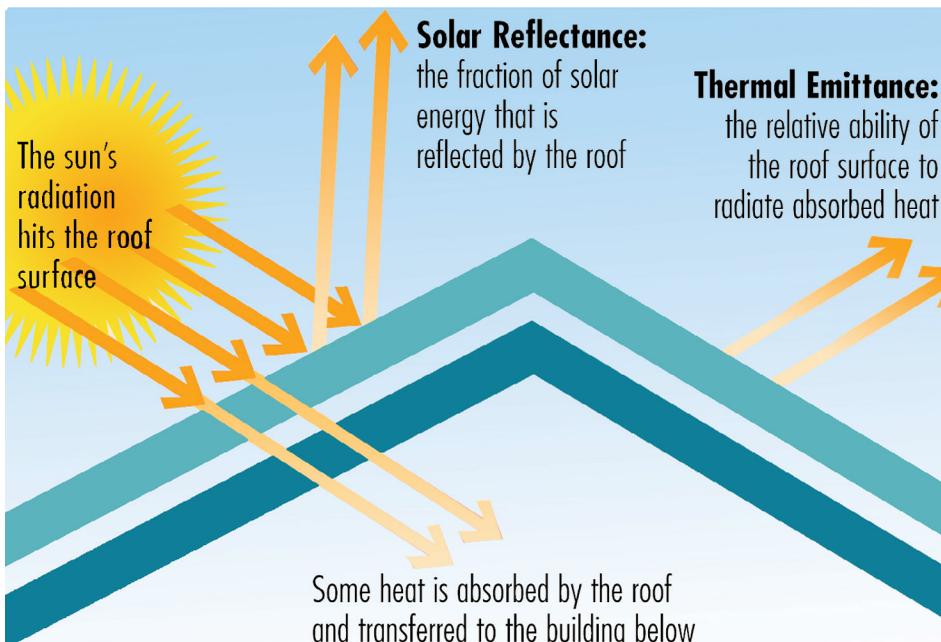


Home and Building Owners, Architects, and Contractors

Learn About Cool Roofs and the Cool Roof Rating Council



What is a Cool Roof?



A cool roof reflects and emits the sun's heat back to the sky instead of absorbing and transferring it to the building below.

"Coolness" is measured by two properties, solar reflectance and thermal emittance. Both properties are measured from 0 to 1 and the higher the value, the "cooler" the roof.



End Users Select Cool Roofs to...

- **Increase occupant comfort** by keeping the building cooler during hot summer months
- **Cut energy costs** by reducing the need for air-conditioning
- **Comply with local codes and gain credits in green building programs** since a growing number of adopted codes and green programs have cool roof and Urban Heat Island mitigation requirements
- **Retain architectural style** with availability in a variety of color and materials that do not compromise architectural style for increased comfort and energy savings.

Note that the overall impact of cool roof benefits may vary depending on factors such as climate zone, time of year, and energy usage patterns. Additionally, while positive impacts of implementing cool roofs can be significant, proper roof installation and maintenance are essential to achieving these benefits.

Accurate, Credible, and Reliable Ratings

The CRRC Product Rating Program remains a leader in cool roofing product data through:

- **Use of strictly independent and accredited testing laboratories**
- **Random Testing program** to ensure products sold on the market meet their laboratory-tested values.
- **Balanced Technical Committee comprised of Industry Experts**

Various national programs and codes including the U.S. Green Building Council's LEED program and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) rely on the CRRC for credible data.

The CRRC Rated Products Directory: A Valuable Resource

The Rated Products Directory is a free online resource designed with you in mind. You can use it to:

- **Find and compare roofing products** based on preferences and needs. You can conveniently search by:
 - o Product type
 - o Roof slope
 - o Manufacturer, brand, and model
 - o Minimum radiative properties
 - o Product Market
 - o Color
- **Determine compliance with adopted building or energy codes** that reference the CRRC or minimum radiative value requirements for roofing materials
- **Receive credits for voluntary building programs**, such as USGBC's LEED rating system.

<http://coolroofs.org/products/results>

The screenshot shows the search interface of the CRRC Rated Products Directory. It features a blue header with three tabs: "Product Type", "Color", and "Minimum Radiative Properties". The "Product Type" tab is selected and circled in yellow, with a yellow arrow pointing to it. Below the tabs, there are radio buttons for "Slope" (All, Low, Steep) and a grid of checkboxes for various roofing materials such as Asphalt Shingle, Metal, Single-Ply, etc. The "Color" tab is also circled in yellow, with a yellow arrow pointing to it. Below the "Color" tab, there is a grid of color swatches with checkboxes, including Red, Blue, Tan, Metallic, Orange, Purple, Grey, Multicolor, Yellow, Bright White, Black, Green, Off-White, and Brown. The "Minimum Radiative Properties" tab is circled in yellow, with a yellow arrow pointing to it. Below the tabs, there are input fields for "Solar reflectance (0.00, 1.00)", "Thermal emittance (0.00, 1.00)", and "Solar Reflectance Index (SRI) (-10, 125)". There are also informational icons and a note about required minimum values. A yellow callout box on the right side of the screenshot contains the text: "Conveniently compare roofing products by color, product type, style, and minimum radiative properties." Another yellow callout box at the bottom right contains the text: "With more than 2,700 roofing products in the Directory, there are ample options to consider."



Frequently Asked Questions

Additional questions and answers are available at <http://coolroofs.org/resources/faq>

1. Are cool roofs affordable?

Yes. Many cool roof products cost the same amount as other comparable roofing materials. For those that are more expensive, the difference is often quickly recovered in savings from reduced energy costs. Additionally, some utilities offer rebates that reduce the upgrade costs of cool roofing materials. Visit <http://coolroofs.org/resources/rebates-and-codes> for more information.

2. Will cool roofs significantly increase my heating bills in the winter months?

No. While cool roof owners may pay slightly more to heat their buildings, this amount is usually insignificant compared to the cooling energy savings during the summer.

3. Can a cool roof cause condensation?

It depends. Regardless of roof type or color, all project-specific building physics parameters must be considered when designing any roof assembly. Roofs with existing condensation problems should be investigated by design professionals and repaired prior to installation of new roofs. The CRRC recommends all roofs comply with application building code requirements for attic ventilation, continuous (above deck) insulation, and installation of air/vapor barriers.

4. Does the CRRC manufacture or sell roofing materials?

No. The CRRC strictly maintains a rating system for the radiative properties of roof surfaces. The CRRC does not make, endorse, or sell any specific roofing products.

5. Can the CRRC help answer my product questions?

Yes. The CRRC's website can help answer general questions you have about available roofing options. The online Product Directory can help you find and compare products that meet your needs.

6. Can the CRRC tell me which product is best for me?

No. As an unbiased organization, the CRRC cannot recommend specific brands or types. Once you have looked at our Rated Products Directory, contact the manufacturer directly or contact a private contractor or roof consultant to assist in choosing the "coolest" product for your home or project.



CONTACT US

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