

## APPENDIX 5

### WILDLAND URBAN INTERFACE REQUIREMENTS (WUI)

The following requirements apply to new single family dwellings, guest houses, and second units, in accordance with CRC Section R327. New buildings include newly constructed buildings and replacement buildings when the entire structure is replaced, including the foundation. At this time manufactured homes are exempt.

Accessory structures such as detached garages, pool houses, storage buildings, barns, etc shall comply with these regulations when the accessory building is constructed in conjunction with an applicable building or if the applicable building was constructed under the requirements of Chapter 7A.

#### **Exceptions:**

1. Accessory buildings classified as Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
2. Accessory buildings classified as Group U occupancy of any size located at least 50 feet from an applicable building.
3. Additions to and remodels of buildings originally constructed prior to the applicable application date.

WUI requirements went into effect in two phases with the first phase becoming effective on December 1, 2005. **Additions to any structure originally constructed under these provisions must also conform to the requirements of this section.**

Phase one included:

Roof coverings, valleys and gutters  
Attic and rafter bay ventilation

Phase two (Jan 2008) included the items in phase one and the following:

Eave and soffit protection  
Exterior wall and opening protection  
Decking  
Appendage and underfloor protection

**Roof coverings, valley and gutters.** Roof coverings shall be Class 'A' per Sonoma County Code. Valley flashings when provided shall be minimum 26 gauge galvanized sheet metal installed over 36" wide underlayment of #72 cap sheet running the full length of the valley. Gutters shall be provided with screens to prevent accumulation of leaves and debris.

**Attic and rafter bay ventilation.** Roof and attic vents shall resist the intrusion of flame and embers into the attic area or shall be protected by corrosion-resistant, noncombustible wire mesh with 1/16" minimum and not exceeding 1/8".

Vents shall not be installed in eaves and soffits unless one of the following exceptions are met:

1. The eave and cornice vents resist the intrusion of flame and burning embers.
2. The attic space being ventilated is fully protected by an automatic sprinkler system.
3. The vent is located more than 12 feet above grade, and the exterior wall and exposed underside of the eave are of noncombustible, or ignition resistant material.

**Open Roof Eaves.** The exposed roof deck on the underside of unenclosed roof eaves shall be protected by ignition-resistant or noncombustible material, consist of 5/8" Type X gypsum sheathing applied behind an exterior covering on the underside of the roof deck, or the exterior portion of a 1-hour assembly on the exposed underside.

The following materials do not require protection:

1. Solid wood rafter tails having a minimum nominal dimension of 2 inch.
2. Solid wood blocking between rafter tails having a minimum nominal dimension of 2 inch.
3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
4. Fascia and other architectural trim boards.

**Enclosed roof eaves and roof eave soffits.** The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by ignition-resistant or noncombustible material, consist of 5/8" Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit, the exterior portion of a 1-hour assembly applied to the underside of the rafter tails or soffit, or meet the performance requirements set forth in SFM Standard 12-7A-3.

**Exterior porch ceilings.** The exposed underside of exterior porch ceilings shall be protected by ignition-resistant or noncombustible material, consist of 5/8" Type X gypsum sheathing applied on the underside of the ceiling, the exterior portion of a 1-hour assembly applied to the underside of the ceiling, or meet the performance requirements set forth in SFM Standard 12-7A-3.

**Exterior wall and opening protection.** Exterior walls shall be approved noncombustible or ignition-resistant material, heavy timber, log wall construction, meet SFM Standard 12-7A-1, include one layer of 5/8" Type X gypsum sheathing applied behind the exterior covering on the exterior of the framing, or the exterior portion of a 1-hour assembly. Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2" nominal solid wood blocking between rafters at all roof overhangs or eave enclosures.

Exterior wall vent openings shall be protected by corrosion-resistant, noncombustible wire mesh with openings of 1/8" to 1/4".

Exterior glazing and glazed openings in exterior doors shall have a minimum of one tempered pane, or have a fire resistive rating of 20 minutes, or be of glass block.

Exterior doors shall be of approved noncombustible construction, or solid core wood having stiles and rails not less than 13/8" thick with interior field panel thickness not less than 11/4" thick, or have a minimum 20 minute fire resistive rating.

Garage vehicle doors may be noncombustible or fire-retardant treated wood.

**Decking.** Decking surfaces, stair treads, risers, and landings of decks, porches, and balconies where any portion of such surface is within 10' of the dwelling unit shall be constructed of: heavy timber, exterior fire-retardant-treated wood or approved noncombustible materials. Alternatively decking materials shall pass the performance requirements listed in CBC Chapter 7A or CRC Chapter 3 Section R327.

**Appendage and underfloor protection.** The underside of cantilevered and overhanging appendages and floor projections shall be protected in a similar manner to enclosed soffits, or the projection shall be enclosed to grade.

Buildings shall have all underfloor areas enclosed to grade with exterior walls that comply with this code. The complete enclosure of underfloor areas may be omitted where the underside of exposed floors, structural columns, beams and supporting walls are protected as required with exterior ignition-resistant material construction or be of heavy timber.

## **PERFORMANCE METHODS**

The materials and methods listed above are not the complete list of options. For each category there are performance tested materials and methods that may be substituted. For additional information see CBC Chapter 7A or CRC Chapter 3 Section R327 or visit the Cal-Fire website at:

<http://www.fire.ca.gov/>

For information on approved products Cal-Fire has a booklet entitled Wildland Urban Interface (WUI) Products, available at:

<http://www.osfm.fire.ca.gov/strucfireengineer/pdf/bml/wuiproducts.pdf>