Technical Committee Update: 2010-2011

Membership Meeting
June 9, 2011
TC Committee Roster
2010-2011

- BOD voted to add AITL TC member line

<table>
<thead>
<tr>
<th>Voting Member</th>
<th>Company</th>
<th>Alternate</th>
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<td>1</td>
<td>Bill Kirn</td>
<td>Tim Kersey</td>
<td>Siplast</td>
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<td>2</td>
<td>Ronnen Levinson</td>
<td>Hashem Akbari</td>
<td>Lawrence Berkeley National Laboratory</td>
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<td>3</td>
<td>Andre Desjarlais</td>
<td>Bill Miller</td>
<td>ORNL</td>
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<td>Stan Graveline</td>
<td>Mike Ennis</td>
<td>SPRI</td>
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<td>5</td>
<td>Darrel Higgs</td>
<td>Bill Morgan</td>
<td>Malarkey Roofing</td>
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<td>Scott Kriner, Chair</td>
<td>Chuck Praeger</td>
<td>Metal Building Manufacturer Association</td>
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<td>7</td>
<td>Richard Slomko</td>
<td>Matthew Friday</td>
<td>Q-Lab Weather Research Service</td>
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<td>David Roodvoets</td>
<td>Cindy Campbell</td>
<td>Momentum Technologies</td>
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<td>Richard Allan Snyder</td>
<td>Tim McQuillen</td>
<td>Firestone Building Products</td>
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<td>Kurt Sosinski</td>
<td>Ingo Joedicke</td>
<td>ISP Minerals Inc</td>
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<td>Greg Peterson</td>
<td>Yoshi Suzuki</td>
<td>MCA Clay Tile</td>
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<td>12</td>
<td>Jim Leonard</td>
<td>Marty Hastings</td>
<td>Dura Coat Products</td>
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<td>13</td>
<td>Ted Best</td>
<td>Greg Crawford</td>
<td>American Iron &amp; Steel Institute</td>
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<td>14</td>
<td>Neelam Patel</td>
<td>Payam Bozorgchami</td>
<td>CEC</td>
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<td>15</td>
<td>Wade Shepherd</td>
<td>Rick Olson</td>
<td>Tile Roofing Institute</td>
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<tr>
<td>16</td>
<td>Dave Yarbrough</td>
<td>Tyler Westerling</td>
<td>Architectural Testing, Inc.</td>
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Current Studies & Technical Issues
Reflectometer Study

- Devices & Services manufacturing new version – V6 – of reflectometer
- Round 1 (last year) – determined V6 in V5 Emulation Mode an accurate replication of V5
- Round 2 (current) – comparing V6 to V5 Emulation Mode
- Results ready fall 2011
The TC and Board voted that all rough-surfaced products be tested with the 5 point reflectance test to determine if CRRC-1 TM 1 or ASTM C1549 should be used.
Tile Product Updates

- September 2010: Approved Template Method
- December 2010: The Interim Tile Test Method deadline was extended to June 30, 2011 (from December 2010)
- June 2011: Tile Test Method accepted as fully approved CRRC method
High Profile/Tile Test Method

• 2010 Proposal for DOE funding to test E1918 robustness - declined

• Indoor lighting study March 2011 – unable to produce results comparable to natural light

• Next Steps:
  – Form task group to write statement of work for E1918 Precision & Bias Study
  – Form task group to investigate on computer modeling and E1918 adjustment approaches for addressing high profile products
E1918 Decision for Profiled Metal Products

• With Board approval to remove “Interim” from the Tile TM, the Board also removed the requirement for profiled metal products to be tested with E1918
Tile Blend Update

- Tile Blend Assemblies: two or more colors
  - Each color must be tested and rated as an individual product
  - Tile blend ratings will be determined by calculating a weighted average of the % of colors in the blend
  - No additional fees for rating blends
Tile Blend Ratings Form (F-3B)

To rate a series of products under a tile blend assembly, submit Addendum F-3B with the Initial Product Application form.
• On April 14, 2011, the BOD voted to ensure that the most current test method is used to test aged products
• Ex: Many aged tile products were initially tested with C1549; aged samples must now be tested with the Tile Test Method
Slide Method

- C1371/emissometer not developed for products of high thermal resistance
- Charlie Moore from Devices & Services devised the Slide Method
- Transient Method – not applicable to all product types
- Slide Method – currently testing, results ready fall 2011
Solar Working Group

- CRRC approached by solar manufacturers interested in the effects of combining solar systems with cool roofs
- Task group is preparing a study proposal regarding the interactions of cool roofs with solar systems to present at the September TC meeting
Cedar Shake Test Method

• Developed a task group to develop test protocol for wood products
• Initial testing done on new and weathered handsplit cedar shakes at LBNL
• Task group is planning a long-term weathering study to determine time frame and effects of weathering natural cedar products
Predictive Aging

- September 2010 TC meeting: Cool Metal Roofing Coalition presented a study on the feasibility of using a predictive formula for SR ratings of metal products.
- TC & BOD voted to pursue investigation of predictive aging formulas for all product types.
- May 2011 TC meeting: LBNL presented an analysis of the 2008 Title 24 predictive aging calculation, comparing actual aged measurements to the calculated values and suggesting formulas per product type.
- CRRC continues to analyze reflectance and emittance predictive formulas per product type.
Electronic Thickness Measurement Devices

- Electronic devices are not listed in D751 or D1669 (standards for measuring thickness of single-ply and field-applied coating products)
- At the May 11, 2011 TC meeting, the TC approved a task group to complete a round robin study on electronic gauges currently being used by AITLs
Directionally Reflective Products

• Directionally reflective roofing products, which appear dark colored from street level and light colored from the angle of the sun

• The TC is forming a task group to develop a test protocol for these products.
C1371 Clarification

• At the May 11, 2011 TC meeting, the TC voted to pursue adding clarifying language to the ASTM C1371 Standard regarding the timing of C1371 measurements.

• Staff will work with the AITLs, LBNL, ORNL, and C1371 Chairman to add clarifying text to the Standard. In the meantime, Staff will draft a memo to AITLs with this clarification.
E408 Consideration

- At the September 2010 TC meeting, the TC considered ASTM E408 using a new device.
- At the May 2011 meeting, AZ Technology presented information about its Temp/Tesa 2000 device which measures normal thermal emittance and applies a conversion factor for hemispherical emittance.
- The Committee directed Staff to approach ASTM E408 about adding the Temp 2000 device and hemispherical emittance to the Standard.
Upcoming TC Meetings

• August 3 – Conference call
• September 22 – San Francisco