Las Vegas, Nevada
June 27, 2012

Annual Membership Meeting

Las Vegas, Nevada
June 27, 2012
Although the Cool Roof Rating Council is a broad-based 501 (c) 3 organization, it does include numerous competitors in the roofing industry and thus care must be taken to scrupulously abide by federal and state antitrust laws. As you know, the CRRC has in effect Antitrust Compliance Guidelines.

Members should remember that antitrust compliance is important at all times whether at formed meetings such as this or in social settings. At this and other CRRC meetings, participants should not discuss sensitive issues including pricing, profitability, payment terms, and allocating markets or customers or anything else recommended against in the antitrust guidelines.
Administrative Update

Membership Meeting
June 27, 2012
Outline

• Board Update
• Growth Report
• CRRC Rating Program Update
• ES-CRRC Program Update
• Marketing Update
• Website Redesign Update
• Random Testing
Board Update

2011-2012 Board Members

Class A Members
Lynne Christensen, CSSB
Greg Crawford, AISI
George Daisey, Dow Chemical Co.
Mike Ennis, SPRI
Darrel Higgs, ARMA
Rick Olson, TRI

Class B Members
Payam Bozorgchami, CEC
Phil Dregger, RCI – Technical Roof Services, Inc.
Jim Hoff, CEIR
Bipin Shah, Winbuild, Inc.
Peter Turnbull, PG&E

Exhibit 2 - Annual Membership Meeting 2012
## Board Update

<table>
<thead>
<tr>
<th>Board Office Positions</th>
<th>June 2011-June 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Mike Ennis</td>
</tr>
<tr>
<td>Vice Chair</td>
<td>George Daisey</td>
</tr>
<tr>
<td>Treasurer</td>
<td>George Daisey</td>
</tr>
<tr>
<td>Secretary</td>
<td>Greg Crawford</td>
</tr>
</tbody>
</table>
Membership Growth

Exhibit 2 - Annual Membership Meeting 2012
## Rating Program Growth

**Licensees** 202  
**Products** 2371

### Licensees Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Licensees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>10</td>
</tr>
<tr>
<td>2003</td>
<td>40</td>
</tr>
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<td>2007</td>
<td>110</td>
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<td>2008</td>
<td>130</td>
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<td>2009</td>
<td>150</td>
</tr>
<tr>
<td>2010</td>
<td>170</td>
</tr>
<tr>
<td>2011</td>
<td>190</td>
</tr>
<tr>
<td>mid-2012</td>
<td>200</td>
</tr>
</tbody>
</table>

### Products Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>10</td>
</tr>
<tr>
<td>2003</td>
<td>40</td>
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<td>2007</td>
<td>110</td>
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<td>2008</td>
<td>130</td>
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<td>2009</td>
<td>150</td>
</tr>
<tr>
<td>2010</td>
<td>170</td>
</tr>
<tr>
<td>2011</td>
<td>190</td>
</tr>
<tr>
<td>mid-2012</td>
<td>200</td>
</tr>
</tbody>
</table>
Rating Program Updates

• Developed a reference guide to help clarify use of the ANSI standard with the CRRC-1 Program Manual
• Formed a Retesting CRRC Ratings Task Group
Rating Program Updates

• Updated the Product Rating Program product type categories
  – To be implemented with the website redesign
• Specifying that only active products must submit aged ratings. Terminated products are not required to produce aged ratings.
• See Technical Update for cont’d updates
115 Total Partners

- 88 (77%) CRRC
- 27 (23%) Non-CRRC
ES-CRRC Certified Products

Products per Month

<table>
<thead>
<tr>
<th>Month</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar</td>
<td>553</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>432</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ES-CRRC Certified Products

1,259 Products
• 25 (1.9%) Terminated
Achievements

• ISO/IEC Guide 65 Accreditation  
  – January 2012
• 1st Renewals cycle  
  – Collected renewals for 835 products

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Partners</th>
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</thead>
<tbody>
<tr>
<td>Collected</td>
<td>100</td>
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<tr>
<td>Late</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>111</td>
</tr>
</tbody>
</table>
Verification Testing

- For the ES-CRRC, products are collected using the same procedures as CRRC Random Testing
- Products cannot be below 5% of minimum EPA requirements:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Performance Specification</th>
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</thead>
<tbody>
<tr>
<td>Low-Slope Roof Products - Initial Solar Reflectance</td>
<td>≥ 0.65</td>
</tr>
<tr>
<td>Low-Slope Roof Products - Aged Solar Reflectance</td>
<td>≥ 0.50</td>
</tr>
<tr>
<td>Steep-Slope Roof Products - Initial Solar Reflectance</td>
<td>≥ 0.25</td>
</tr>
<tr>
<td>Steep-Slope Roof Products - Aged Solar Reflectance</td>
<td>≥ 0.15</td>
</tr>
</tbody>
</table>
Verification Testing

87 Total Products

43 Products Selected by the EPA

44 Products Selected through CRRC Random Testing
Ongoing Developments

- ES-CRRC Task Group
- New Database
- ES-CRRC Logo
- Violation Policing Program
Marketing Update

Outreach Activities 2011-2012

• Tradeshows
• Newsletters
• Publications
• Presentations
• Social Media
• CEU Provider Status
Tradeshows (2011-12)

Greenbuild
October 2011
Toronto, Canada

International Roofing Expo
February 2012
Orlando, FL

WSRCA Western Roofing Expo
June 2012
Las Vegas, NV
Newsletters

- Roofing Reflections
- Email & Website posting
- Distributed quarterly
- Next issue – July 2012
Continuing Education
Course

Course stats

• Viewed online 112,310 times
• 1,936 took the online test
CEU Test Takers

AIA test takers  | Non-AIA test takers  | Total test takers

# Test Takers

AIA CE Deadline

Exhibit 2 - Annual Membership Meeting 2012
CEU Provider Status

- Allows the CRRC to provide continuing education credits for meetings and publications
- RCI and AIA
  - Membership Meeting guest speakers: 2.5 RCI CEH & 2.5 AIA CEU credits
  - AIA Redwood Empire presentation: 1 AIA CEU
### Presentations & Articles

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Workshop on Advances in Cool Roof Research</td>
<td>Jul 2011</td>
<td>Berkeley</td>
</tr>
<tr>
<td>Greenbuild</td>
<td>Oct 2011</td>
<td>Toronto</td>
</tr>
<tr>
<td>Metalcon</td>
<td>Oct 2011</td>
<td>Atlanta</td>
</tr>
<tr>
<td>Ecobuild</td>
<td>Dec 2011</td>
<td>Washington D.C.</td>
</tr>
<tr>
<td>MetalMag Magazine</td>
<td>Jan 2012</td>
<td>article</td>
</tr>
<tr>
<td>Net Zero Energy Panel</td>
<td>May 2012</td>
<td>San Francisco</td>
</tr>
<tr>
<td>AIA Redwood Empire</td>
<td>Jun 2012</td>
<td>Santa Rosa</td>
</tr>
</tbody>
</table>
• Awarded:
  – IRCC – *July 2012*
  – IRE – *February 2013*
  – RCI Convention – *March 2013*

• Additional Proposals Submitted for 2013:
  – AIA, Greenbuild, PCBC
Social Media

Weekly updates on the latest CRRC and cool roof news

Facebook
Twitter
LinkedIn
Additional Marketing Activities

- **LEED V4** -- Comments submitted for BD&C, Homes, ND, and EB-OM rating systems
- **Call for Images** – Restocked image library with 100s of new images
- **Website Redesign** – Fall 2012
- **New Tradeshow Banner**
Website Redesign

Project Goals

Improve communication about the CRRC and cool roofs to the roofing industry, architects and contractors, the general public, and other interested parties.

- Modernize the design, organization, and navigation.
- Improve user experience.
- Simplify and improve accessibility of content.
- Clarify the product rating process for CRRC licensees.
- Update the search function for the Rated Products Directory.
- Reduce maintenance and content updating.
Schedule

• Current status
  – finalized design concepts and site map

• Next steps
  – Build the database for the Rated Products Directory
  – Build templates
  – Content entry
  – Test

• Launch: October 2012
Current CRRC Website

COOL ROOF RATING COUNCIL
The Cool Roof Rating Council (CRRC) is an independent, non-profit organization that maintains a third-party rating system for radiative properties of roof surfacing materials.

Latest News

- **2012 Annual Membership Meeting**: Please join us for the Annual Membership Meeting on June 27th, 8:30 am - 5 pm at the Paris Hotel in Las Vegas.
  - New This Year: Earn 2.5 AIA CEU and 2.5 RCI CEH credits for guest speaker presentations!
  - Click here for more details.
  - Click here to register.

- **2011-2012 ANSI Consensus Review Process for the CRRC-1 Standard**
  - Appeals are due June 15, 2012
  - View the CRRC-1 Standard document.

- **New CRRC Twitter, Facebook, and LinkedIn Accounts**: The CRRC is excited to announce the launch of its new social media accounts. Now you can find the latest CRRC news as it happens.
  - Follow us on Twitter @Cool_Roofs
  - Like us on Facebook
  - Follow us on LinkedIn

- **ENERGY STAR® Product Certification**: Evaluation Services CRRC Program (ES-CRRC®) now offers ENERGY STAR certification.
  - Learn about the ES-CRRC® Program.
  - Learn how to use ES-CRRC® to certify your ENERGY STAR products.
The Cool Roof Rating Council was created in 1998 to develop accurate and credible methods for evaluating and labeling the solar reflectance and thermal emittance (radiative properties) of roofing products and to disseminate the information to all interested parties.

**LATEST NEWS**

**2012 Annual Membership Meeting**
Please join us for the Annual Membership Meeting on June 27th, 8:30 am - 5 pm at the Paris Hotel in Las Vegas.

- [Read more](#)
- [Register](#)

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LATEST NEWS

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» Read more
» Register

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» Like us on Facebook
» Follow us on LinkedIn

AIA Cool Roof Course
The CRRC has revised its AIA Continuing Education Course!
» Read more
## SEARCH RESULTS: 6

Selected Criteria

- Metal
- Gerard and Allmet

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>0840-0022</td>
<td>Gerard and Allmet: Gerard and Allmet Dover White Panels</td>
<td>Metal</td>
<td>Bright White</td>
<td>0.41</td>
<td>0.58</td>
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<tr>
<td>0840-0025</td>
<td>Gerard and Allmet: Gerard and Allmet Sunrise Panels</td>
<td>Metal</td>
<td>Bright White</td>
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<td>0.19</td>
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<td></td>
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<tr>
<td>0970-0001</td>
<td>Gerard and Allmet: Gerard and Allmet Desert Sand Panels</td>
<td>Metal</td>
<td>Bright White</td>
<td>0.17</td>
<td>0.18</td>
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<td></td>
</tr>
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<td>0952-0006</td>
<td>Gerard and Allmet: Gerard and Allmet Aspen Panels</td>
<td>Metal</td>
<td>Bright White</td>
<td>0.29</td>
<td>0.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1056-0010</td>
<td>Gerard and Allmet: Gerard and Allmet Granite Panels</td>
<td>Metal</td>
<td>Bright White</td>
<td>0.23</td>
<td>0.24</td>
<td>0.88</td>
<td>0.87</td>
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<tr>
<td>0918-0002</td>
<td>Gerard and Allmet: Gerard and Allmet</td>
<td>Metal</td>
<td>Bright White</td>
<td>0.35</td>
<td>0.58</td>
<td>0.76</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**Slope**: Steep

**Contact**: Randy Nettleton
714-529-0407 x 238
**Web**: www.gerardusa.com
Exhibit 2 - Annual Membership Meeting 2012

SEARCH CRITERIA

SEARCH BY KEYWORD

Brand
Manufacturer
Model
Product Market

Product Type
- Built-up Roofing (incl. asphalt & cool tar pitch)
- Factory-Applied Coating
- Field-Applied Coating
- Metal
- Modified Bitumen
- Roof Pavers
- Shingles or Shakes
- Single-Ply-Thermoplastic
- Single-Ply-Thermoset
- Tile or Slate
- Other

Color

Minimum Radiative Properties

SEARCH RESULTS: 6

Selected Criteria
- Metal
- Gerard and Allmet

--- | --- | --- | --- | --- | --- | --- | ---
0840-0022 | Gerard and Allmet: Gerard and Allmet Dover White Panels | Metal | Bright White | 0.41 | 0.58 | 0.23
0840-0025 | Gerard and Allmet: Gerard and Allmet Sunrise Panels | Metal | Bright White | 0.18 | 0.19 | 0.29
0970-0001 | Gerard and Allmet: Gerard and Allmet Desert Sand Panels | Metal | Bright White | 0.17 | 0.18 | 0.29
0932-0006 | Gerard and Allmet: Gerard and Allmet Aspen Panels | Metal | Bright White | 0.29 | 0.29
1056-0010 | Gerard and Allmet: Gerard and Allmet Granite Panels | Metal | Bright White | 0.23 | 0.24 | 0.88 | 22 | 25
0918-0002 | Gerard and Allmet: Gerard and Allmet Beil Air 4118, Capistrano 3118, Malibu 2518, lightweight Malibu 418, lightweight Capistrano 518 | Metal | Bright White | 0.35 | 0.38 | 0.76 | 0.88 | 32 | 42

SLOPE Steep
CONTACT Randy Nettleton 714-529-0407 x 238
WEB www.gerarddata.com

COOL ROOF RATING COUNCIL
1610 Harrison Street
Oakland, CA 94612
Tel (866) 465-2525 or (510) 485-7175
Fax (510) 482-4421
Email info@coolroofs.org
### CODES AND PROGRAMS

If you would like your cool roof code, standard, or program referenced, or if you know of any that should be added to the list, please contact us. To find more codes and programs in your area, visit www.dsireusa.org

<table>
<thead>
<tr>
<th>CODES &amp; STANDARDS</th>
<th>REBATE PROGRAMS</th>
<th>COOL ROOF LOAN PROGRAMS</th>
<th>WHOLE BUILDING INCENTIVES</th>
<th>VOLUNTARY PROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOCATION</strong></td>
<td><strong>AGENCY</strong></td>
<td><strong>POLICY NAME</strong></td>
<td><strong>DESCRIPTION</strong></td>
<td><strong>CONTACT</strong></td>
</tr>
<tr>
<td>Arizona</td>
<td>Arizona Energy Commission</td>
<td>ASHRAE/IESNA 90.1-2004</td>
<td>Mandatory for all state owned and funded buildings</td>
<td>(see ASHRAE for requirements)</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>City of Austin</td>
<td>Austin’s 2006 Energy Code</td>
<td>Requirement based on the Austin Energy Green Building Ratings and/or LEED certification; varies by zoning, location and building type</td>
<td>None</td>
</tr>
<tr>
<td>California</td>
<td>California Energy Commission</td>
<td>Title 24, 2008 CRRC Title 24, 2008 Summary</td>
<td>Performance credits for inclusion of cool roofs in buildings; CRRC named as supervisory entity</td>
<td>Low Slope: 0.70 or 0.55+ 78 Low Slope: 0.55 or 0.33</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Department of Buildings</td>
<td>Chicago Energy Conservation Code (pdf)</td>
<td>Section 18-15-101.5.4.1 through 18-15-101.5.4.3</td>
<td>Low Slope (0.12-2.12): Initial 0.72 OR Aged 0.5 Medium Slope (2.12-5.12): None</td>
</tr>
</tbody>
</table>

37
Random Testing

- Key component of CRRC’s mission to provide accurate radiative property data
- California Energy Commission’s Title 24 references CRRC as the sole supervisory entity for cool roof ratings
92 Products
- 80 Passed
- 3 Samples Received
- 2 Failed 1st Test
- 4 Suspended
- 3 Failed
133 Products
• 69 complete
• 26 Collection in process
• 1 Sample Received
• 14 Awaiting Results from AITL
• 4 Failed 1st Test
• 19 Suspended
154 Products
- 90 Being Collected
- 32 Samples Received
- 28 Awaiting Results from AITL
- 4 Suspended

Collection In Process: 58%
Samples Received: 21%
Awaiting Results from AITL: 18%
Suspended: 3%
Random Testing History

Exhibit 2 - Annual Membership Meeting 2012
Questions