



**2022 CALIFORNIA ENERGY CODE
 COOL ROOFS REQUIREMENTS FOR RESIDENTIAL BUILDINGS**

COOL ROOF requirements were adopted by the California Energy Commission – (CEC) for newly constructed buildings, additions, and the re-roofing of existing buildings for which permit applications were filed on or after January 1, 2023 and that use the prescriptive compliance method.

1. COOL ROOFS

To qualify as a COOL ROOF under the 2022 California Energy Code, the roofing material must:

- Have a Cool Roof Rating Council (CRRC) rating for Solar Reflectance and Thermal Emittance
- Meet the Aged Solar Reflectance and Thermal Emittance or SRI

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 (see <http://www.coolroofs.org>) and be labeled as in the following example:

	Initial	Weathered	
	Solar Reflectance	0.00	Pending
	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.</small>			
<small>Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</small>			

The labeled product material shall be available for the jurisdiction's permit inspector at the time of inspection.

2. SINGLE FAMILY BUILDINGS COOL ROOF REQUIREMENTS (Cal Energy Code. Sections 150.1 & 150.2)

NEWLY CONSTRUCTED BUILDING AND ADDITION: When the prescriptive compliance method is used, cool roof is required as shown in the table below.

RESIDENTIAL REROOFING: When more than 50% of a roof is being replaced, products used to reroof must meet minimum cool roof requirements below for the applicable roof slope.

Roof Slope	Slope	Aged Solar Reflectance	Thermal Emittance	SRI
Steep-sloped	2:12 or more	≥0.20	≥0.75	≥16
Low-sloped	Less than 2:12	≥0.63	≥0.75	≥75

Exceptions for both steep- and low-sloped roofs:

1. Roof area covered by solar panels or solar thermal panels is not required to meet the minimum requirements.
2. Roof constructions with a weight of at least 25lb/ft² are exempted.

Exceptions for only steep-sloped roofs: Building to have one of the following features:

1. A ceiling assembly with a U-factor lower than or equal to 0.025 or that is insulated with at least R-38 ceiling insulation.
2. A radiant barrier in the attic that is not installed directly above spaced sheathing and meets Cal Energy Code Section 150.1(c)2.
3. Has no ducts in the attic.
4. R-2 or greater continuous insulation above or below the roof deck.

Exception for only low-sloped roofs: The aged solar reflectance can be met by using insulation at the roof deck as specified in Cal Energy Code Table 150.2-B.