



CITY OF SANTA CLARITA BUILDING & SAFETY

ROOF RECOVERING AND REPLACEMENT

GENERAL REQUIREMENTS

1. All roof recovering or replacement work shall comply with chapter 15 of the 2007 California Building Code (CBC), 2007 California Energy Code with provisions from the 2008 Building Energy Efficiency Standards, City of Santa Clarita amendments, and the manufacturer's installation standards and instructions.
2. No roof recovering or replacement work shall start without first obtaining a reroof building permit and having an onsite preinspection. For more information on inspections, please see the section entitled *Inspections*.
 - Roof repairs of less than 10 percent of the roof area or 200 square feet (whichever is less) may be done *without a permit* provided the damaged portion be replaced to its previous undamaged condition.
 - If the work is more than 10 percent but less than 50 percent of the roof, a permit is required and the roof recovery or replacement work portion shall meet current code while the remaining roof may stay in its current condition.
 - If the work is over 50 percent of the roof, a permit is required and the entire roof must meet current code.
3. Fire-Rating: New roof coverings shall comply with the following:
 - Wood shakes and wood shingles (fire treated or untreated) are not allowed in the City of Santa Clarita.
 - When located within the City's fire zone, all roof coverings shall have a minimum Class A Fire-Rating. Roof coverings elsewhere shall be Class B minimum.
4. Existing Roof Removal: New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following conditions occur: (CBC section 1510.3)
 - Where the existing roof covering or roof deck is water soaked or has deteriorated to a point of not being an adequate base for additional roofing.
 - Where the existing roof covering is wood shake, wood shingle, slate, clay, cement, or asbestos-cement tile.
 - Where the existing roof has two or more applications of any type of roof covering.
5. Reinstallation of Materials: Existing slate, clay, or cement tile will be permitted for reinstallation, except that damaged, cracked, or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars, and metal counter-flashings shall not be reinstalled where rusted, damaged, or deteriorated. Aggregate surfacing materials shall not be reinstalled. (CBC section 1510.5)

6. **Structural Issues:** A licensed engineer or architect may be required to prepare structural calculations and/or plans, when the following condition occurs:
 - When the weight of the new roof covering and the existing roof covering (when not removed) or the new roof covering itself (when the existing roof is removed), exceeds 7 pounds per square foot.
 - When the weight of the new roof replacement exceeds the weight of the removed existing roof.

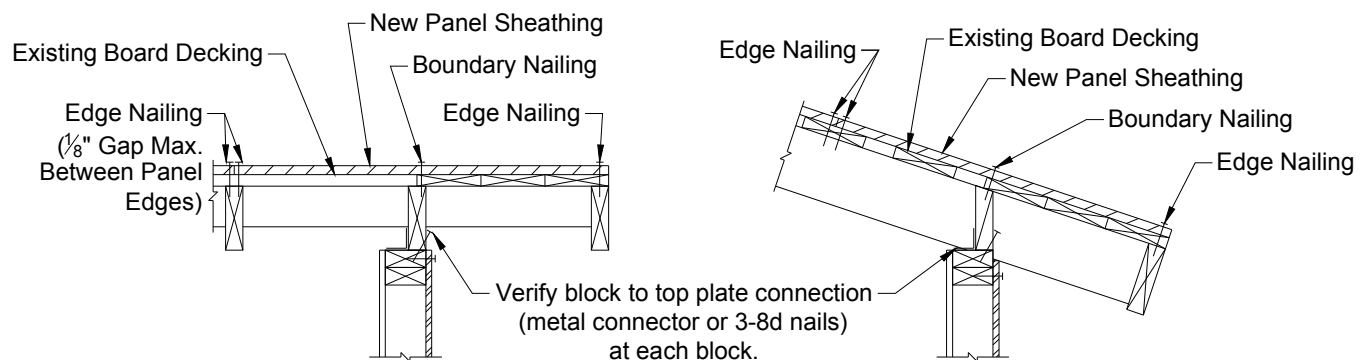
NOTE: The weight of new wood structural panel sheathing over existing board decking must be included in the 7 pounds per square foot maximum. 15/32" plywood is about 1.5 pounds per square foot.

7. **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 1510.6)

EXISTING BOARD DECKING AND PANEL SHEATHING INSTALLATION

Where solid, diagonal, or spaced board decking is encountered, new wood structural panel sheathing shall be installed over the existing board decking or the existing board decking shall be removed without causing structural damage. If the existing board decking is removed, new wood structural panel sheathing shall be installed directly onto the existing rafters. When new panel sheathing is added over the existing board decking, it shall be included in the total weight of the roof.

- Panel sheathing shall be 15/32" minimum thickness CDX grade plywood or exterior grade OSB.
- For panel sheathing over existing 1x board decking, use 10d at 6"/6"/12" on center. For panel sheathing over existing 2x board decking, use 16d at 6"/6"/12" on center. See "Detail A" below.
- Lay panel sheathing perpendicular to rafter supports. For edges parallel to the board decking, a 1½" minimum lap onto the board decking shall be maintained. Minimum panel sheathing shall not be less than 2 feet in width and must span over a minimum of three joist spaces.



DETAIL A

ROOFING MATERIAL

1. **Composition Shingles:** New composition shingles may be installed directly on existing roof coverings if the existing is in reasonably sound condition. The existing roof coverings may not be wood shakes, wood shingles, slate, clay, or asbestos cement tiles. A maximum of two layers of composition shingles may be allowed on a roof. Curled edges need to be removed.

2. Wood Shingles/Wood Shakes: Wood shingles and wood shakes (fire treated or untreated) are not permitted for use in the City of Santa Clarita.
3. Tile Roofing: Tile roofing shall be installed directly on wood structural panel sheathing. No more than one layer of roofing may be installed. If the weight of the new tile is more than 7 pounds per square foot or heavier than the existing tile, a licensed engineer or architect may be required to prepare structural calculations and/or plans. If board decking is encountered, panel sheathing must be placed over the board decking or the existing board decking removed and replaced with panel sheathing. When panel sheathing is installed over board decking, the weight of the panel sheathing must be included in the maximum weight of 7 pounds per square foot. See *Existing Board Decking and Panel Sheathing Installation* as well as note "6" under *General Requirements*.
4. Cap Sheet: New cap sheets may be installed directly on existing residential roof coverings if the existing is in reasonably sound condition. The existing residential roof coverings may not be wood shakes, wood shingles, slate, clay, or asbestos cement tiles. A maximum of two layers of cap sheets may be allowed on a residential roof. A maximum of one layer of cap sheets may be installed on a commercial roof in addition to scheduling a preinspection.

INSPECTIONS

1. Prior to starting the job, the inspection job card shall be posted where it is visible from the street. At the time of inspection, the building address shall be posted (with 4-inch numbers or greater depending on the view from the public right-of-way) on the building where it is clearly visible from the street.
2. A preinspection is required for all roof recovery and replacement work upon removal of all existing layers of roof coverings or, where the existing roof covering is to be recovered, prior to the installation of the new roofing material, to verify that the roof structure is not damaged or dry rotted. Prior to such inspection, any damaged areas of the roof deck or structural framing members shall be repaired and/or replaced with new material. (City Amendment section 18.04.060)
 - A roof sheathing nail inspection is required when any new panel sheathing is installed or when any new framing is performed. This inspection may be combined as part of the preinspection.
 - A final inspection and approval shall be obtained when roof recovering or replacement work is complete. At this time the inspector will verify the flashing and proper lap.
3. A ladder shall be onsite at the time of inspection. The ladder shall have a minimum 300 lb Duty Rating (Type IA) and be long enough to extend 2 feet above the roofline.
4. The contractor/homeowner is responsible for extending all plumbing vents, chimney, and mechanical vents if needed. (section 906.0 – 906.7 California Plumbing Code and sections 802.2 - 802.6 California Mechanical Code)
5. The contractor/homeowner is responsible for ensuring the proper amount of attic ventilation is installed per CBC section 1203.

ENERGY CODE COMPLIANCE

(2007 California Energy Code with provisions from the 2008 Building Energy Efficiency Standards)

Residential Requirements (Section 152b1H)

All residential roof recovery and/or replacement work shall comply with energy requirements if all of the following apply:

- More than 50 percent of the roof or 1000 square feet (whichever is less) is being replaced.
- The roof slope is greater than 2:12.
- The weight of new roofing is 5 pounds per square foot or more.

If all of the items above apply to the residential roof recovery and/or replacement work to be performed, then the building must comply with one of the following requirements:

- A cool roof shall be installed with a minimum aged solar reflectance of 0.15 and a minimum thermal emittance of 0.75, or a minimum SRI of 10. All cool roof products shall be CRRC labeled. See www.coolroofs.org for more information.
- Insulation shall be installed with a thermal resistance of at least 0.85 hour-square foot °F / BTU, or at least ¾ inch airspace shall be added to the roof deck over an attic.
- Ducts in the attic shall be insulated with a minimum of R-6 insulation.
- Ceiling insulation shall be a minimum of R-30 insulation.
- A radiant barrier in the attic shall be provided.
- No ducts are present in the attic.

Commercial Requirements (Section 149b1B)

When more than 50 percent of the roof or 2000 square feet (whichever is less) is being replaced, recovered, or recoated, the altered commercial roof area shall meet the following requirements:

Roofing Weight	Steep Sloped Roofs (more than 2:12)	Low Sloped Roofs * (2:12 or less)
Less than 5 psf	A cool roof (CRRC labeled) shall be provided with a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.	A cool roof (CRRC labeled) shall be provided with a minimum aged solar reflectance of 0.55 and a minimum thermal emittance of 0.75, or a minimum SRI of 64.
5 psf or more	A cool roof (CRRC labeled) shall be provided with a minimum aged solar reflectance of 0.15 and a minimum thermal emittance of 0.75, or a minimum SRI of 10.	

See www.coolroofs.org for more information regarding cool roofs.

* When a low-sloped roof with insulation of less than R-7 or a U-factor of 0.089 or greater is exposed to the roof deck or to the recover boards, the exposed area(s) shall be insulated to the levels specified in table 149-A of the 2007 California Energy Code (R-8 and 0.081 U-factor for non-residential, and R-14 and 0.055 U-factor for high-rise residential and hotel/motel buildings).

There are some exceptions to table 149-A for roofs with the following conditions: roof-mounted mechanical equipment that will not be removed and replaced, parapets, penthouses, rock and gravel surfaces, integrated photovoltaic or solar panels, or ballasted roofs (25 psf or more). Please contact Building & Safety to see if these exceptions apply to your project.