



Roofing Reflections

2007-2008 Spring Issue

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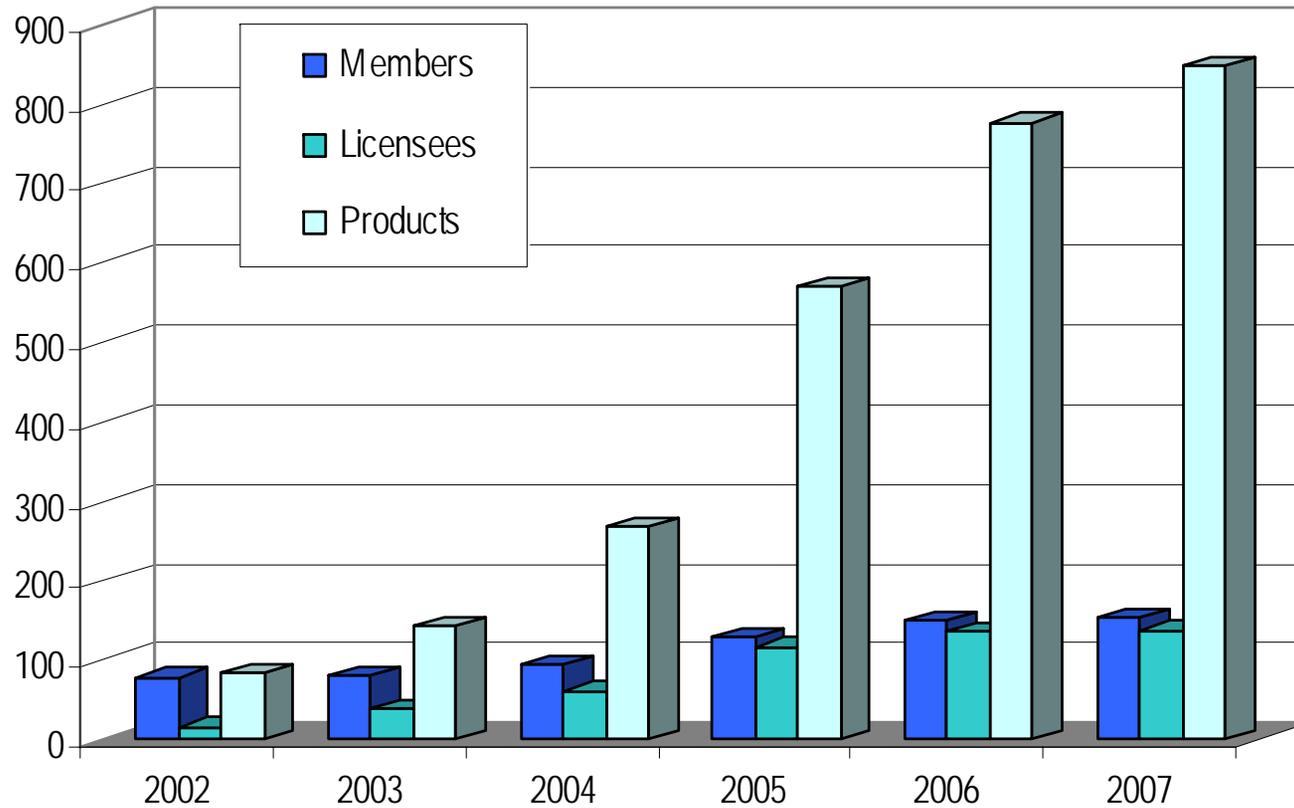
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CRRC Growth Chart





Notable News & Events

Board of Directors Election Is Underway

Voting is one of the more tangible benefits of CRRC membership; this is a great opportunity to have your voice be heard.

This year, four (4) Board positions are open: **two (2) Class A** seats and **two (2) Class B** seats. Nominations have been received by the CRRC and the election schedule is as follows:

- **April 23:** Voting ballots were mailed to CRRC membership
- **May 14:** Completed ballots are due back to the CRRC
- **May 21:** Election results will be reported

Reminder: If you are a voting CRRC member, and have not yet paid your 2007 membership dues, you must pay by **May 31**, or you will be unable to vote in the Board of Directors election.

CRRC Aged Testing

CRRC aged testing has begun, and several products have been removed from the test racks and are in the process of being retested for aged values. You will be contacted by Atlas Test Farm if your products are due to come off exposure.

Please see our “How Do I Get an Aged Product Rating” instructional document (<http://www.coolroofs.org/faqs.html>) and CRRC-F-11 Aged Product Rating Application (<http://www.coolroofs.org/productratingprogram.html>).

Please send us your aged test results **within 90 days** of your product’s exposure completion date.

Proper CRRC member logo usage reminder

Reminder: if you've not already done so, please update your company's marketing team with the correct procedure for using the CRRC member logo. Please refer to the "How Do I Use the Member Logo" instructional document

(<http://www.coolroofs.org/faqs.html>) for more detailed informational guidelines. We e-mailed the updated, correct logo files to members in 2006 in late February of 2007, so please update your marketing materials and tradeshow signage materials if this has not yet been accomplished.

Please contact CRRC staff if you need updated logo files.

CRRC Panel Presentation at IRE: “Everything You Need to Know About Cool Roofing”

The CRRC traveled to Las Vegas in early March to attend the annual International Roofing Expo at the Las Vegas Convention Center. CRRC staff spoke with roofing product manufacturers and sellers, contractors, and architects about participation in the CRRC. The show was a huge success with a large turnout—and a great opportunity to display our new family of CRRC brochures in our exhibit booth. The brochures are specially tailored to different parties—one is a general brochure on cool roofing and the CRRC, another is for our “demand” side (i.e. roofing contractors, specifiers, consultants, architects, and code bodies), another was for our “supply” side (i.e. roofing product manufacturers and sellers),

and finally the last was a ratings, codes, and programs summary sheet. We found that these brochures were useful to our audience, and helped direct them based on their position in the roofing industry.

On Thursday, March 8, there was a CRRC Panel Presentation entitled “Everything You Need to Know about Cool Roofing”. CRRC Board members Stan Graveline, Bill Kirn, Dave Roodvoets, and Peter Turnbull spoke about cool roofs, the CRRC, and cool roof codes and programs (both voluntary and mandatory). There was a robust attendance, and attendees asked many good questions after the presentation. To view a PDF of the presentation, visit our website: <http://www.coolroofs.org/crrcnews.html>.



Ratings, Codes & Programs

CEC Refrigerated Warehouse Report

The CEC has conducted an intensive study on methods and procedures for improving energy efficiency of refrigerated storage buildings for incorporation into the Title 24 Standards. In addition to reviewing refrigeration and insulation systems, the CEC also conducted analysis on the costs and benefits of cool roofs.

One analysis showed that a cool roof as compared with a baseline reflectance of 0.20 could contribute between 0.16 to 0.30 kWh/SF in energy savings and \$0.30 to

\$0.54 present value \$/SF in time-dependent evaluation (TDV) energy cost savings for an already highly insulated refrigerated warehouse.

Incremental costs for using cool roofs was evaluated using a \$0.20/SF and found to be cost effective throughout California. Using a \$0.50/SF incremental cost, cool roofs were still proven cost effective in most CA climate zones.

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CEC Refrigerated Warehouse Report (cont'd)

Cool roofs were also cost effective and recommended for buildings with refrigerated storage units.

The final outcome of the report suggests mandatory energy efficiency standards for this sector similar to the current ASHRAE Commercial Recommendations (solar reflectance > 0.70 , thermal emittance > 0.75). Other benefits to increasing energy efficiency in refrigerated storage facilities include improved system reliability and stored product security. View the report at:
<http://www.energy.ca.gov/title24/2008standards/documents/index.html#022607>.

NYSERDA Report on Mitigating New York City's Heat Island

The New York State Energy Research and Development Authority (NYSERDA) published a New York City Regional Heat Island Initiative Final Report in 2006 entitled, *Mitigating New York City's Heat Island With Urban Forestry, Living Roofs, and Light Surfaces*. A collaborative effort between Columbia University and Hunter College, the report is devoted to research efforts to mitigate the Urban Heat Island Effect (a phenomenon occurring in cities with many dark surfaces, such as roofs, roads, skyscrapers and asphalt parking lots, and little shading vegetation).

Some strategies to counteract the Urban Heat Island Effect include urban forestry, living roofs, and light-colored surfaces, all of which can be used in the Urban Heat Island of NYC, but must *first* be tested with comparable methodologies. The question was whether a combination of these strategies would have a measurable impact on NYC's Urban Heat Island Effect, and if so, which scenario worked better (given prevailing meteorological conditions, and current patterns of land use and land cover in the City). This report employed nine mitigation scenarios that were evaluated city-wide and in six case study areas.

NYSERDA Report on Mitigating New York City's Heat Island (Cont'd)

Results showed that though albedo (i.e. use of reflective materials) is an important factor in mitigating the Urban Heat Island Effect, vegetation had a stronger impact on surface temperature. Therefore, redevelopment of urban surfaces to increase vegetation cover could *significantly* reduce NYC's surface temperature (the cooling effect of trees on surface temperatures tends to be localized to an area of 200 feet, according to remotely-sensed surface data). Nonetheless, cool roofing is still a vital strategy to reducing the Urban Heat Island Effect.

Read the study for yourself at:

http://www.nyserda.org/programs/environment/emep/project/6681_25/06-06%20Complete%20report-web.pdf



Technical Update

LBNL/CRRC Tile Study Complete

LBNL and the CRRC completed a study examining the solar reflectance of high profile clay and concrete tile products. The objective of the study was to find the minimum required size for measuring the solar reflectance of a high profile, variegated product and develop an appropriate test method as an alternative to ASTM E1918, which uses a pyranometer and requires a 10 square foot sample. The study used large, 10 ft² tile assemblies to compare results from E1918 with a new method, E1918A (Alternative), which also uses a pyranometer, but compares a smaller sample (1 square meter) and a reference black and reference white. The study also compared the solar reflectance of small, flat tile coupons of each type of tile, measured with both a reflectometer (ASTM C1549) and a spectrometer (ASTM E903).

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Tile Study (cont'd)

The study found a tight correlation in the E1918 and E1918A results. For single color assemblies, the maximum difference between the two methods was 0.02 and for multicolor assemblies the maximum difference was 0.03. Further details on the results of the study will be presented at the CRRC Membership Meeting on June 8.

The CRRC held a conference call to discuss the results of the study with members of the tile industry. The CRRC will continue to work with LBNL, the Tile Roofing Institute and other tile industry leaders to develop a system to rate high profile and variegated tiles with the CRRC.

Emittance Reporting Required by ENERGY STAR

In its Version 2.0 Program Requirements for Roof Products: Revised Final Draft, ENERGY STAR initially proposed a minimum emittance requirement for their rated roof products. A controversy arose over whether the proposed EPA national minimum emittance requirement was appropriate with varying climates in the U.S.

Therefore, while the newly Revised Final Draft specification requires emittance to be reported, it removed all references to a minimum emittance requirement and the alternate Solar Reflectance Index (SRI) approach to meet that earlier requirement. EPA is taking additional comments before the final specification is released.

Since emittance remains an important consideration, especially in cooler U.S. climate regions, EPA will begin collecting and posting emittance values on the ENERGY STAR qualified product list on **October 31, 2007**. Manufacturers will be required to report emittance measurements for **new and existing products** (using the new Version 2.0 QPI form).

Information on the benefits and potential savings related to emittance will be posted on the ENERGY STAR website in conjunction with emittance data. EPA will continue to research emittance and may reconsider a minimum requirement if new research supports a national standard.



Membership & Outreach

Annual Membership Meeting

This year's CRRC Annual Membership Meeting will be held on **Friday, June 8th** at the Crystal Gateway Marriott in Washington, D.C. We look forward to seeing you there!

Please visit our website to download the official meeting notice and registration form at: http://www.coolroofs.org/crrcnews_announcement3.html. **The registration deadline is Monday, May 21st**, and we will also need to know at that point if you plan to attend the Board Meeting on **Thursday, June 7th**.

Remember, if you want to take advantage of the much lower room rate of **\$159** we've negotiated with Marriott for the night of **June 7th**, please reserve a space in the **Cool Roof Rating Council Room Block by Wednesday, May 16** (we have been told that there are no more rooms available for the night of the 6th). Rooms will be released for general sale after that date, so take advantage of the cheaper rate while you can!



Upcoming Tradeshows the CRRC is Attending

This year, the CRRC will be attending a number of tradeshows for the first time:

- **American Institute of Architects (AIA) Convention** in San Antonio, TX. This is a huge event we were fortunate enough to make it off the waitlist to attend. AIA '07 will take place from May 3-5 (http://www.aiaconvention.com/aia_splash/2007/index.html).
- **EcoBuild America** will be taking place in Anaheim, CA from May 15-17 (<http://www.ecobuildamerica.com/springhome.html>).
- **Building Owners and Managers Association's (BOMA) Office Building Show** will be taking place in New York City, NY from July 22-24 (<http://s19.a2zinc.net/clients/boma/boma2007/public/Content.aspx?ID=3&sortMenu=106000>).

****We hope to see some of you at these shows.**

Feel free to stop by our booth to say hello!**



Contact Us!

Please direct comments, questions or items you'd like us to include in future newsletters to:

info@coolroofs.org

or call toll-free at (866) 465-2523 inside the U.S.

or call (510) 485-7175

or mail to:

Cool Roof Rating Council

1738 Excelsior Avenue

Oakland, CA 94602