



Energy Star Roof Products Program

Source/Author: Energy Star

Reflective Roof Products Can Save Money and the Environment.

The U.S. Environmental Protection Agency (EPA) announced the Energy Star Roof Products Program Charter Partner companies at the National Roofing Contractors Association Convention (NRCA) in Phoenix, Arizona, on February 9, 1999. As of February 21, 2000, a total of 112 roof product manufacturers have joined the program.

What is ENERGY STAR?

In EPA's new ENERGY STAR Roof Products Program, manufacturers will be allowed to use the ENERGY STAR label on reflective roof products that meet EPA's specifications for solar reflectance and reliability.

The ENERGY STAR label, which was designed by EPA and the Department of Energy (DOE) to help consumers easily identify energy-efficient products, is already used on a variety of products, including heating and cooling (HVAC) systems, household appliances, office equipment, insulation and even homes.

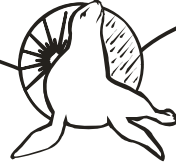
Saving the earth, saving you money

According to EPA, approximately \$40 billion is spent annually in the U.S. to air condition buildings - using one sixth of all electricity generated in the country each year. However, reflective ENERGY STAR-labeled roof products can reduce the amount of air conditioning needed to cool these buildings by preventing the sun's heat from entering them, thereby reducing energy bills by up to 50%. In fact, reflective roofs can lower roof surface temperature by up to 100 degrees Fahrenheit. They can also reduce peak cooling demand by 10 to 15 percent, enabling building owners to buy smaller, less expensive HVAC systems. The extent of savings depends on a number of factors including climate, insulation levels and type of roof installed.

ENERGY STAR-labeled roof products benefit the environment because, in the U.S., most of the energy needed to cool buildings is created by burning fossil fuels, a process which releases pollutants into the air. Consequently, by decreasing the nation's energy needs, reflective roof products will decrease the amount of air pollution produced by power plants.

Energy Seal Coatings

Acrylic Coatings for Roof and Wall Applications



ENERGY STAR-labeled roof products can also help reduce the "heat island effect", a phenomenon in which dark, heat absorbing buildings and paved areas make the air in urban areas as much as 8 degrees hotter than surrounding communities. By reducing the "heat island effect", these products also help reduce smog levels and the associated heat- and smog- related health problems.

EPA anticipates that roofing manufacturers and contractors will want to market ENERGY STAR-labeled products because they offer "increased value to customers".

General information about the program and products is available by calling toll-free 1-888-STAR-YES.

Product Specifications

Low Slope Roofs: Surfaces with a slope of 2:12 inches or less.

Specification	
Characteristic	Performance Specification
Energy Efficiency	
Initial Solar Reflectance	Greater than or equal to 0.65
Maintenance of Solar Reflectance	Greater than or equal to 0.50 three years after installation under normal conditions.
Reliability	
Manufacturer's warranty for defects in materials and manufacturing.	Each company's warranty for reflective roof products or roof coatings must be equal in all material respects to the product warranty offered by the same company for comparable non-reflective roof products and coatings. A company that sells on reflective roof products must offer a warranty that is equal in all material respects to the standard industry warranty for comparable non-reflective roof products.

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Steep Slope Roofs:

Surfaces with a slope greater than 2:12 inches.

Specification	
Characteristic	Performance Specification
Energy Efficiency	
Initial Solar Reflectance	Greater than or equal to 0.25
Maintenance of Solar Reflectance	Greater than or equal to 0.15 three years after installation under normal conditions.
Reliability	
Manufacturer's warranty for defects in materials and manufacturing.	Each company's roof membrane product warranty for reflective roof membrane products must be equal in all material respects to the product warranty offered by the same company for comparable non-reflective roof membrane products. A company that sells on reflective roof products must offer a warranty that is equal in all material respects to the standard industry warranty for comparable non-reflective roof products.

For roof products that can be applied to either low-slope or steep-slope roofs, manufacturers should refer to the low-slope roofs table for ENERGY STAR specifications.



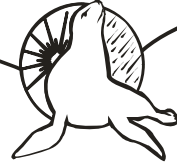
How does Energy Seal Coatings compare to the Energy Star product specifications?

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Energy Seal Coatings				
Roof Slope	Acu-Shield		Acu-Shield: Ceramic	
	Initial	3 Years after Installation	Initial	3 Years after Installation
Low-slope (<2:12)	89%	85%	88%	84%



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Steep Slope Roofs:

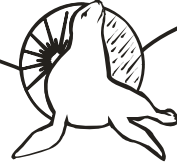
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Energy Seal Coatings				
Roof Slope	Acu-Shield		Acu-Shield: Ceramic	
	Initial	3 Years after Installation	Initial	3 Years after Installation
High-slope^e (>=2:12)	88%	84%	89%	82%

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Save Money !

Reflect and Protect

with...

Energy Seal Coatings