Cool Roof Rating Council

Keeping Cool for 20 Years

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Technical Session WE2B: Roofs
Cool Roofs 101
Cool Roofs 101

Solar Reflectance:
the fraction of solar energy that is reflected by the roof

Thermal Emittance:
the relative ability of the roof surface to radiate absorbed heat

The sun’s radiation hits the roof surface

Some heat is absorbed by the roof and transferred to the building below
Cool Roof Benefits
CRRC Background

- Established in 1998 as 501(c)(3) nonprofit
- Third-party product rating organization for the roofing industry
- ENERGY STAR® Certification Body
- ANSI Accredited Standards Developer
  - Currently maintaining ANSI/CRRC S100 (2016 edition)
- ISO 17065 Accredited Organization
- ASTM Organizational Member
CRRC Founding Partners

& Roofing Industry
CRRC Structure

• Diverse Membership
• Board of Directors
• Technical Committee
• Ratings, Codes & Standards Committee
• International Committee
• ANSI Consensus Body

CRRC Membership*

* Members also include architects, designers, builders, contractors, etc.
CRRC Mission

Ratings

Research

Education
Rapid Ratings Program
Technical Research

Development of method to measure reflectance of Directionally Reflective Materials (DRM)
Upcoming Research

Comparison of Solar Reflectance Test Methods

- ASTM E1918 - 16
  Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field

- ASTM C1549 - 16
  Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer

- ASTM E903 - 12
Working Groups

- Method Evaluation
- Methods & Instruments
- Rough Substrates
- Colorimetry
- Random Testing
The Cool Roof Rating Council
Membership and Product Ratings

Home and Building Owners, Architects, and Contractors
Learn About Cool Roofs and the Cool Roof Rating Council

What is a Cool Roof?

Solar Reflectance:
The fraction of solar energy that is reflected by the roof.

Thermal Emittance:
The infrared ability of the roof surface to reflect absorbed heat.

Some heat is absorbed by the roof and transferred to the building below.

POLICY MAKERS AND CODE OFFICIALS
Learn About Cool Roofs

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www.coolroofs.org
Rated Products Directory

www.coolroofs.org

Free, online resource
Find and compare roofing products
Determine compliance with building or energy codes
Receive credits for voluntary programs (e.g., LEED)
How to Get Involved

• Become a CRRC Member
  Membership Information
  http://coolroofs.org/members/become-a-member

• Participate in Technical Committee and/or working groups

• Serve on our ANSI/CRRC S100 Consensus Body