

## **City of Norco Re-Roof Requirements**

The City of Norco has adopted the California Building Code (CBC) and the California Building Energy Efficiency Standards (CBEES). Along with the Norco Municipal Code (NMC) these documents govern the requirements for the re-roofing of existing structures within the City of Norco. This handout highlights the general requirements of these code documents. Consult the full text of the documents for detailed requirements.

- 1) No building shall be re-roofed without first obtaining a permit. The City of Norco has generally defined a re-roof as the replacement of more than 25% of a structure's roof covering within any 12 month period.
- 2) All permit applications shall include a completed Re-Roof Work Sheet.
- 3) All roofing shall be installed per all applicable sections of the CBC, CBEES and the NMC, and the manufacturer's installation specifications.
- 4) All roofing materials shall be minimum Class B fire-rated.
- 5) All roofing materials shall be tested and labeled by the Cool Roof Rating Council (CRRRC) as indicated on the 2008 CEC Cool Roof Requirements handout. This handout includes multiple exceptions to the Cool Roof requirements.
- 6) All roofing materials installed within any Fire Hazard Severity Zone shall meet the requirements of Chapter 7A CBC, Materials & Construction Methods for Exterior Wildfire Exposure.
- 7) New roofing shall not be installed over any existing wood shake, slate, cement or tile roofing, or over any other type of roofing that is badly deteriorated.
- 8) New roofing shall not be installed over any existing roof that has two or more layers of any type of roofing (original plus one overlay).
- 9) Built-up roofs shall be completely removed to allow the existing roof sheathing to be inspected. Final inspection is also required.
- 10) Metal coping is required on the tops of all parapet walls.
- 11) Structural calculations are required for the installation of any roofing material that exceeds 6.5psf in weight, regardless of the type of existing roofing.
- 12) Sheathing inspection is required when any roof sheathing is removed or replaced or when spaced sheathing has been filled in.
- 13) Application Inspection is required for all re-roofs when approximately 50% of the new roofing is installed.
- 14) Final inspection is required for all re-roofs.
- 15) An OSHA approved ladder of sufficient height shall be provided by the contractor for all inspections.
- 16) A copy of the manufacturer's installation specifications, the CRRRC label, a Re-Roof Worksheet and the job card shall be available on-site for all inspections.

## **2008 CEC Cool Roof Requirements**

The 2008 Building Energy Efficiency Standards, Sections 10-113, 118(i) and 151(f), as adopted by the State of California require that all roofing products installed in Norco (Climate Zone 10) as new roofing or as re-roofing be tested and labeled by the Cool Roofing Rating Council (CRRC) and that they comply with the following:

- 1) Materials with a density of less than 5psf (asphalt shingles, metal roofing, etc) shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or it shall have a minimum Solar Reflectance Index (SRI) of 16.
- 2) Materials with a density of 5psf or more (concrete tile, slate, etc) shall have a minimum aged solar reflectance of 0.15 and a minimum thermal emittance of 0.75, or it shall have a minimum SRI of 10.

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

- a) Buildings with minimum R-30 ceiling insulation.
- b) Buildings with a compliant radiant barrier in the attic.
- c) Buildings that have no HVAC ducts in the attic.
- d) Buildings with existing ducts in the attic that are insulated and sealed with HERS verification. CF-4R form required.
- e) Buildings with 1sf of free ventilation area for every 150sf of attic area, and where at least 30% of the free ventilation area is within 2' vertical distance of the roof ridge.
- f) Buildings with minimum R-3 roof deck insulation above a vented attic.
- g) Buildings where insulation with a thermal resistance of at least 0.85hr\*ft<sup>2</sup>\*°F/BTU or at least a ¾" air space is added to the roof deck over the attic.
- h) Buildings with roof areas covered by building integrated photovoltaic panels or building integrated solar thermal panels, and existing roof areas that have a thermal mass over the roof membrane with a weight of at least 25psf.
- i) Buildings with roof slopes of less than 2:12 (residential only).

# City of Norco Re-Roof Worksheet

Site Address: \_\_\_\_\_

Permit #: \_\_\_\_\_

Existing \_\_\_\_\_ Roof \_\_\_\_\_ Type(s): \_\_\_\_\_

Location(s) & Type(s) of New Roofing: \_\_\_\_\_

Number of Squares: \_\_\_\_\_

Remove & Replace / Overlay (circle one)

Sheathing: New / Existing / Partial \_\_\_\_\_ Size & Material: \_\_\_\_\_

Radiant Barrier: Yes / No

Cool Roof: Yes / No (If No, check applicable exception below)

Reflectance: \_\_\_\_\_ Emittance: \_\_\_\_\_ SRI: \_\_\_\_\_

Exceptions: Existing / New (circle one)

- Building is unconditioned.
- Building has minimum R-30 ceiling insulation.
- Building has a compliant Radiant barrier installed in the attic.
- Building has no HVAC ducts in the attic.
- Building has existing ducts in attic, insulated and sealed with HERS verifications. (Provide CF-4R form)
- Building has 1sf of free ventilating area for every 150sf of attic area, and at least 30% of ventilating area is within 2' vertical distance of roof ridge.
- Building has minimum R-3 deck insulation above vented attic.
- Building has insulation with thermal resistance of at least 0.85hr\* $ft^2$ \* $^{\circ}F$ /BTU or at least a  $\frac{3}{4}$ " air space is added to the roof deck over the attic.
- Buildings with roof areas covered by building integrated photovoltaic or solar thermal panels, and existing roof areas that have a thermal mass over the roof membrane with a weight of at least 25psf.
- Buildings with roof slopes less than 2:12 (residential only).

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This work sheet shall become part of the permit documentation and shall be kept with the job card on-site and available for all inspections.

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