

Brushbond TGP CL

Water based, unpigmented, aqueoussilicates, penetrating aids and deformers waterproofing and hardening for old or new concrete surfaces

Use

Brushbond TGP CL is used for waterproofing and hardening new or aged concrete against either positive or negative hydrostatic water pressure. Brushbond TGP CL penetrates deeply into the gel and capillary pores of the concrete and “Crystallize” as part of the concrete. It is a concrete treatment and not a surfaces coating. It does not change the appearance of the concrete because it becomes part of the concrete and it will not discolour or separate.

Brushbond TGP CL works equally well on old or new concrete, above or below grade, and is intended for use on poured in place walls, preformed tilt-ups, bridges, road surfaces, pipes, basement walls, foundations, sidewalks, slabs on grade and for roof slabs.

Advantages

- Easily applied by spray, brush or roller to new or aged concrete.
- Effective waterproofing system in sealing, hardening, and dust-proofing concrete surfaces.
- Can be applied to damp concrete with no standing water.
- Brushbond TGP CL treatment is permanent and will raise surface PH.
- Non-toxic and US EPA –certified for use with potable water.
- Protect concrete surfaces from abrasion, freeze-thaw damage and chloride ion intrusion.
- Cost effective way of waterproofing system.
- Prevents efflorescence, which will improve the bonding of cementitious toppings, coating and paints.
- Offer excellent resistance to common aids, salts, alkalis, petroleum oils, solvents, alcohol including wine and beer, vegetable oils, animal and fish oils, fats and fatty aids and other common substances.
- Enhances the resistance of exposed concrete against UV Radiation.

Description

Brushbond TGP CL crystalline capillary waterproofing system is a product which contains a blend of sodium silicates, penetrating aids and deformers formulated for application by spray, roller or brush. When apply Brushbond TGP CL to aged or green concrete penetrates deeply into the gel and capillary pores of the concrete reacts with free lime within the concrete to make a calcium silicate gel (CSH) that is insoluble.

Brushbond TGP CL stops water seepage from either the positive or negative side of the concrete slab when the seepage is not caused by cracking or other structural flaws.

Brushbond TGP CL also aids in abatement of dampness odors caused by bacteria in ground water or flood water.

Technical support

Fosroc offers a comprehensive range of high performance, high quality repair, maintenance and construction products. In addition, Fosroc offers a technical support package to specifiers, end users and contractors, as well as on-site technical assistance in locations all over the world.

Properties

The values given below are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

Specific gravity:	~1.2 kg/ltr
Solubility in water:	100% Dispersable
Appearance and Odor:	Slightly opaque odour-less viscous liquid
Permeability-pressure applied on positive side (ASTM D 5084-90):	@ 5 bar No leakage (water tight)
Permeability-pressure applied on negative side (ASTM D 5084-90):	@ 5 bar No leakage (water tight)
Hydrostatic pressure resistance (USACE CRD C48-73):	@ 3 bar No leakage (water tight)
Toxicity (ASTM D 3960 & ASTM D 3792):	Volatile organic content (VOC) < 0.01 mg/ltr

Brushbond TGP CL

Absorption (ASTM C 642):	7 days = 4.13
Efflorescence reduction fresh concrete (ASTM C 67-75):	No change to treated concrete

Instructions for use

Surface Preparation

Surface must be able to absorb water, to be able to absorb Brushbond TGP CL. Surface may be wet, moist or dry, but not having puddles or running water.

Concrete surfaces must be clean, sound and free of oil, dirt, laitance and any other such contaminants which may interfere with the application process. Cleaning can be achieved by high pressure water jetting or by treating the surface with Fosroc Acid Etch.

High pressure water jetting is the preferred method of surface preparation because mechanical cleaning, surfaces saturation and substrate roughening are simultaneously achieved.

New concrete

Following the stripping of formwork, water jet or acid etch as above to remove all traces of form oil or surface laitance. Construction joints, cold joints and non-leaking joints greater than 0.25mm. wide must be routed out to a minimum 25mm. wide by 25mm. in depth to reach sound concrete, the profile of the routed joint should form a "U" shape.

Leaking cracks

Should be prepared as above to form a chase of 25 mm. wide to approximately 35 to 50mm. deep. Remove all debris from the work area before proceed with through saturation of the area prior the next stage of the works.

Where necessary use Renderoc Plug to stop flow of water at areas where treatment is to be applied.

Application

Wet surface before applying Brushbond TGP CL to allow its penetration. Thoroughly mix Brushbond TGP CL before applying by airless sprayer, hand-pump-type garden sprayer, roller, brush or squeegee. Agitate while applying to keep ingredients in suspension and from setting out. If Brushbond TGP CL puddles or beading is present, blow off with air, squeegee, wipe up with cloth.

Do not allow any Brushbond TGP CL to dry on the surfaces, as it will cure into a hard white crystal powder that requires power grinding to remove. Coverage on broom finished concrete is normally about 5m²/ltr/coat of the mix. Smooth, troweled concrete may need less quantity to yield about 10 m²/ltr.

Curing & Protection

All Brushbond TGP CL applications must be kept moist for a minimum period of 48 hours.

After initial penetration has taken place, moist curing using a water spray is recommended. The treated surface shall be 'fog' sprayed 3 to 4 times daily for the 48 hour period.

In hot climatic conditions it is recommended to spray more frequently whereby the treated surface is kept constantly moist. It is extremely important to keep the Brushbond TGP CL moist to allow the crystal formation to occur.

Protect surfaces from foot traffic for 48 hours or heavy traffic for 7 days.

Freshly applied Brushbond TGP CL must be protected from extreme weather conditions such as rain, strong winds, high temperatures and freezing for a period of not less than 48 hours following application.

Limitations

Apply at temperatures above +5 °C and below +40 °C. Do not apply to glass, aluminium, porcelain, enamel, clay brick or other clay based products. Do not apply on painted surfaces. May soften paint if oversprayed onto paint.

Estimating

Supply

Brushbond TGP CL: 20 ltr pails

Coverage

on smooth concrete: ~10m² /ltr/coat

on normal concrete: ~5m² /ltr/coat



Brushbond TGP CL

Additional information

Fosroc manufactures a wide range of complementary products which included:

- Waterproofing membrane & 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

Fosroc further information on any of the above, please consult your local Fosroc office –as below.



Fosroc (Thailand) Limited

777/9 Moo 7,
Bangplee-Tamru Road,
Bangplee Yai, Bangplee,
Samutprakarn 10540 Thailand

www.fosroc.com

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 Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

telephone:
+66 (0)2325 0913-15

fax:
+66 (0)2337 3551

email:
thailand@fosroc.com