Brushbond

FOSROC constructive solutions

Acrylic polymer modified cementltlous waterproofing coating for concrete and masonry surfaces

Uses

Brushbond is designed to re-face and even out variations in concrete and masonry surfaces. It effectively protects against concrete decay by providing a long tasting banner to water borne corrosive salts and atmospheric gases.

It provides a seamless flexible waterproof coating suitable for use in water tanks, reservoirs, fountains toilets and bathrooms, scaling tie bar holes.

Advantages

- Minimum surface preparation needed applied directly to the concrete and masonry
- Excellent adhesion to porous and non-porous surfaces
- Non-toxic - ideal for potable water tanks
- Excellent for damp-proofing basements below grade
- Waterproof - suitable for water retaining surfaces
- Breathable - allows transmission of water vapour from interior of building
- Flexible
- High resistance to carbon dioxide and chloride ion diffusion
- Covers honeycomb and pitted concrete

Standards compliance

Confirms to US Federal Regulations requiring water extractables of less than 0.8 mg per cm^2 of exposed surface for potable water containers.

Description

Brushbond is a two component acrylic polymer modified cementitious coating which is supplied in easy to use kits. By varying the mix proportions, Brushbond can be applied simply by a stiff brush, roller, spray or trowel to obtain the desired texture.

Brushbond consists of specially selected cements, graded hard wearing aggregates and additives supplied in powder form together with a liquid component of blended acrylic copolymers and wetting agents. The acrylic polymer provides Brushbond with exceptional adhesion, resiliency, flexibility, toughness and durability.

Brushbond provides a protective waterproof coating which has an outstanding wear and weather resistance. It has good chemical resistance to mild inorganic acids, diesel ott, gasoline, chlorides, de-icing salts, effluents and organic solvents.

In normal use it win resist water pressure up to 7 metre heat. The degree of resistance of Brushbond to water under pressure depends on the coating thickness.

Technical support

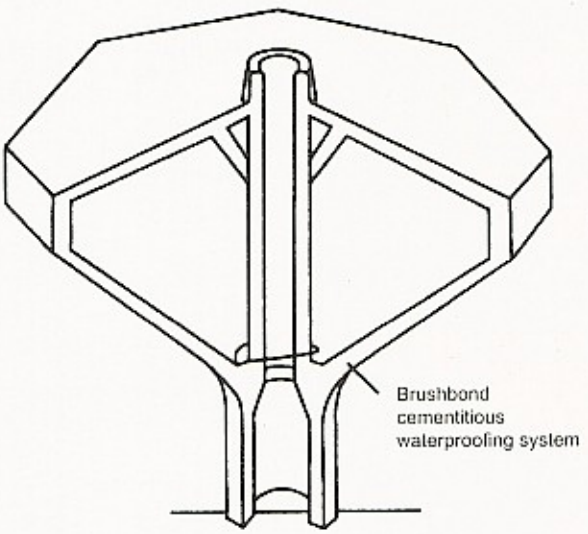
Fosroc offers a comprehensive range of high performance, high quality products for the construction industry. Fosroc offers a technical support package to specifiers and contractors which Includes computer-aided design detailing and technical advice from staff with unrivalled experience.

Application Instructions

Protection

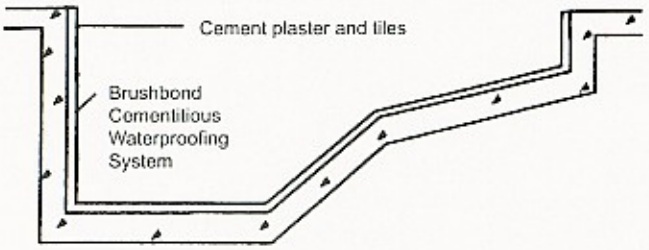
The waterproof coating should be protected from rain, dirt, oil, grease or other loose materials during its drying time.

The main contractor should take precautions to protect the waterproof coating from any mechanical damage during the construction of nearby works.

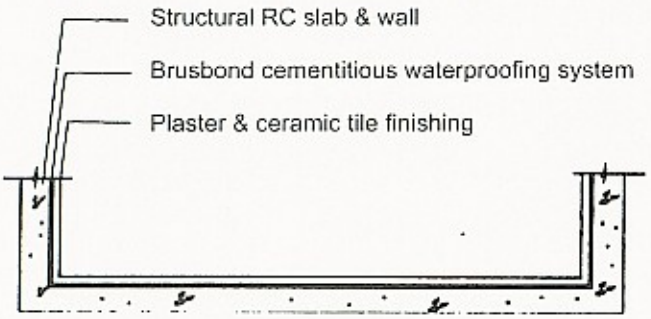


Brushbond Waterproofing system to elevated RC Reservoir

Brushbond



Brushbond Waterproofing system to swimming pool



Cross section of flower box

Properties

Typical properties	
Pot life: at 30°C	80 min
Mixed density:	1.65 kg/ltr (brushable consistency)
Colour:	Grey and white

Typical cured properties

The following figures are for a mix adjusted with water to give the same workability as described in ASTM Flow Test C-230 Samples were cured in air for 28 days.

Properties	Test method	Brushbond Coating
Tensile strength N/mm²:	ASTMC-190	5.0
Compressive strength N/mm²:	ASTM C-190	39.0
Fexural strength N/mm²:	ASTM C-348	11.0
Bond strength N/mm²:	ASTM C-321	3.5
Shear bond strength N/mm²:	ASTM C-109	5.5
Abrasion resistance % weight loss:	ASTM 0241	1.1
Impact strength Inch pound:		16.0
Water vapour transmission rate 1/4" thick perms:	ASTME-96	3.7
Water absorption %:	ASTMC-140	2.0
Freeze/thaw resistance cycles passed:	ASTM C-291	60.0

Specification clauses

Performance specification

All surface waterproofing (specify details and areas of application) must be carried out using a pre-packaged two component cement based products, which contains polymer modifiers.

The coating must be breathable and have a water absorption not greater than 2%. Its flexura) strength must exceed 10 N/mm² and its bond strength must exceed 3 N/mm².

The storage, handling and application of the product must be in strict accordance with the manufacturer's instructions.

Supplier specification

All surface waterproofing (specify details and areas of application) must be carried out using Brushbond manufactured by Fosroc and used in accordance with the manufacturer's data sheet.

Application Instructions

Preparation

All the surfaces which are to receive Brushbond 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.

Mixing

Add the powder component gradually to the liquid avoiding lump formation and mix for 2-4 munutes. Do not mix more material than can be used within pot life. Do not re-temper with water. Continue mixing during application.

Brushbond Components	Mixing Ration	
	Trowel	Brush
Powder	4	3.5
Liquid:	1	1

Brushbond

Application

For best results damp the surface before coating with Brushbond. Use a short, stiff bristle brush preferably 120 to 200 mm in width. Apply like a paint using one or two coats as required. Spray or trowel applications can be undertaken as necessary using the correct mixing ratio to obtain satisfactory consistency. Two coats is recommended for best results.

On hot substrates, over 40°C surface temperature, a primer coat of mixed Brushbond and water with slurry like consistency shouid be applied. Prime only areas that can be coated with Brushbond before the primer dries. Do not apply material at temperature below 5°C.

Overcoating

Brushbond provides an aesthetically pleasing surface finish whose texture is dependent on the method ol application, it does not normally require any further surface finishes. Brushbond is, however, compatible with most forms of subsequent coatings. Should you need more information consult Fosroc Technical Department.

Cleaning

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

Estimating

Packaging

Brushbond is supplied in an industrial kit of 22.5 kg pack which consists of:

Powder:	17.5kg
Liquid:	5.0kg

Consumption

Depending on the usage of the surface to be coated, the total consumption for 2 applications is as follows:

Usage	Consumption	Thickness
Protective coating:	1.5kg/m^2	0.9mm
Waterproofing for toilet or bathroom:	2kg/m^2	1.2mm
Waterproofing for swimming pool or reservoir	3kg/m^2	1.8mm

Storage

Brushbond has a shelf life of 12 months in unopened pack, kept in a dry store. In high humidity locations, the shelf life may be reduced to 6-8 months.

Precautions

Health & safety

Brushbond shall not be applied during rain or when rain is expected. Brushbond is non-toxic but it is 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.

Powder products should be handled to minimise dust formation, use a light mask if excessive dust is unavoidable.

Fire

Brushbond components are non-flammable.