Brushbond

constructive solutions

Acrylic polymer modified cementitious waterproofing coating for concrete and masonry surfaces

Uses

Fosroc Brushbond is a flexible cementitious waterproofing system formulated to waterproof, fill and seals pores and voids of all masonry and concrete as follow:

- Planter box
- Reservoirs and water tanks
- Fountains
- Toilets: bathrooms and kitchen
- Basement
- Retaining wall and tunnel
- Concrete gutter

Advantages

- Minimum surface preparation needed.
- Applied directly to the concrete and masonry.
- Excellent adhesion bonds to porous and non-porous surfaces.
- Breathable-allows transmission of water vapour from interior of building.
- Flexible, with thermal expansion similar to concrete.
- Excellent for pointing leaking brick and masonry walls.
- High resistance to carbon dioxide and chloride and ion diffusion
- Self curing -no fear of premature drying.

Description

Brushbond is a two component acrylic polymer modified cementitious coating. It consists of specially selected cements, graded hard wearing aggregates and additives supplied in powder foam together with a liquid component of blended acrylic copolymers and wetting agents.

The acrylic polymer provides Brushbond with exceptional adhesion, toughness and durability. When mixed, an easy brushable coating is produced. Brushbond can simply be applied by a stiff brush, roller, spray or trowel to obtain the desired texture.

Chemical resistance

Brushbond has outstanding wear and weather resistance and also has good chemical resistance to mild inorganic acid solutions, chlorides, de-icing salts, effluents, etc.
Brushbond provides a protective waterproof coating and has been shown to resist water pressure up to 7 metre head. The degree of resistance of Brushbond to water under pressure depends on the coating thickness and the nature of the substrate

Technical support

Fosroc offers a comprehensive range of high performance, high quality flooring, jointing and repair products for both new and existing floor surfaces. In addition, the company offers a technical support package to specifiers end users and contractors, as well as on site technical assistance in location all over the world.

Properties

Technical Data	Typical data @28days curing
Pot life	@ 20°C 60 min @ 35°C 20 min
Mixed Density	~1.85 ±0.5 kg/litre (brushable consistency)
Colours	Grey and White,
Application Temperature	Not less than 5°C
Toxicity	Non-toxic
Adhesion to Concrete	>1 N/mm^2

Typical Cured Properties

Compressive Strength (ASTM C109)	>10.5 N/mm^2
Flexural Strength (ASTM C348)	5.2 N/mm^2
Abrasion Resistance (ASTM C241)	1.1% weight loss
Water Vapour Transmission Rate 1/4" thk (ASTM E96)	3.7 perms
Water Absorption (ASTM C642)	<2.5% absorption

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 disintergrated concrete should be removed to sound concrete and repaired with a suitable concrete repair mortar such as Renderoc TG.

Brushbond

Mixing

Add the powder component gradually to the liquid avoiding lump formation and mix 2-4 minutes. Do not mix more material than can be used within pot life. Keep mixing from time to time during application. Brushbond is supplied in the correct powder to liquid ratio of 3.5 : 1 (17.5kg : 5kg). Do not re-temper with water.

Application

The concrete substrate must be pre-soaked with water to achieve a saturated surface dry condition (SSD) before applying Brushbond. The surface must still be damp while applying the coating. If necessary, the pre-wetting must be repeated prior the application. Use a short, stiff bristle brush preferably 120 to 200 mm in width. Apply like a paint 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 are recommended for best results. The second coating must be applied as soon as the first coat has set and is still tacky. At normal ambient temperatures of +25 to +35^{0}C, the waiting time should be between 3 to 6 hours max. At higher temperatures, the waiting time might be reduced. Please observe the detailed instruction of the Method Statement for this Product (available as separate document).

On hot substrates i.e .over 40^{0}C surface temperature, a primer coat of mixed Brushbond and water with a slurry like consistency should be applied. Prime only areas that can be coated with Brushbond before the primer dries.

Subsequent Finishes

Brushbond provides an aesthetically pleasing surface finish texture dependent on the methods of application and does not normally require any further surface finish. Brushbond is however, compatible with most forms of subsequent coatings.

Should you need more information consult Fosroc Technical Department.

Protection

The freshly applied waterproof coating shall be protected from rain, dirt, oil grease or other loose materials during its drying time. The contractor should also take precautions to protect the Brushbond of coating from any mechanical damage during the construction of his other works. Brushbond waterproofing system to floors should be protected from damage by applying a protective screed.

Cleaning

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

Limitations

Brushbond should not be applied during rain or when rain is expected. For vertical Application, Brushbond should be cured for at least 7-14 days, depends on ventilation condition of area of application, prior to laying of cement/ sand plastering or tilling or similar. The use of tile adhesive or bonding would be an added advantage to ensure optimum bonding between tilling/ plastering and Brushbond

Packaging

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

Powder	17.5 kg
Liquid	5.0 kg
Total kit	**22.5 kg**

Estimating

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

Usage	Consumption	Thickness
Protective Coating (one coat)	1.6 kg/m^2	0.9mm
General waterproofing (2coats)	2.2 kg/m^2	1.2mm
Swimming Pools (2-3 coats)	3.6 kg/m^2	2.0mm

Storage

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

Precautions

Health and safety

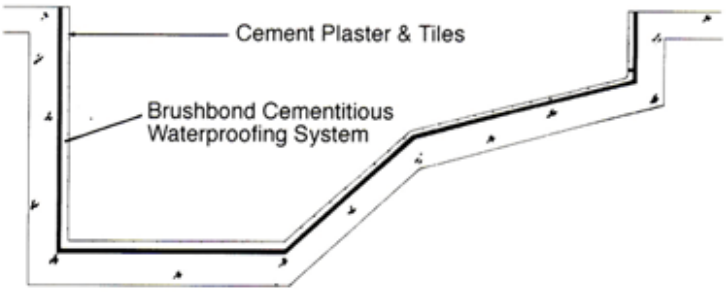
Brushbond is non-toxic but it is alkaline in nature. Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with plenty of clean water. In the event or prolonged irritation, seek medical advice. Powder products should be handled to minimise dust formation. Use a light mask if excessive dust is unavoidable.

Fire

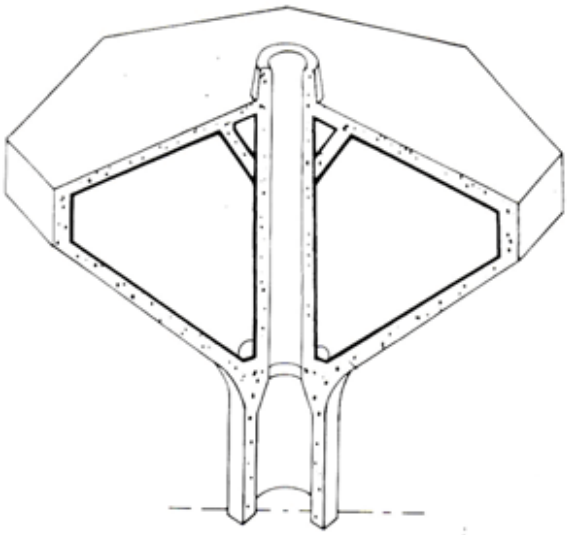
Brushbond components are non-flammable.

Brushbond

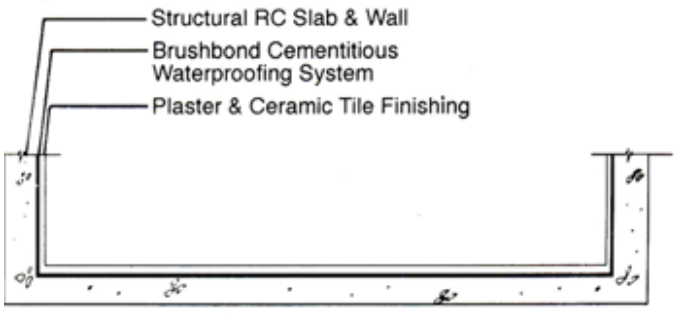
Brushbond Waterproofing System
To Swimming Pool



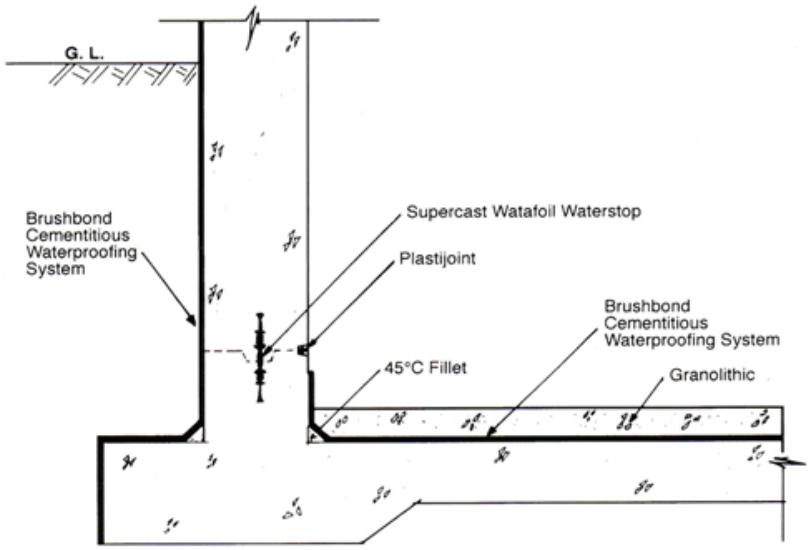
Brushbond Waterproofing System
To Elevated R.C Reservoir



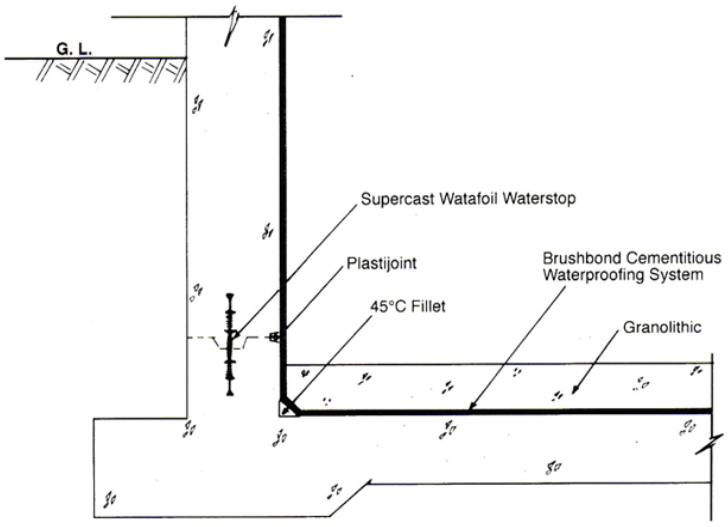
Cross Section Of Flower Box



Brushbond Waterproofing System To The Exterior Foundation/Basement



Brushbond Waterproofing System To The Interior Foundation/Basement



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