



FIRE HARDENING REQUIREMENTS FOR RURAL ADUs

The following improvements are required by DCC 18.116.355. Items listed below required to be clearly noted and detailed on the building permit drawings at time of submission.

ELEMENT	OPTIONS
<u>ROOFING</u>	<ul style="list-style-type: none"> • Asphalt Shingles (in accordance with R905.2) • Slate Shingles (in accordance with R905.6) • Metal Roofing (in accordance with R905.4) • Tile, Clay or Concrete Shingles (in accordance with R905.3) • <i>Or any other approved roofing equivalent to Class B-rated roof assembly</i>
<u>GUTTERS</u>	<ul style="list-style-type: none"> • Noncombustible material with a means to prevent accumulation of leaves and debris in gutter
<u>VENTILATION OPENINGS</u>	<ul style="list-style-type: none"> • Vents designed to resist ember and flame intrusion (Noncombustible corrosion-resistant metal wire mesh) • Ventilation mesh and screening – Min 1/16 inch (1.6 mm) Max 1/8 inch (3.2mm) in any direction
<u>EAVES, SOFFITS & CORNICES</u>	<ul style="list-style-type: none"> • Installation of ventilation openings on the underside of eaves, soffits and cornices PROHIBITED (See R327.4.4.1 for exceptions)
<u>EXTERIOR WALLS/WALL COVERING</u> *	<ul style="list-style-type: none"> • Noncombustible Material • Ignition-Resistant Material • Heavy Timber Assembly • Log Wall Construction Assembly • Wall assemblies that have been tested in accordance with 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 R327.4.5.2 <i>The following shall be deemed to meet the assembly performance criteria:</i> <i>See footnotes 1 and 2</i>
<u>OVERHANG PROJECTIONS</u> *	<ul style="list-style-type: none"> • As required and defined by Section R327.4.6
<u>ENCLOSED ROOF EAVES, SOFFITS & CORNICES</u> *	<ul style="list-style-type: none"> • Noncombustible Material • Ignition-Resistant Material • See additional options in footnotes 1, 2 and 3
<u>EXTERIOR PATIO & PORCH CEILING</u> *	<ul style="list-style-type: none"> • Noncombustible Material • Ignition Resistant • See additional options in footnotes 1, 2 and 3
<u>FLOOR PROJECTIONS</u> *	<ul style="list-style-type: none"> • Noncombustible Material • Ignition Resistant • See additional options in footnotes 1, 2 and 3

*Asterisk * indicates further element clarification is found on page 2*

<u>EXPOSED UNDERFLOOR PROTECTION</u> *	<ul style="list-style-type: none"> • Noncombustible Material • Ignition Resistant • See additional options in footnotes 1, 2 and 3
<u>WALKING SURFACES</u> *	<ul style="list-style-type: none"> • Materials that comply with the performance requirements of Section R327.4.7.1 when tested in accordance with both ASTM E2632 and ASTM E2726 • Ignition-resistant materials that comply with the performance requirements of Section R327.4.2 when tested in accordance with ASTM E84 or UL 723 • Exterior fire-retardant-treated wood • Noncombustible material • 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.
<u>GLAZING</u> *	<ul style="list-style-type: none"> • Tempered glass, multi-layered glazed panels, glass block or fire-resistance rating of not less than 20 minutes

Footnotes: (Additional options as applicable)

1. One layer of 5/8 inch Type X exterior gypsum sheathing. See applicable code section for more detail/requirements.
2. The exterior portion of a 1-hour fire-resistive 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. See applicable code section for more detail/requirements.
3. Assemblies that meet the performance criteria in Section [R327.4.6.5](#) when tested in accordance with ASTM E2957

Element Clarification:

*Extent of exterior wall covering: From top of the foundation to the roof and terminate at 2 inch nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves or soffits, shall terminate the underside of the enclosure.

*Overhang projections: Exterior balconies, carports, decks, patio covers, porch ceilings, unenclosed roofs and floors, overhanging building and similar architectural appendages and projections.

*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 above grade.

*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 above grade. *Exception: Architectural trim boards.*

*Floor projections: The exposed underside of cantilevered floor projections less than 12 feet above grade or the surface below. *Exception: Architectural trim boards.*

*Underfloor protection: The underfloor area of elevated structures shall be enclosed to grade, or the underside of the exposed underfloor shall be protected. *Exception Heavy timber structural columns and beams do not require protections.*

*Walking surfaces: Deck, porch and balcony walking surfaces located greater than 30 inches and less than 12 feet above grade or the surface below. *Exception: Walking surfaces of decks, porches and balconies not greater than 200 square feet in area, where the surface is constructed of nominal 2-inch lumber.*

*Glazing: Exterior windows, windows within exterior doors, and skylights.