

# Heatshield-R20 Insulating Paint Additive



**Reduces Cooling & Heating Costs!**

Transform any paint into an energy-saving Insulating *Radiant Heat Barrier*

with amazing NASA Insulating paint Technology.

**Insulate Your Home With The Stroke Of A Brush!**

Save energy...save money....improve comfort!

**Space Technology Certification**

Heatshield-R20 is the first insulating paint additive to receive NASA certification for its state-of-the-art technology. It protects you from the heat!

# **OUR PRODUCT CAN BE USED ON ALL TYPES OF SURFACES!**

**Roofs...Especially Metal!**

**Exterior & Interior Walls**

**Attics**

**Air Conditioning Cabinets**

**Water Heaters**

**Metal, Boat & Equipment Seats**

**Metal Doors**

**Hot & Cold Pipes**

**ESSENTIALLY—ALL HEAT-BEARING SURFACES!**

## **Thermal Imagery Shows How Effective Our Product Is During Extreme Heat**

Tests were done on a home in Florida to determine just how much Heatshield-R20 can reduce the temperature of a home or structure...and the results were startling.

The photo on the left was taken on October 14 when the high for the day reached 82 degrees..and you can see just how hot the roof of the home has become.

The photo on the right was taken exactly two weeks later on October 28 when the high temperature for the day reached 83 degrees...and as you can see...the roof of the home is substantially less heated...a full eight degrees cooler after being treated with our product.

Results may vary...but the difference is noticeable in any event and the energy savings can be substantial!

## Ready, Set...Reflect!

### Space Foundation Welcomes Heatshield-R20 as New Certified Technology

The Space Foundation announced that GBS/KWIK Company, manufacturer and distributor of Heatshield-R20 Radiant Barrier Paint Additive, is a new Certified Space Technology partner. Heatshield-R20 is a paint mix that acts as a protective, insulating barrier against heat transfer. The Space Certification program was created by the Space Foundation, in cooperation with NASA, to raise awareness and understanding about space and the significant and practical benefits of technologies originally developed for the space program, which have been adapted into products and services that improve life on Earth

“The Space Foundation is pleased to recognize GBS/KwikCompany as a partner in the Space Certification Program,” said Kevin Cook, director of space awareness programs for the Space Foundation. “Heatshield-R20 Radiant Barrier Paint Additive is an excellent example of how technologies originally developed for space exploration often provide practical benefits right here on Earth. We commend GBS/KwikCompany for helping make homes and places of business around the world more energy efficient.”

Heatshield-R20 uses hollow reflect spheres in a powder that can be mixed into virtually any paint to create a protective heat-blocking radiant barrier. Originally developed as spray-on insulation to protect space shuttle components, the process involved a dangerous mix of chemicals and a narrow

application window. GBS/KWIK Company produced an economical and safe spinoff to this proven space technology, which effectively reduces heating and cooling costs for home and business owners by reflecting heat away from any painted surface. The University of Colorado used Heatshield R-20 as an important part of their energy-efficient solar-powered houses that won the National Solar Decathlon in 2002 and 2005.

The Space Certification program highlights products in the technology, education, and imagination categories and plays an integral role in the Space Foundation's mission to improve public awareness and appreciation of the practical benefits of space technology.

For more information about Heatshield-R20, visit [Heatshield-R20.com](http://Heatshield-R20.com). For information about other space technologies that improve life here on Earth, visit the Space Certification Program online at [SpaceConnection.org](http://SpaceConnection.org).

Founded in 1983 and celebrating its 25th anniversary this year, the Space Foundation is an international nonprofit organization advancing space-related endeavors to inspire, enable, and propel humanity. A leader in space awareness activities, major industry events, and educational enterprises that bring space into the classroom, the Space Foundation is headquartered in Colorado Springs, Colo. It conducts research and analysis and government affairs activities from its Washington, D.C., office, and has field representatives in Houston and Cape Canaveral, Fla. For more information, visit [SpaceFoundation.org](http://SpaceFoundation.org).



# How It Works

## THE REACTION OF THE HUMAN BODY TO RADIANT HEAT USING RADIANT BARRIER PAINT ADDITIVE IN COMPARISON

People feel warmer in the presence of radiant energy and cooler in its absence. Science refers to this phenomenon as mean radiant temperature. Stand in the shade of a tree on a sunny, but a cool day; then step into the sunlight. Your body instantly becomes warmer in the sun, more comfortable.

Stepping back into the shade, you are cool; yet, the change in the actual air temperature between shade and sunny areas is negligible.

The human body feels warmer because radiant energy causes molecular friction within the skin and body. When this friction takes place, it creates heat that makes you warmer. In the absence of friction, you are cooler because of the lack of molecular friction.

But only your body is affected, not the air surrounding it. So in winter, you may feel as warm in a 65-degree room as you normally would feel in a room with a temperature set at 72 degrees.

The thermostat can be set down 5 to 8 degrees Fahrenheit in winter and up the same amount on the air conditioner in summer and yet the comfort level of the human body can remain the same.

Heatshield-R20 ceramic coatings raise the mean radiant temperature in buildings in winter and lower it in summer.

Heatshield-R20™ is formulated to have a very small reaction to radiant and microwave-type frequencies.

With very little molecular movement there is very little friction, so very little heat.

# HOW IT WORKS

The small micron size hollow glass microspheres which in part make up HEATSHIELD-R20 coatings are pure sodium borosilicate formulated with hollow ceramic spheres. Each closed-cell smaller in diameter than human hair acts as an efficient insulator. Once applied, water evaporates from the HEATSHIELD-R20 acrylic emulsion topcoat, and the hollow ceramic spheres align with each other eventually touching, then fuse into a continuous membrane, the seamless HEATSHIELD-R20 topcoat and since the microspheres are over 60% void, the entire coating becomes like a flat thermos bottle. Heatshield-R20™ is formulated to have a very small reaction to radiant and microwave-type frequencies. With very little molecular movement there is very little friction, so very little heat.