



Department of Consumer  
and Business Services

## Notice of Rulemaking Hearing

Filed July 31, 2022 / Updated Aug. 15, 2022

### Fire hazard mitigation standards Senate Bill 762 implementation

#### Opportunity for public input

A rulemaking hearing is scheduled to receive public testimony regarding the proposed rules for implementing the requirements of Senate Bill 762 which are to make Section R327 of the Oregon Residential Specialty Code (ORSC) mandatory for in high and extreme wildfire risk zones of the wildland urban interface.

**Update:** This scheduled public rulemaking hearing will be the first of at least two public hearings for this rulemaking. The Oregon Department of Forestry has temporarily withdrawn the wildfire risk map, released June 30, for further refinement.

The Building Codes Division will hold at least one additional public hearing after the map produced by the Oregon Department of Forestry is final. The division is also extending the comment period on these fire hardening building codes standards until after the map produced by the Oregon Department of Forestry is final. The division's code change requirements can't be adopted until there is a map determining where the code requirements will apply. The division will continue to work on the code changes required by SB 762 to be ready to adopt once a final map is available.

**Hearing date:** Aug. 16, 2022

**Time:** 9:30 a.m.

**Location:** This will be a hybrid meeting, open to the public both in-person and virtually.

#### In-person hearing

BCD Conference Room A  
1535 Edgewater St. NW  
Salem, Oregon 97304

#### Virtual connection and live online streaming

This hearing will be hosted virtually through Zoom and live-streamed online at [Oregon.gov/bcd/Pages/bcd-video.aspx](https://Oregon.gov/bcd/Pages/bcd-video.aspx).

The Zoom connection information will be posted on that web page the day of the hearing.

#### Comments and testimony

The division accepts written and oral testimony from the public. Written comments/testimony may be submitted by email to [RulesCoordinator.bcd@dcbs.oregon.gov](mailto:RulesCoordinator.bcd@dcbs.oregon.gov), or to the mailing address below.

**Update:** The due date for written comments/testimony is extended until after a final wildfire risk map is available from the Oregon Department of Forestry.

If you wish to provide oral comments/testimony at the hearing you may do so in person or virtually. Email [RulesCoordinator.bcd@dcbs.oregon.gov](mailto:RulesCoordinator.bcd@dcbs.oregon.gov) to sign up in advance. Please include your name, email address, and organization, and whether you will be attending in-person or virtually.

#### Purpose of the rules

This rule amends the Oregon Residential Specialty Code (ORSC). The amendments to the ORSC are in response to Senate Bill 762 from the 2021 legislative session. SB 762 directed the division to make the provisions of section R327—which details measures that can make a dwelling more resistant to damage from wildfire—mandatory in certain areas of the state. This rule adopts amendments to section R327 of the ORSC. The amendments make the provisions of section R327 mandatory in high and extreme wildfire risk zones of the wildland urban interface. Section R327 will be mandatory for all new construction in the designated areas starting on April 1, 2023. Consistent with the operation of the state building code these standards are not retroactive.



## **Citation**

Amends: OAR 918-480-0010

The anticipated effective date is October 1, 2022.

## **History**

In 2019 the division added section R327 to the Oregon Residential Specialty Code (ORSC). Section R327 of the ORSC includes wildfire hazard mitigation standards that can help make a building more resistant to damage from wildfire. These standards include items like more ignition or heat resistant building materials and construction methods and materials that resist ember intrusion. The section was not required statewide because there was no clear criteria to determine where it should apply, but was instead made available for local adoption, which allowed local jurisdictions to adopt section R327 and make its wildfire hazard mitigation standards mandatory in wildfire risk zones they identified within that jurisdiction.

Senate Bill 762 passed the Oregon Legislature during the 2021 legislative session and was signed into law by the Governor. SB 762 was an omnibus bill relating to many different aspects of wildfire preparation, prevention, and mitigation and it included directives for several Oregon agencies. The sections of the bill that addressed fire hardening requirements and that necessitated this rulemaking were sections 12, 12a, and 12b and they were added to the Oregon Revised Statutes at 455.612.

The law requires the director of DCBS to amend the ORSC. The amendments must change the scope of section R327's wildfire hazard mitigation standards from just being available for local adoption to being required for new construction in high and extreme wildfire risk zones in the wildland-urban interface. Both the wildfire risk zones and the wildfire urban interface are required to be defined and mapped by other agencies. Additionally, the law directs the department to amend Section R327 of the ORSC to include standards for additions to existing dwellings and for replacement of existing exterior elements covered by section R327. The code amendments are required to be enacted no later than Oct. 1, 2022, and mandatory no earlier than April 1, 2023, creating a phase in period for the code provisions.

The division held a rulemaking advisory committee (RAC) to get feedback on the planned rulemaking on June 9, 2022. The input from the RAC was incorporated into the draft rulemaking which was presented to the Residential and Manufactured Structures Board on July 13, 2022. The board provided additional input that was incorporated into the current proposed rulemaking.

**Contact:** If you have questions or need further information, contact Tony Rocco, Structural Program Chief, at 503-373-7529 or [Anthony.J.Rocco@dcbs.oregon.gov](mailto:Anthony.J.Rocco@dcbs.oregon.gov).

OFFICE OF THE SECRETARY OF STATE

SHEMIA FAGAN  
SECRETARY OF STATE

CHERYL MYERS  
DEPUTY SECRETARY OF STATE



ARCHIVES DIVISION

STEPHANIE CLARK  
DIRECTOR

800 SUMMER STREET NE  
SALEM, OR 97310  
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**NOTICE OF PROPOSED RULEMAKING**  
INCLUDING STATEMENT OF NEED & FISCAL IMPACT

CHAPTER 918  
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES  
BUILDING CODES DIVISION

**FILED**

07/29/2022 3:52 PM  
ARCHIVES DIVISION  
SECRETARY OF STATE

FILING CAPTION: Amends section R327 of the residential code to make its provisions mandatory in some areas

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 08/22/2022 5:00 PM

*The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.*

CONTACT: Andy Boulton

971-375-7027

rulescoordinator.bcd@dcbs.oregon.gov

1535 Edgewater Street NW

Salem, OR 97304

Filed By:

Andrew Boulton

Rules Coordinator

HEARING(S)

*Auxiliary aids for persons with disabilities are available upon advance request. Notify the contact listed above.*

DATE: 08/16/2022

TIME: 9:30 AM - 10:30 AM

OFFICER: Staff

ADDRESS: Building Codes Division Conference Room A

1535 Edgewater Street NW

Salem, OR 97304

SPECIAL INSTRUCTIONS:

This will be a hybrid meeting, open to the public both in-person and virtually. The hearing will also be live-streamed at <https://www.oregon.gov/bcd/Pages/bcd-video.aspx>, where the virtual connection information will be posted on the day of the hearing.

NEED FOR THE RULE(S)

Senate Bill 762 passed the Oregon Legislature during the 2021 legislative session and was signed into law by the Governor. SB 762 was an omnibus bill relating to many different aspects of wildfire preparation, prevention, and mitigation and it included directives for several Oregon agencies. The sections of the bill that addressed fire hardening requirements and that necessitated this rulemaking were sections 12, 12a, and 12b and they were added to the Oregon Revised Statutes at 455.612.

The law requires the director of DCBS to amend the ORSC. The amendments must change the scope of section R327's wildfire hazard mitigation standards from just being available for local adoption to being required for new construction in high and extreme wildfire risk zones in the wildland-urban interface. Both the wildfire risk zones and the wildfire urban interface are required to be defined and mapped by other agencies. Additionally, the law directs the department to amend section R327 of the ORSC to include standards for additions to existing dwellings and for replacement of existing exterior elements covered by section R327. The code amendments are required to be enacted no later than October 1, 2022, and mandatory no earlier than April 1, 2023, creating a phase in period for the code provisions. These amendments implement Senate Bill 762 by adopting the required changes to the ORSC.

## DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE

Draft rules, rulemaking advisory committee materials and testimony, and other supporting documents are available from the division's rules coordinator located at 1535 Edgewater Street NW, Salem, OR 97304 and are posted on the division's Web site at: <http://www.oregon.gov/bcd/laws-rules/Pages/proposed-rules.aspx>.

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## STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE

The proposed rule amendments adopt changes to Section R327 of the ORSC that make the section mandatory in high and extreme wildfire risk zones of the wildland urban interface. The wildland urban interface map was developed by Oregon Department of Forestry and Oregon State University and it maps the areas of the state where human development and vegetative fuels intermix. This rule then makes section R327 mandatory in certain areas of the wildland urban interface. This rulemaking implements the direction to the division that was in Senate Bill 762. The division does not anticipate any impact on racial equity in the state from this rulemaking, but invites feedback from the public about any such impacts.

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## FISCAL AND ECONOMIC IMPACT:

These amendments take a section of the ORSC that previously was available for local adoption and make the construction provisions of that section mandatory in high and extreme wildfire risk zones of the wildland urban interface. Section R327 includes several provisions that require certain exterior elements of a dwelling be constructed from certain types of materials to make those elements more resistant to wildfire damage. Some of these materials may have an impact on the cost of new construction and the cost of remodeling for dwellings located in the high and extreme wildfire risk zones of the wildland urban interface.

Approximately 120,000 tax lots in Oregon are within the high and extreme wildfire risk zones of the wildland urban interface and of those approximately 80,000 tax lots already have a structure of some kind. A modification of an existing structure or construction of a new structure that is governed by the ORSC and that sits on one of these tax lots would be required to comply with the requirements of Section R327. The exact cost of complying with Section R327 would depend on the design choices of the owner and the builder but may create additional cost for the construction.

While it isn't possible to determine the exact cost impact of these changes, several estimates were consulted during the rulemaking process:

- When the division first adopted section R327 in 2019 it prepared a statement of fiscal and economic impact on that proposed rulemaking. The division estimated at the time that in jurisdictions where R327 was adopted as mandatory the cost of a typical 1,200 square foot detached single family dwelling would increase by approximately \$2,500-\$3,000.
  - The Oregon Home Builders Association submitted estimates also originally generated when R327 was first adopted. It estimated in 2019 that the cost of a high-end home would increase by \$12,500, that the cost of a production 1,200 square foot home would increase by \$7,800, and that the cost of a production 2,200 square foot home would increase by \$10,800. The home builders estimated that current increased construction costs would lead to a cost increase on a 1,400 square foot home of \$8,200.
  - The Oregon Fire Marshals Association provided documentation of a study done by the National Institute of Building Sciences that found that every dollar spent on wildfire mitigation to dwellings provided between two and four dollars of benefit.
  - Headwaters economics has produced a study comparing the construction cost of a typical home to a wildfire-resistant home. The Montana study found that total construction costs for a wildfire-resistant home was 2.4% less than the construction cost of a typical home. The reduction in cost between the two homes is due to the choice of siding used by the study on a typical home. The study applied wood siding to the typical home which is significantly more expensive than the fiber cement siding on the wildfire resistant home. If the typical home instead had used fiber cement siding, the wildfire-resistant home would have had a cost increase versus the comparator home using base code materials.
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COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

Statement of cost of compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):

Making Section R327 mandatory in high and extreme wildfire risk zones of the wildland urban interface will add some additional steps to the plan review and inspection process for jurisdictions that administer a building department where there are areas in the high and extreme wildfire risk zones of the wildland urban interface within that jurisdiction. The building department will need to confirm that a property is or is not in the applicable zone and if it is, that that the plans reflect the requirements of Section R327 and confirm installation at final inspection. Both plan review and final inspection are normal steps in the process, these new requirements may add a small amount of additional time required for both of these steps.

2. Cost of compliance effect on small business (ORS 183.336):

a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:

This rule will potentially impact small businesses that are either involved in residential construction in the high and extreme wildfire risk zones of the wildland urban interface or that own dwellings in the high and extreme risk zones of the wildland urban interface. If a business is involved in building homes, then this will have an impact on some of the materials that homes can be built from in the applicable areas of the state. Depending on what alternative materials would have been selected had Section R327 not been made mandatory, this could have an impact on cost of the housing being constructed. If a small business owns dwellings or plans to own dwellings in one of the applicable zones, then these new building code provisions will be mandatory for any new construction or remodel that is done.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:

There is no projected new reporting, recordkeeping, or other administrative activities required for compliance relating to these rules.

c. Equipment, supplies, labor and increased administration required for compliance:

If a small business is either performing the construction or is going to have construction done on a building within one of the applicable zones then the requirements of R327 may impact the materials selected for certain building features. Depending on what materials would have been selected absent the requirements of R327, this may increase the cost of construction.

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DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

The Residential and Manufactured structures board includes in its membership representatives of industry and small business. The rulemaking advisory committee that provided input on this rulemaking was open to the public including small business owners.

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WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

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HOUSING IMPACT STATEMENT:

Amends section R327 of the residential code to make its provisions mandatory in high and extreme wildfire risk zones of the wildland urban interface.

Description of the need for, and objectives of the rule:

Senate Bill 762 passed the Oregon Legislature during the 2021 legislative session and was signed into law by the Governor. SB 762 was an omnibus bill relating to many different aspects of wildfire preparation, prevention, and mitigation and it included directives for several Oregon agencies. The sections of the bill that addressed fire hardening requirements and that necessitated this rulemaking were sections 12, 12a, and 12b and they were added to the Oregon Revised Statutes at 455.612.

The law requires the director of DCBS to amend the ORSC. The amendments must change the scope of section R327's wildfire hazard mitigation standards from just being available for local adoption to being required for new construction in high and extreme wildfire risk zones in the wildland-urban interface. Both the wildfire risk zones and the wildfire urban interface are required to be defined and mapped by other agencies. Additionally, the law directs the department to amend section R327 of the ORSC to include standards for additions to existing dwellings and for replacement of existing exterior elements covered by section R327. The code amendments are required to be enacted no later than October 1, 2022, and mandatory no earlier than April 1, 2023, creating a phase in period for the code provisions.

This rule amends the Oregon Residential Specialty Code (ORSC). The amendments to the ORSC are in response to Senate Bill 762 from the 2021 legislative session. SB 762 directed the division to make the provisions of section R327—which details measures that can make a dwelling more resistant to damage from wildfire—mandatory in certain areas of the state. This rule adopts amendments to section R327 of the ORSC. The amendments make the provisions of section R327 mandatory for new construction, additions, and exterior alterations in high and extreme wildfire risk zones of the wildland urban interface starting on April 1, 2023.

List of rules adopted or amended:

Amend 918-480-0010.

Materials and labor costs increase or savings:

These amendments take a section of the ORSC that previously was available for local adoption and make the construction provisions of that section mandatory in high and extreme wildfire risk zones of the wildland urban interface. Section R327 includes several provisions that require certain exterior elements of a dwelling be constructed from certain types of materials to make those elements more resistant to wildfire damage. Some of these materials may have an impact on the cost of new construction and the cost of remodeling for dwellings located in the high and extreme wildfire risk zones of the wildland urban interface.

Approximately 120,000 tax lots in Oregon are within the high and extreme wildfire risk zones of the wildland urban interface and of those approximately 80,000 tax lots already have a structure of some kind. A modification of an existing structure or construction of a new structure that is governed by the ORSC and that sits on one of these tax lots would be required to comply with the requirements of Section R327. The exact cost of complying with Section R327 would depend on the design choices of the owner and the builder but may create additional cost for the construction.

A 1,200 sq. ft. detached single family dwelling is not a common size of house built in the areas that are impacted by the implementation of SB 762. Accordingly exact cost estimates are not commonly available for that construction type. While it isn't possible to determine the exact cost impact of these changes, several estimates were consulted during the rulemaking process which may be applicable:

When the division first adopted section R327 in 2019 it prepared a statement of fiscal and economic impact on that proposed rulemaking. The division estimated at the time that in jurisdictions where R327 was adopted as mandatory the cost of a typical 1,200 square foot detached single family dwelling would increase by approximately \$2,500-\$3,000.

The Oregon Home Builders Association submitted estimates also originally generated when R327 was first adopted. It estimated in 2019 that the cost of a high-end home would increase by \$12,500, that the cost of a production 1,200 square foot home would increase by \$7,800, and that the cost of a production 2,200 square foot home would increase by \$10,800. The home builders estimated that current increased construction costs would lead to a cost increase on a 1,400 square foot home of \$8,200.

The Oregon Fire Marshals Association provided documentation of a study done by the National Institute of Building Sciences that found that every dollar spent on wildfire mitigation to dwellings provided between two and four dollars of benefit.

Headwaters economics has produced a study comparing the construction cost of a typical home to a wildfire-resistant home. The Montana study found that total construction costs for a wildfire-resistant home was 2.4% less than the construction cost of a typical home. The reduction in cost between the two homes is due to the choice of siding used by the study on a typical home. The study applied wood siding to the typical home which is significantly more expensive than the fiber cement siding on the wildfire resistant home. If the typical home instead had used fiber cement siding, the wildfire-resistant home would have had a cost increase versus the comparator home using base code materials.

Based on this information the division anticipates a cost increase for a 1,200 sq. ft. detached single family dwelling that has to comply with the increased construction standards of R327 over the baseline Oregon code of at least \$2,500. However site specific factors, changes in material cost and other potential local requirements may change the exact impact on any particular construction project and lead to higher or lower cost impacts.

Estimated administrative construction or other costs increase or savings:

The proposed rules do not impose any additional administrative requirements.

Land costs increase or savings: N/A

Other costs increase or savings: None.

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AMEND: 918-480-0010

**RULE SUMMARY:** This rule amends the Oregon Residential Specialty Code (ORSC). The amendments to the ORSC are in response to Senate Bill 762 from the 2021 legislative session. SB 762 directed the division to make the provisions of section R327—which details measures that can make a dwelling more resistant to damage from wildfire—mandatory in certain areas of the state. This rule adopts amendments to section R327 of the ORSC. The amendments make the provisions of section R327 mandatory for new construction, additions, and exterior alterations in high and extreme wildfire risk zones of the wildland urban interface starting on April 1, 2023.

**CHANGES TO RULE:**

918-480-0010

Amendments to the Oregon Residential Specialty Code

- (1) The Oregon Residential Specialty Code is amended pursuant to OAR chapter 918, division 8. Amendments adopted during the code-cycle for inclusion into the Oregon Residential Specialty Code are placed in this rule, showing the section reference and a descriptive caption.
- (2) Effective January 24, 2019, until October 1, 2021, the 2017 Oregon Residential Specialty Code Section R327 is amended for additional wildfire hazard mitigation provisions that are available for local adoption.
- (3) Effective October 1, 2020, until October 1, 2021, the 2017 Oregon Residential Specialty Code Section N1107.4 is amended for solar ready provisions.

(4) Effective July 1, 2022, the Oregon Residential Specialty Code Section R101.2.1 is amended for additional clarity on code application to certain childcare facilities, adult foster care facilities, and residential facilities.

(5) Effective October 1, 2022, the Oregon Residential Specialty Code Section R327 is amended to require wildfire hazard mitigation standards for new construction and replacement of existing exterior elements in certain locations, for the purposes of implementing a phase-in period for section R327 requirements the wildfire hazard mitigation standards in the section will not become mandatory until April 1, 2023. A local jurisdiction that had previously adopted R327 may choose to continue enforcing the local program only until April 1, 2023, when the uniform statewide implementation becomes effective.

[Publications: Publications referenced are available for review at the division. See division website for information on where to purchase publications.]

Statutory/Other Authority: ORS 455.020, ORS 455.110, ORS 455.610

Statutes/Other Implemented: ORS 455.610, ORS 455.612, ORS 455.614



The proposed amendments are denoted as follows:

Blue/underline: Language added to the 2021 ORSC

~~Red/strikethrough~~: Language removed from the 2021 ORSC

Green/underline: Language added in consultation with the Residential and Manufactured Structures Board on July 13, 2022

## SECTION R327 WILDFIRE HAZARD MITIGATION

~~R327.1 Purpose. The purpose of this section is to provide minimum standards for dwellings and their accessory structures located in or adjacent to vegetated areas subject to wildfires, to reduce or eliminate hazards presented by such fires.~~

~~R327.2 Scope. The provisions of this section shall apply to all dwellings required to be protected against wildfire by a municipality that has adopted wildfire zoning regulations. The additional provisions of Section R327.4 shall apply when a local municipality has adopted a local ordinance specifically recognizing Section R327.4 and consistent with Sections R327.4 through R327.4.8.~~

~~R327.3 Determination. Wildfire hazard zones shall be determined using criteria established by the Oregon Department of Forestry.~~

R327.1 General. The provisions of this section shall apply to dwellings and their accessory structures required to be protected against wildfire.

Nothing in the code ~~or adopting ordinance~~ prevents a local municipality from ~~waiving~~ modifying the requirements of ~~Section R327.4~~ this section for any lot, property or dwelling, or the remodel, replacement or reconstruction of a dwelling within the jurisdiction, as provided in Section R104.10.

R327.2 Application. Permit applications submitted on or after April 1, 2023, for newly constructed dwellings, their accessory structures, and new additions to existing dwellings and their accessory structures, located in high or extreme wildfire risk classes in the wildland urban interface as determined by the Oregon Wildfire Risk Explorer and indicated on the Oregon Geographic Hazard Design Tool at <https://tools.oregonexplorer.info/> shall be protected against wildfire in accordance with this section. Where existing exterior elements which fall within the scope of this section are replaced on dwellings and accessory structures located in high or extreme wildfire risk classes in the wildland urban interface, the replacement shall be made in accordance with the provisions of this section.

### Exceptions:

1. Nonhabitable detached accessory structures with an area of not greater than 400 square feet, (37.2 m<sup>2</sup>) located not less than 50 feet (15 240 mm) from all other structures on the lot.
2. Partial repairs made in accordance with R105.2.2.

~~R327.3.1.1 Roofing. Roofing shall be asphalt shingles in accordance with Section R905.2, slate shingles in accordance with Section R905.6, metal roofing in accordance with Section R905.4, tile, clay or concrete shingles in accordance with Section R905.3 and other approved roofing which is deemed to be equivalent to a minimum Class C rated roof covering. Untreated wood shingle and shake roofs are not permitted when the construction site is in a wildfire hazard zone as determined by Section R327.3.~~

~~R327.3.1.2 Reroofing or repair of roofing of existing buildings. When 50 percent or more of the roof covering of any building is repaired or replaced within 1 year, the roof covering shall be made to comply with this section and attic ventilation shall be made to comply with this code. Ventilation openings shall be protected with corrosion-resistant wire mesh not greater than 1/2-inch (12.7 mm) or less than 1/8-inch (3.2 mm) in any dimension.~~

~~R327.4 Scope of additional wildfire hazard mitigation requirements.~~

~~R327.4.1 Qualifying lots of record. Qualifying lots of record shall meet all of the following:~~

1. ~~Be located in a wildfire hazard zone as identified by the local municipality using criteria established by the Oregon Department of Forestry. The local municipality is not required to include all areas identified by the Oregon Department of Forestry as wildfire hazard zones. The zone shall be detailed in the local adopting ordinance.~~
2. ~~The local municipality shall determine in the adopting ordinance whether qualifying lots of record shall consist of individual lots or whether qualifying lots must be part of a development that contains a minimum number of lots.~~
3. ~~The local municipality shall make a determination that the lot of record is either located within the identified wildfire hazard zone as determined by the jurisdiction or that it is located outside of the wildfire hazard zone as determined by the jurisdiction. Notification shall be provided in conjunction with the land use approval under ORS 197.522.~~
4. ~~Application:~~
  - 4.1 ~~Lots created prior to the effective date of the local ordinance, that would otherwise qualify under the local adopting ordinance, are exempt from the requirements of the ordinance for a period of 3 years from the creation date of the land use approval under ORS 197.522.~~
  - 4.2 ~~For a lot created after the effective date of the local ordinance that receives notification under this section, the determination in the notification shall be valid for 3 years from the date of the land use approval under ORS 197.522. At the expiration of the 3 years, a lot of record shall be re-evaluated under the current version of the adopting ordinance prior to the issuance of a building permit.~~

R327.2.1 Subdivision infill exception. Dwellings or accessory structures constructed on a lot in a subdivision located partially or completely within the high or extreme risk classes in the wildland urban interface do not need to comply with Section R327.24 when 50 percent or more of the subject lots in the subdivision have existing dwellings that were not constructed in accordance with Section R327.24. Calculation of 50 percent is based on the lots in the subdivision that are located within the high or extreme risk classes in the wildland urban interface.

~~The local municipality must include a process for resolving disputes related to the applicability of the local ordinance and this section.~~

**R327.42.2 Definitions.** The following words and terms shall, for purposes of Section R327, have the meanings shown herein. Refer to [See](#) Chapter 2 for general definitions.

**HEAVY TIMBER.** For the use in this section, *heavy timber* shall be sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). *Heavy timber* walls or floors shall be sawn or glue laminated planks splined, tongue-and-groove or set close together and well spiked.

**IGNITION-RESISTANT MATERIAL.** A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland urban interface conflagrations under worst-case weather and fuel conditions with *wildfire exposure* of burning embers and small flames. Such materials include any product designed for exterior exposure that, when tested in accordance with ASTM E84 or UL 723 for surface burning characteristics of building materials, extended to a 30 minute duration, exhibits a flame spread index of not more than 25, shows no evidence of significant progressive combustion, and whose flame front does not progress more than 10½ feet (3.2 m) beyond the centerline of the burner at any time during the test.

**NONCOMBUSTIBLE MATERIAL.** Any material that in the form in which it is used and under the conditions anticipated will not ignite, burn, support combustion or release flammable vapors when subjected to fire or heat in accordance with ASTM E136.

**WILDFIRE.** Any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property or resources.

**WILDFIRE EXPOSURE.** One or a combination of circumstances exposing a structure to ignition, including radiant heat, convective heat, direct flame contact and burning embers being projected by a vegetation fire to a structure and its immediate environment.

**R327.42.3 Roofing.** Roofing shall be asphalt shingles in accordance with Section R905.2, slate shingles in accordance with Section R905.6, metal roofing in accordance with Section R905.4, tile, clay or concrete shingles in accordance with Section R905.3 or other *approved* roofing which is deemed to be equivalent to a minimum Class B-rated roof assembly. Wood shingle and shake roofs are not permitted [on structures in high and extreme wildfire risk classes hazard zone](#).

Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fireblocked with *approved* materials, or have one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 not less than 36-inch-wide (914 mm) running the full length of the valley.

**R327.42.3.1 Gutters.** ~~When~~ [Where](#) required, roof gutters shall be constructed of *noncombustible materials* and be provided with a means to prevent accumulation of leaves and debris in the gutter.

**R327.42.4 Ventilation.** Where provided, the minimum net area of ventilation openings for enclosed attics, enclosed soffit spaces, enclosed rafter spaces and underfloor spaces shall be in accordance with Sections R806 and R408.

All ventilation openings shall be covered with noncombustible corrosion-resistant metal wire mesh, vents designed to resist the intrusion of burning embers and flame, or other *approved* materials or devices.

Ventilation mesh and screening shall be a minimum of 1/16-inch (1.6 mm) and a maximum of 1/8-inch (3.2 mm) in any dimension.

**R327.42.4.1 Eaves, soffits, and cornices.** Ventilation openings shall not be installed on the underside of eaves, soffits or cornices.

**Exceptions:**

1. The *building official* may *approve* ~~special~~ eave, soffit or cornice vents that are manufactured to resist the intrusion of flame and burning embers.
2. Ventilation openings complying with the requirements of Section R327.42.4 may be installed on the underside of eaves, soffits or cornices where the opening is located 12 feet (3658 mm) or greater above *grade* or the surface below.

**R327.42.5 Exterior walls.** The *exterior wall covering* or wall assembly shall comply with one of the following requirements:

1. *Noncombustible material*.
2. *Ignition-resistant material*.
3. *Heavy timber* assembly.
4. Log wall construction assembly.
5. Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707, complying with the conditions of acceptance listed in Section R327.42.5.2.

**Exception:** Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:

1. One layer of 5/8-inch Type X exterior gypsum sheathing applied behind the *exterior wall covering* or cladding on the exterior side of the framing.
2. The exterior portion of a 1-hour fire ~~resistive~~ [resistance-rated](#) *exterior wall* assembly designed for exterior fire exposure including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association *Fire Resistance and Sound Control Design Manual*.

**R327.42.5.1 Extent of exterior wall covering.** *Exterior wall coverings* shall extend from the top of the foundation to the roof and terminate at 2-inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves or soffits, shall terminate at the underside of the enclosure.

**R327.42.5.2 Conditions of acceptance.** ASTM E2707 tests shall be conducted in triplicate and the conditions of acceptance below shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

1. Absence of flame penetration through the wall assembly at any time during the test.
2. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute test.

**R327.42.6 Overhanging projections.** All exterior projections (exterior balconies, carports, decks, patio covers, porch ceilings, unenclosed roofs and floors, overhanging buildings and similar architectural appendages and projections) shall be protected as specified in this section.

**R327.42.6.1 Enclosed roof eaves, soffits, and cornices.** The exposed underside of rafter or truss eaves and enclosed soffits, where any portion of the framing is less than 12 feet (3658 mm) above *grade* or similar surface below, shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant material.*
3. One layer of  $\frac{5}{8}$ -inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the rafter tails, truss tails or soffit.
4. The exterior portion of a 1-hour fire **resistive resistance-rated** exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association *Fire Resistance and Sound Control Design Manual*.
5. Soffit assemblies with an underside surface that meets the performance criteria in Section R327.42.6.5 when tested in accordance ASTM E2957.

**Exceptions:** The following materials do not require protection required by this section:

1. Eaves and soffits where all portions of the framing members are 12 feet (3658 mm) or greater above *grade*, and 2-inch nominal eave fireblocking is provided between roof framing members from the wall top plate to the underside of the roof sheathing.
2. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
3. Fascia and other architectural trim boards.

**R327.42.6.2 Exterior patio and porch ceilings.** The exposed underside of exterior patio and porch ceilings greater than 200 square feet in area and less than 12 feet (3658 mm) above *grade* shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant material.*
3. One layer of  $\frac{5}{8}$ -inch Type X exterior gypsum sheathing applied behind the exterior covering on the underside of the ceiling.

4. The exterior portion of a 1-hour fire **resistive resistance-rated** exterior wall assembly applied to the underside of the ceiling assembly including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in Section R327.42.6.5 when tested in accordance with the test procedures set forth in ASTM E2957.

**Exception:** Architectural trim boards.

**R327.42.6.3 Floor projections.** The exposed underside of cantilevered floor projections less than 12 feet (3658 mm) above *grade* or the surface below shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant material.*
3. One layer of  $\frac{5}{8}$ -inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
4. The exterior portion of a 1-hour fire **resistive resistance-rated** exterior wall assembly applied to the underside of the floor projection, including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. An assembly that meets the performance criteria in Section R327.42.6.5 when tested in accordance with ASTM E2957.

**Exception:** Architectural trim boards.

**R327.42.6.4 Underfloor protection.** The underfloor area of elevated structures shall be enclosed to *grade* in accordance with the requirements of **Section R327.4** [this section](#), or the underside of the exposed underfloor shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant material.*
3. One layer of  $\frac{5}{8}$ -inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the floor assembly.
4. The exterior portion of a 1-hour fire **resistive resistance-rated** exterior wall assembly applied to the underside of the floor, including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. An assembly that meets the performance criteria in Section R327.42.6.5 when tested in accordance with ASTM E2957.

**Exception:** Heavy timber structural columns and beams do not require protection.

**R327.42.6.5 Conditions of acceptance.** ASTM E2957 tests shall be conducted in triplicate, and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

1. Absence of flame penetration of the eaves or horizontal projection assembly at any time during the test.
2. Absence of structural failure of the eaves or horizontal projection subassembly at any time during the test.
3. Absence of sustained combustion of any kind at the conclusion of the 40-minute test.

**R327.42.7 Walking surfaces.** Deck, porch and balcony walking surfaces located greater than 30 inches and less than 12 feet (3658 mm) above *grade* or the surface below shall be constructed with one of the following materials:

1. Materials that comply with the performance requirements of Section R327.42.7.1 when tested in accordance with both ASTM E2632 and ASTM E2726.
2. *Ignition-resistant* materials that comply with the performance requirements of Section R327.42.2 when tested in accordance with ASTM E84 or UL 723.
3. Exterior fire-retardant-treated wood.
4. *Noncombustible material*.
5. Any material that complies with the performance requirements of Section R327.42.7.2 where tested in accordance with ASTM E2632, where the *exterior wall covering* of the structure is noncombustible or *ignition-resistant* material.
6. Any material that complies with the performance requirements of ASTM E2632, where the *exterior wall covering* of the structure is noncombustible or *ignition-resistant* material.

**Exception:** *Wall covering* material may be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

**Exception:** Walking surfaces of decks, porches and balconies not greater than 200 square feet (18.58 m<sup>2</sup>) in area, where the surface is constructed of nominal 2-inch (51 mm) lumber.

**R327.42.7.1 Requirements for R327.42.7, Item 1.** The material shall be tested in accordance with ASTM E2632 and ASTM E2726, and shall comply with the conditions of acceptance in Sections R327.42.7.1.1 and R327.42.7.1.2. The material shall also comply with the performance requirements of Section R327.42.2 for ignition-resistant material when tested in accordance with ASTM E84 or UL 723.

**R327.42.7.1.1 Conditions of acceptance.** ASTM E2632 tests shall be conducted in triplicate and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted.

All additional tests shall meet the following conditions of acceptance:

1. Peak heat release rate of less than or equal to 25 kW/ft<sup>2</sup> (269 kW/m<sup>2</sup>).
2. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period.
3. Absence of falling particles that are still burning when reaching the burner or floor.

**R327.42.7.1.2 Conditions of acceptance.** ASTM E2762 tests shall be conducted in triplicate and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All of the additional tests shall meet the following conditions of acceptance:

1. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period.
2. Absence of falling particles that are still burning when reaching the burner or floor.

**R327.42.7.2 Requirements for R327.42.7, Item 6.** The material shall be tested in accordance with ASTM E2632 and shall comply with the following conditions of acceptance. The test shall be conducted in triplicate and the peak heat release rate shall be less than or equal to 25 kW/ft<sup>2</sup> (269 kW/m<sup>2</sup>). If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All of the additional tests shall meet the conditions of acceptance.

**R327.42.8 Glazing.** Exterior windows, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire-resistance rating of not less than 20 minutes.