

Re-roofing and the 2016 California Energy Compliance Requirements for Cool Roof

(Important information you need to know before obtaining a re-roof permit)

Beginning January 1, 2017, the California Energy Commission (CEC) has adopted new requirements for residential and commercial re-roofing projects. When more than 50% of the exterior surface of a **residential** roof is being replaced, the roofing product must meet the requirements for a cool roof, see below. Roof area covered by building integrated photovoltaic and/or solar thermal panels is not required to comply with cool roof requirements. Roof areas not covered by photovoltaic or solar thermal panels shall comply with cool roofing requirements. All commercial re-roof projects must include the installation of roofing materials meeting the required specifications detailed in the following table.

| Within the City of Sacramento & climate zone 12 | | | |
|---|------------------------|-------------|------------|
| | | Residential | Commercial |
| Low Sloped Roofs ≤ 2:12 | Aged solar Reflectance | N/R | .63 |
| | Thermal Emittance | N/R | .75 |
| Steep Sloped Roofs > 2:12 | Aged solar Reflectance | .20 | .20 |
| | Thermal Emittance | .75 | .75 |

Exceptions and Alternatives which may apply to **residential** re-roof projects with a roof slope greater than 2:12 (steep slope roofs):

- (a) Mass roof 25 lbs. or greater (uncommon situation such as sod roof);
- (b) Air space 1 inch from top of roof deck to bottom of roofing;
- (c) Roofing product has a profile ratio of raise to width of 1 to 5 for 50% or greater of the width of the roofing product;
- (d) Ducts already meet Section 150.1(c) insulation and duct leakage requirements;
- (e) Roof has R-38 insulation;
- (f) Roof has a radiant barrier;
- (g) No ducts are installed in the attic; or
- (h) R-4 insulation above the roof deck

A Certificate of Compliance Energy form CF1R-ALT-D5E must be completed as applicable to a re-roof project, and submitted with the permit applications. Please see the user instructions in form CF1R-ALT-05-E and the form must be signed by the Document author and the Building Designer (i.e. the contractor or home owner).

At final inspection an Installation Certificate form CF2R-ALT-05-E must be completed by the installing contractor and submitted to the owner and reviewed by the building inspector.

Roofing products that are used for compliance with the energy standards are required to be tested and labeled by the Cool Roof Rating Council (CRRC). The roofing products manufacturer must have its roofing product tested for solar reflectance and thermal emittance and be listed in the CRRC's Rated Product Directory (www.coolroofs.org) and be labeled according to the CRRC procedures.

For more information you can visit the California Energy Commission website at <http://www.energy.ca.gov/title24/2016standards/index.html>