

MEMORANDUM

TO: Board of County Commissioners

FROM: Will Groves, Planning Manager

Peter Gutowsky, Community Development Director

Krista Appleby, Assistant Building Official

Kyle Collins, Associate Planner

DATE: September 6, 2023

SUBJECT: Legislative Amendments - Local Wildfire Hazard Zone and Oregon Residential

Specialty Code Updates Regarding Wildfire Hazard Mitigation (R327)

The Board of County Commissioners (Board) will conduct a public hearing on September 13, 2023, concerning amendments to the Deschutes County Wildfire Hazard Zone and forthcoming updates to the Oregon Residential Specialty Code (ORSC) concerning wildfire hazard mitigation standards (file no. 247-23-00649-TA).

Attached to this memorandum are:

- Staff Report and Draft Amendments¹
- The 2023 Oregon Residential Specialty Code (ORSC) Section R327
- Map of the Deschutes County Wildfire Hazard Zone

I. BACKGROUND

In 2001, the Deschutes County Board of Commissioners (Board) adopted Ordinance 2001-024 establishing a local Wildfire Hazard Zone. The relevant wildfire mitigation standards and references of this zone were subsequently amended in 2011 pursuant to Ordinance 2011-022. The currently adopted Wildfire Hazard Zone includes all areas of Deschutes County. However, the Deschutes County Building Safety Division does not have jurisdiction in certain incorporated cities such as Bend and Redmond. Deschutes County's Wildfire Hazard Zone is separate and distinct from ongoing efforts to produce a Statewide Wildfire Hazard Map pursuant to Senate Bills (SBs) 762² and 80³. The

¹ Within the proposed amendments, added language is shown underlined and deleted shown as strikethrough.

² https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/SB762/Enrolled

³ https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB80/Enrolled

standards imposed by the County's local hazard map are located under Title 15, Buildings & Construction, in Section 15.04.085⁴ of the Deschutes County Code (DCC). Since adoption of the Wildfire Hazard Map in 2001, R327 has exclusively prohibited wooden-shake roofing for newly constructed residences and residential accessory structures.

II. CHANGES & CONCERNS

On October 1, 2023, a new 2023 edition of the ORSC becomes effective and Section R327 detailing wildfire hazard mitigation building standards will be modified. Based on the language of DCC 15.04.085, the forthcoming Section R327 will apply broadly across all residential development in unincorporated Deschutes County based on the existing County Wildfire Hazard Zone. The modified R327 standards still apply to all dwellings and residential accessory structures, but would now require more extensive fire mitigation items, including updated roofing requirements, overhang projection requirements, deck/porch/balcony requirements, ventilation requirements, and others. If no action is taken, citizens will encounter previously unrequired fire mitigation regulations in Deschutes County, greatly increasing impacts to staff in a very short period of time to understand, review, and enforce new regulatory standards while also attempting to educate citizens on the details of these new requirements.

The Board should be aware that based on SBs 762 and 80, once the Statewide Wildfire Hazard Map is approved by the Oregon Department of Forestry (ODF), the complete R327 standards of the ORSC will apply more broadly throughout Deschutes County based on each individual property's wildfire hazard classification and the boundaries of the designated Wildland Urban Interface (WUI). Properties ultimately identified as having a "High" hazard classification and located within a designated WUI will be subject to additional residential fire mitigation standards. However, at this time no jurisdictions are mandated to implement all standards included in R327 prior to release of the Statewide Wildfire Hazard Map.

Should the Board wish to maintain the current status quo and keep residential wildfire mitigation standards limited to a prohibition on wooden-shake roofs, DCC 15.04.085(B) will need to be updated with more specific language regarding the roofing requirements of R327. Additionally, the Board will likely have to revisit DCC 15.04.085 again once the Statewide Wildfire Hazard Map is approved by the Oregon Department of Forestry (ODF) sometime in 2024 to address a larger suite of residential wildfire mitigation requirements.

III. PROPOSED ACTIONS

Staff proposes amendments to Section 15.04.085, as detailed in Attachment 1, to maintain the current fire mitigation standards for residential development during the interim period when the forthcoming Section R327 updates are released, but before the Statewide Wildfire Hazard Map is finalized. No changes to the geographic boundaries of the existing Wildfire Hazard Zone are proposed. The proposed code amendments were developed in consultation with the Building Safety Division.

⁴ https://deschutescounty.municipalcodeonline.com/book?type=ordinances#name=15.04.085 Wildfire Hazard Zones

IV. NEXT STEPS

At the conclusion of the public hearing, the Board may:

- Continue the hearing to a date certain;
- Close the hearing and leave the written record open to a date certain; or
- Close the hearing and commence deliberations.

Attachments:

- 1. Ordinance 2023-021: Staff Report and Amendments
- 2. The 2023 Oregon Residential Specialty Code (ORSC) Section R327
- 3. Map of the Deschutes County Wildfire Hazard Zone

REVIEWED

LEGAL COUNSEL

For Recording Stamp Only

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON

An Ordinance Amending Deschutes County Code Title 15, Building and Construction Codes and Regulations, to Modify the Development Standards for the Wildfire Hazard Zone.

ORDINANCE NO. 2023-021

*

WHEREAS, the Board of County Commissioners directed Deschutes County Community Development Department staff to initiate amendments (Planning Division File No. 247-23-000649-TA) to Deschutes County Code ("DCC"), Chapter 15.04 – Building and Construction Codes and Regulations; and

WHEREAS, the Board considered this matter after a duly noticed public hearing on September 13, 2023 and concluded that the public will benefit from the proposed changes to the Deschutes County Code Titles 15; now, therefore,

THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON, ORDAINS as follows:

<u>Section 1</u>. AMENDMENT. Deschutes County Code Chapter 15.04, Building and Construction Code and Regulations, is amended to read as described in Exhibit "A", attached hereto and by this reference incorporated herein, with new language <u>underlined</u> and language to be deleted in <u>strikethrough</u>.

Section 2. FINDINGS. The Board adopts as its findings Exhibit "B", attached and incorporated by reference herein.

<u>Section 3.</u> EMERGENCY. This Ordinance being necessary for the public peace, health, and safety, an emergency is declared to exist, and this Ordinance becomes effective upon adoption by the Board.

Dated this of _	, 2	2023	BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON
			ANTHONY DEBONE, Chair
ATTEST:			PATTI ADAIR, Vice Chair
Recording Secretary			PHILIP CHANG
Date of 1 st Reading:	day of		, 2023.
Date of 2 nd Reading:	day of		, 2023.
	Record o	of Adopt	tion Vote:
Commissioner	Yes	No	Abstained Excused
Anthony DeBone Patti Adair Philip Chang			
Effective date: d	ay of		2023.

Exhibit A

CHAPTER 15.04 BUILDING AND CONSTRUCTION CODES AND REGULATIONS

15.04.010 Specialty Codes And Building Requirements Adopted; Enforcement

15.04.015 Additional Local Authority

15.04.020 (Repealed)

15.04.025 Fences

15.04.030 (Repealed)

15.04.035 (Repealed)

15.04.037 (Repealed)

15.04.040 (Repealed)

15.04.050 (Repealed)

15.04.055 (Repealed)

15.04.060 (Repealed)

15.04.070 Building Abatement Code; Adopted

15.04.080 Fire Code; Adopted

15.04.085 Wildfire Hazard Zones

15.04.090 Definitions

15.04.100 Mobile Homes; Placement Permit; Inspection

15.04.110 Expedited Construction Start

15.04.120 Mobile Homes; State Certification Required

15.04.130 Building Permit Issuance; Zoning Conformance; Planning Department Approval

15.04.140 Industrial/Commercial Structure; Occupancy Certificate Required

15.04.145 Residential Structure; Occupancy Certificate Required

15.04.150 Building Or Mobile Home Placement Permit Issuance; Zoning And Subdivision Conformance

15.04.160 Permit Fees; Adjustments

15.04.170 Numbers For Addresses; Placement

15.04.180 Administration; Enforcement

15.04.190 Conditions Deemed A Public Nuisance

15.04.200 Violation; Penalty

15.04.210 Requirement For Water Service From Water Districts

15.04.220 Supply Of Water For Domestic Use In Conformance With State And Federal Regulations

15.04.085 Wildfire Hazard Zones

- A. Wildfire Hazard Zones are those depicted on the Deschutes County Wildfire Hazard Areas map on file with the County Clerk.
- B. Adoption of the Wildfire Hazard Areas map implements the provisions of the Wildfire Hazard Mitigation R327 Roofing Section of the Oregon Residential Specialty Code enforced pursuant to DCC 15.04.010(A).

HISTORY

Adopted by Ord. <u>2001-024</u> §1 on 6/6/2001 Amended by Ord. <u>2011-022</u> §2 on 7/27/2011

Amended by Ord. 2023-021 §1 on 9/13/2023



COMMUNITY DEVELOPMENT

STAFF REPORT

FILE NUMBER: 247-23-000649-TA

APPLICANT: Deschutes County Community Development

117 NW Lafayette Avenue

Bend, Oregon 97703

PROPERTY

OWNER: N/A

REQUEST: Text Amendments to modify the standards of the Deschutes County Wildfire

Hazard Zone in anticipation of 2023 updates to the Oregon Residential

Specialty Code (ORSC) Regarding Wildfire Hazard Mitigation.

STAFF CONTACT: Kyle Collins, Associate Planner

I. <u>APPLICABLE CRITERIA</u>:

Deschutes County lacks specific criteria in DCC Titles 18, 19, 22, or 23 for reviewing a legislative text amendment. Nonetheless, since Deschutes County is initiating a legislative text amendment, the County bears the responsibility for justifying that the amendments are consistent with Statewide Planning Goals and its existing Comprehensive Plan.

I. BACKGROUND

The purpose of these code amendments is to address critical changes made by the State Building Codes Division (State BCD) to the residential building code (Oregon Residential Specialty Code or ORSC) regarding wildfire hazard mitigation. The proposed amendments will modify the standards of the Deschutes County Wildfire Hazard Zone during the period before adoption and implementation of that State Wildfire Hazard Map as administered by Senate Bill (SB) 80¹, passed in June 2023. The Deschutes County Wildfire Hazard Zone has been in place since 2001, with minor amendments in 2011. Since its initial adoption, the Deschutes County Wildfire Hazard Zone has prohibited wooden-shake roofs pursuant to standards of the ORSC in all unincorporated areas of Deschutes County. These local amendments would maintain previous requirements for residential roofing by prohibiting wooden-shake style roofing, but would remove requirements for broader

¹ https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB80/Enrolled

wildfire mitigation building standards until such time as the full implementation of SB 80 is complete.

II. APPLICABLE CRITERIA:

Deschutes County lacks specific criteria in DCC Titles 15, 22, or 23 for reviewing a legislative text amendment to local building codes.

III. PROPOSED AMENDMENTS

The proposed amendments are described and detailed in Ordinance 2023-021, attached hereto. Added language is <u>underlined</u> and deleted shown as <u>strikethrough</u>. The amendments are necessary to clarify existing standards and procedures, incorporate changes to the Oregon Residential Specialty Code (State Building Code). The following section summarizes the proposed amendments:

DCC CHAPTER 15.04, BUILDING AND CONSTRUCTION CODES AND REGULATIONS

DCC 15.04.085, Wildfire Hazard Zones – Removes general references to the Wildfire
Hazard Mitigation Section of the ORSC as implemented by the Deschutes County Wildfire
Hazard Zone. In conformance with previous standards, maintains compliance with the
roofing requirements of the ORSC for all areas identified within the existing Wildfire Hazard
Zone.

III. BASIC FINDINGS

The Planning Division determined changes were necessary to maintain existing fire mitigation standards and procedures as administered by the Deschutes County Wildfire Hazard Zone. Staff initiated the proposed changes and notes that notification of the Oregon Department of Land Conservation and Development is not required for amendments to local building codes. As demonstrated in the summary above, the amendments remain consistent with Deschutes County Code, Deschutes County Comprehensive Plan, and the Statewide Planning Goals.

II. FINDINGS:

CHAPTER 22.12, LEGISLATIVE PROCEDURES

Section 22.12.010, Hearing Required

No legislative change shall be adopted without review by the Planning Commission and a public hearing before the Board of County Commissioners. Public hearings before the Planning Commission shall beset at the discretion of the Planning Director, unless otherwise required by state law.

FINDING: DCC 22.04.020 defines "legislative changes" as follows:

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"Legislative changes" generally involve broad public policy decisions that apply to other than an individual property owner. These include, without limitation, amendments to the text of the comprehensive plans, zoning ordinances, or the subdivision or partition ordinance and changes in zoning maps not directed at a small number of property owners.

The proposed amendments would affect DCC Title 15 – Buildings and Construction (as opposed to comprehensive plans, zoning ordinances, etc.). The proposal does not constitute a "legislative change" because it does not propose amendment to the text of the comprehensive plan, zoning ordinances, the subdivision or partition ordinance or change in zoning maps. Therefore, review by the Planning Commission is not required.

The Board of County Commissioners (Board) will hold a hearing to review the amendments on September 13, 2023. This criterion is met.

Section 22.12.020, Notice

Notice

A. Published Notice

- 1. Notice of a legislative change shall be published in a newspaper of general circulation in the county at least 10 days prior to each public hearing.
- 2. The notice shall state the time and place of the hearing and contain a statement describing the general subject matter of the ordinance under consideration.

FINDING: DCC 22.04.020 defines "legislative changes" as follows:

"Legislative changes" generally involve broad public policy decisions that apply to other than an individual property owner. These include, without limitation, amendments to the text of the comprehensive plans, zoning ordinances, or the subdivision or partition ordinance and changes in zoning maps not directed at a small number of property owners.

The proposed amendments would affect DCC Title 15 – Buildings and Construction. The proposal does not constitute a "legislative change" because it does not propose amendment to the text of the comprehensive plan, zoning ordinances, the subdivision or partition ordinance or change in zoning maps. Notice of the public hearing and the proposed amendments will be posted on the Deschutes County website following standard procedure. This criterion is met.

B. Posted Notice. Notice shall be posted at the discretion of the Planning Director and where necessary to comply with ORS 203.045.

FINDING: Posted notice was determined by the Planning Director not to be necessary.

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C. Individual notice. Individual notice to property owners, as defined in DCC 22.08.010(A), shall be provided at the discretion of the Planning Director, except as required by ORS 215.503.

FINDING: Given the proposed legislative amendments do not apply to any specific property, no individual notices were sent. This criterion is inapplicable.

D. Media notice. Copies of the notice of hearing shall be transmitted to other newspapers published in Deschutes County.

FINDING: Notice was provided to the County public information official for wider media distribution. This criterion is met.

Section 22.12.030 Initiation of Legislative Changes.

A legislative change may be initiated by application of individuals upon payment of required fees as well as by the Board of County Commissioners.

FINDING: The application was initiated by the Deschutes County Planning Division at the direction of the Board of County Commissioners, and has received a fee waiver. This criterion is met.

Section 22.12.040. Hearings Body

- A. The following shall serve as hearings or review body for legislative changes in this order:
 - 1. The Planning Commission.
 - 2. The Board of County Commissioners.
- B. Any legislative change initiated by the Board of County Commissioners shall be reviewed by the Planning Commission prior to action being taken by the Board of Commissioners.

FINDING: DCC 22.04.020 defines "legislative changes" as follows:

"Legislative changes" generally involve broad public policy decisions that apply to other than an individual property owner. These include, without limitation, amendments to the text of the comprehensive plans, zoning ordinances, or the subdivision or partition ordinance and changes in zoning maps not directed at a small number of property owners.

The proposed amendments would affect DCC Title 15 – Buildings and Construction. The proposal does not constitute a "legislative change" because it does not propose amendment to the text of the comprehensive plan, zoning ordinances, the subdivision or partition ordinance or change in zoning maps. Therefore, review by the Planning Commission is not required.

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The Board will hold a hearing to review the amendments on September 13, 2023. This criterion is met.

Section 22.12.050 Final Decision

All legislative changes shall be adopted by ordinance

FINDING: The proposed legislative changes will be implemented by Ordinance No. 2023-021 upon approval and adoption by the Board of County Commissioners. This criterion will be met.

III. <u>CONCLUSION</u>:

Based on the information provided herein, the staff recommends the Board of County Commissioners approve the proposed amendments modifying the standards of the Deschutes County Wildfire Hazard Zone in anticipation of 2023 updates to the Oregon Residential Specialty Code (ORSC) Regarding Wildfire Hazard Mitigation.

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2023 Oregon Residential Specialty Code ORSC

Approved Wildfire Hazard Mitigation Provisions

SECTION R327 WILDFIRE HAZARD MITIGATION

R327.1 General. The provisions of this section shall apply to dwellings and their accessory structures required by a local municipality via local ordinance to be protected against wildfire.

Nothing in the code prevents a local municipality from modifying the requirements of 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.

R327.1.1 Local adoption. The provisions of this section may be adopted in whole by a municipality via local ordinance without following ORS 455.040 or OAR 918-020-0370. Where a municipality chooses to adopt these provisions locally, the following shall be included in the adopting ordinance:

- Identification of areas subject to the additional construction standards of Section R327.
- A transition plan or other measures to address subdivisions already under development at the time of local adoption.
- 3. A local appeals process for customers to follow.

Where a *municipality* has previously adopted the provisions of Section R327 locally, the requirements of Section R327.1.1 do not apply and the existing local ordinance may continue without change.

R327.1.2 Notification. Where a *municipality* adopts Section R327 locally, or where a *municipality* has previously adopted Section R327 locally, the *municipality* shall notify the State of Oregon Building Codes Division and provide a copy of the locally adopted map identifying areas of the jurisdiction where the additional construction standards of Section R327 are required.

Senate Bills 762 (2021) and 80 (2023)

The local adoption provisions of §R327.1.1 and the application set forth by §R327.1.2 may be impacted by ongoing efforts to implement Senate Bills 762 (2021) and 80 (2023). These provisions will be updated accordingly to align with any actions taken by the legislature.

R327.1.3 Application. Where required by a municipality via local ordinance, newly constructed dwellings, their accessory structures, and new additions to existing dwellings and their accessory structures, located in areas designated by the municipality shall be protected against wildfire in accordance with this section. Where existing exterior elements that are within the scope of this section are replaced in their entirety, the replacement shall be made in accordance with the provisions of this section.

Exceptions:

- 1. Nonhabitable detached accessory structures with a floor area of not greater than 400 square feet, (37.2 m²) 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.

R327.2 Definitions. The following words and terms shall, for purposes of Section R327, have the meanings shown herein. 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 $10^{1}/_{2}$ 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.

<u>WILDFIRE</u>. 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.

R327.3 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 areas designated by the *municipality*.

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.

R327.3.1 Gutters. 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.

R327.3.2 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.

R327.3.2.1 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* eave, soffit or cornice vents that are manufactured to resist the intrusion of flame and burning embers.
- Ventilation openings complying with the requirements of Section R327.3.2 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.

R327.3.3 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 R327.3.3.2.

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-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.

R327.3.3.1 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.

R327.3.3.2 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 do 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.

R327.3.4 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.

R327.3.4.1 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 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-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.
- Soffit assemblies with an underside surface that meets the performance criteria in Section R327.3.4.5 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.

R327.3.4.2 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 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-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 R327.3.4.5 when tested in accordance with the test procedures set forth in ASTM E2957.

Exception: Architectural trim boards.

R327.3.4.3 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 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-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 R327.3.4.5 when tested in accordance with ASTM E2957.

Exception: Architectural trim boards.

R327.3.4.4 Underfloor protection. The underfloor area of elevated structures shall be enclosed to *grade* in accordance with the requirements of 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 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-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.
- An assembly that meets the performance criteria in Section R327.3.4.5 when tested in accordance with ASTM E2957.

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

R327.3.4.5 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 do 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.

R327.3.5 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 R327.3.5.1 when tested in accordance with both ASTM E2632 and ASTM E2726.
- 2. Ignition-resistant materials that comply with the performance requirements of Section R327.2 when tested in accordance with ASTM E84 or UL 723.
- 3. Exterior fire-retardant-treated wood.
- 4. Noncombustible material.
- Any material that complies with the performance requirements of Section R327.3.5.2 where tested in accordance with ASTM E2632, where the exterior wall covering of the structure is noncombustible or ignitionresistant 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 m²) in area, where the surface is constructed of nominal 2-inch (51 mm) lumber.

R327.3.5.1 Requirements for R327.3.5, 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 R327.3.5.1.1 and R327.3.5.1.2. The material shall also comply with the performance requirements of Section R327.2 for ignition-resistant material when tested in accordance with ASTM E84 or UL 723.

R327.3.5.1.1 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 do not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

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

R327.3.5.1.2 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 do 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.

R327.3.5.2 Requirements for R327.3.5, 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/ft² (269 kW/m²). If any one of the three replicates do not meet the conditions of acceptance, three additional tests shall be conducted. All of the additional tests shall meet the conditions of acceptance.

R327.3.6 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.

DESCHUTES COUNTY WILDFIRE HAZARD AREAS Exhibit "B"

