Random Testing and Verification Testing

Membership Meeting
June 18, 2015
Random Testing and Verification Testing Overview

**Purpose:** Retain credibility of CRRC-rated products in the marketplace by verifying reported solar reflectance and thermal emittance values

**CRRC Role**

1. Administer program by coordinating with relevant parties (manufacturers, collection agencies, EPA)
2. Ensure consistency and impartiality by following procedures
3. Enforce compliance to program requirements
4. Complete program before end of the year
Random Testing Working Group

- **Goal:** Streamline testing programs by improving existing procedures and policies
- Met in 2014 to update Procedure #1
- Updates were a success, group is currently dormant
- Participation in future meetings welcomed
  - Email: mischa@coolroofs.org
Updates to Program for 2015

- Structure put in place to receive procurement information at the time of renewals
- Formulation of clear timeline and response requirements
  - Clarification on “Under Review” and “Suspension” statuses
- Updated timeline with UL
Timeline for 2015

February 2015
EPA nominations for VT and Random Testing product selection

April 2015 - August 2015
Product collection by collection agency

June 2015 - December 2015
Product testing and evaluation of test results

January 2015

March 2015
Notification email to manufacturers and product data collection

December 2015
2015 Random Testing Process

Collection Agency

Manufacturer provides product manufacturing location and contact info to CRRC

Collection list reviewed and organized

Collection agency visits site to procure products

CRRC

Product Selections made

Samples received by CRRC

Samples sent in packages to AITL for testing

CRRC reviews test results and completes necessary actions

AITLs

Product testing

Start

Product information sent to collection agency
## 2015 Random Testing Progress Summary

**Total Products: 117**

- 26 overlap with Verification Testing, 91 Random Testing Only

<table>
<thead>
<tr>
<th>At Stage</th>
<th>Number of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product info collection</td>
<td>Complete</td>
</tr>
<tr>
<td>In Procurement</td>
<td>97</td>
</tr>
<tr>
<td>Samples Received</td>
<td>14</td>
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<tr>
<td>Samples sent to AITL</td>
<td>4</td>
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</table>
Total Products: 49

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<tr>
<td>Product info collection</td>
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<tr>
<td>In Procurement</td>
<td>42</td>
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<tr>
<td>Samples Received</td>
<td>5</td>
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<tr>
<td>Samples sent to AITL</td>
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Verification Testing Requirements

• 10% of active, qualified products list must be randomly selected for Verification Testing
• EPA can nominate up to half of current year’s products
• 2015 selections:
  
  53 VT Only
  + 26 Overlap with RT
  = 79 Total

• EPA actively monitoring and supporting VT efforts
• Semi-annual report
Differences between RT and VT

• Enforcement guidelines
• VT tests solely for solar reflectance
• Criteria for passing a product
  – RT: ±0.05 tolerance
  – VT: minimum values dependent on product type

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Solar Reflectance</th>
</tr>
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<tbody>
<tr>
<td>Low Slope</td>
<td>≥ .65</td>
</tr>
<tr>
<td>Steep Slope</td>
<td>≥ .25</td>
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Source: ENERGY STAR Program Requirements
Verification Testing Progress Summary

Total Products: 79
- 53 VT Only

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Questions