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## Super Therm - Ceramic Paint Insulation

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## SUPER THERM - CERAMIC PAINT INSULATION

### THE NEED

SUPER THERM is the result of years of research and development into Thermal Conductivity in cooperation with the Marshall Space Center, division of NASA. SUPER THERM can control heat exchange between the inside and outside of a building. By implementing SUPER THERM, the effectiveness of the insulative ability will increase because when SUPER THERM is applied to the exterior side of the wall, it repels exterior heat and moisture to prevent it from entering the wall. At the same time, it helps to control the loss of heat from the inside during the winter months by bouncing back the heat waves travelling from the interior heated room through the wall structure escaping to the outside.

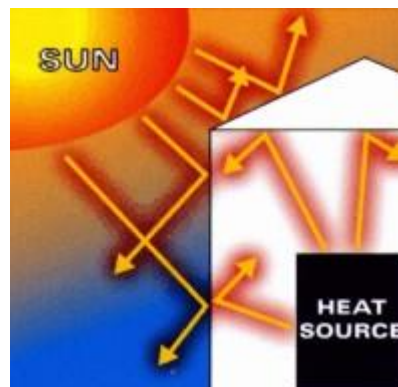


FIGURE 1 SUPER THERM BARRIER MAINTAINS HEAT ON THE SURFACE SIDE OF THE BUILDING - WILL NOT ALLOW PENETRATION

### THE TECHNOLOGY

SUPER THERM is a combination of high-performance acrylic resins in water, which contain no cosolvents and will dry by evaporation. SUPER THERM has two reflective ceramics to reflect sunlight and radiant heat while the third ceramic compound works to stop heat and/or conduction through the coating film. The combination of acrylics provide elasticity and toughness with the urethane providing the binding for the acrylics and compound while also providing a moisture barrier.

The SUPER THERM is perfect for interior or exterior walls of wood, metal, concrete, standard wallboard, stone or stucco, and for roofing surfaces of steel, rubber, tar or asphalt shingles.



**FIGURE 2 SUPER THERM APPLICATION (METAL ROOF/ CONCRETE WALLS/ SURFACE OF STORAGE TANKS)**

Other specific uses of SUPER THERM are for:

- Industrial / chemical plants.
- Oil and gas storage tanks / pipeline
- Interior and exterior walls on building / residential, commercial, warehousing
- Roofing on any structure
- Swimming pool decking or concrete.
- Freezers / refrigeration units / trucks / trains / boats.
- Air conditioning unit outer casings, evaporative coolers.
- Mobile homes / motor homes / cars / trucks
- Poultry, cattle -- all animal shelters

## **THE BENEFITS**

- SUPER THERM is water-based. This offers tremendous advantages to the user of the product.
- SUPER THERM does not require extra effort work in clean-up of equipment and allows equipment longer life.
- The product is non-toxic, non-flammable, will not smoke and offers--due to the ceramics--some sound-proofing. It has been fire-tested with '0' flame and smoke results.
- SUPER THERM cures out completely in one week to an extremely tough, durable, non-yellowing, water-resistant coating that also provides flexibility and ultra-violet stability.
- Clean-up with soap and water, or just water by itself is sufficient.
- USDA-approved for use in and around food preparation.

## **STATUS**

SUPER THERM is awarded NASA's highest rating as non-toxic, passed flammability tests to receive an A-rating (highest non-flammable rating), and NASA is currently considering SUPER THERM for application to the external tanks of The Shuttle and the launch pad. One of the most successful applications of SUPER THERM is in the treatment of roofs and walls of commercial and residential structures as a barrier against heat and cold. Over the past few years SUPER THERM has been well proven in a variety of countries, such



as Australia, Canada, Colombia, Japan, United Arab Emirates, and USA. SUPER THERM is registered as THERMSEAL under Intercoat..

## **BARRIERS**

SUPER THERM was designed and its technology is built upon providing the insulation effectiveness on a single coat, with minimum of 7 dry mils or 200 microns thickness. Two or three applications or coats are required if there is an intent on overcoating SUPER THERM with another paint product, which is usually a particular color over the top of the SUPER THERM for decoration. The extra thickness is required because the colored paint applied over the top of the SUPER THERM will catch and hold heat.

## **POINTS OF CONTACT**

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## **REVIEWERS**

Peer reviewed as an emerging construction technology

## **DISCLAIMER**

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## **PUBLISHER**

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