# CITY OF CALABASAS Standard Construction Notes VERY HIGH FIRE HAZARD SEVERITY ZONE

### 2022 California Residential Code – Section R337 2022 California Building Code – Chapter 7A

Notes: 1) Additional State Fire Marshal approved materials and methods may be found in California Referenced Standards Code, Part 12. 2) Prior to permit final approval, the property shall be in compliance with the **vegetation** management requirements. 3) The use of paints, coating, stains or other surface treatments are not an approved method of protection [R337.3.5.3/701A.5, 703A.5.3].

#### <u>APPLICATION - [R337.1.3/701A]</u>

- 1. New buildings.
- 2. Detached Accessory Building Exceptions:
  - a. Not exceeding 120 sf when located at least 30 ft from an applicable building.
  - b. Any size located at least 50 ft from an applicable building.

#### **ROOFING - [R337.5/705A]:**

- Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.
- 4. **Fire-retardant-treated wood shingles and shakes** shall be approved and listed by the California State Fire Marshal and have passed the weathering test. [R902.2/703A.5.2.2]
- 5. Roof covering shall be Class A [R902.1.1]:
  - a. The entire roof covering of every existing structure where more than 50% of the total roof area is **replaced** within any one-year period,
  - b. The entire roof covering of every **new structure**, or
  - c. And any roof covering applied in the alteration, repair or replacement of the roof of every **existing** structure.
- 6. Where the roof profile allows a **space between the roof covering** and roof decking: [R337.5.2]
  - a. The spaces shall be constructed to prevent the intrusion of flames and embers,
  - b. Be firestopped with approved materials, or
  - c. Have one layer of minimum 72 pound mineralsurfaced nonperforated cap sheet complying with ASTM D 3909 installed over the combustible decking.
- 7. Where **roof valley flashing** is installed [R337.5.3]:

- a. The flashing shall be not less than 0.019-inch No. 26 gage galvanized sheet installed over not less than on layer of minimum 72-pound mineral-surfaced non-perforated cap sheet complying with ASTM D 3909, at least 36inch-wide running the full length of the valley.
- 8. **Roof gutters** shall be provided with the means to prevent the accumulation of leaves and debris in the gutter. [R337.5.4]

#### **VENTS - [R337.6/706A]:**

#### General - Sec. R337.6.1/706A.1

Where provided, ventilation openings 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, and underfloor ventilation shall be in accordance with CBC Sec. 1202 and R337.6.2.

#### **Requirements R337.6.2/706A.2**

9. Ventilation openings shall be fully covered with Wildland Flame and Ember Resistant (WUI) vents approved and listed by the California State Fire Marshal, or WUI vents listed to ASTM E2886.

#### **Off Ridge and Ridge Vents – R337.6.2.1/706A.2.1:**

- 10. Vents that are installed on a sloped roof, such as dormer vents, shall comply with all the following:
  - a. Openings shall be between 1/16<sup>th</sup> and 1/8<sup>th</sup> inch.
  - b. The materials shall be noncombustible except vents located under the roof covering, along the ridge, with noncombustible wire mesh.
  - c. The materials shall be corrosion resistant.

#### EXTERIOR COVERING - Sec. R337.7/707A

Note: The following **exterior covering materials** shall conform to this section: Exterior wall covering or assembly, underside of roof eave overhangs or soffits, underside of exterior porch ceilings, underside of floor projections, and under-floor areas. **The following are exempt:** architectural trim, fascia and gutters; roof or wall projections; solid wood rafter tails and blocking having a minimum dimension of 2 inch nominal.

### **Exterior walls – R337.7.3/707A.3**

- 11. Exterior wall covering or wall assembly shall be of:
  - . Noncombustible material.

- b. Ignition-resistant material.\*
- c. Heavy-timber exterior wall assembly.
- d. Wall assemblies meeting SFM Standard 12-7A-1.
- e. One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side.
- f. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure and shall be in accordance with ASTM E119 or UL 263.

# Extent of Exterior Wall Coverings - R337.7.3.1/707A.3.1

- 12. Exterior wall coverings shall extend from the top of the foundation to
  - a. the roof and terminate at 2 inch nominal solid wood blocking between rafters at all roof overhangs,
  - b. or in the enclosed eaves, terminate at the enclosure.

#### Open (exposed) Roof Eaves - R337.7.5/706A3.1

- 13. The **exposed roof deck** on the underside of unenclosed roof eaves shall consist of one of the following:
  - a. Noncombustible material.
  - b. Ignition-resistant material.\*
  - c. Factory fire-retardant treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
  - d. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck.
  - e. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure.

Exceptions: Fascia and architectural trim boards.

# Enclosed Roof Eaves and Roof Eave Soffits - R337.7.6/707A.6

- 14. 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 one of the following:
  - a. Noncombustible materials.
  - b. Ignition-resistant materials.\*

- c. Factory fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
- d. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit.
- e. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure.
- f. Boxed-in roof eave soffits per SFM Standard 12-7A-3.

Exceptions: Fascia and other architectural trim boards.

#### Exterior Porch Ceilings - R337.7.7/707A.7

- 15. The exposed underside of exterior porch ceilings shall be protected by one of the following:
  - a. Noncombustible material.
  - b. Ignition-resistant material.\*
  - Factory Fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
  - d. One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering on the underside of the ceiling.
  - e. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure.
  - f. Porch ceiling assemblies with a horizontal underside that meets SFM Standard 12-7A-3.

Exception: Architectural trim boards.

#### Floor Projections - R337.7.8/707A.8

- 16. The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one of the following:
  - a. Noncombustible construction.
  - b. Ignition-resistant material.\*
  - c. Factory fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
  - d. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.

- e. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure.
- f. The underside of a floor projection assembly that meets SFM Standard 12-7A-3.

Exception: Architectural trim boards.

#### Under-floor Protection - R337.7.9/707A.9

- 17. The under-floor area of elevated or overhanging building shall be enclosed (and fire-protected) to grade or the underside of the exposed under-floor shall be protected by one of the following:
  - a. Noncombustible construction.
  - b. Ignition-resistant material.\*
  - c. Factory fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
  - d. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
  - e. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure.
  - f. The underside of a floor projection assembly that meets SFM Standard 12-7A-3.

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

#### Underside of Appendages - R337.7.10/707A.10

18. The underside of appendages shall be finished per the above sections.

## EXTERIOR WINDOWS AND DOORS - R337.8/708A Exterior Glazing - R337.8.2/708A.2

Note: The following exterior glazing materials shall comply: windows, glazed doors, glazed opening within exterior doors, glazed opening within exterior garage doors, exterior structural glass veneer.

# Exterior Windows and Exterior Glazed Door Assembly Requirements - R337.8.2.1/708A.2.1

- Exterior windows and exterior glazed door assemblies shall comply with one of the following:
  - a. Multi-pane glazing with a minimum of one tempered pane meeting the Safety Glazing requirements of CBC Sec. 2406 and R308.
  - b. Glass block units.
  - c. 20-minute fire-resistance rating.

d. Meet SFM Standard 12-7A-2.

#### Structural Glass Veneer - R337.8.2.3/708A.2.3

20. The wall assembly behind structural glass veneer shall comply with the wall requirement of Sec. R337.8.2.1/708A.2.1.

#### Exterior Doors - R337.8.3/708A.3

- 21. Exterior doors shall comply with the following:
  - a. The exterior surface or cladding shall be of noncombustible or ignition-resistant material, or
  - b. Shall be constructed of solid core wood that complies with the following:
    - i. Stiles and rails shall not be less than 1-3/8 inches thick.
    - ii. Raised panels shall not be less than 1-1/4 inch thick, except for perimeter of the raised panel that may taper to a tongue not less than 3/8 inch think.
  - Shall have a fire-resistance rating of not less than 20 minutes.
  - d. Meet SFM Standard 12-7A-1.

#### Exterior Door Glazing - R337.8.3.1/708A.3.1

 Shall meet the requirements of R337.8.2.1/708A.2.1 above.

#### **DECKING – R337.9/709A**

- 23. The **walking surface material** of decks, porches, balconies and stairs when any portion of such surface is within 10 ft of the building shall comply with the following:
  - a. Ignition-resistant material shall comply with both ASTM E2632 and ASTM E2726 and shall comply with the conditions of acceptance in Sections R337.9.4.1 and R337.9.4.2.
  - b. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and Section R337.4.3.
  - Factory fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2 of the California Building Code.
  - d. Noncombustible material.
  - e. Materials meeting SFM Standard 12-7A-4A may be used when the attached exterior wall covering is also either noncombustible or ignition-resistant material.

### ACCESSORY STRUCTURES - R337.10/710A

Note: Ignition Resistant Protection is required for the following: trellises, arbor, patio covers, carport, gazebos and similar structures.

24. Accessory structures not exempt per item #1, shall be reviewed and approved by the Fire Marshal prior to construction.

<sup>\*</sup>Ignition-resistant material shall be: 1) determined in accordance with the test procedures in SFM Standard 12-7A-5, or 2) Noncombustible material, or 3) Fire-retardant-treated wood identified for exterior use (CBC Sec. 2303.2).