section 2303—Minimum standards and quality.

2303.1.1.3 Used solid-sawn lumber. Used solid-sawn dimensional lumber in good condition and devoid of areas of decay, not meeting the requirements of Section 2303.1.1, 2303.1.1.1, or 2303.1.1.2, that has a nominal thickness of 2 inches with a nominal width of 6 inches or less, shall be assumed to be spruce-pine-fir stud grade and shall have structural properties assigned in accordance with current adopted standards. All other dimensional lumber shall be assumed to be hem-fir No. 2 grade and shall have structural properties assigned in accordance with current adopted standards.

2303.1.4 Cross-laminated timber. *Cross-laminated timbers* shall be manufactured and identified in accordance with ANSI/APA PRG 320, except as modified by this code.

2303.1.4.1 Modifications to ANSI/APA PRG 320. The text of ANSI/APA PRG 320-19 Section 6.1.2 shall be modified as indicated in this section.

6.1.2 Sawn lumber laminations.

a. Lumber species - Lumber of any softwood species or species combinations recognized by American Lumber Standards Committee (ALSC) under PS 20 or Canadian Lumber Standards Accreditation Board (CLSAB) under CSA O141 with a minimum published specific gravity of 0.35, as published in the National Design Specification for Wood Construction (NDS) in the U.S. and CSA O86 in Canada, shall be permitted.

b. Lumber grades - The minimum grade of lumber in the longitudinal layers shall be visual grade No. 2. The minimum grade of lumber in the transverse layers shall be visual grade No. 3. Mechanical grades shall be permitted in accordance with ASTM D6570 provided that the design strength values required for analysis in 7.2 meet or exceed those of the minimum visual grades. Remanufactured lumber shall be considered as equivalent to solid-sawn lumber when qualified in accordance with Section 5.4 of ANSI A190.1 in the U.S. or SPS 1, 2, 4, or 6 in Canada. Proprietary lumber grades meeting or exceeding the mechanical properties of the lumber grades specified above shall be permitted for

use provided that they are qualified in accordance with the requirements of an approved agency.

Note 7: ASTM D5055 provides guidance for proprietary lumber grades used specifically in I-joist applications.

2303.6 Nails and staples. Nails and staples shall conform to requirements of ASTM F1667, including Supplement 1. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as follows: 80 kips per square inch (ksi) (551 MPa) for shank diameters larger than 0.177 inch (4.50 mm) but not larger than 0.254 inch (6.45 mm), 90 ksi (620 MPa) for shank diameters larger than 0.142 inch (3.61 mm) but not larger than 0.177 inch (4.50 mm) and 100 ksi (689 MPa) for shank diameters of not less than 0.099 inch (2.51 mm) but not larger than 0.142 inch (3.61 mm). Staples used for framing and sheathing connections shall have minimum average bending moments as follows: 3.6 in.-lbs (0.41 N-m) for No. 16 gage staples, 4.0 in.-lbs (0.45 N-m) for No. 15 gage staples, and 4.3 in.-lbs (0.49 N-m) for No. 14 gage staples. Staples allowable bending moments shall be listed on the construction documents.

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 51-50-2304 Section 2304—General construction requirements.

2304.10.1 Fire protection of connections. Connections used with *fire-resistance-rated* members and in *fire-resistance-rated* assemblies of Type IV-A, IV-B, or IV-C construction shall be protected for the time associated with the *fire-resistance rating*. Protection time shall be determined by one of the following:

1. Testing in accordance with Section 703.2 where the connection is part of the *fire-resistance* test.

2. Engineering analysis in accordance with the ANSI/AWC FDS or other approved method that demonstrates that the temperature rise at any portion of the connection is limited to an average temperature rise of 250°F (139°C), and a maximum temperature rise of 325°F (181°C), for a time corresponding to the required *fire-resistance* rating of the structural element being connected. For the purposes of this analysis, the connection includes connectors, fasteners, and portions of wood members included in the structural design of the connection.

2304.11.2.1 Exterior walls. *Exterior walls* shall be permitted to be *cross-laminated timber* not less than 3.5 inches (88 mm) in actual thickness meeting the requirements of Section 2303.1.4.

2304.11.2.2 Interior walls and partitions. Interior walls and partitions shall be of solid wood construction formed by not less than two layers of 1-inch (25 mm) matched boards or laminated construction 3.5 inches (88 mm) in actual thickness, or of 1-hour fire-resistance-rated construction.

2304.11.3.1 Cross-laminated timber floors. *Cross-laminated timber* shall be not less than 3.5 inches (88 mm) in actual thickness. *Cross-laminated timber* shall be continuous from support to support and mechanically fastened to one another. *Cross-laminated timber* shall be

permitted to be connected to walls without a shrinkage gap providing swelling or shrinking is considered in the design. Corbelling of masonry walls under the floor shall be permitted to be used.

2304.11.4.1 Cross-laminated timber roofs. *Cross-laminated timber* roofs shall be not less than 2.5 inches (63 mm) in actual thickness and shall be continuous from support to support and mechanically fastened to one another.

NEW SECTION

WAC 51-50-2308 Conventional light frame construction.

2308.6.1 Floor joists, roof rafters, and ceiling joists. Notches on framing ends shall not exceed one-fourth the member depth. Notches in the top or bottom of the member shall not exceed one-sixth the depth and shall not be located in the middle third of the span. A notch not more than one-third of the depth is permitted in the top of a rafter or ceiling joist not further from the face of the support than the depth of the member. Holes bored in members shall not be within 2 inches (51 mm) of the top or bottom of the member and the diameter of any such hole shall not exceed one-third the depth of the member. Where the member is notched or bored, the notch or hole shall not be closer than 2 inches (51 mm) to another notch or bore.

2308.6.3 Bored holes. The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall not be closer than 0.62 inch (15.9 mm) to the edge of the stud. Bored holes shall not be located within 2 inches of the same section of stud as a cut or notch.

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 51-50-2405 ((~~Section 2405—Sloped glazing and skylights.~~)) Reserved.

((~~**2405.3 Screening.** Where used in monolithic glazing systems, annealed, heat strengthened, fully tempered and wired glass shall have broken glass retention screens installed below the glazing material. The screens and their fastenings shall be:~~

~~1. Capable of supporting twice the weight of the glazing;~~

~~2. Firmly and substantially fastened to the framing members; and~~

~~3. Installed within 4 inches (102 mm) of the glass.~~

~~The screens shall be constructed of a noncombustible material not thinner than No. 12 B&S gage (0.0808 inch) with mesh not larger than 1 inch by 1 inch (25 mm by 25 mm). In a corrosive atmosphere, structurally equivalent noncorrosive screen materials shall be used. Annealed,~~

~~heat strengthened, fully tempered and wired glass, when used in multiple-layer glazing systems as the bottom glass layer over the walking surface, shall be equipped with screening that conforms to the requirements for monolithic glazing systems.~~

~~EXCEPTION:~~ ~~In monolithic and multiple-layer sloped glazing systems, the following applies:~~
~~1. Fully tempered glass installed without protective screens where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane shall have the highest point of the glass 10 feet (3048 mm) or less above the walking surface.~~
~~2. Screens are not required below any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.~~
~~3. Any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144 mm) above grade.~~
~~4. Screens shall not be required within individual dwelling units in Groups R-2, R-3, and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and the following conditions are met:~~
~~4.1. Each pane of the glass is 16 square feet (1.5 m^2) or less in area.~~
~~4.2. The highest point of the glass is 12 feet (3658 mm) or less above any walking surface or other accessible area.~~
~~4.3. The glass thickness is 3/16 inch (4.8 mm) or less.~~
~~5. Screens shall not be required for laminated glass with a 15 mil (0.38 mm) polyvinyl butyral (or equivalent) interlayer within the following limits:~~
~~5.1. Each pane of glass is 16 square feet (1.5 m^2) or less in area.~~
~~5.2. The highest point of the glass is 12 feet (3658 mm) or less above a walking surface or other accessible area.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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.

EXCEPTIONS:
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.

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:
1. Parking garages where operated without parking attendants.
2. 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 m^2).
3. Fixed guideway transit and passenger rail systems constructed in accordance with Section 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).

EXCEPTIONS: 1. 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*.
2. 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.

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 <u>in accordance with Section 1104 and ICC A117.1, Chapter 4</u>. Drinking fountains <u>and bottle filling stations</u> shall not be located in toilet rooms.

2902.5.1 Drinking fountain number. Occupant loads over 30 shall have one drinking fountain <u>and bottle filling station</u> 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 <u>and bottle filling station</u> for each 1000 occupants.
2. A drinking fountain <u>and bottle filling station</u> need not be provided in a drinking or dining establishment.

<u>The minimum number of drinking fountains shall also comply with Section 1110.7.</u>

2902.5.2 Multistory buildings. Drinking fountains and bottle filling stations 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 and bottle filling station 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[a]
((~~(See Sections 2902.2 and 2902.3)~~

~~No.~~	~~Classification~~	~~Occupancy~~	~~Description~~	~~Water Closets~~		~~Lavatories~~		~~Bathtubs/ Showers~~
				~~Male~~	~~Female~~	~~Male~~	~~Female~~	
~~1~~	~~Assembly~~	~~A-1[d]~~	~~Theaters and other buildings for the performing arts and motion pictures~~	~~1 per 125~~	~~1 per 65~~	~~1 per 200~~		~~—~~
		~~A-2[d]~~	~~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[d]~~	~~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~~		~~—~~

No.	Classification	Occupancy	Description	Water Closets		Lavatories		Bathtubs/ Showers
				Male	Female	Male	Female	
		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	—
2	Business	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for first 80 and 1 per 80 for remainder exceeding 80		—
3	Educational	E[c]	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 8
		I-2	Hospitals, ambulatory nursing home care recipient[b]	1 per room[c]		1 per room[c]		1 per 15
			Employees, other than residential care[b]	1 per 25		1 per 35		—
			Visitors other than residential care	1 per 75		1 per 100		—
		I-3	Prisons[b]	1 per cell		1 per cell		1 per 15
			Reformatories, detention centers and correctional centers[b]	1 per 15		1 per 15		1 per 15
			Employees[b]	1 per 25		1 per 35		—
		I-4	Adult day care and child day care	1 per 15		1 per 15		1
6	Mercantile	M	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)))

(See Sections 2902.1.1 and 2902.2)

No.	Classification	Occupancy	Description	Water Closets (Urinals: See Section 424.2)		Lavatories		Bathtubs/ Showers	Other
				Male	Female	Male	Female		
1	Assembly	A-1[d]	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 per 200		-	1 service sink
		A-2[d]	Nightclubs, bars, taverns, dance halls, and buildings for similar purposes	1 per 40	1 per 40	1 per 75		-	1 service sink
		A-2[d]	Restaurants, banquet halls, and food courts	1 per 75	1 per 75	1 per 200		-	1 service sink
		A-2[d]	Casino gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		-	1 service sink
		A-3[d]	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades, and gymnasiums	1 per 125	1 per 65	1 per 200		-	1 service sink
		A-3[d]	Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750		-	1 service sink
		A-3[d]	Places of worship and other religious services	1 per 150	1 per 75	1 per 200		-	1 service sink
		A-5[f]	Coliseums, arenas, skating rinks, pools, and tennis courts for indoor sporting events, and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	-	1 service sink
		A-5[f]	Stadiums, amusement parks, bleachers, and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	-	1 service sink
2	Business	B	Buildings for the transaction of business, nonmedical professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		-	1 service sink
		B	Ambulatory care facilities and outpatient clinics	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50	1 per 50		-	1 service sink per floor
3	Educational	E	Educational Facilities	1 per 35	1 per 25	1 per 85	1 per 50	-	1 service sink
4	Factory and Industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100		1 per 100		-	1 service sink

No.	Classification	Occupancy	Description			Water Closets (Urinals: See Section 424.2)		Lavatories		Bathtubs/ Showers	Other
						Male	Female	Male	Female		
5	Institutional	I-1[b]	Alcohol and drug centers, congregate care facilities, and group homes			1 per 10 care recipients		1 per 10 care recipients		1 per 8 care recipients	-
			Assisted living and residential board and care facilities with care recipients who receive custodial care	Sleeping units for care recipient		1 per 2 sleeping units		1 per 2 sleeping units		1 per 8 sleeping units	-
				Dwelling units for care recipients		1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	1 kitchen sink per dwelling unit
				Employee facilities		1 per 60 care recipient units		1 per 60 care recipient units		-	1 service sink per floor
				Visitor facilities		1 per 75 care recipient units		1 per 75 care recipient units		-	-
			Nursing Homes[b]	Sleeping units for care recipients		1 per 2 care recipient sleeping units		1 per 2 care recipient units		1 per 8 care recipient sleeping units	-
				Employee facilities		1 per 60 care recipient units		1 per 60 care recipient sleeping units		-	1 service sink per floor
				Visitor facilities		1 per 75 care recipient units		1 per 75 care recipient sleeping rooms		-	-
		I-2 [b]	Hospitals		Sleeping units for care recipients	1 per care recipient sleeping unit		1 per care recipient sleeping unit		1 per 15 care recipient sleeping units	-
					Care recipient treatment areas	1 per 25 care recipient treatment rooms		1 per 50 care recipient treatment rooms		-	-
					Employee facilities	1 per 25 care recipient sleeping units or treatment rooms	1 per 25 care recipient sleeping units or treatment rooms	1 per 35 care recipient sleeping rooms or treatment rooms		-	1 sink per floor
					Visitor facilities	1 per 75 care recipient sleeping units	1 per 75 care recipient sleeping units or treatment rooms	1 per 50 care recipient sleeping rooms or treatment rooms		-	-
		I-3 [b]	Prisons			1 per cell		1 per cell		1 per 15	1 service sink
			Reformatories, detention centers, and correctional centers		Cells	1 per 15		1 per 15		1 per 15	1 service sink
					Congregate living facilities	1 per 15		1 per 15		1 per 15	1 service sink
					Employees	1 per 25		1 per 35		-	-
		I-4	Adult day care and child day care			1 per 15		1 per 15		1	1 service sink
6	Mercantile	M	Retail stores, service stations, shops, sales rooms, markets, and shopping centers			1 per 500		1 per 750		-	1 service sink[e]
7	Residential	R-1	Hotels, motels, boarding houses (transient)			1 per dwelling or sleeping unit		1 per dwelling or sleeping unit		1 per dwelling or sleeping unit	1 service sink

No.	Classification	Occupancy	Description	Water Closets (Urinals: See Section 424.2)		Lavatories		Bathtubs/ Showers	Other
				Male	Female	Male	Female		
		R-2	Dormitories, fraternities, sororities, and boarding houses (not transient)	1 per 10		1 per 10		1 per 8	1 service sink
			Apartment house	1 per dwelling unit or sleeping unit		1 per dwelling unit or sleeping unit		1 per dwelling unit or sleeping unit	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units
		R-3	Congregate living facilities with 16 or fewer care recipients receiving custodial care	1 per 10		1 per 10		1 per 8	1 kitchen sink
			One- and two-family dwellings	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		R-4	Congregate living facilities with 16 or fewer care recipients receiving custodial care	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		-	1 service sink

a. 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"~~)) "g" shall apply.

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

c. 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~~)), provided that each patient sleeping unit has direct access ((~~from each patient sleeping unit and with~~)) to the toilet room and provisions for privacy for the toilet room user are provided.

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

e. For business and mercantile classifications with an occupant load of 15 or fewer, a service sink shall not be required.

f. The required number and type of plumbing fixtures for indoor and outdoor swimming pools shall be in accordance with Section 609 of the *International Swimming Pool and Spa Code*.

g. 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.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-3006 Section 3006—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.

5. A *smoke-protective curtain assembly for hoistways* shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such curtain assemblies shall comply with the smoke and draft control requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such curtain assemblies shall be equipped with a control unit *listed* to UL 864. Such curtain assemblies shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44. Installation and maintenance shall be in accordance with NFPA 105.

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 51-50-3102 ((~~Reserved.~~)) Membrane structures.

3102.1 General. The provisions of Sections 3102.1 through 3102.8 shall apply to *air-supported*, *air-inflated*, *membrane-covered cable*, *membrane-covered frame* and *tensile membrane structures*, collectively known as *membrane structures*, erected for a period of longer than 180 days. Those erected for a shorter period of time shall comply with the *International Fire Code*. Membrane *structures* covering water storage *facilities*, water clarifiers, water treatment plants, sewage treatment plants, *greenhouses* and similar *facilities* not used for human occupancy are required to meet only the requirements of Sections 3102.3.1 and 3102.7. Membrane *structures* erected on a *building*, balcony, deck, or other *structure* for any period of time shall comply with this section.

3102.7 Engineering design. The *structure* shall be designed and constructed to sustain *loads* due to tension or inflation and *loads* in accordance with Chapter 16.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-3103 Temporary structures.

3103.1 General. The provisions of ((~~this section~~)) Sections 3103.1 through 3103.8 shall apply to structures erected for a period of ((~~less than~~)) 180 days or less. Temporary *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~~)) *Temporary structures* erected for a longer period of time and *public-occupancy temporary structures* shall comply with applicable sections of this code.

EXCEPTIONS: 1. *Public-occupancy temporary structures* complying with Section 3103.1.1 shall be permitted to remain in service for more than 180 days but not more than 1 year where *approved* by the *building official*.
2. Public-occupancy temporary structures within the confines of an existing structure are not required to comply with Section 3103.6.
3. Tents used as *temporary structures* that cover an area of 400 square feet (37.16 m^2) or less.
4. Tents used exclusively for recreational camping purposes.
5. The building official may authorize unheated tents and yurts under 500 square feet (46 m^2) accommodating an R-1 Occupancy for recreational use as a temporary structure and allow them to be used indefinitely.

3103.6 Structural requirements. *Temporary structures* shall be designed and erected to comply with the structural requirements of this code and Sections 3103.6.1 through 3103.6.4.

EXCEPTION: Where *approved*, *live loads* less than those prescribed by Table 1607.1 shall be permitted provided that a *registered design professional* demonstrates that a rational approach has been used and that such reductions are warranted.

Temporary non*building structures* ancillary to public assemblies or special event *structures* whose structural failure or collapse would endanger assembled public shall be assigned a *risk category* corresponding to the *risk category* of the public assembly. For the purposes of establishing an *occupant load* for the assembled public endangered by structural failure or collapse, the applicable *occupant load* determination in Section 1004.5 or 1004.6 shall be applied over the assembly area within a radius equal to 1.5 times the height of the temporary non*building structure*.

3103.6.1 Structural loads. *Temporary structures* shall be designed in accordance with Chapter 16, except as modified by Sections 3103.6.1.1 through 3103.6.1.6.

EXCEPTION: *Temporary structures* erected within the confines of an enclosed *existing structure* need only be designed for dead and live loads in accordance with Chapter 16.

3103.6.1.1 Snow loads. Snow loads on *temporary structures* shall be determined in accordance with Section 1608. The ground snow loads, p_g, in Section 1608 shall be permitted to be modified according to Table 3103.6.1.1.

EXCEPTION: Ground snow loads, p_g, for *public-occupancy temporary structures* that employ controlled-occupancy procedures per Section 3103.8 shall be permitted to be modified using a ground snow load reduction factor of 0.65 instead of the ground snow load reduction factors in Table 3103.6.1.1.

Where a *public-occupancy temporary structure* is not subject to snow loads or not constructed and occupied during times when snow is to be expected, snow loads need not be considered, provided that where the period of time when the *public occupancy temporary structure* is in service shifts to include times when snow is to be expected, one of the following conditions is met:

1. The design is reviewed and modified, as appropriate, to account for snow loads.

2. Controlled occupancy procedures in accordance with Section 3103.8 are implemented.

Table 3103.6.1.1 Reduction Factors for Ground Snow Loads for Temporary Structures.

Table body not changed.

3103.6.1.2 Wind loads. The design wind load on *temporary structures* shall be permitted to be modified in accordance with the wind load reduction factors in Table 3103.6.1.2.

EXCEPTIONS:
1. Design wind loads for *public-occupancy temporary structures* that implement controlled occupancy procedures per Section 3103.8 shall be permitted to be modified using a wind load reduction factor of 0.65.
2. For *public-occupancy temporary structures* erected in a *hurricane-prone region* outside of hurricane season, the *basic wind speed*, *V*, shall be permitted to be set as follows, depending on *risk category*:
   2.1. *Risk Category* II: 115 mph.
   2.2. *Risk Category* III: 120 mph.
   2.3. *Risk Category* IV: 125 mph.

Table 3103.6.1.2 Reduction Factors for Wind Loads for Temporary Structures.

Table body not changed.

3103.6.1.3 Flood loads. *Temporary structures* need not be designed for flood loads specified in Section 1612. Controlled occupancy procedures in accordance with Section 3103.8 shall be implemented for *public-occupancy temporary structures* located in areas prone to flooding as defined on a flood hazard map.

3103.6.1.4 Seismic loads. Seismic loads on *temporary structures* assigned to *Seismic Design Categories* C through F shall be permitted to be taken as 75 percent of those determined by Section 1613. *Temporary structures* assigned to *Seismic Design Categories* A and B are not required to be designed for seismic loads.

3103.6.1.5 Ice loads. Ice loads on *temporary structures* shall be permitted to be determined with a maximum nominal thickness of 0.5 inch (13 mm), for all risk categories.

Where a *public-occupancy temporary structure* is not subject to ice loads or not constructed and occupied during times when ice is to be expected, ice loads need not be considered, provided that where the period of time when the *public-occupancy temporary structure* is in service shifts to include times when ice is to be expected, one of the following conditions is met:

1. The design is reviewed and modified, as appropriate, to account for ice loads.

2. Controlled occupancy procedures in accordance with Section 3103.8 are implemented.

3103.6.1.6 Tsunami loads. *Temporary structures* in a *tsunami design zone* are not required to be designed for tsunami loads specified in Section 1615. Controlled occupancy procedures in accordance with Section 3103.8 shall be implemented for *public-occupancy temporary structures* located in a tsunami design zone.

3103.6.2 Foundations. *Temporary structures* shall be permitted to be supported on the ground with temporary foundations where *approved* by the *building official*. Consideration shall be given for the impacts of differential settlement where foundations do not extend below the ground or where foundations are supported on compressible materials. The presumptive load-bearing value for *temporary structures* supported on a pavement, slab on grade, or on other collapsible or controlled low-strength substrate soils such as beach sand or grass shall be assumed not to exceed 1,000 pounds per square foot (47.88 kPa) unless

determined through testing and evaluation by a *registered design professional*. The presumptive load-bearing values listed in Table 1806.2 shall be permitted to be used for other supporting soil conditions.

3103.6.4 Durability. Reusable components used in the erection and the installation of *temporary structures* shall be manufactured of durable materials necessary to withstand environmental conditions at the service location. Components damaged during transportation or installation or due to the effects of weathering shall be replaced or repaired.

3103.7 Serviceability. The effects of structural loads or conditions shall not adversely affect the serviceability or performance of *temporary structures*.

NEW SECTION

WAC 51-50-3115 Section 3115—Fixed guideway transit and passenger rail systems.

3115.1 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 3115.2.

3115.2 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.
† 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 ac-

cessory 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 egress 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 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 m/sec^2 (0.17 ft/sec^2).
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.

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-3116 ((~~Section 3116—Fixed guideway transit and passenger rail systems.~~)) Reserved.

((~~**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~~

Station Configuration	Construction Type†
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.
† 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 egress 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 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 m/sec^2 (0.17 ft/sec^2).

~~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.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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

Standard reference number	Title	Referenced in code section number
ANSI/AWC FDS-2024	Fire Design Specification (FDS) for Wood Construction	2304.10.1

Standard reference number	Title	Referenced in code section number
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 with Supplement No. 1 and Supplement No. 2	1615.1
ASTM D6570-18a:	Standard Practice for Assigning Allowable Properties for Mechanically Graded Lumber	2303.1.4.1
IAPMO UPC-24	Uniform Plumbing Code	101.4.3, 201.3, 415.9.3, 603.1.2, 718.5, 903.3.5, 1205.3.3, 1503.4, 1805.4.3, 2901.1, Table 2902.1, 3111.2, 3305.1
ICC IPC-24	International Plumbing Code	Not Adopted
ISO 7010:2019	Graphical Symbols-Safety Colours and Safety Signs-Registered Safety Signs	1013.6.1.1
NFPA 130-20	Standard for Fixed Guideway Transit and Passenger Rail Systems	3101.1, 3116
NFPA 13-19	Standard for the Installation of Sprinkler Systems (except 9.3.6.3.5)	403.3.3, 712.1.3.1, 903.3.1.1, 903.3.2, 903.3.8.2, 903.8.5, 904.13, 905.3.4, 907.6.4, 1019.3

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 51-50-4700 ((~~Appendix P—Construction and demolition material management.~~)) Reserved.

((~~**P101 General**~~

~~**P101.1 Purpose.** The purpose of this code is to increase the *reuse* and *recycling* of construction and *demolition* materials.~~

~~**P101.2 Scope.** This code applies to new *building* construction, *alterations to existing buildings* and the *demolition of existing buildings* having a work area greater than 750 square feet or a project value greater than $75,000, whichever is more restrictive.~~

~~EXCEPTION: Projects determined to be unsafe pursuant to Section 116.~~

~~**P102 General definitions.**~~

Demolition. The process of razing, relocating, or removing an existing *building or structure*, or a portion thereof.

Divert, diverted, or diversion. The reuse, recycling, or beneficial use of construction and *demolition* materials.

Recycling. The process of transforming or remanufacturing waste materials into useable or marketable materials for use other than landfill disposal, combustion, or incineration.

Reuse. The return of a material into the economic stream for use.

Salvage. The recovery of construction and *demolition building* material and components from a *building or site* in order to increase the reuse or repurpose potential of these materials and decrease the amount of material being sent to the landfill. Salvaged material may be sold, donated, or reused on *site*.

P103 Construction and demolition material management.

P103.1 Collection containers. All *sites* where *recyclable* construction and *demolition* materials are generated and transported for *recycling* must provide a separate container for nonrecyclable materials pursuant to WAC 173-345-040.

P103.2 Salvage assessment. A *salvage* assessment shall be submitted prior to permit issuance. The salvage assessment shall identify the building components of an existing building that, if removed, have the potential to be reused. This assessment shall be signed by the owner and serve as an affidavit stating that the project shall be executed in compliance with the requirements of this code.

EXCEPTION: Projects that include only new construction.

P103.3 Waste diversion report. A waste diversion report shall be submitted prior to issuance of the Certificate of Occupancy. The waste diversion report shall identify the following:

1. Weight or volume of project-generated construction and *demolition* material;
2. Whether the material was disposed in a landfill or *diverted*;
3. The hauler of the material;
4. The receiving facility or location; and
5. The date materials were accepted by the receiving facility or location.))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

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

((INTERNATIONAL EXISTING BUILDING CODE

~~**2021 EDITION**~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-480101 ((~~Section 101—Scope and general requirements.~~)) Reserved.

((~~**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 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-480200 ((~~Section 201.3 Definitions.~~)) Reserved.

((~~**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 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, § 51-50-480302, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-480302 ((~~Section 302—General provisions.~~)) Reserved.

((~~**302.2 Additional codes.** Alterations, repairs, additions and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in this code and the Washington State Energy Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, Uniform Plumbing Code, and International Residential Code. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-480306 ((~~Section 306—Accessibility for existing buildings.~~)) Reserved.

((~~**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: 1. 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.~~
~~2. 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 13-04-067, filed 2/1/13, effective 7/1/13)

WAC 51-50-480307 ((~~Section 307—~~))Reserved.

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 51-50-480401 ((~~Section 401—General.~~)) Reserved.

((~~**401.2 Compliance.** The work shall not make the building less complying than it was before the repair was undertaken. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to requirements for alterations.~~

401.4 Demolition and replacement. Where a building or structure is effectively demolished by damage or where the intended method of repair is demolition and replacement, the replaced building, including its replaced foundation, shall comply with requirements for new construction in the *International Building Code*.

EXCEPTION: Existing foundations are permitted to remain and be reused where approved by the code official.))

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 51-50-480405 ((Section 405—Structural.)) Reserved.

((**405.1 General.** Structural repairs shall be in compliance with this section and Section 401.2.

405.1.1 Structural concrete repairs. Repair of structural concrete is permitted to comply with ACI 562 Section 1.7, except where Section 405.2.2, 405.2.3, or 405.2.4.1 requires compliance with Section 304.3.))

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

WAC 51-50-480408 ((Section 408—Plumbing.)) Reserved.

((**408.1 Materials.** Plumbing materials and supplies shall not be used for repairs that are prohibited in the *Uniform Plumbing Code*.))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-480503 ((Section 503—Alterations.)) Reserved.

((**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:
1. A cumulative increase in the occupant load of less than 50 for occupancy categories A or I.
2. A cumulative increase in the occupant load of less than 25 for E occupancies.
3. R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.
4. A cumulative increase in occupant load of less than 100 for occupancy categories M or B.
5. 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 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 20-21-021, filed 10/9/20, effective 11/9/20)

WAC 51-50-480506 ((~~Section 506—Change of occupancy.~~)) Reserved.

((~~**506.1.1 Change in the character of use.** A change of occupancy with no *change of occupancy* classification shall not be made to any structure that will subject the structure to any special provisions of the applicable International Codes and Uniform Plumbing Code, without approval of the code official. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.~~))

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, § 51-50-480603, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-480603 ((~~Section 603—Alteration-Level 2.~~)) Reserved.

((~~**603.1 Scope.** Level 2 alterations include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment, and shall apply where the work is below the threshold of a Level 3 alteration.~~

~~EXCEPTION: The movement or addition of nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall not be considered a Level 2 alteration.~~))

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, § 51-50-480604, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-480604 ((~~Section 604—Alteration-Level 3.~~)) Reserved.

((~~**604.1 Scope.** Level 3 alterations apply where one of the criteria is exceeded:~~

~~1. The work meets or exceeds the threshold of either substantial improvement or substantial damage; or~~

~~2. The alteration area exceeds 50 percent of the building area.~~))

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, § 51-50-480702, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-480702 ((~~Section 702 Building elements and materials.~~)) Reserved.

((~~**702.7 Materials and methods.** New work shall comply with the materials and methods requirements in the *International Building Code*, Washington State Energy Code, *International Mechanical Code*, and Uniform Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.~~))

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

WAC 51-50-480708 ((~~Energy conservation.~~)) Reserved.

((~~**708.1 Minimum requirements.** Level 1 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-480805 ((~~Section 805 Structural.~~)) Reserved.

((~~**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 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, 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 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.~~
~~2. An increase in the occupant load of less than 25 for E occupancies.~~
~~3. R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.~~
~~4. An increase in occupant load of less than 100 for occupancy categories M or B.~~
~~5. 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 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 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 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 51-50-480809 ((~~Section 809—Energy conservation.~~)) Reserved.

((~~**809.1 Minimum requirements.** Level 2 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11C).~~))

AMENDATORY SECTION (Amending WSR 21-06-035, filed 2/23/21, effective 3/26/21)

WAC 51-50-480907 ((~~Energy conservation.~~)) Reserved.

((~~**907.1 Minimum requirements.** Level 3 *alterations* to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11C WAC).~~))

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 51-50-481002 ((~~Section 1002—Special use and occupancy.~~)) Reserved.

((~~**1002.3 Change of occupancy in health care.** Where a change of occupancy occurs to a Group I-2 or I-1 facility, the work area with the change of occupancy shall comply with the *International Building Code*.~~

~~The *International Building Code* shall apply to Group I-1, Condition 2, for licensure as an assisted living facility under chapter 388-78A WAC or residential treatment facility under chapter 246-337 WAC.~~

~~EXCEPTION: A change in use or occupancy in the following cases shall not be required to meet the *International Building Code*:~~
~~1. Group I-2, Condition 2 to Group I-2, Condition 1.~~
~~2. Group I-2 to ambulatory health care.~~
~~3. Group I-2 to Group I-1.~~
~~4. Group I-1, Condition 2 to Group I-1, Condition 1.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-481009 ((~~Section 1009—Plumbing.~~)) Reserved.

((~~**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.~~

~~EXCEPTION: 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.~~

~~**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 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-481101 ((~~Section 1101—General.~~)) Reserved.

((**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 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-481201 ((Section 1201—Historic buildings—General.)) Reserved.

((**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. *Historic buildings* shall comply with the provisions of this chapter relating to their *repair*, *alteration*, relocation and *change of occupancy*.

SECTION 1202—**Reserved.**))

AMENDATORY SECTION (Amending WSR 13-04-067, filed 2/1/13, effective 7/1/13)

WAC 51-50-481203 ((Fire safety.)) Reserved.

((**1203.9 Stairway railings.** Historically significant stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally *dangerous*.))

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, § 51-50-481401, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-481401 ((Relocated or moved buildings—General.)) Reserved.

((**1401.2 Conformance.** Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the *International Residential Code* (chapter 51-51 WAC), the *International Mechanical Code* (chapter 51-52 WAC), the *International Fire Code* (chapter 51-54A WAC), the *Uniform Plumbing Code* (chapter 51-56 WAC), the Washington State Energy Code - Commercial (chapter 51-11C WAC), and

~~the Washington State Energy Code - Residential (chapter 51-11R WAC) for new buildings or structures.~~

~~EXCEPTION: Group R-3 buildings or structures are not required to comply if:~~
~~1. The original occupancy classification is not changed; and~~
~~2. The original building is not substantially remodeled or rehabilitated.~~

~~For the purposes of this section, a building shall be considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.~~))

AMENDATORY SECTION (Amending WSR 23-02-073, 23-12-103, and 23-20-023, § 51-50-481402, filed 1/4/23, 6/7/23, and 9/25/23, effective 3/15/24)

WAC 51-50-481402 ((~~Section 1402 Requirements.~~)) Reserved.
((~~This section is not adopted.~~))

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 51-50-481500 ((~~Section 1501—General.~~)) Reserved.

((**~~1501.7 Facilities required.~~** ~~Sanitary facilities shall be provided during construction or demolition activities in accordance with the Uniform Plumbing Code.~~))

AMENDATORY SECTION (Amending WSR 23-23-102, filed 11/15/23, effective 3/16/24)

WAC 51-50-481600 ((~~Chapter 16—Referenced standards.~~)) Reserved.
((~~Add the reference standards as follows:~~

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

NEW SECTION

WAC 51-50-5200 Appendix Q—Construction and demolition material management.

Q101 General.

Q101.1 Purpose. The purpose of this code is to increase the *reuse* and *recycling* of construction and *demolition* materials.

Q101.2 Scope. This code applies to new *building* construction, *alterations to existing buildings* and the *demolition of existing buildings* having a work area greater than 750 square feet or a project value greater than $75,000, whichever is more restrictive.

EXCEPTION: Projects determined to be unsafe pursuant to Section 116.

Q102 General definitions.

Demolition. The process of razing, relocating, or removing an existing *building or structure*, or a portion thereof.

Divert, diverted, or diversion. The reuse, recycling, or beneficial use of construction and *demolition* materials.

Recycling. The process of transforming or remanufacturing waste materials into useable or marketable materials for use other than landfill disposal, combustion, or incineration.

Reuse. The return of a material into the economic stream for use.

Salvage. The recovery of construction and *demolition building* material and components from a *building or site* in order to increase the reuse or repurpose potential of these materials and decrease the amount of material being sent to the landfill. Salvaged material may be sold, donated, or reused on *site.*

Q103 Construction and demolition material management.

Q103.1 Collection containers. All *sites* where *recyclable* construction and *demolition* materials are generated and transported for *recycling* must provide a separate container for nonrecyclable materials pursuant to WAC 173-345-040.

Q103.2 Salvage assessment. A *salvage* assessment shall be submitted prior to permit issuance. The salvage assessment shall identify the building components of an existing building that, if removed, have the potential to be reused. This assessment shall be signed by the owner and serve as an affidavit stating that the project shall be executed in compliance with the requirements of this code.

EXCEPTION: Projects that include only new construction.

Q103.3 Waste diversion report. A waste diversion report shall be submitted prior to issuance of the Certificate of Occupancy. The waste diversion report shall identify the following:

1. Weight or volume of project-generated construction and *demolition* material;
2. Whether the material was disposed in a landfill or *diverted;*
3. The hauler of the material;
4. The receiving facility or location; and
5. The date materials were accepted by the receiving facility or location.

NEW SECTION

WAC 51-50-5300 Appendix R—Supplemental visitability requirements. The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

Section R101 Administrative

R101.1 Purpose. This appendix provides the minimum levels of accessibility that the Type C provisions require leading to dwelling units being constructed that people who use mobility devices or have difficulty climbing stairs are able to continue to live in their own homes or visit the homes of others. Primarily the requirements establish that portions of a dwelling unit are accessed by a circulation path that does not include any stairways or abrupt level changes. Once inside, the interior path should connect to a toilet room, a habitable space, and, if provided on the entry level, a food-preparation area. When these few access features are provided, people with mobility impairments can visit the homes of friends or family. Furthermore, these features may permit residents who are injured, who develop a disability, or who are recovering from an operation to remain living in their homes for a short time, even if lacking a full bathroom and a separate designated sleeping space, while they plan and make any additional renovations they may need or while seeking a different place to reside.

R101.2 Scope. The provisions of this appendix shall control the supplementary requirements for the design and construction of Type C Visitable Dwelling and Sleeping Units.

R101.3 Applicability. In addition to the other requirements of this code, occupancies having dwelling units or sleeping units where no accessible units, Type A units, or Type B units have been provided, the provisions of this appendix shall apply.

R102 Definitions. The following term shall, for the purposes of this appendix, have the meaning shown herein. Refer to Chapter 2 of this code for general definitions.

> **Type C unit.** A dwelling unit or sleeping unit designed and constructed in accordance with this code and the provisions for Type C units in ICC A117.1.

R103 Type C visitable units. For sites with three or more new dwelling or sleeping units, five percent of new dwelling units and sleeping units provided in a development, but not less than one Type C visitable unit, shall be provided. All dwelling and sleeping units on a site shall be considered to determine the total number of Type C units.

OPTION 1

NEW SECTION

WAC 51-50-5400 Appendix S—Embodied Green House Gas Emissions Reporting and Reduction. *The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.*

***User Note*:**

About this appendix: *The purpose of Appendix S is to establish methods to measure and reduce the embodied carbon impact of building materials over the course of a building's life. Appendix S provides criteria for the production and submission of environmental product declarations, whole building life cycle assessment, and proof of building reuse for a building project.*

Section S101 General.

S101.1 Scope. The provisions of this appendix promote methods to measure and to reduce the environmental impact of building materials over the course of a building's life.

Section S102 Definitions.

Section S102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

Covered project. A new building or structure, or an addition to an existing building or structure, **[INSERT 50,000 OR 100,000]** gross square feet or larger; or an *alteration* that impacts a *work area* of **[INSERT 50,000 OR 100,000]** gross square feet or larger.

Embodied carbon. The sum of greenhouse gas emissions associated with extraction, production, transport, and manufacturing of a product through the product's life.

Environmental product declaration (EPD). A third-party verified report providing information about the environmental performance or impact of a covered product or material.

Global warming potential (GWP). The metric for tracking *embodied carbon*, which is reported in kg CO_2e/unit. GWP normalizes different gases associated with a product to an equivalent mass of carbon dioxide over a period of 100 years.

Industry-average EPD. An *EPD* that reports the impacts of a product, which is an average of data provided by multiple manufacturers in a clearly defined sector and/or geographical area.

Product-specific EPD. An *EPD* that represents the impacts of a single product.

Work area. That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. *Work area* excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.

Section S103 Embodied carbon.

S103.1 Embodied carbon. *Covered projects* shall document *embodied carbon* on *construction documents*, which shall be submitted to the *building official*.

S103.2 Documentation of embodied carbon. Documentation of *embodied carbon* for *covered projects* shall meet one of the following pathways:

1. Product compliance or whole building compliance pathway; for a new building or structure, or an *addition* to an existing building or structure, **[INSERT 50,000 OR 100,000]** gross square feet or larger.
2. Building reuse compliance pathway; for an *alteration* that impacts a *work area* of **[INSERT 50,000 OR 100,000]** gross square feet or larger.
3. Product compliance, whole building compliance, or building reuse compliance pathway; for an *addition* to a building or structure that also includes an *alteration*, where the *addition* and *work area* of the *alteration* have a combined area of **[INSERT 50,000 OR 100,000]** gross square feet or larger.

S103.3 Product compliance pathway. *Covered projects* shall submit Type III *environmental product declarations*, which cover the cradle-to-gate phase or life cycle modules A1 through A3, for all covered products per Section S103.3.1. The product compliance pathway shall calculate the *global warming potential* (GWP)of the total mass or volume of the covered products and total no more than **[INSERT 100, 120, OR 175]** percent of the sum of the applicable *GWP* values from Table S103.3.1, for the same total mass or volume of the covered products. The calculation shall include the following:

1. Project-specific product quantities and *product-specific EPDs;*
2. Be averaged across the entire project based on mass or volume; and
3. Be submitted on a product pathway compliance form (see example in this appendix).

A *product-specific EPD* is permitted to combine varying levels of manufacturing specificity and may be covered across multiple facility locations. Where a *product-specific EPD* is not available for a building product, an *industry-average EPD* shall be permitted.

S103.3.1 Covered products. Covered products shall include no less than 90 percent of the total combined mass or volume of all product(s) used in the building project that are included in Table S103.3.1.

(a) Structural concrete products, including ready mix, shotcrete, precast, and concrete masonry units.

(b) Reinforcing steel products, specifically rebar and post-tensioning tendons.

(c) Structural steel products, specifically hot rolled sections, hollow sections, metal deck, and plate; and

(d) Engineered wood products, such as cross-laminated timber, glulam beams, laminated veneer lumber, parallel strand lumber, dowel laminated timber, nail laminated timber, glulam laminated timber, prefabricated wood joists, wood structural panel, solid sawn lumber, structural composite lumber, and structural sawn lumber.

TABLE S103.3.1
COVERED PRODUCT GWP VALUES[a]

COVERED PRODUCT		GLOBAL WARMING POTENTIAL	UNIT OF MEASUREMENT
Ready mix concrete products	Up to 2,499 psi	235	kg CO_2e/m^3
	2,500-3,999 psi	261	kg CO_2e/m^3
	4,000-4,999 psi	316	kg CO_2e/m^3
	5,000-5,999 psi	386	kg CO_2e/m^3
	6,000-7,999 psi	408	kg CO_2e/m^3
	8,000 psi and greater	487	kg CO_2e/m^3
	Lightweight, up to 3,999 psi	518	kg CO_2e/m^3
	Lightweight, 4,000-4,999 psi	575	kg CO_2e/m^3
	Lightweight, 5,000 psi and greater	632	kg CO_2e/m^3
Concrete masonry unit products	Normal weight, up to 3,249 psi	208	kg CO_2e/m^3
	Normal weight, 3,250-4,499 psi	232	kg CO_2e/m^3
	Normal weight, 4,500 psi and greater	241	kg CO_2e/m^3
	Medium weight, up to 3,249 psi	360	kg CO_2e/m^3
	Medium weight, 3,250 psi and greater	244	kg CO_2e/m^3
	Lightweight, up to 3,249 psi	395	kg CO_2e/m^3
	Lightweight, 3,250 psi and greater	286	kg CO_2e/m^3
Reinforcing steel products	Rebar - unfabricated	753	kg CO_2e/metric ton
	Rebar - fabricated	854	kg CO_2e/metric ton
Structural steel products	Hot-rolled sections - unfabricated	1,000	kg CO_2e/metric ton
	Hot-rolled sections - fabricated	1,220	kg CO_2e/metric ton
	Hollow structural sections - unfabricated	1,710	kg CO_2e/metric ton
	Hollow structural sections - fabricated	1,990	kg CO_2e/metric ton
	Decking	2,320	kg CO_2e/metric ton
	Plate - unfabricated	1,480	kg CO_2e/metric ton
	Plate - fabricated	1,730	kg CO_2e/metric ton

COVERED PRODUCT		GLOBAL WARMING POTENTIAL	UNIT OF MEASUREMENT
Structural wood products	Laminated veneer lumber	361	kg CO_2e/m^3
	Laminated strand lumber	275	kg CO_2e/m^3
	Glue laminated timber	137	kg CO_2e/m^3
	Wood framing	63	kg CO_2e/m^3
	Softwood plywood	219	kg CO_2e/m^3
	Oriented Strand Board (OSB)	242	kg CO_2e/m^3
Insulation products	Expanded polystyrene (EPS)	2.67	1 m^2 @ RSI-1
	Polyiso - wall	4.19	1 m^2 @ RSI-1
	Polyiso - roof - GRF facer	2.20	1 m^2 @ RSI-1
	Polyiso - roof - CFG facer	3.04	1 m^2 @ RSI-1
	Extruded polystyrene (XPS)	41	1 m^2 @ RSI-1
	Heavy density mineral wool board	8.35	1 m^2 @ RSI-1
	Mineral wool blanket	3.33	1 m^2 @ RSI-1
	Closed-cell spray polyurethane foam - medium density	12.1	1 m^2 @ RSI-1
	Closed-cell spray polyurethane foam - roofing	15.5	1 m^2 @ RSI-1
	Closed-cell spray polyurethane foam - 2K-LP	19.7	1 m^2 @ RSI-1
	Open-cell spray polyurethane foam	1.6	1 m^2 @ RSI-1
	Loose-fill cellulose	0.49	1 m^2 @ RSI-1
	Loose-fill mineral wool	1.56	1 m^2 @ RSI-1
a. The GWP values in the table represent industry-average values based on the 2023 Carbon Leadership Forum (CLF) North American Material Baselines Report.			

S103.4 Whole building compliance pathway. *Covered projects* shall submit a whole building life cycle assessment, developed in accordance with Section S103.4.1, and comply with one of the following:

1. **Absolute reduction requirement.** The *global warming potential* of the proposed building shall be no more than 90 percent of 102 $lbCO_2e$/square feet (500 $kgCO_2e/m^2$).

2. **Relative reduction requirement.** The *global warming potential* (*GWP*) of the proposed building shall be no more than 90 percent of the *GWP* of a functionally equivalent reference building. The reference building shall be of the same size, geographic location, and thermal performance as the proposed building, and shall be functionally equivalent per ASTM E2921-22. The products and product quantities in the proposed building and the reference building are permitted to vary. The same LCA tool(s) or software shall be used to complete the whole building life cycle assessment for both the reference and proposed building designs.

S103.4.1 Whole building life cycle assessment. Whole building life cycle assessments shall comply with the following:

1. ISO 14040 and ISO 14044.

2. Software used to conduct a whole building life cycle assessment shall conform to ISO 21931—1 and/or EN 15978 and shall have a data set compliant with ISO 14044 and ISO 21930 and/or EN 15804. The software shall utilize calculation methodology that is compliant with EN 15978, ISO 21931—1 and ISO 21929—1. Environmental impact data shall not be sourced from expired or retired data sources.

3. The scope shall cover cradle-to-grave, including all modules in life cycle stages A, B, and C. The scope is permitted to exclude modules B6 and B7, covering operating energy and water stages.

4. The assessment shall include all of the following building elements: foundations; *exterior wall envelope*; *primary structural frame*; *secondary structural members*; *roof covering*; *roof deck*; *fenestration*; *load-bearing walls*; and insulation. The assessment is permitted to include *nonload bearing walls*; fireproofing; interior constructions and *interior finishes*. An assessment submitted for an *addition* or *alteration* is permitted to exclude existing and/or remaining building components.

5. The reference study period shall be 60 years.

S103.5 Building reuse compliance pathway. An *alteration* shall retain no less than a combined 45 percent, as calculated per Section S103.5.1, of the *existing building's primary* and *secondary structural frame* and *exterior wall envelope* as part of the *work area*. An *addition* to a building or structure that also includes an *alteration*, where the *addition* and *work area* of the *alteration* have a combined area of **[INSERT 50,000 OR 100,000]** gross square feet or larger, is permitted to use this compliance pathway.

S103.5.1 Building reuse compliance calculation. The calculation shall include roof and floor areas, and façade area as measured in elevation, for the entire building. Façade areas are permitted to be considered retained even if the existing *exterior wall covering* is repaired, replaced, or modified to increase insulation or airtightness.

EXCEPTION: Buildings, or portions of building, that are deemed unsafe or *dangerous*, or that have *hazardous materials*, that are remediated as part of the project.

S103.5.2 Construction documents for building reuse compliance pathway. *Construction documents* for the building reuse compliance pathway shall clearly distinguish the square footage for existing and new elements, and include the following information:

(a) Gross floor area of *existing building*(s) in square feet;

(b) Gross floor area of the aggregate addition(s) in square feet (if applicable);

(c) Gross floor area of the *alteration* in square feet;

(d) Existing total floor area and retained total floor area of the *primary* and *secondary structural frame* of the *existing building*(s) in square feet; and

(e) Existing total *exterior wall* and *fenestration* surface area and total retained *exterior wall* and *fenestration* surface area of the *existing building*(s) in square feet, as well as areas allowed to be excluded from the calculations.

Section S104 Verification and amended documentation of reduction of embodied carbon.

S104.1 Registered design professional. A *registered design professional* shall prepare the *construction documents* and provide signature verifying compliance with the requirements of this appendix.

S104.2 Amended construction documents for embodied carbon. Covered products shall be installed in accordance with the approved *construction documents*. Where any change in products occur that are not in compliance with the approved *construction documents*, amended *construction documents*, based on data from procured products, shall be resubmitted for approval prior to the issuance of a certificate of occupancy.

S105 Referenced standards.

S105.1 General. See Table S105.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix that reference the standard.

TABLE S105.1 REFERENCED STANDARDS

Standard Acronym	Standard Name	Sections Herein Referenced
ASTM E2921—2022	Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems	S103.4.1.2.1
EN 15804—2022	Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products	S103.4.3
EN 15978—2011	Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method	S103.4.3
ISO 14040—2006	Environmental management - Life cycle assessment - Principles and framework	S103.4, S103.4.1
ISO 14044—2006	Environmental management - Life cycle assessment - Requirements and guidelines	S103.4, S103.4.1, S103.4.2
ISO 21929-1—2011	Sustainability in building construction - Sustainability indicators - Part 1: Framework for the development of indicators and a core set of indicators for buildings	S103.4.3
ISO 21930—2017	Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services	S103.4.3
ISO 21931-1—2022	Sustainability in buildings and civil engineering works - Framework for methods of assessment of environmental, social and economic performance of construction works as a basis for sustainability assessment - Part 1: Buildings	S103.4.3

Sample Product Compliance Pathway Form

COVERED PRODUCT		INDUSTRY AVERAGE GWP	UNIT	PROJECT-SPECIFIC VOLUME OR MASS	GWP PER PRODUCT-SPECIFIC EPD	REDUCTION, BY VOLUME OR MASS
Ready mix concrete products	Up to 2,499 psi	235	kg CO_2e/m^3			
	2,500-3,999 psi	261	kg CO_2e/m^3			
	4,000-4,999 psi	316	kg CO_2e/m^3			
	5,000-5,999 psi	386	kg CO_2e/m^3			
	6,000-7,999 psi	408	kg CO_2e/m^3			
	8,000 psi and greater	487	kg CO_2e/m^3			
	Lightweight, up to 3,999 psi	518	kg CO_2e/m^3			
	Lightweight, 4,000-4,999 psi	575	kg CO_2e/m^3			
	Lightweight, 5,000 psi and greater	632	kg CO_2e/m^3			
Concrete masonry unit products	Normal weight, up to 3,249 psi	208	kg CO_2e/m^3			
	Normal weight, 3,250-4,499 psi	232	kg CO_2e/m^3			
	Normal weight, 4,500 psi and greater	241	kg CO_2e/m^3			
	Medium weight, up to 3,249 psi	360	kg CO_2e/m^3			
	Medium weight, 3,250 psi and greater	244	kg CO_2e/m^3			
	Lightweight, up to 3,249 psi	395	kg CO_2e/m^3			
	Lightweight, 3,250 psi and greater	286	kg CO_2e/m^3			
Reinforcing steel products	Rebar-unfabricated	753	kg CO_2e/ metric ton			
	Rebar-fabricated	854	kg CO_2e/ metric ton			

COVERED PRODUCT		INDUSTRY AVERAGE GWP	UNIT	PROJECT-SPECIFIC VOLUME OR MASS	GWP PER PRODUCT-SPECIFIC EPD	REDUCTION, BY VOLUME OR MASS
Structural steel products	Hot-rolled sections - unfabricated	1,000	kg CO_2e/ metric ton			
	Hot-rolled sections - fabricated	1,220	kg CO_2e/ metric ton			
	Hollow structural sections - unfabricated	1,710	kg CO_2e/ metric ton			
	Hollow structural sections - fabricated	1,990	kg CO_2e/ metric ton			
	Decking	2,320	kg CO_2e/ metric ton			
	Plate - unfabricated	1,480	kg CO_2e/ metric ton			
	Plate - fabricated	1,730	kg CO_2e/ metric ton			
Structural wood products	Laminated veneer lumber	361	kg CO_2e/m^3			
	Laminated strand lumber	2,745	kg CO_2e/m^3			
	Glue laminated timber	137	kg CO_2e/m^3			
	Wood framing	63	kg CO_2e/m^3			
	Softwood plywood	219	kg CO_2e/m^3			
	Oriented Strand Board (OSB)	242	kg CO_2e/m^3			

COVERED PRODUCT		INDUSTRY AVERAGE GWP	UNIT	PROJECT-SPECIFIC VOLUME OR MASS	GWP PER PRODUCT-SPECIFIC EPD	REDUCTION, BY VOLUME OR MASS
Insulation products	Expanded polystyrene (EPS)	2.67	1 m^2 @ RSI-1			
	Polyiso - wall	4.19	1 m^2 @ RSI-1			
	Polyiso - roof - GRF facer	2.20	1 m^2 @ RSI-1			
	Polyiso - roof - CFG facer	3.04	1 m^2 @ RSI-1			
	Extruded polystyrene (XPS)	41	1 m^2 @ RSI-1			
	Heavy density mineral wool board	8.35	1 m^2 @ RSI-1			
	Mineral wool blanket	3.33	1 m^2 @ RSI-1			
	Fiberglass blanket	N/A	1 m^2 @ RSI-1			
	Closed-cell spray polyurethane foam - medium density	12.1	1 m^2 @ RSI-1			
	Closed-cell spray polyurethane foam - roofing	15.5	1 m^2 @ RSI-1			
	Closed-cell spray polyurethane foam - 2K-LP	19.7	1 m^2 @ RSI-1			
	Open-cell spray polyurethane foam	1.6	1 m^2 @ RSI-1			
	Loose-fill cellulose	0.487	1 m^2 @ RSI-1			
	Loose-fill mineral wool	1.56	1 m^2 @ RSI-1			
	Loose-fill fiberglass	N/A	1 m^2 @ RSI-1			
Total						

OPTION 2

NEW SECTION

WAC 51-50-5400 Appendix S—Embodied carbon reporting and reduction. *The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.*

***User Note*:**

About this appendix: *The purpose of Appendix S is to establish methods to measure and reduce the embodied carbon impact of building materials over the course of a building's life. Appendix S provides criteria for the production and submission of environmental product declarations, whole building life cycle assessment, and proof of building reuse for a building project.*

Section S101 General.

S101.1 Scope. The provisions of this appendix promote methods to measure and to reduce the environmental impact of building materials over the course of a building's life.

Section S102 Definitions.

Section S102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

Baseline building. The baseline shall be of the same size, geographic location, and thermal performance as the proposed building, and shall be functionally equivalent per ASTM E2921-22.

Covered project. A new building or structure, or an addition to an existing building or structure, **[INSERT 50,000 OR 100,000]** gross square feet or larger.

Embodied carbon. The sum of greenhouse gas emissions associated with extraction, production, transport, and manufacturing of a product through the product's life.

Environmental product declaration (EPD). A third-party verified report providing information about the environmental performance or impact of a covered product or material.

Global warming potential (GWP). The metric for tracking *embodied carbon*, which is reported in kg CO_2e/unit. GWP normalizes different gases associated with a product to an equivalent mass of carbon dioxide over a period of 100 years.

Industry-average EPD. An *EPD* that reports the impacts of a product, which is an average of data provided by multiple manufacturers in a clearly defined sector and/or geographical area.

Product and facility-specific EPD. An *EPD* that represents the impacts of a single product from a single manufacturing facility.

Proposed building. The building identified as the *covered project*.

Section S103 Embodied carbon.

S103.1 Embodied carbon. *Covered projects* shall document *embodied carbon* on *construction documents*, which shall be submitted to the *building official*.

S103.2 Whole building compliance pathway. *Covered projects* shall submit a whole building life cycle assessment (WBLCA), developed in accordance with Section S103.2.1, and comply with one of the following:

1. **Absolute reduction requirement.** The *global warming potential* of the proposed building shall be no more than **[INSERT 102 or 92]** $lbCO_2e$/square feet (**[INSERT 500 or 450]** $kgCO_2e/m^2$).

2. **Relative reduction requirement.** The *global warming potential* (*GWP*) of the proposed building shall be no more than **[INSERT 100 or 90]** percent of the *GWP* of a functionally equivalent baseline building. The products and product quantities in the proposed building and the baseline building are permitted to vary. The same LCA tool(s) or software shall be used to complete the whole building life cycle assessment for both the *baseline building* and *proposed building* designs.

S103.2.1 Whole building life cycle assessment. Whole building life cycle assessments shall comply with the following:

1. ISO 14040 and ISO 14044.

2. Software used to conduct a whole building life cycle assessment shall conform to ISO 21931—1 and/or EN 15978 and shall have a data set compliant with ISO 14044 and ISO 21930 and/or EN 15804. The software shall utilize calculation methodology that is compliant with EN 15978, ISO 21931—1 and ISO 21929—1. Environmental impact data shall not be sourced from expired or retired data sources.

3. The scope shall cover cradle-to-grave, including all modules in life cycle stages A, B, and C. The scope is permitted to exclude modules B6 and B7, covering operating energy and water stages. For software that only calculates A1-3, estimates of stages A4, A5, and B and C can use the Vancouver Embodied Carbon Guidelines. https://vancouver.ca/files/cov/embodied-carbon-guidelines.pdf

4. The assessment shall include all of the following building elements: foundations; *exterior wall envelope*, including *fenestration*; *primary structural frame*; *secondary structural members*; *roof covering*; *roof deck*; *load-bearing walls*; and insulation. The assessment is permitted to include *nonload-bearing walls*; fireproofing; interior constructions and *interior finishes*. An assessment submitted for an *addition* is permitted to exclude existing and/or remaining building components.

5. The reference study period shall be 60 years.

6. **Reuse and salvage.** Existing and salvaged building components are permitted to be included or excluded at the discretion of the project team. For reused and salvaged materials, it is permissible to assume the A1 – A4 stages carry no impact in the *proposed building* WBLCA to show the benefit of reusing materials, while retaining the A1 – A4 estimated impacts for these products for these materials in the *baseline building* WBLCA.

7. **Structural and material optimization.** Structural and material use optimization shall be included or excluded at the discretion of the project team as long as the *baseline building* and the *proposed building* are functionally equivalent.

8. **Material improvement.** When the *construction documents* require materials to have a *global warming potential* no greater than a specified value, the *proposed building* WBLCA can include these improved values.

Section S104 Verification and amended documentation of reduction of embodied carbon.

S104.1 Registered design professional. A *registered design professional* shall prepare the *construction documents* and provide signature verifying compliance with the requirements of this appendix.

S104.2 Amended construction documents for embodied carbon. An updated WBLCA for the *proposed building* that includes actual EPD values from procured products shall be submitted after procurement of all *covered products*. The updated *proposed building* WBLCA must be lower than the *global warming potential* of the *absolute reduction requirement* or the *relative reduction requirement* selected under Section S103.2, or else a narrative is to be provided describing why it was not met.

S105 Referenced standards.

S105.1 General. See Table S105.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix that reference the standard.

TABLE S105.1 REFERENCED STANDARDS

Standard Acronym	Standard Name	Sections Herein Referenced
ASTM E2921—2022	Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems	S103.4.1.2.1
EN 15804—2022	Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products	S103.4.3
EN 15978—2011	Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method	S103.4.3
ISO 14040—2006	Environmental management - Life cycle assessment - Principles and framework	S103.4, S103.4.1
ISO 14044—2006	Environmental management - Life cycle assessment - Requirements and guidelines	S103.4, S103.4.1, S103.4.2
ISO 21929-1—2011	Sustainability in building construction - Sustainability indicators - Part 1: Framework for the development of indicators and a core set of indicators for buildings	S103.4.3
ISO 21930—2017	Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services	S103.4.3
ISO 21931-1—2022	Sustainability in buildings and civil engineering works - Framework for methods of assessment of environmental, social and economic performance of construction works as a basis for sustainability assessment - Part 1: Buildings	S103.4.3

NEW SECTION

WAC 51-50-5500 Appendix T—Single exit provisions for multifamily up to six stories.

Section T101 Scope and Purpose.

T101.1 Scope. Appendix T applies statewide to structures served by a professional fire department meeting the requirements of Section T102.1.

T101.2 Purpose. Appendix T is intended to provide an alternate method of construction to requirements listed in Section 1006.3.3 that allows for the construction of a six story Group R-2 occupancy building with a single exit.

Section T102 General.

T102.1 Professional fire department required. A professional fire department shall be defined by RCW 35.103.020(5) or 52.33.020(4) and be capable of occupant rescue using an aerial ladder fire apparatus compliant with NFPA 1901 at the time of manufacture, sufficient to reach the emergency escape and rescue openings of the highest story.

T102.1.1 Inspection of documents. The [F]*fire chief* shall provide to the [F]*fire code official* the fire department's most current annual report complying with RCW 35.103.040 or 52.33.040 showing the following:

1. Policy statement – Service delivery objectives per RCW 35.103.030 or 52.33.030.
2. Aerial ladder fire apparatus sufficient to reach the emergency escape and rescue openings of the highest story.
3. Response times.
4. Staffing levels.
5. Certification and training of staff.

T102.1.1.1 Additional documents required. The [F]*fire code official* shall be authorized to request from the [F]*fire chief* any additional documentation necessary to determine the response capabilities of the professional fire department.

T102.1.2 Performance statement. The [F]*fire chief* shall in writing, provide a statement to the [F]*fire code official* attesting to the ability of the professional fire department to perform occupant rescue using aerial ladder fire apparatus of sufficient to reach the emergency escape and rescue openings of the highest story, having an *approved* response time, in Group R-2 occupancies using the provisions of Appendix T.

T102.1.3 Alternative means of compliance. Mutual and automatic aid agreements used to fulfill the requirements of having a professional fire department with aerial ladder fire apparatus capable of response shall be *approved* by the [F]*fire code official*.

T102.1.4 Emergency preparedness required. Group R-2 occupancies using the provisions of Appendix T shall comply with Sections T102.1.4.1 through T102.1.4.2.

[F] T102.1.4.1 Fire safety and evacuation plans. An *approved* fire safety and evacuation plan in accordance with Section 404 of the *International Fire Code* shall be prepared and maintained.

[F] T102.1.4.2 Emergency guide. Fire emergency guides shall be provided. Guide contents, maintenance, and distribution shall comply with Sections 403.9.2.2.1 through 403.9.2.2.3 of the *International Fire Code*.

T102.1.5 Inspections. The [F]*fire code official* is authorized to conduct inspections no less than annually to determine the extent of compliance with the provisions of the *International Fire Code* and to approve reports of inspections by *approved* agencies or individuals.

T102.2 Single exit in Group R-2 apartment houses. In addition to the *means of egress* requirements of Chapter 10, not more than five stories of Group R-2 apartment houses are permitted to be served by a single exit under the following conditions:

1. The building has not more than six stories above grade plane.

2. **USER NOTE:** The five-story limitation in Section XX102.2 does not prohibit an R-2 apartment occupancy from being located on the first story of a six-story building. For a six-story building with a single exit stairway, R-2 apartments or other occupancies are permitted on the first story (subject to other requirements in this code), provided that the required means of egress for the occupancies on the first story are separate from the single exit stairway. See Figure XX102.2. Other occupancies are permitted in the same building provided they comply with all the requirements of this code. Other occupancies shall not directly communicate with the Group R-2 occupancy portion of the building or with the single-exit stairway.

EXCEPTION: Parking garages accessory to the Group R-2 occupancy are permitted to communicate with the exit stairway.

3. *Occupiable roofs* are not permitted.

EXCEPTION: Private roof decks up to 750 square feet are permitted above the sixth story above grade plane. The private roof deck must be accessed by a stair serving only that unit.

4. The building shall not have an occupied floor, including mezzanines or occupiable roof, located more than 75 feet above the lowest level of fire department access.

5. There shall be no more than 20 units served by the single exit.

6. The building shall be of IA, IB, IIA, IIIA, IV-A, IV-B, IV-C, IV-HT, or VA construction.

7. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

8. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed.

EXCEPTION: Manual fire alarm boxes are not required throughout the building where all of the following conditions are met:
1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. The notification appliances will activate upon sprinkler water flow.
3. Not fewer than one manual fire alarm box is installed at an approved location.

9. An automatic smoke detection system that activates the occupant notification system shall be installed throughout in the following locations.

a. Common spaces outside of *dwelling units*.

b. Laundry rooms, mechanical equipment rooms, and storage rooms outside of *dwelling units*.

c. All interior *corridors* serving *dwelling units*.

10. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11.

11. *Habitable spaces* in *dwelling units* shall be provided with visible alarm notification. Visible alarms shall be activated by the in-room smoke alarm and the building fire alarm system.

12. A minimum ½ hr fire-resistance rated *corridor* shall separate each dwelling unit entry/exit door from the door to an *interior exit stairway*, including any related exit passageway, on each floor. Dwelling unit doors shall not open directly into an interior exit stairway. Dwelling unit doors are permitted to open directly into an exterior exit stairway.

13. There shall be no more than 20 feet (6096 mm) of travel to the exit stairway from the entry/exit door of any dwelling unit.

14. *Exit access* travel distance measured in accordance with Section 1017 shall not exceed 125 feet.

15. An exterior exit stairway or interior exit stairway shall be provided. The interior exit stairway, including any related exit passageway, shall be pressurized in accordance with Sections 909.6.3 and 909.20. Doors in the stairway shall swing into the interior exit stairway regardless of the occupant load served. Doors from the interior exit stairway to the building exterior shall swing in the direction of exit travel. Stairway shaft pressurization equipment shall be connected to legally required standby power per Section 909.21.5. For the purposes of this section, legally required standby power shall comply with 2023 NEC Section 701.12, options (D), (E), (F), or (H) or subsequent revised section number(s).

16. Elevator hoistway openings shall be protected in accordance with Section 3006.3. Where approved by the building official, natural ventilation is permitted to be substituted for pressurization where the ventilation would prevent the accumulation of smoke or toxic gases. Hoistway shaft pressurization equipment shall be connected to legally required standby power per Section 909.21.5. For the purposes of this section, legally required standby power shall comply with 2023 NEC Section 701.12, options (D), (E), (F), or (H) or subsequent revised section number(s).

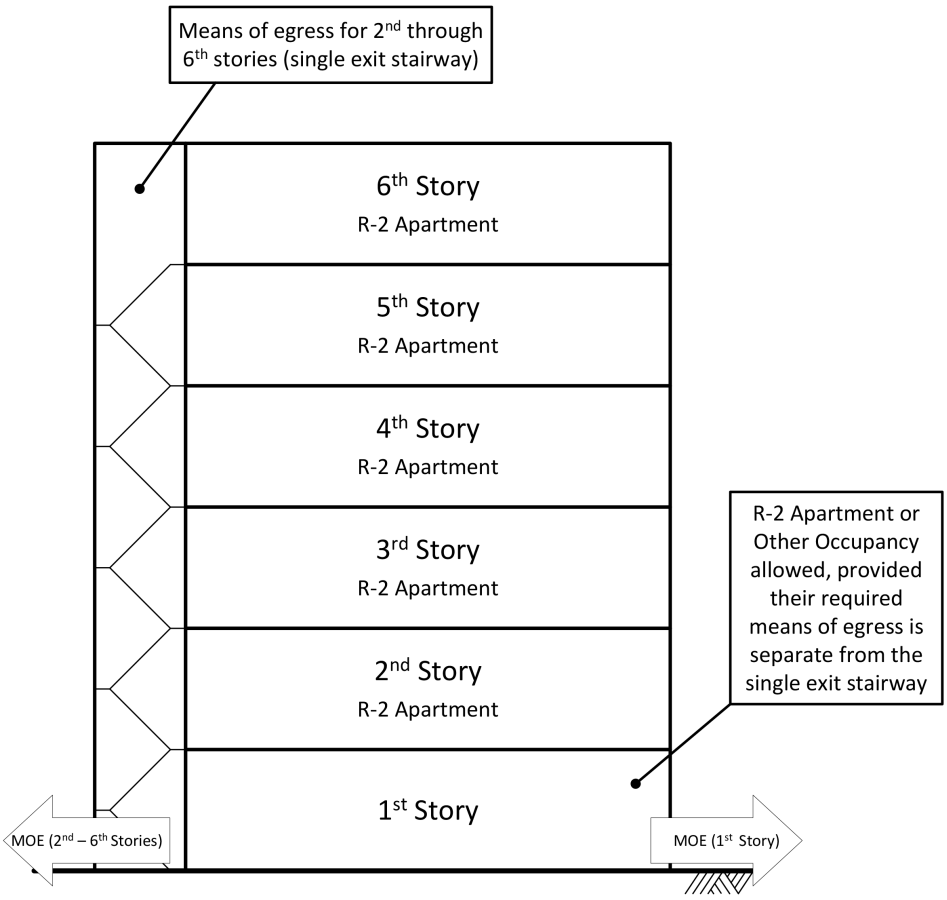
17. The exit serving the Group R occupancy shall not discharge through any other occupancy, including an accessory parking garage.

18. The exit shall not terminate in an egress court where the court depth exceeds the court width unless it is possible to exit in either direction to the public way.

19. Openings within 10 feet (3048 mm) of an exterior exit stairway or nonrated exterior walls of the interior exit stairway enclosure shall be protected by opening protectives having a fire protection rating of not less than ¾ hour.

20. Emergency escape and rescue openings complying with Section 1031 shall be provided in all sleeping rooms on all floors served by the single exit.

Figure T102.2 – Single Exit Stairway Serving 5 stories of R-2 Apartments in a 6-story Building



NEW SECTION

WAC 51-50-5600 Appendix U—Temporary emergency shelters. *The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.*

Section U101 General.

U101.1 Scope. This appendix shall be applicable to emergency housing and emergency housing facilities, as defined in Section U102.

Section U102 Definitions.

U102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

DEPENDENT UNIT. Emergency housing not equipped with a kitchen area, toilet and sewage disposal system.

EMERGENCY. State of emergency as defined in chapter 38.52 RCW.

EMERGENCY HOUSING. Housing in a permanent or temporary structure(s), occupied during a declaration of state of emergency, local emergency, or shelter crisis. Emergency housing may include, but is not limited to,

buildings and structures constructed in accordance with the Washington Building Code; and emergency sleeping cabins, emergency transportable housing units and tents constructed in accordance with this appendix.

EMERGENCY HOUSING FACILITIES. On-site common use facilities supporting emergency housing. Emergency housing facilities include, but are not limited to, kitchen areas, toilets, showers, and bathrooms with running water. The use of emergency housing facilities is limited exclusively to the occupants of the emergency housing, personnel involved in operating the housing and other emergency personnel.

EMERGENCY HOUSING SITE. A site containing emergency housing and emergency housing facilities supporting the emergency housing.

EMERGENCY SLEEPING CABIN. Relocatable hard-sided structure constructed in accordance with this appendix, which may be occupied only for emergency housing if allowed by the enforcing agency.

EMERGENCY TRANSPORTABLE HOUSING UNIT. A single- or multiple-section prefabricated structure that is transportable by a vehicle and that can be installed on a permanent or temporary site in response to a need for emergency housing.

LANDING PLATFORM. A landing provided as the top step of a stairway accessing a loft.

LOCAL EMERGENCY. Emergency as defined by local ordinance.

LOFT. A floor level located more than 30 inches (762 mm) above the main floor and open to it on at least one side with a ceiling height of less than 6 feet 8 inches (2032 mm), used as a living or sleeping space.

MEMBRANE STRUCTURE. An air-inflated, air-supported, cable or frame-covered structure, not otherwise defined as a tent. (See Chapter 31 of this code.)

TENT. A structure, enclosure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

Section U103 Emergency housing.

U103.1 General. Emergency sleeping cabins, emergency transportable housing units, membrane structures and tents constructed and/or assembled in accordance with this appendix, shall be occupied only during a local declaration of a state of emergency.

Buildings and structures constructed in accordance with the Washington Building Code, used as emergency housing, shall be permitted to be permanently occupied.

U103.2 Existing buildings used for emergency housing. Existing residential and nonresidential buildings or structures shall be permitted to be used as emergency housing and emergency housing facilities provided such buildings or structures comply with the building code provisions or this appendix. Existing buildings or structures used as emergency housing shall be occupied only during a local declaration of a state of emergency. Existing buildings used for emergency facilities shall constitute a temporary use and shall not be construed as a change of occupancy or change or use as defined elsewhere in the code. After the emergency is removed the occupancy and use will revert to the previous classification.

U103.2.1 New additions, alterations, and change of occupancy. New additions, alterations, and change of occupancy to existing buildings shall comply with the requirements of the Washington Building Code effective at the time of addition, alteration, or change of occupancy. The requirements shall apply only to and/or within the specific area of the addition, alteration, or change of occupancy.

EXCEPTION: Existing buildings and structures used for emergency housing and emergency housing facilities are not required to comply with the Washington State Energy Code.

U103.3 Occupant load. Except as otherwise stated in this appendix, the maximum occupant load allowed in buildings and structures used as emergency housing shall be determined by the enforcing agency, but the interior floor area shall not be less than 70 square feet (6.5 m^2) for one occupant. Where more than one person occupies the building/structure, the required floor area shall be increased at the rate of 50 square feet (4.65 m^2) for each occupant in excess of one.

EXCEPTIONS: 1. Tents.

2. For emergency housing the minimum interior floor area may be reduced to 53 square feet (4.9 m^2) if the enforcing agency determines that 53 square feet (4.9 m^2) is adequate space for a single-occupancy sleeping unit.

U103.4 Fire and life safety requirements not addressed in this appendix. If not otherwise addressed in this appendix, fire and life safety measures including, but not limited to, means of egress, fire separation, fire sprinklers, smoke alarms, and carbon monoxide alarms, shall be determined and enforced by the enforcing agency.

U103.5 Privacy. Emergency housing shall be provided with a privacy lock on each entrance door and all windows for use by the occupants.

U103.6 Heating. All sleeping areas shall be provided with adequate heating as determined by the enforcing agency.

Section U104 Emergency sleeping cabins.

U104.1 General. Emergency sleeping cabins shall have an interior floor area of not less than 70 square feet (6.5 m^2) for one occupant. Where more than one person occupies the cabin, the required floor area shall be increased at the rate of 50 square feet (4.65 m^2) for each occupant in excess of one. The interior floor area shall not exceed 400 square feet (37 m^2), excluding lofts.

U104.2 Structural loads. Emergency sleeping cabins shall be designed to resist intrusion of wind, rain, and to support the following structural loads:

1. Floor live loads not less than 40 pounds per square foot (1.92 kPa) of floor area.
2. Lateral loads not less than 15 pounds per square foot (718 Pa) of vertical wall and roof area.
3. Roof live loads not less than 20 pounds per square foot (958 Pa) of horizontal roof area.
4. In areas where snow loads are greater than 30 pounds per square foot (958 Pa)(ASD), the roof shall be designed and constructed to resist these additional loads.

U104.3 Minimum ceiling height. Habitable space and hallways in emergency sleeping cabins shall have a ceiling height of not less than 80 inches (2032 mm). Bathrooms, toilet rooms and kitchens, if provided, shall have a ceiling height of not less than 76 inches (1930 mm). Ob-

structions shall not extend below these minimum ceiling heights including beams, girders, ducts, lighting, and other obstructions.

EXCEPTION: Ceiling heights in lofts constructed in accordance with Section U108 are permitted to be less than 80 inches (2032 mm).

U104.4 Means of egress. Emergency sleeping cabins shall be provided with at least two forms of egress placed remotely from each other. One form of egress may be an egress window complying with Section U104.4.1. When a loft is provided, one form of egress shall be an egress window complying with Section U104.4.1, provided in the loft space.

U104.4.1 Egress window. The bottom of the clear opening of the egress window shall not be more than 44 inches (1118 mm) above the floor. The egress window shall have a minimum net clear opening height of 24 inches (610 mm), and a minimum net clear opening width of 20 inches (508 mm). The egress window shall have a minimum net clear opening area of 5 square feet (0.465 m^2).

U104.5 Plumbing and gas service. If an emergency sleeping cabin contains plumbing or gas service, it shall comply with all applicable requirements of the Washington Plumbing Code and the Washington Mechanical Code.

U104.6 Electrical. Emergency sleeping cabins shall be provided with all of the following installed in compliance with the Washington Electrical Code RCW 19.28:

1. Continuous source of electricity.

EXCEPTION: The source of electricity may be an emergency generator or renewable source of power such as solar or wind power.

2. At least one interior lighting fixture.

3. Electrical heating equipment listed for residential use and a dedicated receptacle outlet for the electrical heating equipment.

EXCEPTION: Electrical heating equipment and a dedicated receptacle outlet for the electrical heating equipment are not required if a nonelectrical source of heating is provided.

4. At least one GFCI-protected receptacle outlet for use by the occupant(s).

U104.7 Ventilation. Emergency sleeping cabins shall be provided with means of ventilation (natural and/or mechanical) allowing for adequate air replacement, as determined by the enforcing agency.

U104.8 Smoke alarms. Emergency sleeping cabins shall be provided with at least one smoke alarm installed in accordance with the Washington Building Code.

U104.9 Carbon monoxide alarms. If an emergency sleeping cabin contains a fuel-burning appliance(s) or a fireplace(s), a carbon monoxide alarm shall be installed in accordance with the Washington Building Code.

Section U105 Tents and membrane structures.

U105.1 General. Tents shall not be used to house occupants for more than 7 days unless such tents are maintained with floors raised at least 4 inches (101.6 mm) above the ground level.

Membrane structures installed and/or assembled in accordance with Chapter 31 of this code, may be permitted to be used as emergency housing and emergency housing facilities, as determined by the enforcing agency.

Section U106 Accessibility.

U106.1 General. Emergency housing shall comply with the applicable requirements in Chapter 11 and/or the U.S. Access Board Accessibility Guidelines for Emergency Transportable Housing Units.

Note: The Architectural and Transportation Barriers Compliance Board (U.S. Access Board) issued the Final Guidelines for Emergency Transportable Housing on May 7, 2014. The final guidelines amended the 2004 ADA Accessibility Guidelines (2004 ADAAG) and the 2004 Architectural Barriers Act (ABA) Accessibility Guidelines (2004 ABAAG) to specifically address emergency transportable housing units provided to disaster survivors by entities subject to the ADA or ABA. The final rule ensures that the emergency transportable housing units are readily accessible to and usable by disaster survivors with disabilities.

Section U107 Lofts in emergency housing.

U107.1 Minimum loft area and dimensions. Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections U108.1.1 through U108.1.3.

U107.1.1 Minimum area. Lofts shall have a floor area of not less than 35 square feet (3.25 m^2).

U107.1.2 Minimum dimensions. Lofts shall be not less than 5 feet (1524 mm) in any horizontal dimension.

U107.1.3 Height effect on loft area. Portions of a loft with a sloping ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.

EXCEPTION: Under gable roofs with a minimum slope of 6:12, portions of a loft with a sloping ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.

U107.2 Loft access. The access to and primary egress from lofts shall be any type described in Sections U107.2.1 through U107.2.4.

U107.2.1 Stairways. Stairways accessing lofts shall comply with the Washington State Residential Code or with Sections U107.2.1.1 through U107.2.1.6.

U107.2.1.1 Width. Stairways accessing a loft shall not be less than 17 inches (432 mm) in clear width at or above the handrail. The minimum width below the handrail shall be not less than 20 inches (508 mm).

U107.2.1.2 Headroom. The headroom in stairways accessing a loft shall be not less than 74 inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width.

U107.2.1.3 Treads and risers. Risers for stairs accessing a loft shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas:

1. The tread depth shall be 20 inches (508 mm) minus 4/3 of the riser height; or
2. The riser height shall be 15 inches (381 mm) minus 3/4 of the tread depth.

U107.2.1.4 Landing platforms. The top step of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 74 inches (1880 mm). The landing platform shall be 18 inches (457 mm) to 22 inches (559 mm) in depth measured

from the nosing of the landing platform to the edge of the loft, and 16 inches (406 mm) to 18 inches (457 mm) in height measured from the landing platform to the loft floor.

U107.2.1.5 Handrails. Handrails shall comply with the Washington Building Code.

U107.2.1.6 Stairway guards. Guards at open sides of stairways shall comply with the Washington Building Code.

U107.2.2 Ladders. Ladders accessing lofts shall comply with Sections U108.2.2.1 and U108.2.2.2.

U107.2.2.1 Size and capacity. Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm), and 10 inches (254 mm) to 14 inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a 200 pound (90.7 kg) load on any rung. Rung spacing shall be uniform within 3/8 inch (9.5 mm).

U107.2.2.2 Incline. Ladders shall be installed at 70 to 80 degrees from horizontal.

U107.2.3 Alternating tread devices. Alternating tread devices are acceptable as allowed by the enforcing agency.

U107.2.4 Loft guards. Loft guards shall be located along the open side of lofts. Loft guards shall not be less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less. Loft guards shall not have openings from the walking surface to the required guard height that allow passage of a sphere 4 inches (102 mm) in diameter.

Section U108 Location, maintenance, and identification.

U108.1 Maintenance. Emergency housing and emergency housing facilities shall be maintained in a safe and sanitary condition, and free from vermin, vectors and other matter of an infectious or contagious nature. The grounds within emergency housing sites shall be kept clean and free from accumulation of debris, filth, garbage and deleterious matter. Emergency housing and emergency housing facilities shall not be occupied if a substandard condition exists, as determined by the enforcing agency.

U108.1.1 Fire hazards. Dangerous materials or materials that create a fire hazard, as determined by the enforcing agency, shall not be allowed on the grounds within emergency housing sites.

U108.2 Identification. Emergency housing shall be designated by address numbers, letters or other suitable means of identification. The identification shall be in a conspicuous location facing the street or driveway fronting the building or structure. Each identification character shall be not less than 4 inches (102 mm) in height and not less than 0.5 inch (12.7 mm) in width, installed/painted on a contrasting background.

Section U109 Emergency housing facilities.

U109.1 Drinking water. Potable drinking water shall be provided for all occupants of emergency housing.

U109.2 Kitchens. Where occupants of dependent units are permitted or required to cook for themselves, a separate area shall be equipped and maintained as a common use kitchen. Refrigerated storage shall be provided for safe storage of food.

U109.3 Toilet and bathing facilities. When dependent units are used as emergency housing, the emergency housing site shall be provided with one toilet and one bathing facility for every 15 occupants of each gender. The enforcing agency may permit different types and ratios of toilet and bathing facilities. The approval shall be based upon a finding that the type and ratio of toilet and bathing facilities are sufficient to process the anticipated volume of sewage and waste water, while maintaining sanitary conditions for the occupants of the emergency housing. Bathing facilities shall be provided with heating equipment which shall be capable of maintaining a temperature of 70 degrees F (21.0 degrees Celsius) within such facilities. Lavatories with running water shall be installed and maintained in the toilet facilities or adjacent to the toilet facilities.

U109.4 Garbage, waste, and rubbish disposal. All garbage, kitchen waste, and rubbish shall be deposited in approved covered receptacles, which shall be emptied when filled and the contents shall be disposed of in a sanitary manner acceptable to the enforcing agency.

NEW SECTION

WAC 51-50-620000 2024 International Existing Building Code.

INTERNATIONAL EXISTING BUILDING CODE
2024 EDITION

NEW SECTION

WAC 51-50-620101 Section 101—Scope and general requirements.

101.2.1 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.

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.

NEW SECTION

WAC 51-50-620200 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 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.

NEW SECTION

WAC 51-50-620302 Section 302—General provisions.

302.2 Additional codes. Alterations, repairs, additions and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in this code and the Washington State Energy Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, Uniform Plumbing Code, and International Residential Code. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

NEW SECTION

WAC 51-50-620306 Section 306—Accessibility for existing buildings.

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.

NEW SECTION

WAC 51-50-620408 Section 408—Plumbing.

408.1 Materials. Plumbing materials and supplies shall not be used for repairs that are prohibited in the *Uniform Plumbing Code*.

NEW SECTION

WAC 51-50-620502 Section 502—Additions.

502.1.1 Risk category assignment. The risk category of the *addition* and *existing building* shall be classified in accordance with Section

1604.5 of the *International Building Code*. Where the addition is structurally independent of the *existing building* the classification for each portion shall be permitted to be determined independently in accordance with Section 1604.5.1. Where the addition is not structurally independent of the *existing building*, the *existing building* and its *addition* acting together as a single structure shall be assigned a risk category in accordance with Table 1604.5 of the *International Building Code*.

Where the *addition* results in a building being assigned to a higher *risk category* for the *existing building* compared with the *risk category* for the *existing building* before the *addition*, such a change shall comply with Section 506 of this code.

EXCEPTION: Where the increase in building area or increase in occupant load due to the addition is less than 10 percent than building area or occupant load of the existing building before the addition, the original risk category classification of the existing building is permitted to remain unless required by Section 502.1.1.1. The cumulative effect of occupancy changes over time shall be considered.

502.1.1.1 Multiple occupancies. Where the *addition* and the *existing building* have different occupancies, the *risk category* of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher *risk category* for the *existing building* compared with the *risk category* for the *existing building* before the *addition*, such a change shall be considered a *change of occupancy* and shall comply with Section 506 of this code. Where application of that section results in a higher *risk category* for the *addition* compared with the *risk category* for the *addition* by itself, the *addition* and any systems in the *existing building* required to serve the *addition* shall comply with the requirements of the *International Building Code* for new construction for the higher *risk category*.

NEW SECTION

WAC 51-50-620503 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. With the *alteration* complete, 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.

EXCEPTION: New lateral force-resisting systems designed in accordance with the *International Building Code* 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.

3. Supports and attachments for nonstructural elements removed and reinstalled to facilitate the work to comply with 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.

EXCEPTION: Condition 4 need not be satisfied where the work complies with Section 304.3.2, Item 3.

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:
1. A cumulative increase in the occupant load of less than 50 for occupancy categories A or I.
2. A cumulative increase in the occupant load of less than 25 for E occupancies.
3. R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.
4. A cumulative increase in occupant load of less than 100 for occupancy categories M or B.
5. 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 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.

NEW SECTION

WAC 51-50-620506 Section 506—Change of occupancy.

506.1.1 Change in the character of use. A change of occupancy with no *change of occupancy* classification shall not be made to any structure

that will subject the structure to any special provisions of the applicable International Codes and Uniform Plumbing Code, without approval of the code official. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.

NEW SECTION

WAC 51-50-620603 Section 603—Alteration-Level 2.

603.1 Scope. Level 2 alterations include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment, and shall apply where the work is below the threshold of a Level 3 alteration.

EXCEPTION: The movement or addition of nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall not be considered a Level 2 alteration.

NEW SECTION

WAC 51-50-620604 Section 604—Alteration-Level 3.

604.1 Scope. Level 3 alterations apply where one of the criteria is exceeded:

1. The work meets or exceeds the threshold of either substantial improvement or substantial damage; or
2. The alteration area exceeds 50 percent of the building area.

NEW SECTION

WAC 51-50-620702 Section 702—Building elements and materials.

702.7 Materials and methods. New work shall comply with the materials and methods requirements in the *International Building Code*, Washington State Energy Code, *International Mechanical Code*, and Uniform Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

NEW SECTION

WAC 51-50-620708 Energy conservation.

708.1 Minimum requirements. Level 1 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

NEW SECTION

WAC 51-50-620805 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 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, 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 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.
2. An increase in the occupant load of less than 25 for E occupancies.
3. R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.
4. An increase in occupant load of less than 100 for occupancy categories M or B.
5. 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 Section 304.3. Any lateral resisting elements shall be required to comply with design requirements for re-

duced 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 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.

NEW SECTION

WAC 51-50-620809 Section 809—Energy conservation.

809.1 Minimum requirements. Level 2 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11C or 51-11R WAC).

NEW SECTION

WAC 51-50-620904 Fire protection.

904.1.3 Upholstered furniture or mattresses. Work areas shall be provided with an automatic sprinkler system in accordance with the *International Building Code* where any of the following conditions exist:

1. A Group F-1 occupancy where the area used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2).

2. A Group M occupancy where the area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m^2).

3. A Group S-1 occupancy where the area used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2).

EXCEPTION: Self-service storage facilities not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior.

NEW SECTION

WAC 51-50-620907 Energy conservation.

907.1 Minimum requirements. Level 3 *alterations* to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11C or 51-11R WAC).

NEW SECTION

WAC 51-50-621002 Section 1002—Special use and occupancy.

1002.3 Change of occupancy in health care. Where a change of occupancy occurs to a Group I-2 or I-1 facility, the work area with the change of occupancy shall comply with the *International Building Code*.

The *International Building Code* shall apply to Group I-1, Condition 2, for licensure as an assisted living facility under chapter 388-78A WAC or residential treatment facility under chapter 246-337 WAC.

EXCEPTIONS:
1. A change in use or occupancy in the following cases shall not be required to meet the *International Building Code*:
   1.1. Group I-2, Condition 2 to Group I-2, Condition 1.
   1.2. Group I-2 to ambulatory health care.
   1.3. Group I-2 to Group I-1.
   1.4. Group I-1, Condition 2 to Group I-1, Condition 1.
2. In a Group I-1 occupancy, where a *change of use* is not in conjunction with a Level 3 alteration, a smoke barrier in accordance with Section 420.6 of the *International Building Code* is not required to be added.

NEW SECTION

WAC 51-50-621009 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.

EXCEPTION: 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.

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*.

NEW SECTION

WAC 51-50-621101 Section 1101—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.

1101.3 Risk category assignment. The *risk category* of the *addition* and *existing building* shall be classified in accordance with Section 1604.5 of the *International Building Code*. Where the addition is structurally independent of the *existing building* the classification for each portion shall be permitted to be determined independently in accordance with Section 1604.5.1 of the *International Building Code*.

Where the addition is not structurally independent of the *existing building*, the *existing building* and its *addition* acting together as a single structure shall be assigned a risk category in accordance with Table 1604.5 of the *International Building Code*.

Where the *addition* results in a building being assigned to a higher *risk category* for the *existing building* compared with the *risk category* for the *existing building* before the *addition*, such a change shall comply with Chapter 10 of this code.

EXCEPTION: Where the increase in building area or increase in occupant load due to the addition is less than 10 percent than building area or occupant load of the existing building before the addition, the original risk category classification of the existing building is permitted to remain unless required by Section 1101.3.1. The cumulative effect of occupancy changes over time shall be considered.

1101.3.1 Multiple occupancies. Where the *addition* and the *existing building* have different occupancies, the *risk category* of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher *risk category* for the *existing building* compared with the *risk category* for the *existing building* before the *addition*, such a change shall be considered a *change of occupancy* and shall comply with Chapter 10 of this code. Where application of that section results in a higher *risk category* for the *addition* compared with the *risk category* for the *addition* by itself, the *addition* and any systems in the *existing building* required to serve the *addition* shall comply with the requirements of the *International Building Code* for new construction for the higher *risk category*.

NEW SECTION

WAC 51-50-621201 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. *Historic buildings* shall comply with the provisions of this chapter relating to their *repair*, *alteration*, relocation and *change of occupancy*.

NEW SECTION

WAC 51-50-621203 Fire safety.

1203.9 Stairway railings. Historically significant stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally *dangerous*.

NEW SECTION

WAC 51-50-621401 Relocated or moved buildings—General.

1401.2 Conformance. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the *International Residential Code* (chapter 51-51 WAC), the *International Mechanical Code* (chapter 51-52 WAC), the *International Fire Code* (chapter 51-54A WAC), the *Uniform Plumbing Code* (chapter 51-56 WAC), the Washington State Energy Code - Commercial (chapter 51-11C WAC), and the Washington State Energy Code - Residential (chapter 51-11R WAC) for new buildings or structures.

EXCEPTION: Group R-3 buildings or structures are not required to comply if:
1. The original occupancy classification is not changed; and
2. The original building is not substantially remodeled or rehabilitated.

For the purposes of this section, a building shall be considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

NEW SECTION

WAC 51-50-621402 Section 1402—Requirements. This section is not adopted.

NEW SECTION

WAC 51-50-621500 Section 1503—Sanitary.

1503.1 Facilities required. Sanitary facilities shall be provided during construction or demolition activities in accordance with the Uniform Plumbing Code.