



Oregon

Kate Brown, Governor

Department of Consumer and Business Services

Building Codes Division

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Residential and Manufactured Structures Board

Meeting agenda

Wednesday, January 6, 2021, 9:30 a.m.

Live audio-conference board meeting

Audio streamed via the [Internet](#)

I. Board business

- A. Call to order
- B. Roll call
- C. Approval of agenda and order of business
- D. Approval of the draft extra board meeting minutes of [Oct. 7, 2020](#)
- E. Date of the next regularly scheduled meeting: April 7, 2021

II. Public comment

The division is taking extra precautions for public meetings given concerns regarding the Coronavirus/COVID-19. Board members and appropriate staff will be connected by “GoToMeeting.” Because of these unusual circumstances, the division is taking steps to ensure opportunity for the public to submit written and oral testimony. Send your written testimony or request to provide oral public testimony to the boards coordinator 24 hours in advance of this meeting date. Requesting oral testimony for this meeting has a cutoff date of Jan. 5, 2021, at noon. *(Additional instructions are at the end of the agenda).*

III. Reports

- A. Residential structures program update
- B. [Chapter 1 update](#)
- C. Oregon Residential Reach Code update

IV. Communications - None

V. Appeals - None

VI. Unfinished business - None

VII. New business

Board review and make a recommendation to the Administrator regarding the [requested changes to the additional measures table](#); Table N1101.1(2) in Chapter 11 of the 2021 Oregon Residential Specialty Code (ORSC)

VIII. Announcements – None

IX. Adjournment

Please read carefully

Temporary instructions for submitting public testimony for board meetings:

- Please submit written testimony for consideration by noon the day before the scheduled meeting by email to debra.j.woods@oregon.gov.
- Include your name and the organization you represent (if any).
- List the board and agenda item to which your comments are related.
- Please include all related material.
- Expect an email from the boards coordinator, the chief, or the chair of the board acknowledging that your testimony has been received and will be presented to the board.
- *If you would like to be connected by the GoToMeeting for oral testimony, please send an email to debra.j.woods@oregon.gov and the boards coordinator will send you specific instruction on the process by email. Please include your name, organization, and the agenda item to which your testimony relates. The board Chair will manage public testimony during the meeting. Testimony will be limited to 5 minutes.*
- If you do not receive confirmation of your testimony within one business day or by 8:30 a.m. on the date of the board meeting, please resubmit your testimony.

Thank you for working with us to ensure the health and safety of all participants.

Note: For information regarding re-appointments or board vacancies, please visit the Governor's [website](#).

Residential & Manufactured Structures Board (RMSB)

Virtual meeting minutes

Oct. 7, 2020

- RMSB members present:** Rebai Tamerhoulet, Vice-chair, building official
Gordon Anslow, home designer
Forrest Barnes, distributor of new manufactured dwellings
John Chmelir, multi-family contractor
Rich Fry, residential structural contractor
Emily Kemper, public member
Eli Volem, utility of energy supplier
- RMSB members absent:** James Austin, manufacturer of manufactured dwellings
Douglas Lethin, remodeler residential structural contractor
Rich Tovar, residential building trade sub-contractor
Vacant, structural engineer
- Staff:** Alana Cox, interim administrator, Building Codes Division
Richard Rogers, chief building official, Building Codes Division
Mark Heizer, P.E., mechanical and energy code engineer, PTS
Tony Rocco, structural program chief, PTS
Andy Boulton, policy analyst, PTS
Warren Jackson, manager, Statewide Services
Eric McMullen, senior building codes specialist, PTS
Francisco Ramos, building code specialist, PTS
Lori Graham, emeritus administrator, Building Codes Division
Debi Barnes-Woods, boards administrator/coordinator, PTS
Melissa Stiles, policy development coordinator, PTS
- Guests:** Terry Whitehill, building official, Portland
Kevin Duell, engineering consultant, NW Natural
Blake Shelide, facilities engineer, Oregon Department of Energy
Shilpa Surana, Northwest Energy Efficiency Alliance
David Heslam, Earth Advantage, ZERO Coalition
Gary Heikkinen, energy consultant
Mike Goodrich, Oregon Home Builders Association
John Frankel, senior manager, NW Natural
Don MacOdrum, senior project manager, TRC Companies
Mark Whitmill, building official, Eugene
Frank Stewart, Hoover Treated Wood Products
Ted Zuk, building official, Jackson County
Miles Pengilly, Thorn Run Partners
Carl Brown, building inspector, Wilsonville
Shawn Mullins, Owens Corning

I. Board business

A. Call to order

Chair Rebai Tamerhoulet called the virtual board meeting to order at 9:30 a.m.

B. Roll call

Douglas Lethin, James Austin, and Rich Tovar were absent.

C. Approval of agenda and order of business

Chair Tamerhoulet ruled the agenda and order of business approved.

D. Approval of the draft minutes

Chair Tamerhoulet ruled final the draft meeting minutes of Sept. 16, 2020.

E. Date of the next regularly scheduled meeting: January 6, 2021.

II. Public comment

No general public comments were received.

III. Reports

Residential structures program update

Tony Rocco, structural program chief, posted clarifications to solar ready provisions, <https://www.oregon.gov/bcd/codes-stand/Documents/17orsc-solar-amendments.pdf>, and notified people who requested updates. The division will kick off the Reach Code Process at the next Construction Industry Energy Board meeting October 20, with provisions brought to this board at a future meeting.

IV. Communications - None

V. Appeals - None

VI. Unfinished business - None

VII. New business

A. Board review and make a recommendation to the Administrator regarding the adoption of the 2021 ORSC: Structural, Design, Fire and Life-Safety code provisions.

Chief Rocco summarized committee recommendations in the structural, fire and life safety provisions of the 2021 Oregon Residential Specialty Code, posted here: <https://www.oregon.gov/bcd/boards/Documents/rmsb-20201007-agenda.pdf>

Chair Tamerhoulet acknowledged written testimony received from:

- [Mike Goodrich, Oregon Home Builders Association](#)

Chair Tamerhoulet invited public testimony. Mike Goodrich said Oregon Home Builders Association supports the code package and would like to see it approved today. In written testimony, OHBA asked to delay code approval to give time to train members on implementation, partly due to industry hardship brought on by the Covid-19 pandemic, wildfire smoke, supply chain disruptions and labor shortages. But after a better understanding of the code process, OHBA changed its opinion and now supports code adoption. Board Member Chmelir and Chair Tamerhoulet asked if a three-month grace period is adequate for builders. Mr. Goodrich said builders have a lot of stock plans in inventory and need more time to convert plans to meet portal frame and wall bracing code requirements. Board Member Eli Volem said he is concerned extending the grace period will make it difficult to reach the Zero Energy Ready standard in Executive Order 17-20.

Board Member Anslow said he has heard from builders concerned about the portal frame bracing changes. He said most affordable homes are built using stock plans and builders need as much time as possible to comply with new codes. Board Member Chmelir said Southern Oregon lost 2,400 dwellings in a wildfire two weeks ago and there is much clean up for builders to do. To give builders a code compliance deadline in summer is about the time people will start rebuilding. He asked if the board could delay new code implementation until October. Division Administrator Cox said the board could extend the grace period to six months and the timeframe would be reflected in the rulemaking process.

Building Official Terry Whitehill recommended the board move the code forward and extend the grace period from July 1 to October 1. He said the new code provides more flexibility for builders and protection for consumers.

MOTION BY Board Member John Chmelir to approve with the amendment to extend the grace period to October, with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

Roll call:

Yea: Eli Volem; Emily Kemper; Rich Fry; John Chmelir; Forrest Barnes; Gordon Anslow; Chair Rebai Tamerhoulet.

Nay: none

Motion passed unanimously.

B. Board review and make a recommendation to the Administrator regarding the adoption of the mechanical and energy efficiency provisions of the 2021 Oregon Residential Specialty Code (ORSC)

Mark Heizer, P.E., mechanical and energy systems engineer, said natural ventilation is being replaced with whole-house, mechanical ventilation, which runs 24 hours a day, 365 days a year. This system balances and distributes the air

and provides better indoor air quality. Whole-house mechanical ventilation requires an override switch so homeowners can turn it off during a high smoke event. Mr. Heizer reviewed the 8 significant mechanical provisions, available online: <https://www.oregon.gov/bcd/boards/Documents/rmsb-20201007-agenda.pdf>

Chair Tamerhoulet acknowledged written testimony posted received from:

- [David Heslam, ZERO Coalition](#)
- [Mike Goodrich, Oregon Home Builders Association](#)
- [Shilpa Surana, Northwest Energy Efficiency Alliance](#)
- [Angela Crowley-Koch and Zach Snyder, Oregon Solar Energy Industries Association \(OSEIA\) and Oregon Solar Energy](#)
- [Shannon Souza, PE, Sol Coast Consulting & Design, LLC](#)
- [Mike Moore, PE, on behalf of Broan-NuTone](#)
- [Samuel Rashkin, Chief, Architect, US Department of Energy](#)
- [Blake Shelide, Oregon Department of Energy](#)
- [Kevin Duell, P.E., NW Natural](#)
- [Jim Purekal, SunPower Corporation](#)
- [Ryan Mayfield, Mayfield Renewables](#)

Chair Tamerhoulet invited public testimony on the mechanical provisions. David Heslam said Zero Coalition proposes replacing the heat recovery ventilation and 30 percent reduction fresh air allowance with a requirement to supply the home with filtered outside air. They advocate for filtered air because of smoke events, which may become more common in Oregon. Mike Goodrich said Oregon Home Builders Association supports the code changes with an extended grace period to provide time for training and implementing new processes.

Board Member Eli Volem said it is significant that Sam Rashkin, Department of Energy (DOE), provided testimony that proposed code changes would not meet the Zero Energy Ready Home standards. Mr. Volem said if the goal is zero energy ready homes, the board needs to stay with the current ventilation standards. He also supports eliminating the heat recovery ventilation requirement because 75 to 80 percent of new homes have ducted systems and would not be impacted.

Chair Tamerhoulet moved to the energy efficiency portion of the code changes. Mr. Heizer said Oregon is one of the top states in the country for its simple, well-thought out energy code. The division has worked with Energy Trust of Oregon and NEEA on code outreach to help builders know which measures would qualify them for energy incentive programs. The division made optional the provision to bring ducts inside to help get close to zero energy readiness, while providing options for all types of homes and heating/cooling systems. Mr. Heizer reviewed 11 significant code changes, posted online:

<https://www.oregon.gov/bcd/boards/Documents/rmsb-20201007-agenda.pdf>

Division Administrator Cox thanked the code committee and board for the recent healthy discussion about solar ready provisions. She invited everyone to continue the discussion through the reach code process, which would begin soon.

Chair Tamerhoulet invited public testimony on the energy provisions. Blake Shelide referred to his written testimony and said Oregon Department of Energy supports the advancement of the energy efficient provisions in the proposed code. David Heslam referred to his written testimony and said Zero Coalition supports moving forward with code adoption. Shilpa Surana referred to written testimony and said Northwest Energy Efficiency Alliance does not think whole-house ventilation and bringing ducts inside will result in enough savings to keep Oregon on track to meet Executive Order 17-20 goals. Mike Goodrich said Oregon Home Builders Association supports code changes with an extended grace period. Kevin Duell said NW Natural, serving 2.5 million people in Oregon and Washington, supports the code provisions because they will result in energy efficiency.

Motion by Board Member Chmelir to adopt the proposal as presented with the amendment to extend the grace period to October, with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

Motion Amendment by Board Member Eli Volem to remove the exception for reduced air flow and remove the HRV requirement.

Re-Styled Amendment by Board Members Kemper and Volem: to remove M1505.4.3, which proposes to add an exception allowing for a 30 percent reduction in ventilation for distributed whole-house ventilation systems; and also remove N1105.7, which requires a heat recovery ventilator (HRV).

Amended Motion Accepted by Board Member Chmelir.

Roll call:

Yea: Eli Volem; Emily Kemper; Rich Fry; John Chmelir; Forrest Barnes, Gordon Anslow; Chair Rebai Tamerhoulet.

Nay: None

Motion passes unanimously.

VIII. Announcements - None

IX. Adjournment

Acting Chair Tamerhoulet adjourned the meeting of Oct. 7, 2020, at 12:37 p.m.

Respectfully submitted by Melissa Stiles, policy development coordinator.

CHAPTER 1 SCOPE AND ADMINISTRATION

PART 1—SCOPE AND APPLICATION

SECTION R101 GENERAL

R101.1 Title. These provisions shall be known as the *Oregon Residential Specialty Code* and shall be cited as such and will be referred to herein as “this code.”

R101.2 Scope. The *Oregon Residential Specialty Code*, as adopted by the State of Oregon, Building Codes Division, includes portions of the *International Residential Code* and the *International Fire Code* pertaining to any construction, reconstruction, alteration, repair, and installation of materials and equipment in or part of buildings and structures covered under the *state building code*.

R101.2.1 Application. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair, equipment*, use, occupancy and location of the following:

1. Detached one- and two-family *dwellings* and *townhouses* classified as Group R-3, not more than three stories above *grade plane* in height, and their *accessory structures*.
2. Detached owner-occupied *lodging houses* containing not more than five guest rooms.
3. Residential aircraft hangars as defined in Section R202.
4. Live/work units located in detached one- and two-family *dwellings* and *townhouses* and complying with the requirements of Section 419 of the *Building Code*.

The following uses shall comply with the *Building Code*:

1. New “family childcare” uses and new “foster care” uses identified in ORS Chapters 418, 443 and 329A, located within detached one-family *dwellings*, shall be classified as Group R-3 occupancies.
2. *Congregate living facilities.*

Consistent with discretionary decision-making powers granted to *building officials*, a *building official* may take any action including but not limited to waiving a requirement, modifying a requirement and/or accepting an alternate method to the requirements of the *state building code*. When waiving or accepting a modification, a *building official* shall not allow a provision that would create an unsafe or dangerous condition regarding fire and life safety, and may not enforce requirements that are in addition to the *state building code* except where additional code requirements are specified by the terms of an alternate method approval.

R101.2.2 Optional local adoption. In addition to the work exempt from building *permit* in Section R105, the following items are exempt from building *permits* unless specifically required by a *municipality’s* local ordinance. If a *municipality* adopts an ordinance to require a *permit* for any of these items, the construction standards of this code shall be applicable.

1. Fences, other than required *swimming pool* barriers, constructed of wood, wire mesh or chain link. Statewide, fences serving as a *swimming pool* barrier, or as a portion of a *swimming pool* barrier, shall require a building *permit*. A *municipality* may adopt an ordinance to regulate the construction of other fences constructed of wood, wire mesh or chain link, provided that the threshold established for requiring a building *permit* does not include fences that are 7 feet (2123 mm) or less in height. A *municipality* may adopt an ordinance to regulate fences constructed of materials other than wood, wire mesh or chain link, regardless of height. A local height threshold greater than 7 feet (2123 mm) is allowed, regardless of which materials are used.
2. Retaining walls. Statewide, retaining walls that provide safeguards for the users of the buildings; support a regulated building; or retain material, which if not restrained, could impact a regulated building, shall require a building *permit*. A *municipality* may adopt an ordinance to regulate other retaining walls, provided that the threshold established for requiring a *permit* does not include retaining walls 4 feet (1219 mm) or less in height, when measured from the bottom of the footing to the top of the wall except where the retaining wall supports ascending backfill exceeding a 3:1 slope or where the retaining wall supports a non-soil surcharge. A local height threshold greater than 4 feet (1219 mm) is allowed.
3. Freestanding radio television and other telecommunication antennae and towers not attached to or supported by a regulated building. A local *municipality* may adopt an ordinance to require a building *permit* for these structures.
4. Ground mounted photovoltaic systems. A local *municipality* may adopt an ordinance to require a building *permit* for these structures provided that a *permit* is not required for these structures that are 10 feet (3048 mm) or less in height, measured to the highest point of the installation, provided no public access is permitted beneath the structures. A local height threshold greater than 10 feet (3048 mm) is allowed.
5. Tanks that are located exterior to and not attached to or supported by a regulated building.
6. Existing buildings and structures, in accordance with Appendix J.
7. Fixed docks not supporting a superstructure.

8. The design and construction of in-ground *swimming pools* accessory to detached one- and two-family *dwelling*s, and individual *townhouse dwelling units*.

R101.2.3 Matters not available for local regulation under the statutory authority of the state building code. While the following matters may be included in the published national model code, they may not be regulated by the local *municipality* under the authority of the *state building code*. Any references to these matters in this code have been retained for the convenience of the reader.

R101.2.3.1 Matters outside the statutory authority of the state building code. The following matters are outside the statutory authority of the *state building code*. Local *municipalities* may not regulate these matters under the *state building code*. A *municipality* may have additional authority outside of the *state building code* to regulate these matters locally, where not preempted.

1. Public utility facilities owned and maintained by the serving utility.
2. Abatement of nuisances and dangerous buildings.
3. Demolition.
4. Floating structures.
5. Floating docks.
6. Transitional housing accommodations.
7. Administration and implementation of a National Flood Insurance Program (NFIP).
8. Mechanical equipment not specifically regulated in this code.

R101.2.3.2 Matters preempted by the state building code. The following matters are preempted by the *state building code* and may not be adopted by a local *municipality*.

1. Appendix A (Sizing and Capacities of Gas Piping)
2. Appendix B (Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category 1 Appliances, and Appliances listed for use with Type B Vents)
3. Appendix C (Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems)
4. Appendix D (Recommended Procedure for Safety Inspection of an Existing Appliance Installation)
5. Appendix G (Piping Standards for Various Applications)
6. Appendix I (Private Sewage Disposal)
7. Appendix L (Permit Fees)
8. Appendix M (Home Day Care—R-3 Occupancy)
9. Appendix N (Venting Methods)
10. Appendix O (Automatic Vehicular Gates)
11. Appendix P (Sizing of Water Piping System)
12. Appendix Q (RESERVED)
13. Appendix T (Solar-Ready - Detached One- and Two-Family Dwellings, and Townhouses)

R101.2.4 Appendices. The following appendices are adopted

as part of this code.

1. Appendix E (Manufactured Housing Used as Dwellings)
2. Appendix F (Radon Control Methods)
3. Appendix H (Patio Covers)
4. Appendix K (Sound Transmission)
5. Appendix R (Light Straw-Clay Construction)
6. Appendix S (Strawbale Construction)

R101.3 Owner-built dwellings. For exempt owner-built dwellings and out-buildings, see ORS 455.320.

ORS 455.320 is not part of this code but is reprinted here for the readers' convenience:

455.320 Owner-built dwellings exempt from certain structural code provisions; recording of exemption. (1) As used in this section, unless the context requires otherwise:

(a) "Owner" means the owner of the title to real property or the contract purchaser of real property, of record as shown on the last available complete assessment roll which person has not taken advantage of the exemptions under subsection (2) of this section during the five years prior to applying for an exemption under this section.

(b) "Owner-built dwelling and outbuildings" means a single-family residence and adjacent auxiliary structures the structural components of which are constructed entirely by the owner who intends to occupy the structures or by that owner and friends and relatives of the owner assisting on an unpaid basis.

(2) Owner-built dwellings and outbuildings shall be exempt from any requirements of the structural code for ceiling heights, room sizes and the maintenance of specific temperature levels in those structures. The exemption shall apply to the new construction, renovation, remodeling or alteration of an owner-built dwelling or outbuilding.

(3) A building permit issued for an owner-built dwelling or outbuilding shall note whether the owner-built dwelling or outbuilding complies with the requirements it is exempted from under subsection (2) of this section. If the dwelling or other structure does not comply with these requirements, the owner-builder shall file a copy of the building permit with the county clerk, who shall make the permit a part of the permanent deed record of the property. The owner shall provide the county clerk with a description of the property sufficient if it were contained in a mortgage of the property to give constructive notice of the mortgage under the law of this state.

(4) Noncompliance with subsection (3) of this section shall not affect, in any manner, any conveyance of interest in property subject to this section. [Formerly 456.920]

R101.4 Intent. The purpose of this code is to establish minimum requirements to provide a reasonable level of safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

R101.5 Statutory references. This code is adopted pursuant to Oregon Revised Statutes (ORS). Where this code and the statutes specify different requirements, the statute shall govern. Statutes related to this code include, but are not limited to, ORS 455.010 through 455.895.

Statutes referenced may be obtained from the Building Codes Division, 1535 Edgewater St. NW, Salem, OR 97304 or P.O. Box 14470, Salem, OR 97309 at a nominal cost or read online at Oregon.gov/bcd.

SECTION R102 APPLICABILITY

R102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

R102.2 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

R102.3 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

R102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2.

Exception: Where enforcement of a code provision would violate the conditions of the *listing* of the *equipment* or *appliance*, the conditions of the *listing* and manufacturer's instructions shall apply.

102.4.1 ASCE Standard 24 Flood Resistant Design and Construction. The following ASCE Standard 24 Tables are not adopted by the State of Oregon as the subject matter encompasses Free Board, Base Flood Elevation and Design Flood Elevation. The authority to establish the same is reserved for local government:

1. Table 2-1, *Minimum elevation of the top of lowest floor.*
2. Table 4-1, *Minimum elevation of bottom of lowest supporting horizontal structural member of lowest floor.*
3. Table 5-1, *Minimum elevation below which flood damage-resistant materials shall be used.*
4. Table 6-1, *Minimum elevation of floodproofing.*
5. Table 7-1, *Minimum elevation of attendant utilities and equipment.*

National Flood Insurance Program (NFIP)

Each local community participating in the National Flood Insurance Program (NFIP) designates a local *flood plain administrator* who is responsible to make sure communities meet their insurance program obligations. Certain matters comprised within the NFIP program may conflict with or overlap with the *state building code*. Certain decisions such as sill plate height and other NFIP criteria fall under the authority and responsibility of the *flood plain administrator*. Once decisions under the NFIP program are made, then the appropriate requirements of this code for the construction of the building are applied.

Local communities may choose to designate their local *building official* as the *flood plain administrator* or may designate other staff. When a *building official* functioning in the capacity of *flood plain administrator* exercises authority under the NFIP, such decisions are not part of this code nor subject to the *building official* duties and responsibilities as adopted by the Oregon Building Codes Division.

Per ORS 455.210(3)(c), local communities are prohibited from using building permit monies for any matter other than administration and enforcement of the *state building code*. Administration and implementation of a local NFIP program are not part of the *state building code*.

R102.4.2 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

R102.4.3 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

OAR 918-008-0000 is not part of this code but is reprinted here for the readers' convenience:

918-008-0000 Purpose and Scope

(1) The Department of Consumer and Business Services, Building Codes Division, adopts model building codes, standards and other publications by reference, as necessary, through administrative rule to create the state building code. When a matter is included in a specialty code or referenced publication that is in conflict with Oregon Revised Statutes or Oregon Administrative Rules, the statute or rule applies and the code or standard provision does not. All remaining parts or application of the code or standard remain in effect.

(2) Unless required by law, matters generally not authorized for inclusion in a specialty code or referenced standard include, but are not limited to: licensing or certification requirements, or other qualifications and standards for businesses or workers; structures or equipment maintenance requirements; matters covered by federal or state law; and matters that conflict with other specialty codes or publications adopted by the department.

(3) OAR 918-008-0000 to 918-008-0070 provides the process for adopting and amending the state building code that is consistent across all program areas.

(4) The state building code is derived from the most appropriate version of base model codes, which are updated periodically.

(5) The Oregon specialty code amendment process begins approximately midway into a code cycle.

(6) An appropriate advisory board approves or forwards the adoption of the Oregon specialty code and amendments to the Department for adoption.

(7) Notwithstanding sections (3) through (6) of this rule, the division may adopt supplemental code amendments as authorized by OAR 918-008-0028.

Statutory/Other Authority: ORS 447.020, 455.030 & 479.730

Statutes/Other Implemented: ORS 447.020, 455.030 & 479.730

R102.5 Reserved.

R102.6 Partial invalidity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code.

R102.7.1 Additions and alterations. *Additions and alterations* to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. *Additions and alterations* shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing egress; will create a fire hazard; will reduce required fire resistance; or will otherwise create conditions dangerous to human life. Any building plus new additions shall not exceed the height and stories specified for new buildings in Section R101.2.

Exception: Structural changes which improve the resistance of the building to seismic forces may be made without complying with the current code requirements provided:

1. The strength of the existing structural elements is not reduced; and
2. An unsafe condition is not created.

R102.7.2 Repairs. *Repairs shall not make the building any less conforming with the provisions of this code than the building was before the repair was undertaken. Repairs for the purposes of building maintenance shall comply with Section R105.2.2. Repairs for the purposes of correcting damage shall be permitted to conform with the code edition in effect at the time of original construction, where the requirements of this section are met.*

Where it becomes necessary to repair all or a portion of a legally existing building that has been damaged by, including but not limited to fire, wind, flood, earthquake or other similar damage, and where prior to the damage, the legally existing building did not contain unsafe conditions, the building may be reconstructed exactly as it existed prior to the damage. The following requirements from the currently effective code shall be included in the reconstruction, where applicable:

1. *Repaired structural elements in accordance with the design criteria and loading requirements of Chapter 3, or to the maximum extent practical as approved by the building official.*
2. *Smoke alarms in accordance with Section R314.*
3. *Carbon monoxide alarms in accordance with Section R315.*
4. *Guards and fall protection in accordance with Section R312.*
5. *Hazardous glazing locations in accordance with Section R308.*

6. *Emergency escape and rescue openings in accordance with Section R310.*

7. *Table N1101.2, to the maximum extent practical.*

8. *Floodplain construction requirements, where applicable, as determined by the flood plain administrator.*

Such repairs for the purposes of correcting damage are not required to meet other current code requirements for new construction. Where unsafe conditions existed prior to the damage occurring, the building may be reconstructed in accordance with this section provided that the unsafe conditions are corrected, as determined by the building official.

PART 2—ADMINISTRATIVE AND ENFORCEMENT

SECTION R103 DEPARTMENT OF BUILDING SAFETY

Not adopted by the State of Oregon Building Codes Division as part of the *state building code*.

SECTION R104 DUTIES AND POWERS OF THE BUILDING OFFICIAL

R104.1 General. The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving safeguard requirements specifically provided for in this code, statewide alternate methods, or statewide code interpretations. Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances.

R104.2 Applications and permits. The *building official* shall receive applications, review *construction documents* and issue *permits* for the erection, *alteration and moving* of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

R104.3 Notices and orders. The *building official* shall issue necessary notices or orders to ensure compliance with this code.

R104.4 Inspections. The *building official* shall make the required inspections, or the *building official* shall have the authority to accept reports of inspection by *approved agencies* or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such *approved agency* or by the responsible individual. The *building official* is authorized to engage such expert opinion as deemed necessary to report on unusual technical issues that arise.

R104.5 Identification. Not adopted by the State of Oregon, Building Codes Division, as part of the *state building code*.

R104.6 Right of entry. Not adopted by the State of Oregon, Building Codes Division, as part of the *state building code*.

R104.7 Department records. The building official shall retain official records for the periods specified regarding the retention of public records. See OAR 166-150-0020 for locations where a county has jurisdiction; OAR 166-200-0025 where a city has jurisdiction; and OAR 166 Division 300 et al for the cities and counties where the State of Oregon has jurisdiction.

R104.8 Liability. See ORS 30.265 for regulations relating to liability.

ORS 30.265 is not part of this code but is reprinted here for the readers' convenience:

ORS 30.265 Scope of liability of public body, officers, employees and agents; liability in nuclear incident.

(1) Subject to the limitations of ORS 30.260 to 30.300, every public body is subject to civil action for its torts and those of its officers, employees and agents acting within the scope of their employment or duties, whether arising out of a governmental or proprietary function or while operating a motor vehicle in a ridesharing arrangement authorized under ORS 276.598.

(2) The sole cause of action for a tort committed by officers, employees or agents of a public body acting within the scope of their employment or duties and eligible for representation and indemnification under ORS 30.285 or 30.287 is an action under ORS 30.260 to 30.300. The remedy provided by ORS 30.260 to 30.300 is exclusive of any other action against any such officer, employee or agent of a public body whose act or omission within the scope of the officer's, employee's or agent's employment or duties gives rise to the action. No other form of civil action is permitted.

(3) If an action under ORS 30.260 to 30.300 alleges damages in an amount equal to or less than the damages allowed under ORS 30.271, 30.272 or 30.273, the sole cause of action for a tort committed by officers, employees or agents of a public body acting within the scope of their employment or duties and eligible for representation and indemnification under ORS 30.285 or 30.287 is an action against the public body. If an action is filed against an officer, employee or agent of a public body, and the plaintiff alleges damages in an amount equal to or less than the damages allowed under ORS 30.271, 30.272 or 30.273, the court upon motion shall substitute the public body as the defendant. Substitution of the public body as the defendant does not exempt the public body from making any report required under ORS 742.400.

(4) If an action under ORS 30.260 to 30.300 alleges damages in an amount greater than the damages allowed under ORS 30.271, 30.272 or 30.273, the action may be brought and maintained against an officer, employee or agent of a public body, whether or not the public body is also named as a defendant. An action brought under this subsection is subject to the limitations on damages imposed under ORS 30.271, 30.272 or 30.273, and the total combined amount recovered in the action may not exceed those limitations for a single accident or occurrence without regard to the number or types of defendants named in the action.

(5) Every public body is immune from liability for any claim for injury to or death of any person or injury to property resulting from an act or omission of an officer, employee or agent of a public body when such officer, employee or agent is immune from liability.

(6) Every public body and its officers, employees and agents acting within the scope of their employment or duties, or while operating a motor vehicle in a ridesharing arrangement authorized under ORS 276.598, are immune from liability for:

(a) Any claim for injury to or death of any person covered by any workers' compensation law.

(b) Any claim in connection with the assessment and collection of taxes.

(c) Any claim based upon the performance of or the failure to exercise or perform a discretionary function or duty, whether or not the discretion is abused.

(d) Any claim that is limited or barred by the provisions of any other statute, including but not limited to any statute of ultimate repose.

(e) Any claim arising out of riot, civil commotion or mob action or out of any act or omission in connection with the prevention of any of the foregoing.

(f) Any claim arising out of an act done or omitted under apparent authority of a law, resolution, rule or regulation that is unconstitutional, invalid or inapplicable except to the extent that they would have been liable had the law, resolution, rule or regulation been constitutional, valid and applicable, unless such act was done or omitted in bad faith or with malice.

(7) This section applies to any action of any officer, employee or agent of the state relating to a nuclear incident, whether or not the officer, employee or agent is acting within the scope of employment, and provided the nuclear incident is covered by an insurance or indemnity agreement under 42 U.S.C. 2210.

(8) Subsection (6)(c) of this section does not apply to any discretionary act that is found to be the cause or partial cause of a nuclear incident covered by an insurance or indemnity agreement under the provisions of 42 U.S.C. 2210, including but not limited to road design and route selection. [1967 c.627 §§2,3,10; 1969 c.429 §1; 1975 c.609 §12; 1977 c.823 §2; 1981 c.490 §4; 1985 c.731 §31; 1987 c.705 §7; 1991 c.861 §1; 2005 c.22 §19; 2007 c.803 §4; 2011 c.270 §1]

R104.9 Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

R104.9.1 Used materials and equipment. Used materials, equipment and devices shall not be reused unless approved by the building official. Used or salvaged dimensional lumber shall be permitted to be used in accordance with all of the following:

1. Used or salvaged dimensional lumber shall be in generally good condition and free of any obvious areas of decay.
2. Where used or salvaged dimensional lumber is identified by a grade mark or where a certificate of inspection is provided from a lumber grading or inspection agency approved by an accreditation body that complies with DOC PS 20, structural properties for the used or salvaged lumber shall be as determined by the approved agency in accordance with the grade stamp or certificate provided.

Exception: In lieu of the grade mark or certificate described in Item 2, used or salvaged dimensional lumber not bearing a grade stamp or provided with a certificate shall be assumed to be Douglas Fir-Larch No. 2 grade and shall have structural properties assigned in accordance with current adopted standards.

R104.10 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not

[create an unsafe or dangerous condition regarding fire and life safety, and does not require enforcement of any requirements that are in addition to the *state building code* except where additional code requirements are specified by the terms of an alternate method approval.](#) The details of action granting modifications shall be recorded and entered in the *municipality's* files.

R104.10.1 Flood hazard areas. Not adopted by the State of Oregon, Building Codes Division, as part of the *state building code*.

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Compliance with the specific performance-based provisions of the current edition of the *Building Code* shall be an alternative to the specific requirements of this code. Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

R104.11.1 Tests. Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made at no expense to the *municipality*. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

SECTION R105 PERMITS

R105.1 Required. Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, ~~demolish~~ or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any ~~electrical, gas, or mechanical or plumbing~~ system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*.

ORS 455.310(2) is not part of this code but is reprinted here for the readers' convenience:

455.310(2) Single-family residence repair and maintenance exempt from codes; exemption itemized. (2) Items designated by the Director of the Department of Consumer and Business Services, with the advice of the Residential and Manufactured Structures Board, shall be exempt from permits and fees required under this chapter. The director shall, pursuant to ORS chapter 183, develop and maintain an applicable list of such exempt items, which shall include, but not be limited to, concrete slabs, driveways, sidewalks, masonry repair, porches, patio covers, painting, interior wall, floor or ceiling covering, nonbearing partitions, shelving, cabinet work, gutters, downspouts, small accessory buildings, door and window replacements, replacement or repair of siding and replacement or repair of roofing. In making the list of exempt items, the director shall further define the items on the list contained in this subsection so that no item which adversely affects the structural integrity of the dwelling shall be on the list. [Formerly 456.753 and then 456.915; 1993 c.744 §93; 2003 c.675 §26; 2009 c.567 §17]

R105.2 Work exempt from permit. Exemption from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws. [Nothing in this code limits a local municipality's ability to require application of its ordinances, or to enforce its own ordinances. See Section R101 for the application and scope of this code.](#) *Permits* shall not be required for the following:

Building:

1. [Nonhabitable one-story detached accessory structures](#), provided that the floor area does not exceed 200 square feet (18.58 m²) and does not exceed [a height of 15 feet \(3048 mm\)](#) measured from [grade plane](#) to the average height of the highest roof surface.

Exception: Where the structure is located on a parcel of 2.0 acres or greater in area, and the structure is located a minimum of 20 feet (6096 mm) from all property lines and regulated structures, the floor area may be increased to 400 square feet (37.16 m²).

2. [Concrete sidewalks, slabs, platforms, driveways, and similar work.](#)
3. [Painting, papering, tiling, carpeting, cabinets, counter tops, interior wall, floor or ceiling covering, shelving, and similar work.](#)
4. [Above-grade and on-ground](#) swimming pools.
5. Swings, other playground equipment, [and similar work.](#)
6. [Patio covers](#), as defined in AH102, and porch covers not over 200 square feet (11 m²), and supported by an exterior building wall.
7. [Window awnings](#) supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.

8. Nonbearing partitions, except when such partitions create *habitable space*.
9. Replacement or repair of siding not required to be fire resistive.
10. Retrofitted insulation.
11. Masonry repair.
12. Porches and decks, where the floor or deck is not more than 30 inches (762 mm) above adjacent *grade* measured at any point within 3 feet (914 mm) horizontally of the floor or deck, and where in the case of a covered porch, the covered portion of the porch does not come closer than 3 feet (914 mm) to *lot* lines.
13. Gutters and downspouts
14. Door and window replacements (where no structural member is changed).
15. Re-roofing, where replacement or repair of roofing and sheathing does not exceed 30 percent of the required live load design capacity.

Exceptions: Permits for re-roofing are required for the following:

1. Structures in wildfire hazard zones as provided in Section R327.
 2. Townhouses.
 3. Installation of building-integrated photovoltaic roof coverings.
16. Framed-covered nonhabitable *accessory structures* not more than 500 square feet (46.45 m²) in area, one story in height and not closer than 3 feet (914 mm) to a property line, where the structure is composed of a rigid framework that supports a fabric membrane.

Unless otherwise exempted, separate plumbing, electrical and mechanical *permits* may be required for the above exempted items.

Electrical: See the *Electrical Code*.

Mechanical:

1. Portable heating *appliances*, *cooking* or *clothes drying appliances*.
2. Portable ventilation *appliances*.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping within any heating or cooling *equipment* regulated by this code.
5. Replacement of any minor part that does not alter approval of *equipment* or make such *equipment* unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell *appliances* that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing: See the *Plumbing Code*.

R105.2.1 Emergency repairs. Where *mechanical equipment* replacements and repairs must be performed in an emergency situation, the *permit* application shall be submitted to the *building official* within the next 5 working business day.

R105.2.1.1 Structural temporary repairs. For temporary (180 days) structural supports, structural replacement or repairs performed in an emergency on an existing structure, the building official shall be notified within 72 hours and permit application for the temporary work shall be submitted to the building official within the next 5 business days.

ORS 455.058 is not part of this code but is reprinted here for the readers' convenience:

455.058 Investigation fee for work commenced without permit; rules.

(1) Except as provided in subsection (2) of this section, the Department of Consumer and Business Services, or a municipality administering and enforcing a building inspection program, may assess an investigation fee against a person that is required to obtain a permit for work on the electrical, gas, mechanical, elevator, boiler, plumbing or other systems of a building or structure if the work is commenced before the permit required for the work is obtained. The amount of the investigation fee shall be the average or actual additional cost of ensuring that a building, structure or system is in conformance with State Building Code requirements that results from the person not obtaining a required permit before work for which the permit is required commences.

(2) This section does not apply to:

- (a) An emergency repair required for health, safety, the prevention of property damage or the prevention of financial harm if the required building permit for the repair is obtained no later than five business days after commencement of the repair; or
- (b) Any project for which construction, alteration, repair, maintenance or installation in a building or structure prior to obtaining a permit is expressly authorized by law.
- (c) The department may adopt rules and establish policies and procedures for use by the department or municipalities in assessing an investigation fee under this section. [2013 c.324 §2]

R105.2.2 Repairs. Application or notice to the *building official* is not required for ordinary repairs to structures. Repair work shall be performed using like materials, or materials permitted by this code for new construction. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include *addition* to, *alteration* of, replacement or relocation of any gas, piping, or mechanical work.

R105.2.3 Public service agencies. A *permit* shall not be required for the installation, *alteration* or repair of generation, transmission, distribution, metering or other related *equipment* that is under the ownership and control of public service agencies by established right.

R105.3 Application for permit. To obtain a *permit*, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

1. Identify and describe the work to be covered by the *permit* for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by *construction documents* and other information as required in Section R106.1.
5. State the valuation of the proposed work.
6. Be signed by the applicant or the applicant's authorized agent.
7. Give such other data and information as required by the *building official*.

R105.3.1 Action on application. The *building official* shall examine or cause to be examined applications for *permits* and amendments thereto within a reasonable time after filing. If the application or the *construction documents* do not conform to the requirements of pertinent laws, the *building official* shall reject such application in writing stating the reasons therefor. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and laws applicable thereto, the *building official* shall issue a *permit* therefor as soon as practicable. [Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances.](#)

R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas. Not adopted by the State of Oregon, Building Codes Division, as part of the *state building code*.

R105.3.2 Time limitation of application. An application for a *permit* for any proposed work shall be deemed to have been abandoned 180 days after the date of filing unless such application has been pursued in good faith or a *permit* has been issued; except that the *building official* is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

R105.4 Validity of permit. The issuance or granting of a *permit* shall not be construed to be a *permit* for, or an *approval* of, any violation of any of the provisions of this code. *Permits* presuming to give authority to violate or cancel the provisions of this code shall not be valid. The issuance of a *permit* based on *construction documents* and other data shall not prevent the *building official* from requiring the correction of errors in the *construction documents* and other data. The *building official* is authorized to prevent occupancy or use of a structure where in violation of this code, [by withholding or revoking a certificate of occupancy.](#) [Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances.](#)

R105.5 Expiration. Every *permit* issued shall become invalid unless the work authorized by such *permit* is commenced within 180 days after its issuance, or [if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced.](#) The *building official* is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

R105.6 Suspension or revocation. The *building official* is authorized to suspend or revoke a *permit* issued under the provisions of this code wherever the *permit* is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any of the provisions of this code. [Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances.](#)

R105.7 Placement of permit. The building *permit* or a copy shall be kept on the site of the work until the completion of the project.

R105.8 Responsibility. It shall be the duty of every person who performs work for the installation or repair of building, structure, or mechanical systems, for which this code is applicable, to comply with this code.

R105.9 Preliminary inspection. Before issuing a *permit*, the *building official* is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

SECTION R106 CONSTRUCTION DOCUMENTS

R106.1 Submittal documents. Submittal documents consisting of *construction documents*, and other data shall be submitted in two or more sets with each application for a *permit*. The *construction documents* shall be prepared by a registered *design professional* where required by [state law](#). Where special conditions exist, the *building official* is authorized to require additional *construction documents* to be prepared by a registered *design professional*.

Exception:

1. The *building official* is authorized to waive the submission of *construction documents* and other data not required to be prepared by a registered *design professional* if it is found that the nature of the work applied for is such that reviewing of *construction documents* is not necessary to obtain compliance with this code.
2. [Plans, calculations and specifications, diagrams and other data prepared and designed by an architect or an engineer licensed by the state to practice as such are not required for the following work:](#)
 - 2.1 The erection, enlargement or alteration of any building, or any appurtenance thereto, where the resulting building has a ground area of 4,000 square feet (372 m²) or less and is not more than 20 feet (6096 mm) in height from the top surface of the lowest floor to the highest interior overhead finish (ORS 671.030).

- 2.2. A detached single-family dwelling, a farm agricultural building, nonfarm agricultural building, or accessory building to a single-family dwelling.
- 2.3. Alterations or repairs that do not involve structural parts of the building.

R106.1.1 Information on construction documents. *Construction documents* shall be drawn upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *building official*. *Construction documents* shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws.

R106.1.2 Manufacturer's installation instructions. Manufacturer's installation instructions, as required by this code, shall be available on the job site at the time of inspection.

R106.1.3 Information on braced wall design. All braced wall lines shall be identified on the *construction documents*. Pertinent information including, but not limited to, bracing methods, location and length of *braced wall panels* and foundation requirements of braced wall panels at top and bottom shall be provided.

R106.1.4 Information for construction in flood hazard areas. For buildings and structures located in whole or in part in flood hazard areas as established by the *flood plain administrator*, *construction documents* shall include:

1. Delineation of flood hazard areas, floodway boundaries and flood zones and the design flood elevation, as appropriate.
2. The elevation of the proposed lowest floor, including *basement*; in areas of shallow flooding (AO Zones), the height of the proposed lowest floor, including *basement*, above the highest adjacent *grade*.
3. The elevation of the bottom of the lowest horizontal structural member in coastal high hazard areas (V Zone) and in Coastal A Zones where such zones are delineated on flood hazard maps or otherwise delineated by the *flood plain administrator*.

R106.2 Site plan or plot plan. The *construction documents* submitted with the application for *permit* shall be accompanied by a site plan showing the size and location of new construction and existing structures on the site and distances from *lot lines*. The *building official* is authorized to waive or modify the requirement for a site plan where the application for *permit* is for *alteration* or repair or where otherwise warranted.

R106.3 Examination of documents. The *building official* shall examine or cause to be examined *accompanying construction documents* and shall ascertain by such examination whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws.

R106.3.1 Approval of construction documents. Where the *building official* issues a *permit*, the *construction documents* shall be *approved* in writing or by a stamp that states "REVIEWED FOR CODE COMPLIANCE." One set of *construction documents* so reviewed shall be retained by the

building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the *building official* or a duly authorized representative. *Construction documents* shall be *approved* in the timelines specified in ORS 455.467.

R106.3.2 Previous approvals. This code shall not require changes in the *construction documents*, construction or designated occupancy of a structure for which a lawful *permit* has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

R106.3.3 Phased approval. The *building official* is authorized to issue a *permit* for the construction of foundations or any other part of a building or structure before the *construction documents* for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such *permit* for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a *permit* for the entire structure will be granted.

R106.3.4 Design professional in responsible charge.

R106.3.4.1 General. When it is required that documents be prepared by a registered *design professional*, the *building official* shall be authorized to require the owner to engage and designate on the *building permit* application a registered *design professional* who shall act as the registered *design professional* in responsible charge. If the circumstances require, the owner shall designate a substitute registered *design professional* in responsible charge who shall perform the duties required of the original registered *design professional* in responsible charge. The *building official* shall be notified in writing by the owner if the registered *design professional* in responsible charge is changed or is unable to continue to perform the duties.

The registered *design professional* in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

R106.4 Amended construction documents. Work shall be installed in accordance with the *approved construction documents*, and any changes made during construction that are not in compliance with the *approved construction documents* shall be resubmitted for approval as an amended set of *construction documents*.

R106.5 Retention of construction documents. One set of *approved construction documents* shall be retained by the *building official* for a period of not less than that dictated by OAR 166-150-0020 where a county has jurisdiction; OAR 166-200-0025 where a city has jurisdiction; and OAR 166-300 et al., for the jurisdictions where the State of Oregon has jurisdiction. One set of *approved plans* and specifications shall be returned to the applicant, and kept on the site of the building or work at all times during which the work authorized thereby is in progress. The *building official* shall maintain a permanent record of all *permits*

issued in *flood hazard areas*, including copies of inspection reports and certifications required in Section R109.1.3.

SECTION R107 TEMPORARY STRUCTURES AND USES

R107.1 General. The *building official* is authorized to issue a *permit* for temporary structures and temporary uses. Such *permits* shall be limited as to time of service, but shall not be permitted for more than 180 days. The *building official* is authorized to grant extensions for demonstrated cause.

R107.2 Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

R107.3 Temporary power. See the *Electrical Code*.

R107.4 Termination of approval. The *building official* is authorized to terminate such *permit* for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION R108 FEES

R108.1 Payment of fees. A *permit* shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a *permit* be released until the additional fee, if any, has been paid.

R108.2 Schedule of permit fees. Permit and plan review fees shall be as adopted by the *municipality*, except as otherwise limited by statute. On buildings, structures, and mechanical systems or *alterations* requiring a *permit*, a fee for each *permit* shall be paid as required, in accordance with the schedule as established by the *municipality* under authority of ORS 455.020 and 455.210, or set forth in OAR chapter 918, division 480 where the State of Oregon has jurisdiction.

ORS 455.020(2) is not part of this code but is reprinted here for the readers' convenience:

455.020(2) Purpose: scope of application; exceptions; scope of rules; fees by rule.

(2) The rules adopted pursuant to this chapter shall include structural standards; standards for the installation and use of mechanical, heating and ventilating devices and equipment; and standards for prefabricated structures; and shall, subject to ORS 455.210, prescribe reasonable fees for the issuance of building permits and similar documents, inspections and plan review services by the Department of Consumer and Business Services. The department may also establish, by rule, the amount of any fee pertaining to the State Building Code or any specialty code that is authorized by statute, but for which an amount is not specified by statute. [Formerly 456.755; 1991 c.227 §2; 1991 c.310 §2; 1995 c.304 §1; 1995 c.400 §5; 1999 c.1045 §13; 1999 c.1082 §11; 2001 c.710 §8]

ORS 455.210(3)(a) is not part of this code but is reprinted here for the readers' convenience:

455.210 Fees; appeal of fees; surcharge; reduced fees; rules.

(3) (a) A municipality may adopt by ordinance or regulation such fees as may be necessary and reasonable to provide for the administration and enforcement of any specialty code or codes for which the municipality has assumed responsibility under ORS 455.148 or 455.150. A municipality shall give the director notice of the proposed adoption of a new or increased fee under this subsection. The municipality shall give the notice to the director at the time the municipality provides the opportunity for public comment under ORS 294.160 regarding the fee or, if the proposed fee is contained in an estimate of municipal budget resources, at the time notice of the last budget meeting is published under ORS 294.426. [Subsections (1) to (5) formerly 456.760; subsection (6) enacted as 1987 c.604 §6; 1997 c.856 §1; 1999 c.432 §1; 1999 c.1045 §24; 1999 c.1082 §9; 2001 c.573 §9; 2001 c.673 §1; 2005 c.193 §1; 2005 c.833 §3; 2007 c.69 §5; 2011 c.473 §29]

R108.2.1 Plan review fees. When *construction documents* are required by Section R106.1, a plan review fee shall be paid at the time of submitting the *construction documents* for plan review. Said plan review fee shall be a percentage of the building *permit* fee as established under Section R108.2. The plan review fees specified in this section are separate from the *permit* fees specified in Section R108.2 and are in addition to the *permit* fees. The state surcharge is not applied to plan review fees. When *construction documents* are incomplete or changed so as to require additional plans an additional plan review fee shall be charged according to the rate established by the *municipality*, or OAR chapter 918, division 480 where the State of Oregon has jurisdiction.

R108.3 Building permit fees. Structural and mechanical permit fees shall be based upon the uniform fee methodologies as established by OAR 918-050-0100. Valuations used to calculate structural permit fees shall be based upon the uniform methodology established by OAR 918-050-0100.

R108.4 Related fees. The payment of the fee for the construction, or *alteration* for work done in connection to or concurrently with the work authorized by a building *permit* shall not relieve the applicant or holder of the *permit* from the payment of other fees that are prescribed by law.

R108.5 Refunds. The *building official* is authorized to establish a refund policy.

R108.6 Work commencing before permit issuance. Any person who commences work requiring a permit on a building, structure, or mechanical system before obtaining the necessary permits shall be subject to an investigation fee. The amount of the investigation fee shall be the average or actual additional cost of ensuring that a building, structure or system is in conformance with this code and shall be in addition to the required *permit* fees.

Exception: Work exempt from building *permit*.

OAR 918-050-0100 is not part of this code but is reprinted here for the readers' convenience:

918-050-0100 Statewide Fee Methodologies for Residential and Commercial Permits.

(1) (1) Residential construction permit fees shall be calculated using the following methodologies:

(a) (a) A plumbing permit fee for new construction includes one kitchen and is based on the number of bathrooms, from one to three, on a graduated scale. An additional set fee shall be assessed for each additional bath or kitchen.

(C) (C) No additional fee shall be charged for the first 100 feet of water and sewer lines, hose bibbs, icemakers, underfloor low-point drains, and rain drain packages that include the piping, gutters, down-spouts, and perimeter system.

(D) (D) The plumbing permit fee described in this section does not include:

(i) Any storm water retention/detention facility;

(ii) Irrigation and fire suppression systems; or (iii) Additional water, sewer and service piping or private storm drainage systems exceeding the first 100 feet.

(E) Permit fees for an addition, alteration, or repair shall be calculated based on the number of fixtures, appurtenances, and piping, with a set minimum fee.

(b) A mechanical permit fee shall be calculated per appliance and related equipment, with a set minimum fee.

Effective January 1, 2009, a structural permit fee for new construction and additions shall be calculated using the ICC Building Valuation Data Table current as of April 1 of each year, multiplied by the square footage of the dwelling to determine the valuation. The valuation shall then be applied to the municipality's fee schedule to determine the permit fee. The plan review fee shall be based on a predetermined percentage of the permit fee set by the municipality.

(C) The square footage of a dwelling, addition, or garage shall be determined from outside exterior wall to outside exterior wall for each level.

(D) The square footage of a carport, covered porch, patio, or deck shall be calculated separately at fifty percent of the value of a private garage from the ICC Building Valuation Data Table current as of April 1.

(E) Permit fees for an alteration or repair shall be calculated based on the fair market value as determined by the building official, and then applying the valuation to the municipality's fee schedule.

Stat. Auth.: ORS 455.048 & 455.055

Stats. Implemented: ORS 455.046 & 455.055

SECTION R109 INSPECTIONS

R109.1 General. Construction or work for which a permit is required shall be subject to inspection by the *building official* and such construction or work shall remain accessible and exposed for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other laws of the *municipality*. Inspections presuming to give authority to violate or cancel the provisions of this code or of other laws of the *municipality* shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the *building official* nor the state shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

R109.1.1 Foundation inspection. Inspection of the foundation shall be made after poles or piers are set or trenches or *basement* areas are excavated, and any required forms erected, and any required reinforcing steel is in place and supported prior to the placing of concrete. The foundation inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or *equipment* and special requirements for wood foundations.

R109.1.1.1 Concrete slab or under-floor inspection.

Concrete slab or under-floor inspection shall be made after in-slab or under-floor building service equipment, conduit, piping accessories and other ancillary equipment items are in place but before any concrete is placed or floor sheathing installed, including subfloor.

R109.1.2 Mechanical systems inspection. Rough inspection of mechanical systems shall be made prior to covering or concealment, before fixtures or *appliances* are set or installed, and prior to framing inspection.

Exception: Backfilling of ground-source heat pump loop systems tested in accordance with Section M2105.28 prior to inspection shall be permitted.

R109.1.3 Floodplain inspections. In flood hazard areas as established by the *flood plain administrator*, upon placement of the lowest floor, including *basement*, and prior to further vertical construction, the *flood plain administrator* shall require submission of documentation, prepared and sealed by a registered *design professional*, of the elevation of the lowest floor, including *basement*, required in Section R322.

R109.1.4 Frame and masonry inspection. Inspection of framing and masonry construction shall be made after the roof, masonry, framing, firestopping, draftstopping and bracing are in place and after the plumbing, mechanical and electrical rough inspections are *approved*.

R109.1.4.1 Moisture content. After the framing inspection and prior to the installation of interior finishes, the *building official* shall be notified in writing by the general contractor that all moisture-sensitive wood framing members used in construction have a moisture content of not more than 19 percent of the weight of dry wood framing members.

R109.1.5 Other inspections. In addition to inspections in Sections R109.1.1 through R109.1.4, the *building official* shall have the authority to make or require other inspections to ascertain compliance with this code and other laws enforced by the *building official*.

R109.1.5.1 Fire-resistance-rated construction inspection.

Where fire-resistance-rated construction is required between *dwelling units* or due to location on property, the *building official* shall require an inspection of such construction after lathing or gypsum board or gypsum panel products are in place, but before any plaster is applied, or before board or panel joints and fasteners are taped and finished.

R109.1.5.2 Insulation and vapor retarder inspection. Inspection shall be made after all insulation and required vapor retarders are in place, but before any lath or gypsum board interior wall covering is applied.

Exceptions:

1. Ceiling and floor insulation visible during final inspection.
2. The *building official* may allow the frame, insulation and vapor retarder inspections to be performed simultaneously.

R109.1.5.3 Reinforced masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection. Reinforced masonry walls, insulating concrete form (ICF) walls and conventionally formed concrete walls located in Seismic Design Categories D₁, D₂, and E shall be inspected after plumbing, mechanical, and electrical systems embedded within the walls, and reinforcing steel are in place and prior to placement of grout or concrete. Inspection shall verify the correct size, location, spacing, and lapping of reinforcing. For masonry walls, inspection shall also verify that the location of grout cleanouts and size of grout spaces comply with the requirements of this code.

R109.1.6 Final inspection. Final inspection shall be made after all work required by the building permit is completed.

R109.1.6.1 Elevation documentation. If located in a flood hazard area, the documentation of elevations required in Section R322.1.10 shall be submitted to the *building official* prior to the final inspection.

R109.2 Inspection agencies. The *building official* is authorized to accept reports of *approved* agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

R109.3 Inspection requests. It shall be the duty of the holder of the building permit or their *duly authorized* agent to notify the *building official* when work is ready for inspection. It shall be the duty of the *permit holder* to provide access to and means for inspection of such work that are required by this code.

OAR 918-098-1900 is not part of this code but is reprinted here for the readers' convenience:

918-098-1900 Corrective Notices—Cite-it Write-it Requirement.

In addition to any other requirements set forth in statute and rule, all building officials, inspectors and plans examiners certified under Division 098, OAR 918-225-0540, 918-281-0020, 918-695-0400, and ORS 460.055 must include an exact reference to the applicable specialty code section, Oregon administrative rule, or statute, when issuing corrective notices at construction sites or to buildings or related appurtenances during a plan review while administering or enforcing a building inspection program. The building official, inspector, or plans examiner must include a plain statement of facts upon which the citation for correction action is based.

Stat. Auth.: ORS 455.720 & 455.740

Stat. Implemented: ORS 455.720 & 455.740

R109.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *building official*. The *building official* upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the *permit holder* or their *duly authorized* agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *building official*.

SECTION R110 CERTIFICATE OF OCCUPANCY

R110.1 Use and occupancy. A building or structure shall not be used or occupied, and a change in the existing character, use or occupancy classification of a building or structure or portion thereof shall not be made, until the *building official* has issued a *certificate of occupancy* for such change in character, use or occupancy. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code. Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances. See OAR 918-480-0140.

Exceptions:

1. Certificates of occupancy are not required for work exempt from permits under Section R105.2.
2. *Accessory structures*.

OAR 918-480-0140 is not part of this code but is reprinted here for the readers' convenience:

OAR 918-480-0140 Residential Certificates of Occupancy.

(1) Prior to occupancy of a new residential dwelling or townhouse the building official must issue a certificate of occupancy in the form and format established by the division, unless a temporary certificate of occupancy is issued by the building official.

(2) This rule applies to a new residential dwelling or townhouse, if the structural permit for construction of the residential dwelling or townhouse was applied for on or after April 1, 2008.

(3) For purposes of this rule, the terms "residential dwelling" and "townhouse" have the same meaning as in section R202 of the 2008 *Oregon Residential Specialty Code*.

(4) Before the certificate of occupancy is issued, the general contractor or owner who was issued the structural permit for construction must provide to the building official the contact information and relevant license information for the general contractor, as well as any electrical contractor, HVAC contractor and plumbing contractor that performed work on the residential dwelling or townhouse.

A building official may revoke a certificate of occupancy or a temporary certificate of occupancy when the residential dwelling or townhouse is in violation of applicable law that poses a threat to health and safety. The revocation must be in writing and state the basis for the revocation of the certificate of occupancy.

R110.2 Change in use or occupancy. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of this code, or the *Building Code* for such division or group of occupancy. Subject to the approval of the *building official*, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is not more hazardous, based on life and fire risk, than the existing use.

R110.3 Certificate issued. After the *building official* inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department of building safety, the *building official* shall issue a certificate of occupancy containing the following:

1. The building *permit* number.
2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
6. The name of the *building official*.
7. The edition of the code under which the *permit* was issued.
8. If an automatic sprinkler system is provided and whether the sprinkler system is required.
9. Any special stipulations and conditions of the building *permit*.

R110.4 Temporary occupancy. The *building official* is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the *permit*, provided that such portion or portions shall be occupied safely. The *building official* shall set a time period during which the temporary certificate of occupancy is valid.

R110.5 Revocation. The *building official* is authorized to, in writing, suspend or revoke a certificate of occupancy or certificate of completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any of the provisions of this code. Nothing in this code limits a local municipality's ability to require application of its own ordinances, or to enforce its own ordinances.

SECTION R111 SERVICE UTILITIES

Not adopted by the State of Oregon Building Codes Division as part of the *state building code*. Municipalities may have independent local authority regarding service utilities.

SECTION R112 BOARD OF APPEALS

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, the municipality shall establish an appeals procedure. ORS 455.475 provides an alternative appeal process to that set forth by the local municipality.

R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

ORS 455.475 is not part of this code but is reprinted here for the readers' convenience:

455.475 Appeal of decision of building official. A person aggrieved by a decision made by a building official under authority established pursuant to ORS 455.148, 455.150 or 455.467 may appeal the decision. The following apply to an appeal under this section:

(1) An appeal under this section shall be made first to the appropriate specialty code chief inspector of the Department of Consumer and Business Services. The decision of the department chief inspector may be appealed to the appropriate advisory board. The decision of the advisory board may only be appealed to the Director of the Department of Consumer and Business Services if codes in addition to the applicable specialty code are at issue.

(2) If the appropriate advisory board determines that a decision by the department chief inspector is a major code interpretation, then the inspector shall distribute the decision in writing to all applicable specialty code public and private inspection authorities in the state. The decision shall be distributed within 60 days after the board's determination, and there shall be no charge for the distribution of the decision. As used in this subsection, a "major code interpretation" means a code interpretation decision that affects or may affect more than one job site or more than one inspection jurisdiction.

(3) If an appeal is made under this section, an inspection authority shall extend the plan review deadline by the number of days it takes for a final decision to be issued for the appeal.

Forms for appeals under ORS 455.690 and ORS 455.475 are available online at Oregon.gov/bcd.

R112.3 Qualifications. An appeals board shall consist of members who are qualified by experience and training to pass judgement on matters pertaining to building construction.

R112.4 Administration. Not adopted by the State of Oregon Building Codes Division as part of the *state building code*.

SECTION R113 VIOLATIONS

R113.1 Prohibited acts. Prohibited acts are as described in ORS 455.450.

ORS 455.450 is not part of this code but is reprinted here for the readers' convenience:

455.450 Prohibited acts. A person shall not:

(1) Violate, or procure or assist in the violation of, any final order of the Director of the Department of Consumer and Business Services, an advisory board, a state administrative officer or any local appeals board, building official or inspector, concerning the application of the state building code in a particular case or concerning a license, certificate, registration or other authorization.

(2) Engage in, or procure or assist any other person to engage in, any conduct or activity for which a permit, label, license, certificate, registration or other formal authorization is required by any specialty code, any provision of ORS 446.003 to 446.200, 446.225 to 446.285, 446.395 to 446.420, 446.566 to 446.646, 446.666 to 446.746, 479.510 to 479.945, 479.950 and 480.510 to 480.670, this chapter or ORS chapter 447, 460 or 693, or any rule adopted or order issued for the administration and enforcement of those provisions, without first having obtained such permit, label, license, certificate, registration or other formal authorization.

Violate, or procure or assist in the violation of, any standard, specification, requirement, prohibition or other technical provision set forth in the state building code or an applicable local building code or in any rule or order of the Department of Consumer and Business Services, an advisory board, a local governing body or local building official.

R113.2 Notice of violation. The *building official* is authorized to serve a notice of violation or order on the person responsible for the erection, construction, *alteration*, extension, repair, moving, or occupancy of a building or structure in violation of the provisions of this code, or in violation of a detail statement or a plan *approved* thereunder, or in violation of a *permit* or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

R113.3 Prosecution of violation. If the notice of violation is not complied with in the time prescribed by such notice, the *building official* is authorized to request the legal counsel of the *municipality* to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

R113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the *approved construction documents* or directive of the *building official*, or of a *permit* or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

SECTION R114 STOP WORK ORDER

Not adopted by the State of Oregon Building Codes Division as part of the *state building code*. *Municipalities* may have independent local authority regarding stop orders.

SECTION R115 PREFABRICATED CONSTRUCTION

R115.1 General. See ORS 455.010 and OAR chapter 918, division 674.

ORS 455.010(6) is not part of this code but is reprinted here for the readers' convenience:

ORS 455.010(6) "Prefabricated structure" means a building or sub-assembly that has been in whole or substantial part manufactured or assembled using closed construction at an off-site location to be wholly or partially assembled on-site. "Prefabricated structure" does not include a manufactured dwelling, recreational structure or recreational vehicle, as those terms are defined in ORS 446.003.

SECTION R116 INSPECTION CARD

R116.1 Record required. The *permit* holder or *permit* holder's agent shall post the inspection record on the job site in an accessible and conspicuous place to allow the *building official* to make the required entries. The record shall be maintained by the *permit* holder until the final inspection has been made and *approved*. The *building official* may adopt local policies approving alternative inspection recording methods.

SECTION R117 MOVED BUILDINGS

R117.1 Moved buildings. See ORS 455.410.

ORS 455.410 is not part of this code but is reprinted here for the readers' convenience:

455.410 Relocated buildings; substantial compliance required; permits.

(3) Existing buildings or structures which are removed from their foundation and relocated to another site within this state shall be in substantial compliance as defined in sub- sections (2) and (3) of this section.

(4) "Substantial compliance" means compliance with local construction codes in effect as of the original permit date of the building or structure, or where there was no permitting required at the time of original construction, with basic health and safety standards, as described in the closest dated *Uniform Housing Code*, as published by the International Conference of Building Officials as of the date of construction. Only the insulation, overhead and underneath the structure, shall be upgraded to the current insulation requirements of the state building code, or to the maximum extent possible subject to the design of the structure. Nothing in this statute shall be construed to mean that all heating, plumbing and electrical systems shall be replaced with systems meeting current standards for new construction, except that any life-threatening deficiencies in those systems shall be repaired, notwithstanding that the cost of rehabilitation may exceed 50 percent of the value of the structure before rehabilitation.

(5) All foundation and basement construction on the structure and any remodeling at the new location shall be constructed subject to all applicable local current building and safety codes, or where none exist, with the applicable standards as described in the *Uniform Housing Code* described in subsection (2) of this section.

(6) All moved houses shall be provided with either battery- operated or hard-wired smoke detection devices located in accordance with the provisions of the state building code.

(7) Nothing in this section is intended to permit any person to move a structure unless the person first consults the appropriate building inspection authority and obtains all required permits.

SECTION R118 HISTORIC BUILDINGS

R118.1 Repairs, alterations and additions. Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a historical building may be made without conforming to all of the requirements of this code when authorized by the *building official*, provided:

1. The building has been officially designated a historic building.
2. Unsafe conditions are corrected.
3. The restored building will be no more hazardous, based on life and fire risk, than the existing building.
4. The *building official* seeks the advice of the State of Oregon Historic Preservation Office.

In the case of appeals related to historic buildings, the local appeals board or the appropriate state appeals board shall seek the advice of the state historic preservation officer.

State of Oregon

Board memo

Building Codes Division

January 6, 2021

To: Residential and Manufactured Structures Board

From: Andy Boulton, policy advisor, Policy and Technical Services

Subject: 2021 Oregon Residential Specialty Code – Additional Measures Table N1101.1(2)

Action requested:

Approve, amend and approve, or decline to approve changes to the additional measures table (Table N1101.1(2)) in Chapter 11 of the Oregon Residential Specialty Code (ORSC).

Background:

[Oregon Revised Statute 455.610](#) requires the division, with the approval of the board, to adopt, and amend as necessary, a low-rise residential dwelling code “that contains all the requirements, including structural design provisions, related to the construction of residential dwellings three stories or less above grade.”

The board began the code development process at its April 10, 2019, meeting where the division announced the process method. At its August 20, 2019, board meeting, the division announced the intent to incorporate some of the optional additional measures from Table N1101.1(2) into the required code and to reduce the number of additional measures that must be used from two to one. Delays caused by the ongoing COVID-19 pandemic made it necessary to delay the effective date of the new ORSC to April 1, 2021.

With the additional time, the board appointed a code committee at its July 8, 2020, meeting. The committee met three times on August 3, 2020, August 17, 2020, and August 25, 2020. At the August 25, 2020, meeting, the ZERO Coalition proposed adding additional measures to Table N1101.1(2) and altering the number of additional measures that are required using a sliding scale based on home size. The committee discussed the proposal and declined the change to a sliding scale of required measures. The committee accepted two of the new additional measures proposed by the ZERO Coalition for inclusion in Table N1101.1(2), expanding the selection to eight possible options. The approved measure seven gave credit for homes that capped the glazing area to less than 12 percent of the conditioned floor area.

The committee provided its recommendations to the board and the board reviewed the structural, design, fire and life-safety, mechanical and energy code provisions, as well as the administrative rule changes required for adoption of the 2021 ORSC at its October 7, 2020, meeting.

The ZERO Coalition has requested the opportunity to testify before the board to ask that additional measure number seven be removed as an available additional measure on Table N1101.1(2).

Options:

- Remove additional measure seven from Table N1101.1(2) with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public, or necessary to conserve scarce resources.
- Amend and approve the content of Table N1101.1(2), with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.
- Decline to make any changes to Table N1101.1(2).



Zero Energy Ready Oregon (ZERO) Coalition
623 SW Oak St., 3rd floor
Portland, OR 97233

Residential and Manufactured Structures Board (RMSB)

CC: Alana Cox, Building Codes Division Acting Administrator

RMSB Chair Tamerhoulet:

The ZERO coalition is writing today to withdraw the proposed use of Measure 7 in Table N1101.1(2) that is included in the current draft of the 2021 ORSC. Measure 7 is the use of limited glazing as an energy savings method. Measure 7, as submitted by the ZERO coalition, was part of a broader change to Table N1101.1(2) and how that table is used in the ORSC. However, the code update process did not allow time for discussion amongst code committee members, nor RMSB members, and they may not have realized that the adoption of Measure 7 without the overall proposed change would result in a minimal delivery of energy savings by the 2021 ORSC. The intent of the more holistic ZERO proposal was to do the opposite – to increase the overall energy savings delivered by the 2021 ORSC.

The ZERO coalition submitted a code change proposal titled “ZERO Proposal to modify ORSC Table N1101.1(2)” to the RMSB code committee for their meeting on 8/25/2020. Part of that proposal included the addition of Measure 7 to Table N1101.1(2). The code committee did not have an opportunity to discuss and debate the full extent of our proposal within the time frame of that meeting and instead the committee had a limited discussion about selecting specific elements of what we proposed. The addition of Measure 7 to Table N1101.1(2) was one element selected by the committee and included in the recommendations sent to the RMSB. The RMSB voted to approve inclusion of Measure 7 when it voted on the proposed 2021 ORSC.

At the time of the code committee meeting and the later RMSB meeting the loss of overall code-related savings due the inclusion of Measure 7 was not known to committee members, board members or to the ZERO coalition as advocates of the proposal. Building Codes Division staff made the interpretation of this result after the meeting and shared that publicly during a code stakeholder meeting hosted by the Oregon department of Energy on 10/19/2020, yesterday. The ZERO coalition is attempting to act in an expeditious manner to address this situation by asking for a withdrawal of Measure 7 before the adoption of the 2021 ORSC moves to the next stage of approval, which we understand is the publishing of a draft for public comment.

Thank you for your consideration of this request.

The ZERO coalition

2021 Oregon Residential Specialty Code draft language

Approved at the Oct. 7, 2020 Residential and Manufactured Structures Board meeting

TABLE N1101.1(2)
ADDITIONAL MEASURES

<u>1</u>	<u>HIGH EFFICIENCY HVAC SYSTEM ^a</u> <u>a. Gas-fired furnace or boiler AFUE 94 percent, or</u> <u>b. Air source heat pump HSPF 10.0/14.0 SEER cooling, or</u> <u>c. Ground source heat pump COP 3.5 or Energy Star rated</u>
<u>2</u>	<u>HIGH EFFICIENCY WATER HEATING SYSTEM ^b</u> <u>a. Natural gas/propane water heater with minimum UEF 0.90, or</u> <u>b. Electric heat pump water heater with minimum 2.0 COP, or</u> <u>c. Natural gas/propane tankless/instantaneous heater with minimum 0.80 UEF and Drain Water Heat Recovery Unit installed on minimum of one shower/tub-shower</u>
<u>3</u>	<u>WALL INSULATION UPGRADE</u> <u>Exterior walls—U-0.045/R-21 conventional framing with R-5.0 continuous insulation</u>
<u>4</u>	<u>ADVANCED ENVELOPE</u> <u>Windows—U-0.21 (Area weighted average), and</u> <u>Flat ceiling^c—U-0.017/R-60, and</u> <u>Framed floors—U-0.026/R-38 or slab edge insulation to F-0.048 or less (R-10 for 48”; R-15 for 36” or R-5 fully insulated slab)</u>
<u>5</u>	<u>DUCTLESS HEAT PUMP</u> <u>For dwelling units with all electric heat provide:</u> <u>Ductless heat pump of minimum HSPF 10 in primary zone replaces zonal electric heat sources, and</u> <u>Programmable thermostat for all heaters in bedrooms</u>
<u>6</u>	<u>HIGH EFFICIENCY THERMAL ENVELOPE UA ^c</u> <u>Proposed UA is 8 percent lower than the code UA</u>
<u>7</u>	<u>GLAZING AREA</u> <u>Glazing area, measured as the total of framed openings is less than 12 percent of conditioned floor area</u>
<u>8</u>	<u>3 ACH AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION</u> <u>Achieve a maximum of 3.0 ACH50 whole-house air leakage when third party tested and provide a whole-house ventilation system including heat recovery with a minimum sensible heat recovery efficiency of not less than 66 percent.</u>

For SI: 1 square foot = 0.093 m², 1 watt per square foot = 10.8 W/m².

- a. Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors.
- b. The maximum vaulted ceiling surface area shall not be greater than 50 percent of the total heated space floor area unless vaulted area has a U-factor no greater than U-0.026.
- c. Table N1104.1(1) Standard base case design, Proposed UA shall be at least 8 percent less than the Code UA.