

# Thermashield



Contains Thermilate Insulating Technology

**SAVES  
ENERGY!  
SAVES  
MONEY!**

**insulates and  
waterproofs**

- Reflects and dissipates heat from the sun, Saves on energy costs
- Waterproofs sloped roofs
- Designed for exterior use
- Non-toxic, safe to use

## What is Thermashield Coating?

Thermashield is a high quality elastomeric paint containing the revolutionary, durable Thermilate composite spheres which makes the paint insulate and reduce energy costs.

Thermashield uses paint additive, Thermilate, which uses technology developed by NASA with the US space shuttle program. It has been independently tested and scientifically proven. It has also been featured on the popular BBC science program Tomorrow's World.

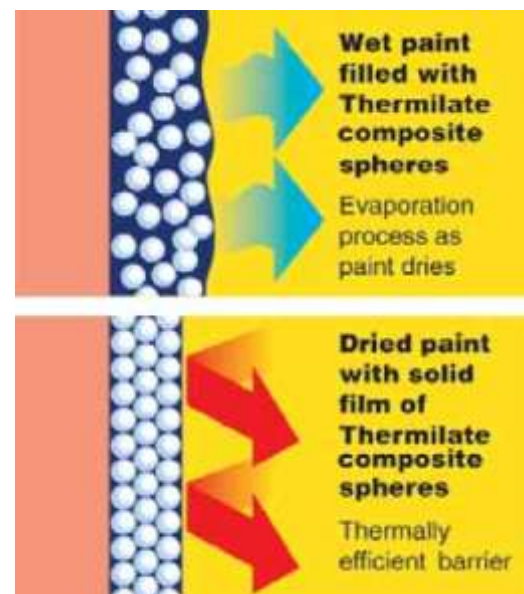
## Key Features

- ✓ Saves energy
- ✓ High Weather Resistance
- ✓ Stable over temperature variations
- ✓ Non-toxic & environmentally friendly
- ✓ Remains intact on flexible surfaces
- ✓ Excellent crack bridging
- ✓ Exceptional film durability
- ✓ Resistant to atmospheric pollution
- ✓ Resistant to UV degradation
- ✓ Bonds well to a wide range of surfaces
- ✓ Gloss retention & Mildew resistant
- ✓ Easy to apply
- ✓ Rapid drying for quick re-coating
- ✓ Easy clean up with soap and water

Thermashield coating is ideal for areas that will be subjected to moisture as it will not only reduce heat transfer, but also protect against moisture ingress. Thermashield coating also acts as a water-proofing membrane if applied as per manufacturer's recommendations.

## How does it work?

Thermilate is a fine powder, made up of composite micro-spheres. Thermilate composite spheres have a vacuum inside, similar to a mini thermos flask. The spheres enable Thermashield to refract, dissipate heat. On internal walls ceilings this reduces heat loss - Thermashield on external walls and roofs will reflect heat from the sun, creating a cooler internal environment.



Thermashield contains Thermilate composite spheres which create a thermal barrier. They refract, reflect and dissipate heat. These spheres are 30-100 microns in diameter.

## Why use THERMASHIELD?

- **Energy Savings.**
- **Superior Flexibility-** its durability & flexibility makes it ideal for supplies that will bend or move through flexing or expansion and contraction due to heating and cooling.
- **UV Blocker** - Blocks solar UV radiation, protects coating and surface applied upon.
- **Lightweight** - Thermashield coatings is lighter than traditional insulation boards.
- **Reduces labor costs** - Easy application reduces costs and saves time.

## Applying Thermashield

Thermashield coating is supplied in 20 Kgs packing. It can be applied by paint brush, roller or paint pad. It can also be applied by spray equipment but the filters must be removed.

For best results, minimum two coats of Thermashield coating should be applied. Thermashield coating gives a very mild textured feel and produces a flat finish.

## Save money - and the environment!

Thermashield coating is a high tech, innovative, environmentally friendly latex coating containing ceramic insulation material which is manufactured using the latest technology.

When used on the Roof, External walls and Inside of external walls, Thermashield coating can reduce energy costs by up to 37%.

Thermashield coating is specially formulated for use on buildings which are subject to sustained solar heat.

If painted on interior walls, it helps to retain heat within the building when outside night temperatures fall.

It is applied by conventional methods and designed for use on:

- Domestic, commercial, and industrial buildings (Precast, masonry, metal sheets)
- Oil storage tanks and shipping containers
- Caravans and mobile homes
- Steel and GRP hulls on boats & yachts
- Bituminous sheeting and membranes
- Sprayed PU foam

## Recommended System:

### For Concrete Roof surfaces:

- 1st coat: Uniprime-P @ 50 Sq. ft. / ltr.
- 2nd coat: Thermashield-R @ 0.25 kg. / Sq. mtr.
- 3rd coat: Thermashield-R @ 0.25 kg. / Sq. mtr.
- 4th coat: Thermashield-R @ 0.25 kg. / Sq. mtr.

### For External & Internal wall surface areas:

- 1st coat: Thermashield @ 0.25 kg. / Sq. mtr.
- 2nd coat: Thermashield @ 0.25 kg. / Sq. mtr.
- 3rd coat: Thermashield @ 0.25 kg. / Sq. mtr.

**For Steel and other surfaces:** Please contact Patsa technical services at (+9221)32201072

## Specifications

Coating type	Elastomeric
Thermal Transmission	0.017 W/m/K
Solar Reflectance	Reflects > 85%
Toxicity	None
Fungus Resistance	No growth or discoloration
Impact Resistance	Good
Volatile Organic Compound	Not Exceeding 250gms / ltr
Abrasion Resistance	Very Good
Number of coats	2 or 3
Solids by volume	61% ± 2%
Warranty	10 years
Accelerated Weathering	Discoloration - None / Chalking – None
Vehicle Type	100% Acrylic Latex
Pigment Type	Titanium Dioxide, Calcium Carbonate
Touch Dry	@ 77 °F - 2 Hours
Recoating time	@ 77 °F: 12 Hours
Curing Mechanism	Evaporation, Coalescence
Viscosity	115± 5 KU
Flash Point (Seta)	None
60° Specular Floss	Low-Lustre
Surface Temperature Limits at Application	Min 50°F (10°C) / Max 110° F (44°C)
Clean-up Medium (uncured material)	Clean Water
Weight Per Gallon	11.5lbs (5.2kg)
Storage Temperature Limits	Min 40°F (5°C) / Max 105° F (40°C)

## Thermilate additive has been tested by leading facilities such as:

- **Geoscience Ltd**
- **Italabs, India**
- **CIEMS, California**
- **Salford University, United Kingdom**
- **Al Hoty & Stanger, Saudi Arabia**
- **Center for Scientific Research, Bulgaria**
- **Steinbock, Ukraine**
- **Union Test Laboratory, United Kingdom**
- **Taylor Woodrow, UK**



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