



# **Acrylic Polymer for concrete & masonry**

## Uses

Brushcrete polymer in conjunction with cement provides a seamless waterproof coating to concrete and masonry surfaces. It can be used as a waterproof or protective coating.

### **Advantages**

- Can be applied in uniform thickness to horizontal and vertical surfaces.
- Develops excellent bond to most building materials.
- Improves mechanical & physical properties of the coating system when used in conjunction with cement.
- Reduces or prevents salt penetration into concrete.
- Resistance to ultraviolet light or by chemicals ranging from mild acids to strong alkalies.
- Is highly impermeable in continuous wet condition.
- Is non-flammable and does not give off toxic gases, when exposed to fire.
- Non toxic

## Description

Brushcrete is a single component acrylic based polymer when blended with cement forms a composite polymer modified cementitious waterproofing system, when used in conjunction with fibre mesh forms a tough hard wearing surface.

## **Technical Support**

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

### **Properties**

| Pot life                    | : | 20-30 min. at 30ºC   |
|-----------------------------|---|----------------------|
| Mixed Density of            | : | 2.1-2.2 g/cc.        |
| brushcrete topping          |   |                      |
| Colour                      | : | White liquid         |
| Application temperature     | : | > 10°C <35°C         |
| Bond strength with concrete | : | > 1N/mm <sup>2</sup> |

## **Areas of Application :**

- Waterproofing of toilets, terraces, water retaining structures.
- General cementitious render

# **Application Instructions**

### **Surface Preparation**

Prior to application of Brushcrete, surface must be prepared as mentioned below to avoid failure :

The surface shall be cleaned to remove all dust, foreign matters, loose materials or any deposits of contmination which could affect the bond between the surface and the coatingThis can be done by scarifying, grinding, water blasting, sand blasting, acid washing or by any other approved method.

New flat surface like sub-base concrete shall be made reasonably smooth so as not to impede the application of Brushcrete coating and to avoid sharp projections.

All concrete surfaces shall be thoroughly pre-wetted for at least one hour prior to the application of Brushcrete coating by pouring water on flat surface or by vigorously spraying water on vertical/inclined surfaces. Ensure that surface is only damp during application of Brushcrete coating.. In no case there should be standing water or a shiny wet surface.

Depressions are filled and leveled using Brushcrete. For filling, the mixing ratio is 1 kg cement:1.5 by silica sand and 0.5 kg Brushcrete.

## Mixing

Brushcrete Polymer is mixed with neat cement in the ratio of 100 kg cement:50 kg of Brushcrete. The mix has to be stirred thoroughly until no air bubbles remain in the mix. Any lump found in the mix should be removed.

### Application

The mix has to be applied by brush on rendered sound prepared surface. Two or more coats are recommended. First coat should be allowed to dry for 5-6 hours. The surface should be made wet before application in case of porous substrates.

equipment immediately after use with clean water. Hardened material can be removed mechanically.

### Curing

During the first 12 hours of curing, it must be protected from abrasion, rain and other adverse conditions. No traffic shall be allowed on a Brushcrete treated surface within 48 hours after application. After application of final coat of Brushcrete, initial air drying shall be done for 2-6 hours. During this period no water is to be used for curing. In case of high temperature and low humidity combined with high wind condition, the coating shall be covered with polythene sheet to avoid rapid drying of the coating. After maximum period of 6 hours of the final application moist curing shall be done for the next 24 hours

# **Brushcrete**

by way of spraying water on Brushcrete coating. During this period at no point of time should the Brushcrete coating be left completely dry or submerged in water. Following moist curing, the Brushcrete coating shall be allowed to air dry for 3 days before submersion in water if required for use

## Cleaning

Brushcrete should be removed from tools and equipment immediately after use with clean water. Hardened material can be removed mechanically.

### **Estimating**

## Packaging

Brushcrete is supplied as a package of 5L, 10L, 20L & 50L container.

### Yield/Coverage

### **Brushcrete Coating/Slurry**

Mix Proportion : 100 kg cement : 50 kg Brushcrete

| Material   | 1 coat on concrete | 2 coats on concrete |
|------------|--------------------|---------------------|
|            | Kg/m <sup>2</sup>  | Kg/m <sup>2</sup>   |
| Cement     | 0.50               | 0.75                |
| Brushcrete | 0.25               | 0.38                |

## **Brushcrete Topping**

Mix Proportion : 100 kg cement : 50 kg Brushcrete

| Material           | Quantities of Material<br>in Kg for |                              |  |
|--------------------|-------------------------------------|------------------------------|--|
|                    | One cubic meter                     | 1sq.m for 1.5mm<br>thickness |  |
| Cement             | 860                                 | 1.30                         |  |
| Brushcrete polymer | 440                                 | 0.70                         |  |
| Fine Silica Sand   | 860                                 | 1.30                         |  |
| Total Weight in kg | 2160                                | 3.30                         |  |

### Storage

Brushcrete has a shelf life of 12 months if unopened containers stored in cool dry place.

### Precautions

### **Health and Safety instructions**

Brushbond is non-toxic. Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, medical advice should be sought. Should use a dust mask while handing the powder.

#### Important note :

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