



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

January 18, 2012

Dear ENERGY STAR[®] Roof Products Stakeholder or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is proposing revisions to the ENERGY STAR Version 2.2 Roof Products Specification to address comments and concerns raised by stakeholders. Please find attached the Draft 1 Version 3.0 specification, Draft Version 2.3 specification, and ENERGY STAR Test Method for Roof Products: Maintenance of Solar Reflectance, March 2015 for review and comment. Interested stakeholders are encouraged to submit comments to EPA **by February 15, 2012**.

The changes proposed in the Version 3.0 of the specification impact product testing and qualification and as such, a March 1, 2015 effective date is proposed. EPA is targeting the first quarter of 2012 to finalize Version 3.0 requirements. In contrast, EPA is of the opinion that changes proposed in the Draft Version 2.3 specification are relatively minor and will not affect current qualification status of those roof products listed on the ENERGY STAR website. Therefore it is EPA's intent to finalize the Version 2.3 specification by February 29, 2012. Key changes in the Version 2.3 and 3.0 specifications are summarized below.

Review of Reflectivity Levels: EPA has reviewed the current reflectivity requirements and the market share of qualifying roof products. The Agency estimates that approximately 35% of roof products are ENERGY STAR qualified. Given the relatively low market share over the lifetime of the program and because it can be very difficult to determine the savings potential with incremental changes in reflectivity, EPA is not proposing changes to the specification criteria under Version 2.3 or 3.0. However, EPA welcomes comments on this decision and remains open to reviewing the specification levels based on stakeholder feedback and supporting data.

Version 3.0 Draft 1 Specification Proposed Testing and Qualification Revisions:

- **Acceptable Laboratories:** All roof products will be required to be tested on a weathering farm approved by an EPA-recognized Certification Body (CB). Roof product samples using existing roof installations to fulfill aged solar reflectance testing requirements will no longer be eligible for ENERGY STAR qualification as of March 1, 2015. *EPA is proposing this change after reviewing current test procedures and having received numerous comments from stakeholders that existing testing requirements are flawed and subject to potential manipulation of data. EPA agrees that the existing test procedure for aged reflectivity is outdated (12 years old) and calls into question the integrity of test results.*
- **Qualified Products:** As of March 1, 2015, all products must be third-party certified to the Version 3.0 Eligibility Criteria to qualify as ENERGY STAR. Products currently on the ENERGY STAR qualified product list that were not tested on a weathering farm will need to be retested and third-party certified by an EPA-recognized CB to remain qualified. However, qualified products that have been tested on weathering farms, but not third-party certified, may be able to retain their qualification without retesting if that testing was conducted by an EPA-recognized laboratory and test data is accepted by an EPA-recognized CB.
- **Consideration of Climate Zones:** EPA is considering a requirement that samples be tested on more than one weathering farm across multiple climate zones.
- **Cleaning of Samples:** As of March 1, 2015 all roof products, including those previously qualified under Version 1.0, must be tested and third-party certified using un-cleaned samples to be qualified under the Version 3.0 specification.

Version 2.3 Draft Specification

EPA is also proposing minor revisions to the ENERGY STAR Version 2.2 Roof Products Specification to address comments and questions submitted by EPA-recognized CBs and manufacturers over the last several months. EPA plans to finalize and release the Version 2.3 specification by February 29, 2012.

Based on the fact that changes proposed in the Version 2.3 specification are limited to clarifications, all currently qualified roof products will remain qualified once effective February 29, 2012. However, please note that as of this date, ASTM E408 will no longer be allowed for emissivity testing. All roof products tested on February 29, 2012 and beyond must be evaluated using the ASTM C1371-04a(2010)e1 Standard.

Key clarifications proposed in the Version 2.3 specification are summarized below:

- **Emissivity Test Methods:** Effective February 29, 2012, ASTM E408 will no longer be allowed for emissivity testing as test method ASTM C1371-04a(2010)e1 has been shown to provide more reliable results.
- **Excluded Products:** Roof products intended for use on siding or walls are not eligible for ENERGY STAR qualification.
- **Variiegated Roof Products:** Variiegated roof products are generally not eligible for qualification as a Color Family Additional Element consistent with the Cool Roof Rating Council's product rating program. Variiegated roof products may only qualify using Maintenance of Solar Reflectance testing.
- **Compound Ratings:** Compound Product Ratings, as defined by the Cool Roof Rating Council, can be used to qualify roof products as ENERGY STAR.

Frequently Asked Questions (FAQ)

Additional questions submitted by EPA-recognized CBs and manufacturers are addressed at www.energystar.gov/3rdpartycert. A link to FAQs can be found at the bottom of the webpage.

Comment Submittal

Stakeholders are encouraged to submit comments on both the Version 2.3 and Version 3.0 Draft proposals to Roofs@energystar.gov by **February 15, 2012**. All comments will be posted to the ENERGY STAR Product Development website at www.energystar.gov/revisedspecs unless the submitter requests otherwise.

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Your input is very valuable during this specification revision process. If you are not familiar with the ENERGY STAR Guiding Principles, you are encouraged to review them at www.energystar.gov/productdevelopment and clicking the "systematic process" link in the second paragraph.

Please direct any specific questions to Steve Ryan, EPA, ryan.steven@epa.gov and (202) 343-9123 or Michael Holzheimer, ICF International, at mholzheimer@icfi.com and (202) 862-1584.

Thank you for your continued support of ENERGY STAR.

Sincerely,



Steve Ryan
ENERGY STAR Roof Products Program Manager
U.S. EPA, ENERGY STAR Program