#### constructive solutions

High performance elastomeric cementitious waterproof coating

#### Uses

Brushbond RFX is an high performance elastomeric cementitious coating used for waterproofing and to protect atmospherically exposed reinforced concrete structures from attack by acid gases, chloride ions, oxygen & water. Brushbond RFX is suitable for all types of structures including those in coastal environments.

The product can be used on concrete, brick and blockwork substrates and is equally suitable for new and existing structures. The product is designed to reface and even out variations in concrete and masonry surfaces and bridge shrinkage cracks. It provides a seamless, flexible waterproof coating suitable for water tanks, reservoirs, drainage culverts basements, roofs, toilets & wet areas. The product provides a tough durable water resistant coating which can withstand light pedestrian traffic and also has excellent weather resistance for exterior applications.

#### Advantages

- Excellent barrier to carbon dioxide, chloride and sulphate ions.
- Allows water vapour to escape from the structure.
- Waterproof-suitable for water retaining structures.
- High resistance to the effect of long-term weathering, durable in all climate conditions including UV attack.
- Non toxic ideal for potable water tanks.
- Flexible, with thermal expansion similar to concrete.
- Excellent bond to concrete and masonry.
- Good crack accommodation capacity.
- Minimum surface preparation needed and low labour costs.

# Standards compliance

Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836.

# Description

Brushbond RFX is a two component acrylic polymer modified cementitious coating which consists of Brushbond RFX powder and Brushbond RFX liquid acrylic emulsion. It requires only the addition of clean water at site to produce an easily brushable coating. Brushbond RFX can simply be applied by stiff brush, roller or trowel to obtain the desired thickness.

#### **Technical Support**

Fosroc offers technical support service to specifiers, endusers and contractors, as well as on-site technical assistance in locations all over the country.

# **Properties**

Pot life : 30 min @ 27°C

Mixed density : 1.68g/cc (brushable

consistency)

Colour : Grey

Application temp. : Not less than 10°C

Adhesion to concrete : >1N/mm²

Toxicity : Non-toxic

Static crack accommodation : 1mm

# **Application Instructions**

#### **Surface Preparation**

All surfaces which are to receive the coating must be free from oil, laitance, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Typically concrete surfaces can be cleaned using high pressure water jet or grit blasting or by proper wire brushing Spalled surfaces or those containing large blow holes, cracks and other such defects should be repaired using Renderoc concrete repair mortars. For further advice on suitable repair mortars, contact the local Fosroc Office.

#### Mixing

Brushbond RFX liquid concentrate should be poured into a plastic container or metal drum. Clean fresh water is added in the proportions shown below and mixing commenced with a propeller agitator attached to a slow speed drill (500pm). The powder component should be added gradually to the liquid to avoid lump formation and mixed for 2-4 minutes. Brushbond RFX should be immediately used after mixing. Do not mix more material than can be used within the pot life. Keep stirring Brushbond RFX during the application

# Mixing ratio

Brushbond RFX Components	Brush Application Indl Pack	Small
Brushbond RFX powder	15kg	5kg
Brushbond RFX liquid	5.088kg	1.71kg
Water	3L	1L

#### Application

For best results, surfaces should be damp. In order to obtain the protective properties of Brushbond RFX, it is important that the correct rates of application are observed. Use a short stiff brush preferably 120-150mm width and apply the mixed material like paint.

The application of Brushbond RFX should not be done if the temperature of the substrate is below 10°C. When applying Brushbond RFX on hot substrates i.e., over 30°C surface temperature, saturate the surface with water. Apply Brushbond RFX in 2 coats to achieve 1mm thickness. The second coat of Brushbond RFX shall be applied as soon as the first coat has reached touch dry state. It is recommended that for general surfacing Brushbond RFX should be applied at a minimum thickness of 1mm. Areas subjected to moderate and heavy

# **Brushbond RFX**

loads/hydrostatic pressure, minimum 2mm thickness coating is recommended with screed above. Water curing OR Curing membrane shall not be applied over Brushbond RFX coating, only air curing is recommended

# Mechanical Key (Vertical & Horizontal application)

Sprinkle sieved coarse sand on wet surface of final coating for better adhesion of plaster or screed. Allow the coating to dry for a minimum period of 7 days before covering with plaster on the vertical surface & 3 days before covering with screed/plaster on the horizontal surface. Maximum thickness of cement plaster recommended is 12 to18mm & height of 1mt in a single day to avoid de-bonding of plaster from Brushbond RFX coating. Any deviation from the above recommendation please contact Local Fosroc office for advice.

#### Cleaning

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

# Estimating

#### Packing

Powder component : 15kg & 5kg packs

Liquid polymer component : 5.088kg & 1.71kg containers

# Coverage

This depends on the required consistency. The approximate coverage per pack at even consistency (1mm thickness) is as follows

#### Consistency

#### **Brush application**

Coverage (15kg + 5.088kg pack) Coverage (5kg + 1.71kg pack) 12 - 14m<sup>2</sup> 4 - 4.5m<sup>2</sup>

# Storage

Shelf life

12 months in unopened packs if kept in a dry store.

#### Precautions

Health and Safety instruction

Brushbond RFX is non-toxic but alkaline in nature. 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, seek medical advice. Use a dust mask while handling the powder.

#### Fire

Brushbond RFX components are non inflammable.

#### Additional Information

The Fosroc range of associated products includes high strength cementitious, epoxy grout, polyester resin based mortar for rapid presetting of steel shims to level or for direct bedding of small base plates; Resin Anchoring systems for same day anchoring of bolts in drilled holes in concrete or rock. Also available a range of products for use in construction; viz., admixtures, curing compounds, release agents, flooring systems and repair mortars.

Separate datasheets are available on these products.



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# Important note: Fosroc products are

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