



# City of Jurupa Valley Building Department

**RESIDENTIAL-Re-roof**

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF COMPLIANCE      Prescriptive Residential Alterations That Do Not Require HERS Field Verification      Residential Re-Roof-CF1R-ALT-01-E

Project Address:	Permit Number:	Date:
City/State:      Jurupa Valley, CA      Zip code:		

**E. Roof Replacement (Section 150.2(b)1H)**      City of Jurupa Valley / Climate Zone 10

01	02	03	04	05	06	07	08	09	10	11	12		13	14
Tag/ ID	Method of Compliance	>2:12 Roof Pitch	Indicate which # Exception	CRRC Product ID Number	Product Type	R-value Deck Insulation	Proposed				Minimum Required			
							Initial Solar Reflectance	Aged Solar Reflectance	Thermal Emittance	SRI (Optional)	Aged Solar Reflectance (Max)	Aged Solar Reflectance (Min= 0.20)	Thermal Emittance (Min= 0.75)	SRI (Optional) (Min= 16)

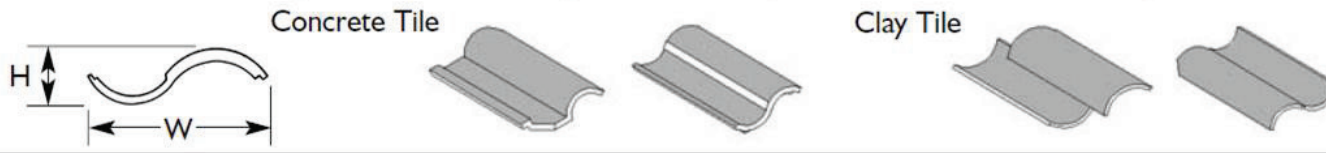
**Notes:**

- Roof area covered by building integrated photovoltaic panels and solar thermal panels are exempt from the above Cool Roof requirements.
- Liquid field applied coatings must comply with installation criteria from section 110.8(i)4.

**NOTE: Exceptions and alternatives for cool roof products on steep slope roofs (pitch greater than 2:12):**

1. Air space of 1.0" (25mm) between the roof deck and the bottom of the roofing product.
2. Roofing product profile ratio of rise to width is at least 1:5 for >50 percent width of roofing product.

**High Profile Tile** – Tiles having a rise to width ratio greater than 1:5 (measured in installed condition)



3. Existing ducts in attic are insulated and sealed according to §150.1(c)9.
4. Building has at least R-38 roof/ceiling insulation.
5. Roof of attic spaces has a radiant barrier according to §150.1(c)2.
6. There are no ducts in the attic space.
7. In Climate Zones 10 through 15, greater than R-2.0 insulation above the roof deck.

Contractor Name:	License #:	Phone:	E-mail:
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CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS



**E. Roof Replacement** (Section 150.2(b)1H)

When more than 50% of the roof is being replaced, the cool roof requirements are triggered. Any areas of roof covered by building integrated photovoltaic panels and solar thermal panels are exempt; however, the area of roof not covered by photovoltaic panels would still need to meet any applicable cool roof requirements. Additionally, there are many alternatives/exceptions when a cool roof is required.

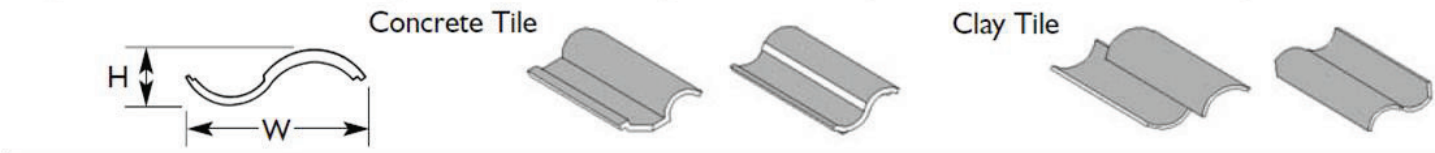
When the roof is steep slope (pitch greater than 2:12) the roof requirements include a cool roof in climate zones 10-15. The minimum requirement is 0.20 Aged Solar Reflectance, 0.75 Thermal Emittance, or a minimum SRI of 16. Cool roof is not required for low slope roof (pitch 2:12 or less) in climate zone 10.

1. Tag/ID: A label, if any, from the plans, for example R-1.
2. Method of Compliance: Indicate if the method of compliance is going to be based on Aged Solar Reflectance and Thermal Emittance, the Solar Reflectance Index (SRI), or an Exception.
3. Roof Pitch: Expressed as 4:12, for example, which means the roof rises 4 feet within a span of 12 feet. When roofs have multiple pitches the requirements are based on the pitch of 50% or more of the roof.
4. Exception: If meeting one of the exceptions. Indicate which exception is, or will be, met.

**NOTE: Exceptions and alternatives for cool roof products on steep slope roofs (pitch greater than 2:12):**

1. Air space of 1.0" (25mm) between the roof deck and the bottom of the roofing product.
2. Roofing product profile ratio of rise to width is at least 1:5 for >50 percent width of roofing product.

**High Profile Tile** – Tiles having a rise to width ratio greater than 1:5 (measured in installed condition)



3. Existing ducts in attic are insulated and sealed according to §150.1(c)9.
4. Building has at least R-38 roof/ceiling insulation.
5. Roof of attic spaces has a radiant barrier according to §150.1(c)2.
6. There are no ducts in the attic space.
7. In Climate Zones 10 through 15, greater than R-2.0 insulation above the roof deck.

NOTE: If one of the exceptions above has been selected than the rest of Section E is Not Required.



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5. The CRRC Product ID Number is obtained from the Cool Roof Rating Council’s Rated Product Directory at [www.coolroofs.org/products/results](http://www.coolroofs.org/products/results). Products are listed by manufacturer, brand, type of installation, roofing material, and color, as well as product performance.
6. Product Type: See Cool Roof Rating Council’s directory. Generally product types include single-ply roof, wood shingles, asphalt roof, metal roof, tile roof.
7. R-value Deck Insulation: If one of the exceptions selected includes adding roof deck insulation, indicate the R-value of insulation.
8. Proposed Initial Solar Reflectance: Based on the product chosen from the Cool Roof Rating Council’s Rated Product Directory. If using default assumption indicate NA since the Aged Solar Reflectance is available.
9. Proposed Aged Solar Reflectance: Value is from the Cool Roof Rating Council’s Rated Product Directory. If the aged value is not available, calculate the calculated Aged Solar Reflectance using the Solar Reflectance Index (SRI) Calculation worksheet located on the California Energy Commission website ([http://energy.ca.gov/title24/2013standards/documents/solar\\_reflectance/](http://energy.ca.gov/title24/2013standards/documents/solar_reflectance/)) or the aging equation  $\rho_{aged} = [0.2 + \beta(\rho_{initial} - 0.2)]$ , where  $\rho_{initial}$  = the initial solar reflectance and soiling resistance  $\beta$  is listed by product type below.

VALUES OF SOILING RESISTANCE  $\beta$  BY PRODUCT TYPE

Product Type	CRRC Product Category	$\beta$
Field-Applied Coating	Field-Applied Coating	0.65
Other	Not A Field-Applied Coating	0.70

10. Proposed Thermal Emittance: From the product specification default value. If using a calculated SRI place the Thermal Emittance used to calculate SRI.
11. Proposed SRI: It is optional to meet the SRI but if chosen to do so, use the Solar Reflectance Index (SRI) Calculation Worksheet found on the California Energy Commission website [http://www.energy.ca.gov/title24/2013standards/documents/solar\\_reflectance/](http://www.energy.ca.gov/title24/2013standards/documents/solar_reflectance/).
12. Minimum Required Aged Solar Reflectance: Based on climate zone and roof slope.
13. Minimum Required Thermal Emittance: Based on climate zone and roof slope.
14. Minimum Required SRI: Based on climate zone and roof slope.

NOTE: If the cool roofing requirements will be met by a liquid field applied coating, Section 110.8(i)4 requires the coating be applied across the entire roof surface and meet the dry mil thickness or coverage recommended by the manufacturer.