

The background of the entire page is a close-up, high-resolution image of granules. The top and bottom sections are a solid blue color with white granules. The middle section is white with blue granules. A dark blue rectangular box is positioned on the right side of the white granule section, containing white text.

A BRIGHT IDEA FOR THE  
GREEN BUILDING INDUSTRY

**WHITE ARMOR<sup>®</sup>**  
HIGH REFLECTANCE  
COOL ROOF GRANULES



With a greater focus on green building today, the demand for cool roof technologies is stronger than ever. But not all options are the same. One cool roof solution rises above all others when it comes to long-term performance, ease of manufacturing, and fast installations – WHITE ARMOR® high reflectance cool roof granules from U.S. Silica.

## Ideal for Many Applications

WHITE ARMOR cool roof granules are specifically designed for use with commercial, municipal and industrial flat and low-sloped modified bitumen roofs and mineral cap sheets.

Well-suited for both new construction and replacement, they provide an attractive option for specifiers, building owners and facility managers who are challenged to meet increasingly stringent environmental standards.

When used with modified bitumen roofs, WHITE ARMOR cool roof granules may help buildings qualify for LEED credits and assist in complying with the environmental standards of ENERGY STAR and the California Energy Code (CEC), Title 24.

## A Higher Standard of Performance

A patented technology provides WHITE ARMOR cool roof granules with their high solar reflectivity.

Whiter and brighter than most other granules on the market, WHITE ARMOR cool roof granules outperform other cool roofing options:



**Highly reflective** – The white color runs throughout the granules to reflect solar rays instead of transferring heat into the building (meets LEED requirements for 70+% reflectivity)



**Durable** – modified bitumen roofs with WHITE ARMOR cool roof granules stand up to weathering and the weight of maintenance personnel for a long, reliable service life



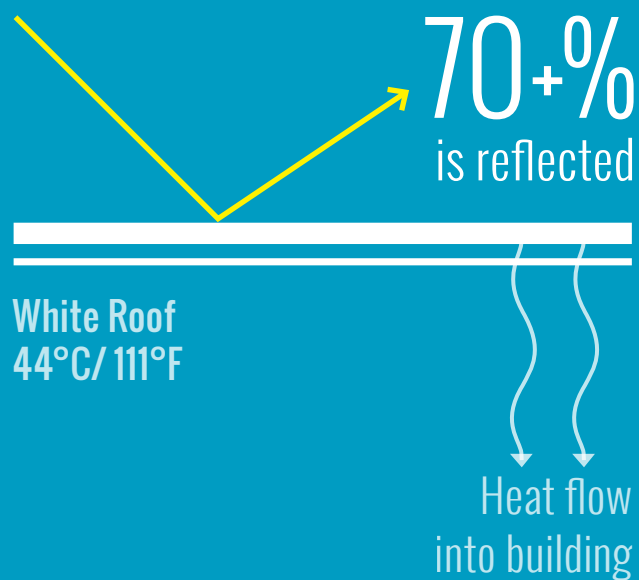
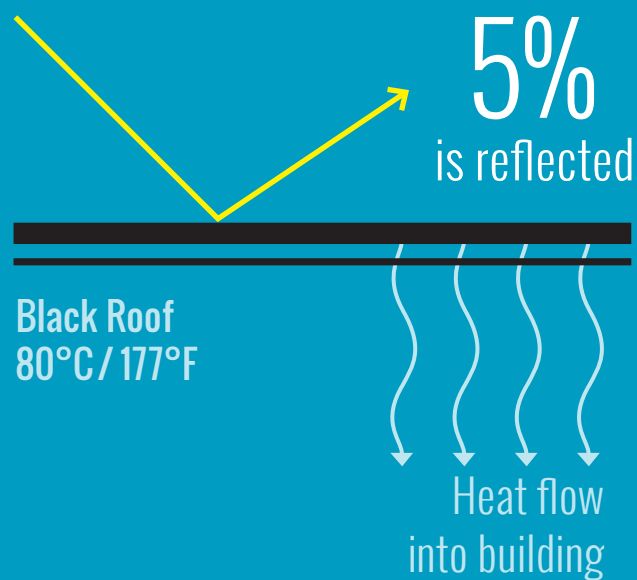
**Fast and easy installations** – roofs with WHITE ARMOR high reflectance granules are installed the same as modified bitumen roofs



**Environmentally responsible** – high reflectance roofs help reduce urban heat island effect in urban settings\*

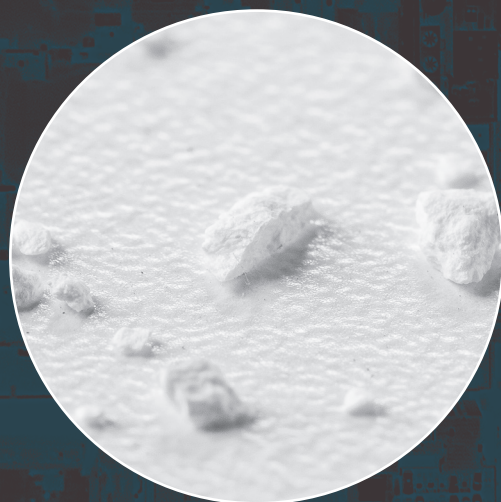
\*According to Lawrence Berkeley National Laboratory—[heatisland.lbl.gov](http://heatisland.lbl.gov)

Patented technology provides WHITE ARMOR cool roof granules with high solar reflectivity.



WHITE ARMOR cool roof granules feature a proprietary coating to repel water and promote a long service life.

Engineered granules are white throughout for maximum reflectivity.

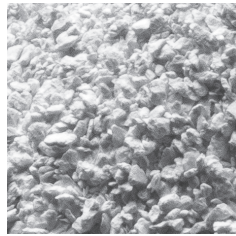




## Clear Advantages

The market has seen more than its share of cool roof options, but nothing quite compares to WHITE ARMOR cool roof granules.

**FOR MANUFACTURERS**, the benefits start with enhanced processability. WHITE ARMOR cool roof granules are faster, easier and less expensive to manufacture than coated granule cap sheets or roof coatings. The WHITE ARMOR granules do not require a secondary coating process, saving on time, equipment and labor costs in manufacturing. Consistent particle size and a larger surface area additionally promote adhesion to modified bitumen asphalt.



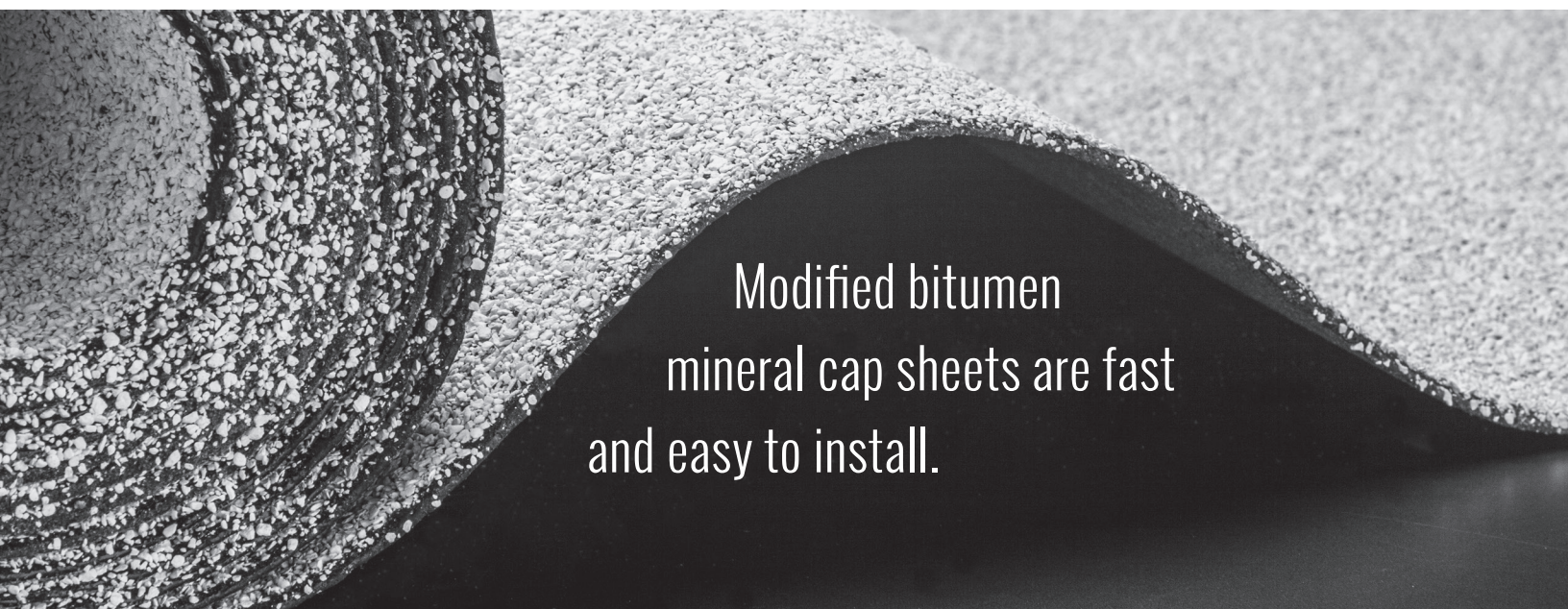
**BUILDING OWNERS** and facility managers benefit from the physical characteristics of our innovative product. Whiter than competitive granules, WHITE ARMOR cool roof granules offer maximum reflectivity. Unlike painted granules that are only white on the surface, WHITE ARMOR cool roof granules are white throughout, so even if weather damage or the weight of maintenance personnel cause the granules to crack or break over time, the surface area remains white to effectively continue to protect the roof. Patented for use with roofing systems, WHITE ARMOR cool roof granules improve manufacturers' ratings from the Cool Roof Rating Council and assist in complying with stringent California Title 24 requirements for reflectivity and emissivity.

## Growing Acceptance

The market for cool roofs has never been hotter. Every year the number of localities mandating cool roofs grows substantially both in the U.S.A. and abroad.



Advanced education in the market has also led specifiers and building owners to better understand the tremendous value of cool roofs — not just for their proven environmental benefits, but because they represent a wise investment. Cool roofs effectively lower energy costs by reflecting solar radiation that could otherwise create higher HVAC costs for building owners and lead to an urban heat island effect.\* WHITE ARMOR cool roof granules successfully combine cool roof-compliant technology with the durability and proven track record of modified bitumen roofing systems to reduce the uncertainty and complexity of other alternative roofing systems.



Modified bitumen  
mineral cap sheets are fast  
and easy to install.



## ONLY FROM U.S. SILICA

When you purchase WHITE ARMOR cool roof granules from U.S. Silica, you can be confident you've partnered with the best.

For more than 100 years, we've stood behind the products we sell. U.S. Silica is a market leader known for our high-quality products and service in a multitude of industries, including the building industry. We've been providing silica products to the roofing market for more than 30 years and today are a member of the Cool Roof Rating Council.



### FOR MORE INFORMATION

Visit [coolroofgranules.com](http://coolroofgranules.com),  
email [sales@ussilica.com](mailto:sales@ussilica.com) or call 800-345-6170



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