Changes to ENERGY STAR®

by Mark S. Graham

The U.S. Environmental Protection Agency (EPA) has made some changes to its ENERGY STAR Roof Products Program that take effect Dec. 31. If you install roof systems with reflective roof surfaces, the changes may affect you.

Background

Since 1998, the ENERGY STAR Roof Products Program has served as a way to recognize roofing products with relatively highly reflective exposed surfaces.

To qualify for an ENERGY STAR designation, a roofing product intended for a slope of 2-in-12 (9 degrees) or less needs to have been tested and found to have an initial solar reflectance value of 0.65 or higher and maintain a solar reflectance value of at least 0.50 three years after installation under typical conditions. A roofing product intended for a slope greater than 2-in-12 (9 degrees) needs to have been tested and found to have an initial solar reflectance value of 0.25 or higher and maintain a solar reflectance value of at least 0.15 three years after installation under typical conditions.

Currently, about 169 manufacturers market 1,496 ENERGY STAR-recognized roof products.

Changes

Based on feedback received from those involved with the ENERGY STAR Roof Products Program, EPA is making a number of changes to the program.

For example, the program currently allows specimens to be cleaned before they are tested for solar reflectance values after three years of exposure. With this change, loose or embedded dirt, environmental stains, mold, mildew or any other foreign material that rests on or has become incorporated into a material's surface no longer will be allowed to be removed before testing occurs.

For products tested before this change is implemented, retesting of uncleaned specimens is not required for continued recognition by the program. A notation that a product has been tested after cleaning will be made on ENERGY STAR's Roof Products List to differentiate the two types of data.

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Also, the program will begin requiring products' emissivity levels to be tested. At this point, EPA has not established a required emissivity level; the only requirement is products' emissivities be tested and reported to EPA. EPA will include products' emissivity data in ENERGY STAR's Roof Products List.

EPA has indicated it intends to include a specific emissivity level requirement at some point. But EPA acknowledges there currently is no research that supports specific regional or national emissivity requirements that would deliver cost-effective energy savings to building owners.

Despite a number of users' suggestions, EPA will continue to allow manufacturers to self-test specimens and report data to EPA to qualify for the program. However, EPA will begin to require manufacturers to submit test data in a standardized format using EPA's Qualified Product Information Form along with the test report.

Implementation

Although these revisions should be viewed as positive steps toward improving the program, I am concerned some changes will result in confusion.

For example, no longer allowing cleaning of specimens before testing is a positive change. The new three-year data will provide some indication of a roof surface's ability to resist dirt and resulting discoloration. However, existing specimen data and the new uncleaned specimen data still will be allowed to provide a basis for compliance with the program with no differentiation in product labeling or marketing materials being required. In fact, the only required indication of whether three-year test specimens have been cleaned will be a notation in ENERGY STAR's Roof Products List, which few users or consumers see.

If you use the ENERGY STAR Roof Products Program, seek products that comply with the program on the basis of using data for uncleaned three-year specimens. This information should be available from product manufacturers or ENERGY STAR's Roof Products List, which is on ENERGY STAR's Web site, www.energystar.gov.

Additional information regarding EPA's ENERGY STAR Roof Products Program is available by calling (888) 782-7937 or accessing ENERGY STAR's Web site.

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