



**B&B Specialities (INDIA) Private Limited.**

*“The Specialty Chemical Company”*

# HI-HEAT COAT

(Elastomeric Latex acrylic polymer based solar reflective and insulating coating)

## Uses

**HI-HEAT COAT** is designed for use as a thermal insulation coating on roof slabs and walls of buildings. It can also be used on the interior walls and the roof of freezer rooms and cold storage facilities.

Application Areas include:

- Concrete or metal roofs
- Asbestos sheet and other metal surfaces
- External and internal walls
- Cold storage facilities
- Steam pipes and fittings
- Wood, tiles, PU foams and asphalt shingles.

## Advantages

- Minimum surface preparation needed
- Single component - Brush or roller applied directly on the substrate
- Light weight yet effective
- Excellent adhesion to most building substrates
- Excellent flexibility at both high and low temperatures
- Non conductive property saves air conditioning energy cost
- Has resistance to water penetration
- Flexible - high elongation characteristics
- Good resistance to atmospheric pollution
- Durable - High UV resistance
- Breathable - allows water vapour to escape

## Description

**HI-HEAT COAT** is a water-based white coloured emulsion comprising of acrylic polymers and specially designed hollow "microspheres", less than 100 microns in diameter with non conductive properties.

These microspheres collectively acts as thermal insulation blanket covering the structure effectively reflecting solar radiation back into the atmosphere. This results in impressive temperature reduction behind the substrate by a min. of 10°C.

This system also has certain waterproofing properties and is able to bridge hairline cracks caused by thermal movements.

## Technical support

The company provides a technical advisory service supported by a team of specialists in the field.

## Properties

Appearance and colour	White coloured, pasty consistency
Surface drying time	15 min - 20 min at 31°C
Adhesive Bond strength/Pull out	
Over coating time	2 - 3 hours
Shore A Hardness	45 - 55
Tensile strength at break	1.75 - 3.00Mpa
ASTM D 412	
Elongation at break	4
00%ASTM D 412	
Service temperature	-30°C 60°C
Thermal conductivity	
HI-HEAT COAT	0.17 W/ m °C
Normal Concrete	2.23 W/m °C
Steel	18.60 W/m °C
Note: High values indicate higher rate of transmission of heat	

## Application instructions

### Preparation

All the surfaces which are to receive HI-HEAT COAT coating, must be free from oil, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Spalled and deeply disintegrated concrete should be removed to sound concrete and repaired with Renderoc system.

Metal surface must be thoroughly abraded to ensure proper mechanical key.

### Priming

Priming is not required on metallic and non porous surfaces. On highly porous cementitious surfaces, apply a polymer modified slurry coat using a clean roller/brush and allow the surface to dry for atleast 2-3 hours.

# HI-HEAT COAT

(Elastomeric Latex acrylic polymer based solar reflective and insulating coating)



## Application

Once the sealer coat has dried, the HI-HEAT COAT system shall be applied using a brush/roller or by a suitable spray equipment. Allow the surface to dry for atleast 2-3 hours before applying the second coat.

## Cleaning

HI-HEAT COAT coating should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

## Estimating

### Packaging

HI-HEAT COAT system is supplied in 4 L and 20 L packs.

### Coverage

This depends on the roughness & porosity of the substrate. The approximate coverage on Concrete : 2.5- 3.0 m<sup>2</sup>/2coats/Litre @ 300 microns dft after dilution.

Steel : 0.3-3.5 m<sup>2</sup>/2coats/Litre @ 300 microns dft after dilution.

Though diluted, for workability purpose, extra yield in material per pack shall not be used for extended coverage.

A minimum of 2 coats are recommended for effective performance. Allowances should be made for any possible wastages when estimating.

## Storage

### Shelf life

HI-HEAT COAT system has a shelf life of 6 months in unopened packs, if kept in a cool dry store.

## Precautions

### Health and Safety instructions

HI-HEAT COAT system is non-toxic but alkaline in nature. Gloves and goggles should be worn while handling. Any splashes on the skin or eyes should be washed off with clean water. In the event of prolonged irritation, medical advice should be sought. HI-HEAT COAT system is non- flammable.

**This Product is Formulated and Labeled and Commercial use only**  
For Best Results and Safest Usage, User is Specialty Directed to Consult.

Product Warranty: All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct, HIBOND warrants its products to be free of mfg. Defects and that, at the time and place of shipment, our material will meet current published physical properties when applied within HIBOND'S directions and tested in HIBOND'S standards. HIBOND'S facility is limited to replacement of material found to be defective. As HIBOND has no control over the use to which others may put its products. It is recommended that the product be tested to determine if suitable for a specific application and / or our information is valid in particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, applications and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patent