R337.4.3.1 Fire testing of wood structural panels. *Wood structural panels shall be tested with a ripped or cut longitudinal gap of $^1/_8$ inch (3.2 mm).*

R337.4.4 Alternative methods for determining ignition-resistant material. *Any one of the following shall be accepted as meeting the definition of ignition-resistant material:*

1. *Noncombustible material. Material that complies with the definition for noncombustible materials in Section R202.*
2. *Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use that complies with the requirements of Section 2303.2 of the California Building Code.*
3. *Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 of the California Building Code and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an Ignition-resistant wall covering material when installed over solid sheathing.*

SECTION R337.5 ROOFING

R337.5.1 General. *Roofs shall comply with the requirements of Sections R337 and R902. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions. Roof assemblies in the Fire Hazard Severity Zones shall be Class A rating when tested in accordance with ASTM E108 or UL790.*

R337.5.2 Roof coverings. *Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, a 72 lb. (32.7kg) cap sheet complying with ASTM D3909 Standard Specification for "Asphalt Rolled Roofing (Glass Felt) Surfaced with Mineral Granules," shall be installed over the roof deck. Bird stops shall be used at the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.*

Exception: *Cap sheet is not required when no less than 1 inch of mineral wool board or other noncombustible material is located between the roofing material and wood framing or deck.*

Alternately, a Class A fire rated roof underlayment, tested in accordance with ASTM E108, shall be permitted to be used. If the sheathing consists of exterior fire-retardant-treated wood, the underlayment shall not be required to comply with a Class A classification. Bird stops shall be used at the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.

R337.5.3 Roof valleys. *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, at least 36-inch-wide (914 mm) running the full length of the valley.*

R337.5.4 Roof gutters. *Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.*

SECTION R337.6 VENTS

R337.6.1 General. *Where provided, ventilation openings for enclosed attics, gable ends, ridge ends, under eaves and cornices, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, underfloor ventilation, foundations and crawl spaces, or any other opening intended to permit ventilation, either in a horizontal or vertical plane, shall be in accordance with Section 1202 of the California Building Code and Sections R337.6.1 through R337.6.2 to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.*

R337.6.2 Requirements. *Ventilation openings shall be fully covered with Wildfire Flame and Ember Resistant vents approved and listed by the California State Fire Marshal, or WUI vents tested to ASTM E2886 and listed, by complying with all of the following requirements:*

1. *There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.*
2. *There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.*
3. *The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).*

R337.6.2.1 Off ridge and ridge vents. *Vents that are installed on a sloped roof, such as dormer vents, shall comply with all the following:*

1. *Vents shall be covered with a mesh where the dimensions of the mesh therein shall be a minimum of $^1/_{16}$ inch (1.6 mm) and shall not exceed $^1/_8$ inch (3.2 mm) in diameter.*
2. *The mesh material shall be noncombustible.*
3. *The mesh material shall be corrosion resistant.*

SECTION R337.7 EXTERIOR COVERING

R337.7.1 Scope. *The provisions of this section shall govern the materials and construction methods used to resist building ignition and/or safeguard against the intrusion of flames resulting from small ember and short-term direct flame contact exposure.*

R337.7.2 General. *The following exterior covering materials and/or assemblies shall comply with this section:*

1. *Exterior wall coverings.*
2. *Exterior wall assemblies.*