



## Residential Cool Roof Requirements

Important information you need to know BEFORE obtaining a re-roof permit!

The California Energy Commission (CEC) has adopted requirements for re-roofing projects.

Beginning July 1st, 2014 when more than 50% of the exterior surface of the roof or more than 1,000-sq. ft. of roof is replaced, whichever is less, the roofing product must meet the following prescriptive requirements for Cool Roofs.

### Alternatives to the Cool Roof requirement may be one of the following:

1. R4 insulation installed on the deck above vented attic; or
2. 1 inch air-space is provided between the top of the roof deck to the bottom of the roofing product; or
3. If existing ducts in the attic are insulated and sealed according to CEC Regulations §151(f)10 and tested (leak test certificate CF3R required by HERS rater); or
4. Buildings with at least R-38 ceiling insulation; or
5. Radiant barrier in the attic meeting the requirements of §151(f)2 ; or
6. Buildings with no ducts in the attic; or
7. The installed roofing product has a profile ratio to width of 1 to 5 for 50% or greater of the width of the roofing product

### For roof slopes of greater than 2:12:

1. Roofing products with a density of less than 5lbs/sq. ft. (i.e. Asphalt shingles) shall have a minimum 3-year aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a Solar Reflectance Index (SRI) of 16.
2. Roofing products with a density of 5lbs/sq.f t. or more (i.e. Concrete, clay tiles or slate) shall have a minimum 3-year aged solar reflectance of 0.15 and a minimum thermal emittance of 0.75, or a SRI of 10.
3. **Low Slope Roofs**, ( $\leq 2/12$ ) shall have a minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75 or a minimum SRI of 0.75

### New Construction Exception 150.1 (c) 11

1. Buildings intergraded with photovoltaic panels and buildings intergraded with solar thermal panels are exempt.
2. Roof constructions that have thermal mass over the roof membrain with a weight of at least 25lb/sq ft are exempt.

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).

 COOL ROOF RATING COUNCIL	Solar Reflectance	Initial	Weathered
	Thermal Emittance	0.00	Pending
	Rated Product ID Number	-----	-----
	Licensed Seller ID Number	-----	-----
	Classification	Production Line	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</small>			

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](http://www.coolroofs.org)) and be labeled according to CRRC procedures. Below is an example of an approved CRRC product label.

A Certificate of Compliance Energy Form "CF-1R-ALT" must be completed and submitted with the permit application. The "CF-1R-ALT" form must be signed by the documentation Author and the building designer (i.e. Contractor or Home Owner).

At Final Inspection an Installation Certificate Form "CF-6R-ENV-01" must be completed by the installing contractor and submitted to the owner and the building inspector.