TECHNICAL COMMITTEE, RESEARCH STUDIES, & WORKING GROUP UPDATES

George Daisey
CRRC Technical Committee Chair

Mischa Egolf
CRRC Senior Technical Manager

Annual General Membership Meeting
Webinar
June 17, 2020
TECHNICAL COMMITTEE UPDATES
WHAT IS THE TECHNICAL COMMITTEE?

• Advisory committee to the Board of Directors
• Charged with understanding and resolving scientific and technical issues
• Makes non-binding recommendations
WHAT IS THE TECHNICAL COMMITTEE?

- Diverse and balanced group comprised of 32 members (16 voting)
- Meets 3 - 4 times per year

TC Meeting attendees at May 2, 2019 meeting in St. Louis, MO
<table>
<thead>
<tr>
<th>Voting Member</th>
<th>Company</th>
<th>Alternate</th>
<th>Company</th>
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<tbody>
<tr>
<td>Steve Heinje</td>
<td>GAF</td>
<td>Anna Johnson</td>
<td>Arkema</td>
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<tr>
<td>Ronnen Levinson</td>
<td>Lawrence Berkeley National Lab.</td>
<td>Hashem Akbari</td>
<td>Concordia University</td>
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<td>Andre Desjarlais</td>
<td>Oak Ridge National Lab.</td>
<td>Chad Fisher</td>
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<tr>
<td>Gary Whittemore</td>
<td>Sika Sarnafil, Inc.</td>
<td>Randy Ober</td>
<td>Single-Ply Roofing Industry (SPRI)</td>
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<td>Greg Keeler</td>
<td>Owens Corning Roofing &amp; Asphalt</td>
<td>VACANT</td>
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<tr>
<td>David Cocuzzi</td>
<td>National Coil Coating Association</td>
<td>VACANT</td>
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<tr>
<td>Ted Best</td>
<td>Sherwin Williams</td>
<td>Mark Thimons</td>
<td>American Iron &amp; Steel Institute</td>
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<td>Wade Shepherd</td>
<td>Boral Roofing</td>
<td>Rick Olson</td>
<td>Tile Roofing Institute</td>
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<tr>
<td>Brent Barbeau</td>
<td>PRI</td>
<td>Payam Bozorgchami</td>
<td>California Energy Commission</td>
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<td>Dan Rardon</td>
<td>Specialty Granules, Inc.</td>
<td>George Daisey, Chair</td>
<td>Dow Construction Chemicals</td>
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<td>Kurt Sosinski</td>
<td>Tremco, Inc.</td>
<td>Jennifer Sherwin</td>
<td>Firestone Building Products</td>
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<tr>
<td>Annette Sindar, Vice Chair</td>
<td>Eagle Roofing Products</td>
<td>VACANT</td>
<td>VACANT</td>
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<tr>
<td>Rebecca Everman</td>
<td>3M</td>
<td>Maureen Kavanagh</td>
<td>3M</td>
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<tr>
<td>Dave Yarbrough</td>
<td>R&amp;D Services, Inc.</td>
<td>Tyler Westerling</td>
<td>Architectural Testing, Inc.</td>
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Since 2019 Membership Meeting:

• Voting members appointed:
  – Brent Barbeau, PRI
  – David Cocuzzi, National Coil Coating Association
  – Rebecca Everman, 3M
  – Steve Heinje, GAF
  – Greg Keeler, Owens Corning
Since 2019 Membership Meeting:

• Alternate voting members appointed:
  – Anna Johnson, Arkema
  – Maureen Kavanagh, 3M
  – Randy Ober, SPRI

• Re-appointed the following voting members for another two-year term:
  – Ronnen Levinson, Lawrence Berkeley National Laboratory
<table>
<thead>
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<th>Major Decisions</th>
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<tr>
<td>Approved test method for Surface Optics 410-Solar-i to be used in the Product Rating Program</td>
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<td>Approved a procedure for Rapid Ratings testing of variegated non-shingle products</td>
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<td>Recommended the purchase of a Devices &amp; Services Solar Spectrum Reflectometer and AE1 Emissometer for the CRRC, to be used for technical research purposes</td>
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<td>Recommended approval of two research projects to be initiated in 2020</td>
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<td>Initiated a round robin to validate a thermal emittance test method for aggregate roofing products</td>
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WORKING GROUPS
ACTIVE WORKING GROUPS

- Rough Substrates
- Methods & Instruments (M&I) Subcommittee
• Monitoring weathering study results
• Developing three key documents for the implementation of Rough Substrate Ratings for coating products:
  – Implementation Specification
  – Excel Reporting Tool
  – Policy for Existing Ratings
• Small group established to:
  – Evaluate new/modified test methods and devices for the measurement of SR or TE
  – Make recommendations to the TC on actions related to methods or instruments for determining SR or TE
Currently exploring three topics:

a. Aggregate thermal emittance test method

b. Implementation specification for aggregate products embedded in a liquid component (e.g. coating)

c. Thermal emittance traceability

Photo: Devices & Services
TECHNICAL RESEARCH UPDATE
Coatings on Rough Substrates: Weathering Observation

Site-Specific Aged Data Project
Objective: Observe durability of rough substrate underlayment during field exposure in 3 climates

Key details:

• 66 total specimens provided by RCMA manufacturer members and CRRC working group

• Observe specimens at 3-month intervals for up to 3 years

Outcome: Confirmation that rough substrate protocol can withstand three-year weathering
• Specimens have been weathered for 2 years
  – No observed delamination
  – No significant granule loss

• ORNL will take aged solar reflectance readings after 3 years of exposure
Objective: Develop a dataset of current and previously CRRC-rated products with aged data, separated by climate zone

Key details:

• Three Phases: Data Compilation (Phase 1), Analysis (Phase 2), Dissemination (Phase 3)

Outcome: Comprehensive dataset that will facilitate further research and understanding of how products age under different conditions
Completed:

- Comparison of SR Methods Study
  - E1918A follow up measurements

Upcoming:

- Compilation of Historical Weathering Data
- Evaluating Variegated Test Methods
• July 30
• October 29

• Interested in attending? Contact: Sarah Schneider sarah@coolroofs.org
QUESTIONS?