



RES RE-ROOF		
<b>B</b> SECTION	FORM NUMBER	<b>2013 CBC</b> CODE CYCLE
<b>01/01/2011</b> EFFECTIVE DATE		<b>010/01/2014</b> REVISION DATE

**RESIDENTIAL RE-ROOF**

**GENERAL INFORMATION**

This standard applies to all residential re-roof projects in the City of Downey.

Permits may be obtained through one of the following:

- A licensed and insured **C-39** roofing contractor
- A property owner-As defined by the Contractors State License Board
- A licensed and insured B contractor **ONLY** when the roof is in conjunction with the required multiple trade(s) requirements of the California State License Board 7057. (b): "A general building contractor shall not take a prime contract for any project involving trades other than framing or carpentry unless the prime contract requires at least two unrelated building trades...or unless contractor holds the appropriate license classification or subcontracts with an appropriately licensed specialty contractor to perform the work."

**ALL WORK SHALL CONFORM TO THE:**

- 2013 CALIFORNIA BUILDING CODE
- 2013 CALIFORNIA PLUMBING CODE
- 2013 CALIFORNIA MECHANICAL CODE
- 2013 CALIFORNIA ELECTRICAL CODE
- 2013 CALIFORNIA ENERGY CODE
- CITY OF DOWNEY MUNICIPAL CODE

Permits are valid for 180 days from last APPROVED inspection  
(Non-permitted work must be completed in 60 days)

**GENERAL REQUIREMENTS**

- ASPHALT SHINGLES-No more than 1-overlay of asphalt shingles may be applied over an existing asphalt roof.
- METAL ROOFING-Metal roofing shall be installed per the manufacturer's specifications. You must provide a current test report (ICC-ES #, NER#, UL#, or equal) for listed assembly
- CLAY OR CONCRETE TILE ROOFING-CBC1507.3
  - Tile roofs weighing 6psf or less may be installed after existing roof coverings are removed, without need for structural calculations.
  - Tile roofs weighing over 6psf, or tile roofs of any weight when installed over existing roof coverings require structural calculations by a licensed engineer or architect. **The engineer must also note that "the entire structure is adequate to sustain the additional loads", regardless if the original is torn off or not.** You must submit these calculations, along with a dimensioned framing plan for review and approval to the Building Division. **A current ICC report # or equivalent for this product is required for approval.**
- BUILT-UP ROOFING-Roofing shall be completely removed prior to applying new roof covering, unless approved by the Building Official (CBC 1507.9.8).
- ROCK ROOFING-Roofing shall be completely removed prior to applying new roof covering. Roofing aggregates shall comply with CBC standard 1507.10.2 and cementing adhesives with CBC Table 1507.10.2. Provide a current test report (ICC-ES #, NER #, UL #, or equal) for listed assembly.

## INSTALLATION REQUIREMENTS

- The following installations are accepted under the 2013 CBC, Chapter 15, and the 2013 CRC, Section R905. Roof slope requirements may vary for different types of roofing materials.
- Roofing materials must be installed per the manufacturer's installation instructions.
- At the time of tear-off inspection, all damaged decking and supporting members must have been replaced.
- Existing slate, clay, or cement tile shall be permitted for re-installation-although damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edging, drain outlets, collars and metal counter flashings shall not be reinstalled where rusted, damaged, or deteriorated. Aggregate surfacing materials shall not be reinstalled. (CRC R907.5)
- Flashings shall be reconstructed in accordance with approved manufacturer's installation constructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation. (CRC R907.6)
- New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following conditions occur: (CRC R907.3)
  - 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.
  - Where the existing roof covering is wood shake, slate, clay, cement, or asbestos-cement tile.
  - Where the existing roof has two or more applications of any type of roof covering.
  - Exceptions:
    - Complete and separate roof 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.
    - Installation of metal panel, metal shingle, and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when the application is in accordance with section R907.4.
    - 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.
  - 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 (CRC R907.5).
  - Where the application of a new roof covering creates a combustible concealed space, such as when battens or metal roofing is installed, fire blocking shall be installed in accordance with CRC R302.11.
  - **FLAT ROOFS:**
    - In order to prevent excessive accumulation of water (ponding), the roof must be sloped to provide positive roof drainage (CRC R907.1 exc).
    - When old roof membrane is removed to original deck, it is recommended (not required) that deck be sloped to ¼ inch per foot, the roof membrane installed must be approved for a flat roof installation and roof framing shall be checked for ponding instability as per ASCE7-05, Section 8.4.

## ENERGY REQUIREMENTS

- **Cool Roofs:**
  - The City of Downey is in Climate Zone 8/9. Replacement of a roof surface on existing residential roofs does require installation of a cool roof in Climate Zone 8/9. (CEnC 150.2(b)1H)
- **Radiant Barrier:**
  - If the existing roof sheathing over an attic space is being replaced, a continuous Radiant Barrier is required
    - If required, the radiant barrier is to be installed below the roof deck in the attic, and on the gable ends. The most common installation method is to use roof sheathing with a barrier bonded to it by the manufacturer. The sheathing is installed with the barrier facing down towards the attic. Alternatively, a barrier material can be draped over the top of the rafters or trusses before the sheathing is installed, or can be stapled between or underneath the rafters or top chords of the trusses after the sheathing is installed. A radiant barrier shall have an emittance of 0.05 or less, tested in accordance with ASTM C1371 or ASTM E408, and shall be certified to the Department of Consumer Affairs as required by Title 24, Part 12, Chapter 12-13, Standards for Insulating Material and shall meet the installation criteria specified in the Reference Residential Appendix RA4 [CNeC 110.8(j) and 150.1©2, Compliance Manual Section 3.8.2B]
- **Title 24 Energy Compliance Reports:** (If radiant barrier is required)
  - The following forms must be filled out and submitted with the permit application
    - Certificate of Compliance form CF1R-ALT-01 Prescription Alterations
  - The following forms must be completed by the installer(s) prior to final
    - Certificate of Installation form CF-2R-ENV-04 Roofing-Radiant Barrier

## SMOKE AND CARBON MONOXIDE ALARMS

In single and multi-family residences (including townhomes, condominiums, and apartments), installation of smoke alarms and carbon monoxide alarms is required prior to final inspection.

## INSPECTIONS

- Inspection requests can be made for the following workday, Monday-Friday, by leaving a voicemail message at 562-904-7141. You must call before 3:30pm the day before, to receive an inspection the following day. You will need to know the “BLD” permit #, property address, and type of inspection to be requested.
- The City of Downey Building inspectors are required to perform the inspections listed below on all re-roof work:
  1. **Pre-roof (tear off) Inspection:** After existing roofing is removed, but before any new material is installed.
  2. **Roof Nail Inspection:** After plywood (or wood) to create solid deck is installed (when applicable).
  3. **The City of Downey requires a roof sheathing inspection for all roofs and re-roofs.**
  4. **In process Inspection:** Required for all lightweight tile, concrete tile, and clay-tile
  5. **Remove/Remount Solar Panels:** Additional inspection may be required if roof mounted

PV panels are present.

6. **Final Inspection:** When all work has been completed, including:

- Smoke and carbon monoxide alarm installation
  - Overflow drains cleaned
  - Skylights secured
  - All flues extended and secured
  - Any roof equipment and/or piping secured
  - All exposed nails protected
  - All exposed wood, roof jacks, and metal flashing or edging painted
- For each inspection, the permit card with the Energy Compliance Reports forms completely filled out and attached, the ICC report on the roofing materials, and the approved job set of plans (if any) must be presented to the inspector. Permits expire 180 days after permit issuance, or last approved inspection.
  - **Roof inspections require an approved OSHA ladder to be provided and secured to roof, and roofing materials must be on site.** Required inspections are dependent upon the roof material and method of installation chosen. In general, call for an inspection before covering something up.