



**Planning & Building Agency
 Building Safety Division
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ROOFING REQUIREMENTS

BLD-02

A. GENERAL

A building permit is required for all reroofing except for repairs totaling less than 100 square feet.

Roofing shall comply with Chapter 15 of the 2022 California Building Code (CBC), Cool Roof requirements of the 2022 California Energy Code (CEnc), and ICC Evaluation Service reports or other approved third party listing agencies for proprietary products.

B. STRUCTURAL ENGINEERING REQUIREMENTS

Structural engineering is required for the any of the following:

1. Tile and other heavy roofing materials greater than 6 psf (pounds per square foot)
2. Re-sheathing of more than 50% of commercial buildings, for structural roof diaphragm requirements

C. RESIDENTIAL CALIFORNIA ENERGY CODE REQUIREMENTS

A Cool Roof Rating Council (CRRC) certified cool roof is required in the City's climate zone (climate zone 8). Reroofs of existing buildings where more than 50 percent of the roof is being replaced, shall require a CRRC certified cool roof as follows

Building Type	Aged solar reflectance	Thermal emittance	SRI
Residential Buildings			
Low -sloped (slope of 2:12 or less)	0.63	0.75	75
Steep-sloped (slope of more than 2:12)	0.20	0.75	16
Multifamily Buildings (low-rise & high-rise)			
Low -sloped (slope of 2:12 or less)	0.63	0.75	75
Steep-sloped (slope of more than 2:12)	0.20	0.75	16

D. NON-RESIDENTIAL CALIFORNIA ENERGY CODE REQUIREMENTS

A Cool Roof Rating Council (CRRC) certified roof shall be provided for non-residential buildings. Reroofs of existing conditioned buildings where more than 50 percent of the roof or more than 2,000 square feet (whichever is less) is being replaced, recovered or recoated, shall require a CRRC certified cool roof as follows:

Building Type	Aged solar reflectance	Thermal emittance	SRI
Non-residential Buildings and Hotel / Motel			
Low -sloped (slope of 2:12 or less)	0.63	0.75	75
Steep-sloped (slope of more than 2:12)	0.20	0.75	16

Please visit the CRRC website <http://www.coolroofs.org> or call toll-free (866) 465-2523 for additional cool roof information.

E. INFORMATION REQUIRED FOR PLAN CHECK

1. Floor plan with overall dimensions and square footages of conditioned vs. unconditioned areas.
2. Compliance shall be shown for California Energy Code Cool Roof requirements.
3. With or without tear off of existing roofing?

4. Without tear off; specify existing roofing material and number of layers.
5. Number of squares to be installed.
6. Type, grade and thickness of sheathing to be installed.
7. Felt number to be used (15#, 30#, etc.)
8. Tile roof requires International Code Council (ICC) Evaluation Service Report Number and structural engineering for weight greater than 6 pounds per square foot. Include the following with the structural calculations:
 - a. Floor plan showing location of all bearings walls and size of openings.
 - b. Roof framing plan including the species, grade and size of all framing members including headers, beams, supporting posts, and connectors.
 - c. Details addressing the complete load path from the roof to the foundation.

F. INSPECTIONS

Telephone (714) 667-2738 or schedule online at www.santa-ana.org/building-inspection-scheduling/ at least 24 hours in advance to schedule an inspection.

1. Provide a ladder for access to roof for all inspections.
2. Preroofing inspection required to check roof framing and plywood sheathing, and the number of existing roofing layers (do not cover until this inspection is approved). The roof deck must be structurally sound.
3. Existing roofing must be securely attached to the deck.
4. The contractor shall provide evidence of Cool Roof Rating Council (CRRC) certification of cool roofs.
5. Roof drains and drainage must be sufficient to prevent extensive accumulation of water. The City of Santa Ana requires a minimum 2" per hour rainfall in roof drainage design.

Where extensive ponding of water is apparent, an analysis of the roof structure for compliance with CBC Section 1611. Roof systems shall be sloped a minimum of 2% for drainage or engineered for water accumulation. If required, corrective measures such as relocation of roof drains or re-sloping of the roof shall be made. CBC Section 1502 and the California Plumbing Code, Chapter 11.

6. Existing insulation must not be water soaked.
7. Fire-retardant requirements shall be maintained.
8. No vents shall be removed or cuts made to existing appliances; and all heater vents shall maintain approved clearances from combustibles (tar paper, shingles, wood framing, etc.).
9. Mechanical equipment, electrical conduit, gas or condensate piping shall be replaced to code and secured for seismic purposes. P.V.C. plastic pipe and fittings are not approved for condensate drains on roofs.
10. Existing equipment screens removed for reroofing shall be subject to building inspector approval prior to reinstallation and may require separate permits for replacement. A handout for equipment screens is available.
11. Call for final inspection.

G. REQUIRED RATING OF ROOF COVERING

Table 1505.1 Minimum Roof Covering Classification For Types Of Construction

I-A	I-B	II-A	II-B	III-A	III-B	IV	V-A	V-B
B	B	B	C	B	C	B	B	C

H. RE-ROOFING

1. **General.** Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of CBC Chapter 15.
 Exception: Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in CBC Section 1507 for roofs that provide positive roof drainage.
2. **Structural and construction loads.** Structural roof components shall be capable of supporting the roof-covering system and the material and equipment loads that will be encountered during installation of the system.

3. **Roof replacement & recover.** Roof replacement shall include the removal of all existing layers of roof assembly materials down to the roof deck.

The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

- a. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
- b. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
- c. Metal panel, metal shingle, and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1512.3.
- d. The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.

Exceptions:

A roof recover shall not be permitted where any of the following conditions occur:

- i. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- ii. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
- iii. Where the existing roof has two or more applications of any type of roof covering.

4. **Roof recovering.** Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other approved materials securely fastened in place. CBC Section 1512.3.
5. **Reinstallation of materials.** Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken sate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counterflashings shall not be reinstalled. CBC Section 1512.4.
6. **Flashings.** Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation. CBC Section 1512.5