

# **Techno Brushlastic TIC**

Elastomeric Acrylic Polymer based Solar Reflective & Insulating Coating

# **Product Description**

Techno Brushlastic TIC 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  $\,^{\circ}$ C.

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

### Uses

Techno Brushlastic TIC 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.

# **Areas of Application 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

Properties	
Appearance and colour	White coloured, pasty consistency
Surface drying time	15 min - 20 min at 30 <sup>0</sup> C
Over coating time	2 - 3 hours
Shore A Hardness	45 - 55
Tensile strength at break ASTM D 412	1 - 1.5 N/mm <sup>2</sup>
Elongation at break ASTM D 412	100%
Q-UV accelerated weathering (3000 Hrs)	No evidence of cracking, deterioration & loss of flexibility
Service temperature	$30^{0}$ C to +90 $^{0}$ C
Thermal conductivity	
Techno Brushlastic TIC	0.1 W/m <sup>0</sup> C
Normal Concrete	1.28 W/m <sup>0</sup> C
Steel	16.0 W/m <sup>0</sup> C

Note: High values indicate higher rate of transmission of heat

# **Application Instructions**

### Preparation

All the surfaces which are to receive Techno Brushlastic TIC 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 Technokem Repair products. Metal surface must be thoroughly abraded to ensure proper mechanical key.

#### Mixing

Add 10% clean water (i.e. 2 litres of clean water to the 20 litre container) and mix thoroughly using a slow speed drill fitted with a paddle.

### **Priming**

Techno Brush Seal ensures proper adhesion of all brushbable elastomeric memberane when waterproofing is done on porous substrates. It also acts as a bond layer between elastomeric coating and substrate. The surfaces to be primed must be dried before treating with Techno Brushlastic TIC.

#### **Application**

Once the sealer coat has dried, the Techno Brushlastic TIC 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

Techno Brushlastic TIC coating should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

### Coverage

This depends on the roughness & porosity of the substrate. The approximate coverage 4.5 -  $6~m^2/ltr/coat$  after dilution on Steel or Concrete surfaces.

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.

### **Estimating**

#### **Packing**

Techno Brushlastic TIC system is supplied in 4 and 20ltrs packs.

### **Health & Safety**

Techno Brushlastic TIC 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.

# **Precautions & Limitations**

Techno Brushlastic TIC system has a limited resistance to water permeability. To provide effective protection to the building, when used on concrete surfaces, this system should be used in conjunction with TechnoCrete range of Waterproofing Systems.

### **Fire**

Techno Brushlastic TIC system is non-flammable

### **Shelf Life**

Techno Brushlastic TIC system has a shelf life of 6 months in unopened packs, if kept in a cool dry storage

Important: Technokem products are guaranteed against defective materials and are sold subject to its standard terms and conditions of sale. It is the Customer's responsibility to satisfy themselves by checking with the Company whether the information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current Technical Literatures. However, Technokem does not warranty or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendation relating to application and end use are given in good faith.

For Complaints/Suggestions:
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