Solar Reflective Index (SRI) Calculation Worksheet SRI-WS

Computer Generated Form

Date:		Climate Zone:		Building Type:	○ Residential ○ Nonresidential
Project Name:					
Project Address:					

Roofing Products (Cool Roof)

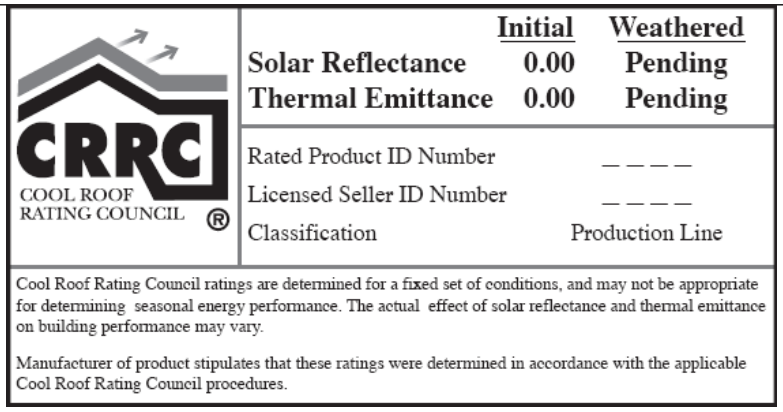
Roofing products with high solar reflectance and thermal emittance are referred to as "Cool Roof", which refers to an outer layer or exterior surface of a roof. As the term implies, the temperature of a cool roof is lower on hot sunny days than for a conventional roof, reducing cooling loads and energy required to provide air conditioning.
The benefit of a high reflectance surface is obvious: while dark surfaces absorb the sun's energy (visible light, invisible infrared, and ultraviolet radiation) and become hot, light-colored surfaces reflect solar energy and stay cooler. However, high emittance is also important. Emittance refers to the ability of heat to escape from the surface once it is absorbed. Surfaces with low emittance (usually shiny, metallic surfaces) contribute to the transmission of heat into the roof components under the roof surface. The heat can increase the building's air conditioning load, resulting in increased energy costs and detracting from the comfort level of the home. High-emittance roof surfaces give off absorbed heat relatively quickly through the path of least resistance: upward and out of the building.

Rating and Labeling

Roofing products that are used for compliance with the standards (prescriptive and performance approaches) are required to be tested and labeled by the Cool Roof Rating Council (CRRC). Roofing product manufacturers must have their roofing product tested for solar reflectance and thermal emittance, and be labeled according to CRRC procedures. See example of a CRRC label at right.

CRRC-1 Label Attached to Submittal

(Note: If no CRRC-1 label is available, this compliance method cannot be used and another method is required to meet compliance)



CRRC Product ID Number	Manufacturer	Brand	Model

≤2:12	>2:12	Field-Applied Coating	Other	Aged Reflectance Listed with CRRC?	CRRC listed Aged Solar Reflectance	Initial Solar Reflectance	Calculated Aged Solar Reflectance	Thermal Emittance
○	○	○	○					

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