

## Polymer based solar reflective and insulating coating

### Uses

Brushbond Coolcoat 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.

Brushbond Coolcoat can be applied on the following substrates:.

### Advantages

- Concrete
- Asbestos Sheet
- weatherproof and roofing materials

### Application area

- External and internal walls
- Cold storage facilities
- Roof slabs

### Technical Support

- Minimum surface preparation needed
- Single component - Brush or roller applied directly on the substrate
- Light weight yet effective
- Excellent adhesion to most building substrates
- Low thermal conductivity reduces energy consumption
- Durable - High UV resistance

### Description

Brushbond Coolcoat is a water-based white coloured emulsion comprising of 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.

### 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           |
| Over coating time     | 2 - 3 hours                       |
| Service temperature   | -30°C to ±90°C                    |

### Thermal conductivity

|                    |             |
|--------------------|-------------|
| Brushbond Coolcoat | 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 Coolcoat 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 800ml clean water per pack of 4 L of Brushbond Coolcoat 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 slurry coat made with 1:1:3 (Nitobond SBR:Water:Cement) using a clean roller/brush and allow the surface to dry for atleast 2-3 hours.

#### Application

Once the sealer coat has dried, the Brushbond Coolcoat 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 Coolcoat coating should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

# Brushbond® Coolcoat

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## Estimating

### Packaging

Brushbond Coolcoat system is supplied in 4 L & 20 L packs.

### Coverage

This depends on the roughness & porosity of the substrate. The approximate coverage 2.5 - 3m<sup>2</sup>/2 coats/litre after dilution on 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.

## Storage

### Shelf life

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

## Limitations

Brushbond Coolcoat 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 Coolcoat 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 Coolcoat 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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