



2025 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, 2026, and that use the prescriptive compliance method.


Cool Roofs

Energy efficient roofs are also known as cool roofs. These roofs are designed to reflect more sunlight and absorb less heat than a standard roof. Energy efficient roofing products have high solar reflectance and thermal emittance properties.

To qualify as a 'cool roof' under the 2025 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 Solar Reflectance Index (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](#) 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

Single Family Buildings Cool Roof Requirements (Cal Energy Code sec. 150.1 & 150.2)

Residential reroofing:

When more than 50% of a roof is being replaced, products used to reroof must meet minimum cool roof requirements below, for applicable roof slope, per CEnC sec 150.2(b)I

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 building integrated photovoltaic panels or building integrated solar thermal panels is not required to meet minimum requirements.
2. Roof constructions with thermal mass over the roof membrane with a weight of at least 25 lbs/ft2.
3. Additions 300 SF or less (per CEnC sec. 150.2(a) exception 1).

Exceptions for only steep-sloped roofs:

The building will 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 CA Energy Code sec. 150.1(c)2.
3. Buildings that have no ducts in the attic.
4. Buildings with 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 CA Energy Code Table 150.2-E.

TABLE 150.2-E—AGED SOLAR REFLECTANCE INSULATION TRADE-OFF TABLE

Minimum Aged Solar Reflectance	Roof Deck Continuous Insulation R-Value
0.60	16
0.55	18
0.50	20
0.45	22
No requirement	24

Contact Information

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