

Elastomeric acrylic polymer based solar reflective and insulating coating

Uses

Brushbond TI Flexicoat 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

Brushbond TI Flexicoat 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 27°C
Adhesive Bond strength/Pull out	
Over coating time	2 - 3 hours
Shore A Hardness	45 - 55
Tensile strength at break ASTM D 412	1 - 1.5 N/mm ²
Elongation at break ASTM D 412	100%
Q-UV accelerated weathering (3000 Hrs)	No evidence of cracking, deterioration & loss of flexibility
Service temperature	-30°C to +90°C
Thermal conductivity	
Brushbond TI Flexicoat	0.1 W/ m °C
Normal Concrete	1.28 W/m °C
Steel	16.0 W/m °C
Note: High values indicate higher rate of transmission of heat	

Application instructions

Preparation

All the surfaces which are to receive Brushbond TI Flexicoat 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.

Mixing

Add 20% clean water (i.e. 4 litres of clean water to the 20 litre container) and mix thoroughly using a slow speed drill fitted with a paddle.

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.

Brushbond TI Flexicoat

Application

Once the sealer coat has dried, the Brushbond TI Flexicoat 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

Brushbond TI Flexicoat coating should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

Estimating

Packaging

Brushbond TI Flexicoat 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 m²/2coats/ Litre @ 300 microns dft after dilution.

Steel : 0.3-3.5 m²/2coats/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

Brushbond TI Flexicoat system has a shelf life of 6 months in unopened packs, if kept in a cool dry store.

Limitations

Brushbond TI Flexicoat 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 Fosroc's Brushbond/Nitoproof/Proofex range of waterproofing systems. Fosroc shall be consulted before recommending or using this system.

Precautions

Health and Safety instructions

Brushbond TI Flexicoat 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. Brushbond TI Flexicoat system is non- flammable.

Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



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