ENERGY STAR® Products
Enhanced Testing and Verification: Roof Products

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Agenda

• Overview of enhanced testing and verification requirements for ENERGY STAR

• New proposed requirements for Roofing Products
  – Certification programs
  – Lab accreditations for qualifying and verifying products

• Discussion
  – Leveraging existing certification programs under CRRC
  – Lab accreditations
Key Elements of Enhanced Testing Requirements

- Testing and reporting prior to qualification
  - Ensure that EPA has testing information on all products prior to labeling
  - Require test data from accredited labs that is representative of the product in the marketplace
- Continued testing after qualification
  - Verify that products continue to meet the ENERGY STAR requirements regardless of changes in the production process
  - Provide consumers with confidence that ENERGY STAR products are delivering the savings they expect
ENERGY STAR Enhanced Testing and Verification – Market-Based Testing Program

Market-Based Testing
Scope: All ENERGY STAR Product Categories

Qualification Testing
Purpose: Ensure that testing is conducted as required by ENERGY STAR specification and that lab submits test results to EPA that are representative of products sold to customer

1. Product tested in approved, accredited lab
2. EPA approves submission and adds product to list of ENERGY STAR qualified products
3. Partner labels product
   Provides new data to EPA if changes to the model result in changes to energy consumption

Lab sends test information to EPA at mfg request

Verification Testing
Purpose: Ensure that products continue to meet ENERGY STAR requirements

1. Product selected for testing
   Third-party administrator facilitates product selection once or twice a year based on certified product (if certification program) or ES QP list (if EPA-selected administrator)
2. Manufacturer pays third-party to administer independent, off-the-shelf or off-the-line witnessed testing
3. Third party administrator has products tested as required and shares results with EPA
4. If models deemed failure based on testing, EPA delists product
   Requires corrective actions and analyzes root cause to prevent future problems
Third Party Certification and Verification Testing

- Laboratory requirements – preference to third-party labs with considerations for manufacturers in-house labs
- Formal market-based certification programs to administer testing
- Verification testing to be conducted on all products within certain timeframe
- Potential for multiple certification/verification programs to serve this function
  - Off-the-shelf testing where possible
  - Combination of random testing and selected products
- Challenge testing requirements
Third Party Testing – Program Administration

- Third-party entity will administer certification and verification testing program (more than one third-party may offer such programs as long as they meet the qualification criteria)

- Qualifications
  - Proficiency in measurement testing or statistics
  - Demonstrated impartiality regarding the outcome of testing
  - Quality control measures (e.g., ISO/IEC Guide 65:1996)
  - May not require membership for product to be certified
  - Need to be approved by EPA

- Responsibilities
  - Identify and select qualified laboratories for testing
  - Work with manufacturers to test ENERGY STAR products for both initial qualification and verification purposes
  - Ensure testing remains on schedule
  - Provide detailed test reports and summaries of results to EPA/DOE
Third Party Qualification Testing

- Third-party independent lab will be required by default
  - In-house labs may be allowed
- To certify product, manufacturer must provide information on the distribution of product (for purposes of conducting verification testing)
Third-Party Verification Testing: Laboratory Requirements

• Third-party independent accredited lab will be required by default
• Witness testing may be allowed on a product-specific basis
Third-Party Verification Testing: Selecting and Obtaining Products

- Selected by third-party program, allowing for input from EPA/DOE and other stakeholders
- Must test all certified products at least every three years
- Need to ensure that products still available on market and that the current specification applies
- Preferred option is to obtain products from the marketplace – need to consider appropriateness of random selection of product off production line
Considerations for Discussion

- Leveraging existing certification programs under CRRC
- Lab accreditations
Next Steps

• Comments due April 30, 2010
  – ENERGYSTARVerificationProgram@energystar.gov
• Complete draft including product-specific requirements – May 2010
• Finalize Requirements – July/August 2010
• Phase-in requirements for certification programs
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