

CITY OF NEWPORT BEACH COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

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2022 VERY HIGH FIRE HAZARD SEVERITY ZONE MINIMUM CONSTRUCTION REQUIREMENTS

GENERAL

- New buildings, alterations and additions located in any Very High Fire Hazard Severity Zone (VHFHSZ) or Special Fire Protection Area shall comply with the provisions of CBC Chapter 7A. (NBMC 15.04.050)
- 2. All new construction and existing structures that are increased in size by 2,000 square feet or more and exceed 50% of the area of the existing structure located on parcels of land within the City of Newport Beach Hazard Reduction Zone and Local Agency Very High Fire Hazard Severity Zones (Special Fire Protection Area) shall comply with regulations found in Chapter 7A. (NBMC 9.04.380)
- 3. A certificate of occupancy, issued by the City, shall be obtained following completion of construction and final inspection. (CBC 701A.4 #2)

ROOFING

- 1. Class A roof assemblies are required for new and/or reconstructed buildings. (CBC 1505.1.1)
- Regardless of roofing Class, wood or other combustible roof covering is not permitted where more than 50% of the total existing roof area is added or replaced within any one-year period. (NBMC 15.04.120, CBC 1505.1.1)
- 3. Where 50% or less of the total existing roof area is added or replaced all roof covering applied shall be Class B or better. Fire-retardant-treated Class B wood roof covering may be used to match existing wood roofing. (CBC 1505.1)
- 4. Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, one of the following shall be provided: (CBC 705A.2)
 - a. A 72 lb. cap sheet complying with ASTM D3909 for "Asphalt Rolled Roofing (Glass Felt) Surfaced with Mineral Granules," installed over the roof deck.
 - b. No less than 1" of mineral wool board or other noncombustible material between the roofing material and wood framing or deck.
 - c. A Class A fire rated roof underlayment, tested in accordance with ASTM E108.
 - d. Sheathing consisting of exterior fire-retardant treated wood.
- 5. Airspace between roof covering and roof deck shall have bird stops at the eaves. Hip and ridge caps shall be mudded in.
- 6. Valley flashing shall be not less than 0.019-inch, No. 26 gage, galvanized and corrosion-resistant metal. (CBC 705A.3)
- 7. Valley flashing shall be under laid with a minimum of one layer 72 pound, mineral-surfaced, nonperforated cap sheet at least 36 inches wide and running the full length of the valley. (CBC 705A.3)
- 8. Debris covers shall be provided on all roof gutters. (CBC 705A.4)

VENTILATION OPENINGS

- 1. 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. (CBC 706A.2)
- 2. Vents on sloped roof shall be covered with a mesh with noncombustible and corrosion-resistance material. The dimensions of the mesh shall be a minimum of 1/16-inch and shall not exceed ½-inch in diameter. (CBC 706A.2)

EXTERIOR COVERING

- 1. Exterior wall covering shall be one of the following: CBC 707A.3
 - a. Noncombustible material; (CBC 202)
 - b. Ignition-resistant material; (CBC 702A & 704A.2)
 - c. Exterior rated fire-retardant-treated wood. (CBC 704A.4 & 2303.2)
- 2. Exterior wall assembly shall be one of the following: CBC 707A.4
 - a. Assembly of sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches;
 - b. Log wall construction assembly.
 - c. Assembly that has been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.4.1.
 - d. Assembly that meets the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.
 - e. Assembly suitable for exterior fire exposure with a 1-hour fire-resistance rating, rated from the exterior side, as tested in accordance with ASTM E119 or UL 263.
 - f. Assembly suitable for exterior fire exposure containing one layer of 5/8-inch Type X gypsum sheathing applied behind the exterior wall covering or cladding on the exterior side of the framing.
 - g. Assembly suitable for exterior fire exposure containing any of the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual as complying with a 1-hour fire-resistance rating, as tested in accordance with ASTM E119 or UL 263.

WINDOWS, DOORS & SKYLIGHTS

- 1. Exterior windows, exterior glazed doors, and skylight assemblies shall be one of the following (CBC 708A.2.1):
 - a. Multi-pane glazing with a minimum of one tempered pane;
 - b. Glass block units; or,
 - c. 20 minute fire-resistance rated when tested according to NFPA 257, or
 - d. Tested to meet the SFM Standard 12-7A-2
- 2. Exterior doors shall be one of the following (CBC 708A.3):
 - a. Noncombustible or ignition-resistant material;
 - b. Solid core wood with stiles and rails shall not be less than 1³/₈ inches thick with raised panels shall not be less than 1¹/₄ inches thick; or,
 - c. 20-minute fire-resistance rated.
- 3. Plastic skylight assemblies are not permitted. (CBC 708A.2.1)

GARAGE DOOR PERIMETER GAP

- 1. Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides, and tops of doors from exceeding 1/8 inch. Gaps shall be controlled by one of the following methods:
 - a. Weather-stripping products made of materials that have been tested for tensile strength in accordance with ASTM D638 after exposure to ASTM G155 for a period of 2,000 hours, where the maximum allowable difference in tensile strength values between exposed and none exposed samples does not exceed 10% and exhibit a V-2 or better flammability rating when tested to UL 94.
 - b. Door overlaps onto jambs and headers,
 - c. Garage door jambs and headers covered with metal flashing.

MATERIALS & TESTING

- Fire-retardant-treated wood shall be tested in accordance with ASTM D 2898, "Standard Practice for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing (Method A)" and CBC 2303.2. (CBC 703A.5.2.1)
- 4. Tested materials and material assemblies shall bear an identification label issued by a testing and/or inspecting agency approved by the California State Fire Marshal. The labeling shall include the following: (CBC 703A.4)

- a. Identification mark of the approved testing and/or inspecting agency;
- b. Contact and identification information of the manufacturer;
- c. Model number or identification of the product or material;
- d. Pre-test weathering specified in CBC 703A.5.2; and,
- e. Compliance standard as described in CBC 703A.7.
- 5. Regardless of testing approvals, paints, coatings, stains or other surface treatments are not an approved method of fire protection. (CBC 703A.5.3)