COMMUNITY DEVELOPMENT DEPARTMENT
Building Inspection Division
221 West Pine St./PO Box 3006, Lodi, CA 95241-1910
(209) 333-6714

Re-roofing Handout

Policy and Procedure No.: **B-04-01**

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Purpose

Re-roof permits are required to ensure that the installation of roofing materials, including plywood decking, nailing, flashing, etc. are properly installed for residential and non-residential buildings according to the provisions of the 2010 California Building Code & 2010 California Residential Code. This handout outlines the necessary information required to obtain a building permit and shows different allowable construction methods to successfully complete the project.

Permits Required

A re-roof permit is required for the following type of work. Repairs may include similar or new roofing materials.

- Repairs to a roof that does not exceed 10% of the roof area, or 1,000 ft², whichever is less, does not require a permit.

  Example: A building with a total of 20 squares
  20 Sq x 10% = 2 Sq (no permit required)
  20 Sq x 15% = 3 Sq (permit *is* required)
  (1 Sq = 10 ft x 10 ft, or 100 ft²)

Note: *California's updated 2008 building energy codes require* ***cool roofs*** *on existing residential buildings*

Cool Roofing Products Alterations to existing roofs need to meet §152(b)1H, which requires that when more than 50 percent of the roof or more than 1,000 ft2 of exterior existing roof, whichever is less, is replaced, the criteria set forth below must be met.

1. **For steep-sloped roofs**, roofing products with a density of less than 5 lb/ft² in climate zones 10 through 15 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

2**. For steep-sloped roofs**, roofing products with a density of 5 lb/ft² or more in climate zones 1 through 16 shall have a minimum aged solar reflectance of 0.15 and a minimum thermal emittance of 0.75, or a minimum SRI of 10.

Roofing products with less than 5 lb/ft² generally include asphalt shingles and metal roofs. Products with a density more than 5 lb/ft² generally include concrete, clay tiles, slate and possibly some synthetic roof coverings.

When any of the options in items a through h below are used, they are considered equivalent to the reflectance, emittance, and the SRI requirements described in items 1 and 2 above:

a. Insulation with a thermal resistance of at least 0.85 hr•ft²•°F/Btu or at least a 3/4 inch air-space is added to the roof deck over an attic; or

b. Existing ducts in the attic are insulated and sealed according to §151(f)10; or

c. In climate zones 10, 12 and 13, with 1 ft² of free ventilation area of attic ventilation for every 150 ft² of attic floor area, and where at least 30 percent of the free ventilation area is within two feet vertical distance of the roof ridge; or Note:

d. Buildings with at least R-30 ceiling insulation; or

e. Buildings with a radiant barrier in the attic meeting the requirements of §151(f)2; or

f. Buildings that have no ducts in the attic; or

h. Roof areas covered by building integrated photovoltaic panels and building integrated solar thermal panels and existing roof areas that have thermal mass over the roof.

Plans Required

Two copies of a roofing plan on 8 1/2 x 11 paper showing the location of vents & ventilation calculations.

Title 24 Forms

Required when the area of exterior roof surface to be replaced exceeds 50% of the existing roof area, or more than 1,000 ft², whichever is less.

At permit submittal: **Form CF-1R-ALT**

- At Final Inspection: **Form CF-6R-ENV-01** (when using cool roofing products)

Work Description

Obtain the following information regarding the existing condition and proposed roofing materials:

- Existing – top and/or second layer material, specify if existing roof material will be removed or if project consists of an overlay.
- Proposed – if overlaying, provide number of layers, type of material and weight per each square; sheathing type; roof skylight locations (include ICC or UL listing number).

Re-roofing Overlays Allowed

General

Recovering versus replacement.
New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following conditions occur:

1. 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.
2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

Exceptions:

1. 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.
2. 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 CBC Section 1510.4 or CRC R907.4.
3. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.

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.

Overlay on Existing Built-up Roofs

Built-up roof covering may be applied over one existing roof covering provided the roof structure is sufficient to sustain the weight of the additional roof. All blisters, buckles and other irregularities shall be cut and made smooth and secure; a base sheet shall be secured in place with approved fasteners. The following conditions shall be prepared for these applications:

1. Gravel-surfaced Roofing

   All existing gravel shall be cleaned of loose gravel and debris. The base sheet shall not be mopped to the old roofing. New roofing conforming to CBC Section 1507.10 or CRC R905.9 shall be applied.
2. Smooth or Cap-sheet Surface

   A base sheet shall be nailed or, in the case of non-nailable decks, mopped to the existing

roofing. Apply new roofing conforming to CBC Section 1507.11 or CRC R905.11.

Overlay on Existing Wood Roofs or Asphalt Shingle Roofs

Only fire-retardant roofing assemblies or noncombustible roof covering may be applied over existing wood shake or shingle roofs in accordance with the manufacturer's installation requirements.

1. Asphalt Shingle Application

   Not more than one overlay of asphalt/composition shingles shall be applied over an existing composition or asphalt shingle roof.
   Not more than one overlay of asphalt/composition shingles shall be applied over an existing wood shingle roof.

2. Wood Shingle Application

   Not more than one overlay of wood shingles shall be applied over existing wood or asphalt shingles, and shall be installed to manufacturer's specifications.

3. Flashing and Edgings

   Rusted or damaged flashing and counterflashing, vent caps and metal edgings shall be replaced with new materials as necessary.

Composite Material

Prior to permit issuance, a structural analysis will be required when reroofing with a composite material in place of a lighter roofing material. Composite materials include: tile, cellulose, cement, and any products with weights in *excess of 350 pounds per square*.
Submittal of structural calculations (two "wet" stamped and signed sets) prepared by a licensed professional engineer shall be submitted in order to evaluate if the existing roof structure is adequate to sustain the added load. Analysis may be required at the Building Official's discretion.

Re-Roofs shall comply with Attic Ventilation per CBC 1203.2 or CRC R806.2

Inspections

Overlay Applications

1. Pre-Inspection

   Required prior to any overlay application is installed.

2. Final Inspection

   Required after the project is complete.

Tear-off Applications

1. Pre-Inspection

   Required after the existing roofing is completely torn off.

2. Roof Sheathing Inspection

   Required after the new decking, nails and staples are installed according to nationally recognized standards, and roof assembly installation instructions (also refer to Plywood Sheathing Nail Diagram). Inspection is required prior to concealing the roof with felt, paper, roofing or any other material concealment.

3. Final Inspection

   Required after the project is complete.

Inspection Phone Line

The inspection phone line is **(209) 333-6716**, available 24 hours/day. Inspection requests received before 3:00pm will be scheduled for the following business day.
(Note: morning or afternoon inspections cannot be guaranteed, please call the office in advance).

Fees

Re-roofing permit fees are based on a flat rate. Consult with a Permit Technician for details.

Application Forms

An Application for Permit form may be requested at the Building Safety & Inspection office located at:

Address: *221 W. Pine St*
Phone: ***(209) 333-6714***