

BC SEAL 107

Product Description

A two part acrylic modified cementitious coating. It is composed of special types of cement, fillers (powder), and a copolymeric acrylic blend with chemical additives (liquid). Once mixed, BC Seal 107 produces a tough flexible waterproofing membrane which bonds to most concrete or masonry substrates and protects against possible ingress of water and waterborne chemicals.

Advantages

- Polymer modified, therefore reduces permeability while increasing bond, flexure and tensile strength
- Withstands negative and positive water pressure
- **Elastomeric, can bridge cracks up to 1.5 mm**
- Resistant against Chloride and Sulphate ion attack
- Breathable, whilst repelling water it allows substrate to breath
- Good adhesion, bonds to porous and non-porous substrate
- Non-toxic, can be used for potable water tanks
- For interior or exterior use, old and new surfaces
- Can be applied to 24 hours old concrete, thereby giving immediate protection to concrete.

Properties	Results
Component A	
Appearance	Powder
Density	1.30 kg/L
Component B	
Appearance	Liquid
Density	1.0 kg/L
Elongation (ASTM D412)	200%
Tensile adhesion strength (ASTM D412)	> 2.2 N / mm ²
Resistance to hydrostatic pressure at 1.5 bar (BS EN 14891)	Passed
C02 Diffusion resistance	R > 357 m Sc > 89 cm (1 mm dft) Sc–equivalent concrete thickness
Chloride ion diffusivity	Zero penetration at 90 days
Chloride Ion diffusion coefficient	1.04 x 10 ⁻⁷ cm ² /s
Water vapour transmission	< 25 gm / m ² / 24 hrs.
Resistance to following chemicals	Waste water, diesel, kerosene, engine oil, hydraulic oil, methyl alcohol, ethyl alcohol
Pot life at 25°C	45 minutes
Initial curing	4-5 hours
Curing period	96 hours
All values are subject to 5-10 % tolerance	

Total Application Thickness:	2 mm, minimum.
Bond Strength (ASTM 4541)	Not less than 0.9 N/mm ²
Crack Bridging Capacity (ASTM C836) :	Not less than 0.5mm, .
Resistance to Positive Water Pressure:	1.5 bars, minimum.
VOC Content:	To limit set by the authorities having jurisdiction

Application Information

Instructions For Use

Surface Preparation

The surface of the concrete shall be sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Moss and lichen must be removed physically followed by treatment with fungicidal wash. After treatment, it must be washed down thoroughly with clean water.

In addition, make sure that all surfaces must be damp but not totally wet before progressing the work.

Crack treatment

Shrinkages and non-moving structural cracks less than 0.3mm shall be filled with a pre-treatment strip of BC Seal directly bridging over the crack.

Static cracks that are greater than 0.3mm shall be repaired by chiselling the crack into a V-shape, to a depth and width of 25mm and priming it followed by the application of BC Repair 100 cementitious repair material.

Movement Joints

Expansion and movement joints should be sealed with BC Tec 30 S, a Polyurethane sealant. Allow to cure before the application of BC Seal 107

Application

BC Seal 107 shall be mixed with liquid at a low speed drill and will be allowed to set for 5 minutes after mixing. Remix the product again shortly before application.

It is recommended that the waterproofing slurry shall be applied onto the dampened surface by a brush at a rate of 1.8 Kg/m² to achieve a minimum of dry film thickness of 1.0mm (usually achieved in two coats). Coating must be applied at right angles to one another with a 6-8 hour intervals between each application at 25°C.

The total dry film thickness shall not be less than 3mm and shall be used for positive pressure waterproofing and will be capable of forming a flexible waterproofing layer resistant to the aggression of chemicals, Chlorides and Sulphates.

The powder should always be added to the liquid. Remixing and re-tempering shall not be permitted.

On substrates that are exposed to movements and deformation or where cracks are expected, reinforcing glass fibre mesh shall be spread into the first coat of BC SEAL before applying adhesives. Tiling or finished floor installations should be carried out as soon as possible after full cure of membrane is established.

Special precaution

BC Seal 107 shall be applied over green concrete with 28 days of installation for effective crystallization and strong bonding, adhesion

Recommendations

- Store the components of BC Seal 107 out of direct sunlight before mixing during hot weather
- After application, use sheets to protect the drying surface from the rapid evaporation during dry, hot or windy condition.

Packaging, Coverage / Consumption

Packaging:

BC Seal 107 is supplied in 30 kgs Pack
(Part A – 20 kg powder, Part B – 10 liter liquid).

Consumption:

1.8 kg/m² per 1 mm thick coat depending on surface conditions.

Shelf Life & Storage

Storage:

Keep the product in dry place and its original containers.

Shelf life:

12 months from the date of production if stored properly

Contact information:

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