



# TECHNICAL COMMITTEE UPDATE

Annual Membership Meeting  
June 15, 2016



# TECHNICAL COMMITTEE

- Charged with understanding and resolving core science and technical issues
- Serves an advisory committee to the Board
  - Makes non-binding recommendations
- Comprised of 32 members (16 voting)
  - Wide representation of CRRC membership (Class A and B)
- Meets 4 times per year
  - Working groups meet more frequently



# COMMITTEE ROSTER

## 2015 - 2016 Technical Committee Roster with Alternates

Voting Member	Company	Alternate	Company
Tim McQuillen	Firestone Building Products	Steve Heinje	Quest Construction Products
Ronnen Levinson	Lawrence Berkeley National Laboratory	Hashem Akbari	Concordia University
Andre Desjarlais	Oak Ridge National Laboratory	Chad Fisher	UL
Gary Whittemore	Sika Sarnafil, Inc.	Mike Ennis	Single-Ply Roofing Industry (SPRI)
Bill Morgan	Malarkey Roofing	Marcin Pazera	Owens Corning Roofing and Asphalt
Scott Kriner	Metal Construction Association	Dan Walker	Metal Building Manufacturer's Association
Richard Slomko, Chair	Atlas Material Testing Solutions	Matthew Friday	Q-Lab Weather Research Service
Ted Best	Valspar	Mark Thimons	American Iron & Steel Institute
Wade Shepherd	Boral Roofing	Rick Olson	Tile Roofing Institute
Kurt Shickman	Global Cool Cities Alliance	Payam Bozorgchami	California Energy Commission
David Roodvoets	DLR Consultants	Cindy Campbell	Momentum Technologies
Dan Rardon	Specialty Granules, Inc.	Diana Fisler	Johns Manville
Kurt Sosinski	Tremco, Inc.	Paul Riesebieter	Tremco, Inc.
Annette Sindar, Vice Chair	Eagle Roofing Products	Yoshi Suzuki	MCA Clay Tile
Hal Leland	Western Colloid	Frank Klink	3M
Dave Yarbrough	R&D Services, Inc.	Tyler Westerling	Architectural Testing, Inc.



# TEST METHODS AND STANDARD PRACTICES



# DIRECTIONALLY REFLECTIVE MATERIALS TEST METHOD



**2013**

- CRRC helped fund study on measuring solar reflectance of DRM
- Board adopted product rating method in November based on study
- DRM incorporated rating method into CRRC-1 Program Manual

**2014**

- Technical Committee working group developed test method for measuring solar reflectance of DRM

**2015**

- Round robin study of draft test method completed
- Technical Committee approved the test method in October
- Board approved adoption of test method in November
- CRRC-1 Program Manual updated to include test method

**2016**

- CRRC pursuing a standalone ASTM standard for DRM test method

# RAPID RATINGS PROCEDURE FOR VARIEGATED SHINGLES

- Technical Committee approved procedure preparing and measuring the radiative properties of variegated shingle specimens for the CRRC Rapid Ratings Program (also known as the *Variegated Shingle Template Method*)
- Developed by shingle manufacturer with input from CRRC Methods & Instruments subcommittee
- Procedure can be found in appendix of CRRC-1 Program Manual

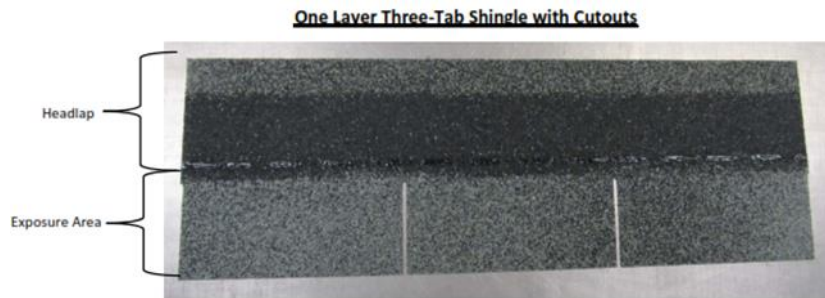
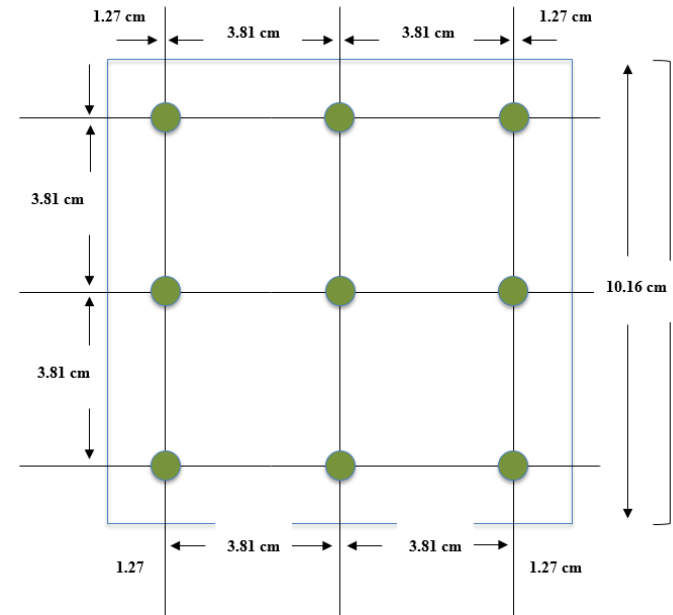


Image provided by CertainTeed





# METHOD EVALUATION RETESTING GUIDE

- Approved by Technical Committee in Oct. 2015
- Developed by Method Evaluation Working Group
- Serves as an internal document to assist the Committee with the technical evaluation of a proposed test method
- Provides CRRC with guidance when evaluating whether products should be re-tested under a new test method
- Some key criteria:
  - Proposed method should be as accurate as current method
  - Round robin study of proposed test method
  - Evaluate benefits of switching to proposed method



# E1918 PRECISION AND BIAS STATEMENT

- ASTM E1918-06 (2015) - *Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field*
- CRRC conducted Interlaboratory study (ILS) and developed precision and bias (P&B) statement
- CRRC submitted draft P&B statement to ASTM committee for approval
- ASTM will be publishing the P&B statement
- Additional ILS may be requested on granule-surfaced products per request of committee member





# RESEARCH PROJECTS

- Emittance traceability – CRRC supporting Devices & Standards in development of traceable standard
- Technical Committee evaluation of potential research projects
- 20+ project ideas being considered



# COMMITTEE WORKING GROUPS

# METHODS & INSTRUMENTS SUBCOMMITTEE

- Methods & Instruments (M&I) subcommittee established in October 2014 at the direction of the Technical Committee
- Subcommittee Scope
  - Discuss and undertake the technical evaluation of new or modified methods or instruments for radiative measurement
  - Report results of discussions and evaluations to the Technical Committee
- 2015-2016 topics of focus:
  1. Emittance traceability (completed)
  2. Aggregate test method (completed)
  3. Rapid Ratings shingle procedure (completed)
  4. Potential C1549 Update (ongoing)





# ROUGH SUBSTRATES WORKING GROUP

2012

- RRCI and RCMA studies find solar reflectance lower for coatings on rough substrates

2013

- Technical Committee voted for dual ratings for coatings
- Draft test procedure developed

2015

- Working group designed round robin procedure
- CRRC working with RCMA to identify manufacturer participants

2016

- Round robin conducted
- Results to be presented to Technical Committee in August
- Board to develop product listing approach later this year



# METHOD EVALUATION WORKING GROUP

2014

- Studying data from C1371/Slide Method round robin to develop statistical approach to adopt for other proposed test method changes

2015

- ARMA completed analysis and proposal. Analysis will provide guidance on methods to be used in future test method updates
- Findings presented to Technical Committee in August
- Developed guide for evaluating new test methods that has been approved by Technical Committee

2016

- ARMA will present analysis to Technical Committee in October



# ASTM E408 WORKING GROUP

Revisions to E408 (complete)

ASTM Approval (complete)

Development of emittance traceable standard

Design Round Robin Study

Run study & analyze results





# UPCOMING MEETINGS

- August 18, 2016 – Conference call  
–2 hours
- October 19, 2016 – In-person meeting  
–Kansas City, Missouri  
–All day
- Contact [sarah@coolroofs.org](mailto:sarah@coolroofs.org) or [Vanessa@coolroofs.org](mailto:Vanessa@coolroofs.org)



# QUESTIONS?