



# Brushbond FLX



## Two component, polymer modified elastomeric waterproofing membrane system for concrete and masonry surfaces

### Uses

Brushbond FLX is a seamless, durable elastomeric waterproofing membrane for terraces, wet areas, water tanks and pools.

It can also be applied on concrete surfaces that need to be protected against seawater and de-icing salts.

### Advantages

- Easy to apply
- Elastomeric - able to bridge cracks
- Excellent elongation (200%)
- Prevents carbonation in concrete
- Able to take foot traffic when cured
- Compatible with ceramic, mosaic and natural stone coatings
- Can also be applied over existing coatings
- Low VOC content
- Highly resistant against chloride ions
- Prevents concrete against de-icing salts like calcium and sodium chloride, seawater and carbon dioxide gas.
- Suitable for permanent water exposure
- UV resistant

### Description

Brushbond FLX is a two component polymer modified ultra flexible waterproof membrane which is supplied in readymix kits. When mixed, an easily brushable coating is produced. It can simply be applied by a stiff brush, roller, or trowel to obtain the desired thickness.

Brushbond FLX consists of specially selected cements, graded hard wearing aggregates and additives supplied in powder form together with a liquid component of polymers providing exceptional adhesion, resiliency, flexibility, toughness and durability.

### Properties

Typical properties	
Pot life at 25°C	120 mins
Density	1,55 gr/cm <sup>3</sup>
Application Temperature	+5°C - +35°C
Service Temperature	-20°C - +80°C
Adhesion to concrete	
EN 1542	>1 N/mm <sup>2</sup>
Shore A Hardness	
EN ISO 868	≈ 60

### Elongation at Break (%)

ASTM D412	>200
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### Water vapour transmission

EN ISO 7783-1/2	S <sub>D</sub> < 5 m Class I
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### Waterproofing Capacity

at 3 mm thickness	≥7 bar (positive)
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### Crack bridging, EN 14891

Crack bridging ability under standard conditions	> 3,25 mm
Crack bridging ability at low temperature (-5°C)	> 1.75 mm
Crack bridging ability at very low temperature (-20°C)	> 1.25 mm

### Instruction for use

#### Preparation

All surfaces which are to receive Brushbond FLX coating, must be free from oil, grease, wax, dirt or any other form of foreign matter which might effect adhesion. Spalled and deeply disintegrated concrete should be removed to sound concrete and repaired with Renderoc System.

If the application surface is very absorbent, the surface should be slightly moistened with water before application.

#### Mixing

The Brushbond FLX component B is poured from the plastic container into the metal drum supplied and mixed mechanically with a slow speed drill (350-450 rpm) fitted with a Fosroc Mixing Paddle (MR3). Add the component A gradually to the liquid avoiding lump formation and mix for 4-5 minutes until a smooth consistent mix is achieved. Use the material within the recommended pot life.

#### Application

Before the application, the surface must be cleared of water puddles. A short, stiff bristle brush, preferably 120-200 mm wide, can be used. It should be applied in layers until a total consumption of 3.0 – 3.5 kg/m<sup>2</sup> is reached. Consumption for 1 mm thickness should be 1.6 kg/m<sup>2</sup>. Since the mixture consistency is very fluid, the consumption per coat will be reduced in vertical and overhead applications, and 3 or more coats will be required.

For trowel application, ensure that the substrate is levelled and repaired of any undulations or pin holes.

# Brushbond FLX

Nitoband Joint Tape should be used in corner turns to reduce the load on the system.

Brushbond FLX is a material with ultra flexible properties. Using a carrier core to increase the tensile strength of the insulation system will decrease the flexibility values of the material. However, if necessary, Fosroc Technical service should be contacted for the appropriate seal type.

Application properties	
Number of coats	2 or 3 coat
Time to wait between coats	Min. 5 hours
Pot life	Max. 3 hours
Full drying time	Min. 48 hours
Time required to apply ceramic on it	Min. 3 hours
Mechanical strength gain time	Min. 7 days
Water impermeability	Min. 7 days
Time to wait for the water tanks to be filled with water	Min. 7 days
Full cure time	28 days

**Note:** The above values are determined for 23°C. Higher temperatures will reduce the time, while lower temperatures will increase the time.

## Cleaning

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

## Limitations

- Brushbond FLX should not be applied if the air or substrate temperature is greater than 35°C. This may result in different color shades.
- If it will be used in swimming pools, it must be covered.
- Nitoband Joint Tape application is recommended for rigid and movement cracks and joints on the application surface.
- On porous surfaces, Brushbond FLX should be applied after Renderoc FC.
- It should be protected from water contact and rain in the first 24 hours after the application.
- If it will be used in direct UV contact, it should be ensured that the movements of the applied surface under thermal variables are within the limits that can be tolerated by the material.

## Note

If necessary, Brushbond FLX can be applied on cement-based repair and installation mortars, cement-based grout systems and cement and cement acrylic-based semi-flexible, fully flexible insulation products. For details, contact Fosroc Technical Service.

The definitions made ultra elastic, full elastic, semi elastic for our cement and acrylic based two component waterproofing materials based on the crack bridging standard EN 1063-7 under EN 1504-2. These definitions are particular for Fosroc to define the performance differences of our cement and acrylic based waterproofing materials

Definition	Class	Crack Bridging Ability (µm)
Ultra Elastic	A5	>2500
Full Elastic	A3, A4	500 - 2500
Semi Elastic	A1, A2	<500

## Estimating

Brushbond FLX	30 kg pack
Component A (Powder)	20 kg bag
Component B (Liquid)	10 kg jerry can
Coverage	
Brushbond FLX	
at 1 mm thickness	1,6 kg/m <sup>2</sup>
Total	3,0 – 3,5 kg/m <sup>2</sup>

## Storage

Brushbond FLX has a shelf life of 12 months in unopened pack, kept in a dry store, between 35°C and 10°C. The component A and B must not be allowed to freeze.

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## Precautions

### Health and safety

Brushbond FLX is alkaline and contains chemicals which may cause irritation to the eyes, respiratory system and skin. Brushbond TGP should not be swallowed or allowed to come into contact with skin and eyes. Wear suitable protective gloves and goggles. In case of contact with the skin, wash immediately with soap and water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting. For further information consult the Safety Data Sheet available for this product.

### Fire

Brushbond FLX is non-flammable.

## Additional Information

Fosroc manufactures a wide range of complementary products which include :

- waterproofing membranes & waterstops
- joint sealants & filler boards
- cementitious & epoxy grouts
- specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete. Fosroc's 'Systematic Approach' to concrete repair features the following :

- hand-placed repair mortars
- spray grade repair mortars
- fluid micro-concretes
- chemically resistant epoxy mortars
- anti-carbonation/anti-chloride protective coatings
- chemical and abrasion resistant coatings

For further information on any of the above, please consult your local Fosroc office

*\* Denotes the trademark of Fosroc International Limited*

*† See separate data sheet*



### Important Note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All Fosroc datasheets are updated on a regular basis. It is the user's responsibility to obtain the latest version.

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