

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



OFFICE OF
AIR AND RADIATION

February 23, 2007

Dear ENERGY STAR® Roof Products Partner or Other Industry Stakeholder:

The purpose of this letter is to provide a **Revised** Final Draft ENERGY STAR Version 2.0 Specification for Roof Products, describe the changes in this draft versus the previous one, and request comments from stakeholders on the Revised Final Draft by March 26, 2007.

Based on a thorough review of current research and a series of meetings with industry representatives, EPA has concluded that establishing a national emissivity requirement for ENERGY STAR qualified roof products is not appropriate at this time. While buildings in warmer climates benefit from higher emissivity levels, it is possible that buildings in colder climates would experience lower net energy savings.

Given that different emissivity levels may be appropriate in different parts of the country, EPA is interested in pursuing a regional approach. However, we recognize that determining appropriate levels on a region-by-region basis may not be feasible without significant additional research and testing. Therefore, EPA is proposing to address emissivity through the ENERGY STAR Program by providing prospective roof product purchasers with emissivity data along with educational information to help them choose the ENERGY STAR qualified roof product that cost-effectively saves the most energy for their climate.

To this end, EPA is proposing that emissivity values be reported as part of the roof product qualification process. In particular, the Agency is taking the following two steps that will serve a direct educational purpose for end users:

1) Under Version 2.0, EPA will collect and post initial emissivity values on the ENERGY STAR qualified product list. **As of October 31, 2007, the effective date of the revised specification, all manufacturers will be required to report initial emissivity results for newly submitted and already qualified products using the attached Version 2.0 ENERGY STAR Qualifying Product Information (QPI) form.** Manufacturers must use one of the test procedures listed below when measuring emissivity:

- ASTM C1371-04a – *Standard Test Method for Determination of Emittance of Materials Near Room Temperature using Portable Emitters*
- ASTM E408-71(1996) e1 - *Standard Test Method for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.*

EPA will include submitted emissivity data in the Qualified Products List posted on the ENERGY STAR Web site which will allow end users to identify the emissivity of ENERGY STAR qualified roof products and further inform their purchasing decisions based on their location and individual climate needs.

2) EPA will develop and post guidance for end users about emissivity via the ENERGY STAR Web site. Specifically, EPA will convey the potential savings and benefits of purchasing roof products of various emissivity levels based on geographic location. In drafting the educational content, EPA will seek review by researchers and industry experts. Should you know of any existing sources for clear and accurate information on this subject, please provide them in your comments.

As noted above, the Revised Final Draft does not include a required emissivity level. All performance requirements for emissivity and references to Solar Reflectance Index (SRI) have been removed. However, please be aware of the following aspects of the Revised Final Draft specification that have not changed:

- Requires that data on newly submitted roof products for ENERGY STAR qualification reflect that tested samples were not cleaned prior to testing for Maintenance of Solar Reflectance
- Partners are allowed to self-test and report roof products for ENERGY STAR qualification
- Partners are required to submit testing reports along with all QPI forms. QPI forms submitted without testing reports will not be accepted.

EPA will continue to follow research efforts and state energy efficiency initiatives regarding emissivity and may revise this specification in the future if new data or research clearly supports specific emissivity levels that would routinely deliver cost-effective energy savings to end users.

All stakeholders are encouraged to provide comments on this revised final draft for EPA consideration to Rebecca Duff, ICF International, at rduff@icfi.com by March 26, 2007. All comments previously submitted from stakeholders for which EPA received permission to post on the Web site are available on the ENERGY STAR Product Development Web page at www.energystar.gov/productdevelopment. Please indicate in your comments whether they may be posted on the Web site.

Thank you for your input and participation during the specification revision process. Please feel free to contact me directly with any questions or concerns at ryan.steven@epa.gov or (202) 343-9123.

Sincerely,



Steven J. Ryan, U.S. EPA
ENERGY STAR for Roof Products