



Technical Committee Update

A presentation to the
CRRC Membership
June 11, 2008



2007/2008 Highlights

- Thanks AITL's
- ASTM C1549 and C1371 AITL Round Robin successfully completed
- E1918A approved as a CRRC test method
 - Round Robin will be conducted
- Field-applied coating thickness requirement



Technical Committee Structure

- Voting and non-voting members
 - Limited number of voting members
 - AITL's



Field Applied Coating Thickness

- Test samples must have a thickness within 20% of the minimum manufacturer recommended thickness
- AITL tests upon initial application



2008 Activities in Progress

- Single ply thickness
- ASTM E903
- Shingle rating
- High profile products
- Reflectometer correction and spectrum change



Thickness of Single-Ply Products

- Single-ply products are allowed to use a compound rating
 - Multiple thicknesses/backings share a rating, provided that the thinnest version is tested
- The thickness of the samples is not currently measured during testing
- It may be worth measuring the overall thickness of single-ply products during testing



ASTM E903

- E903 is currently under review by ASTM prior to being re-instated
- CRRC, LBNL, and NFRC are involved in the review process
- The Technical Committee has no specific recommendations for changes to the method at this time, but the CRRC will remain involved



ARMA Shingle Proposal

- Initial research on blended shingle solar reflectance ratings by LBNL and 3M
- ARMA has proposed that blended shingles be rated using a weighted average of monicolor shingle ratings
- Monicolor shingle ratings (initial and aged) would be collected in an industry database



High Profile Products

- 2006 research indicated that high profile products may have a reduced solar reflectance compared to their flat counterparts
- Cool Metal Roofing Coalition has completed a study on profiled metal roofing products, which shows an insignificant difference for certain profiles
- Tile Roofing Institute is in the process of exploring profile effects for tile products



Devices and Services Reflectometer

- The current D&S SSRv5 has a sensor error
- The error can be corrected as part of an upgrade costing \$2,500
- The error is very small and unlikely to significantly impact solar reflectance measurements for cool roofing purposes



Solar Irradiance Standards

- Both C1549 and E903 currently use the E891 direct solar irradiance standard
- This standard neglects diffuse light and potentially misrepresents the effects of the actual solar spectrum
- LBNL has developed a new solar irradiance standard which they propose to use in place of E891 for both test methods
- The Technical Committee has made no formal recommendation regarding the proposed new solar standard



2008 Activities in Progress

- RCMA Field applied coating study in progress
- RRCI Field applied coating study in progress
 - 1 year data to be harvested in June 08