



PC-Sealcoat® Penetration

Penetrating Waterproofing compound for positive & negative water presser

PC-sealcoat® Penetration is a very highly built integral waterproofing compound that Waterproofs and protects concrete in-depth permanently. It consists of specialty chemical compositions of active chemicals, which build a strong barrier against water-penetrating concrete surfaces. needs only to be mixed with water before application. When applied to a concrete surface, the active chemicals react with moisture and the by-products of cement hydration to cause a catalytic reaction that generates an insoluble, crystalline structure. These crystals penetration depth in concrete up to 1000 mm , fills the pores, and minor shrinkage cracks up to 500 microns in the concrete to prevent further water ingress under pressure. It's effective for positive and negative water pressure. In addition to waterproofing the structure, it protects concrete against seawater, wastewater, aggressive groundwater, and many other chemical solutions. **PC-Sealcoat® Penetration** is approved for use in contact with potable water and is therefore suitable for use in water storage tanks, reservoirs, water treatment plants, etc

APPLICATION AREA

- For waterproofing structures and objects that are in contact with water. For indoor and outdoor use. It is used for waterproofing: the external and internal walls of
- Basement retaining walls
- Parking structures
- Concrete slabs (floor/roof/balcony, etc.)
- Tunnels and subway systems
- Construction joints
- Foundations
- Water retaining structures
- Underground vaults
- Swimming pools
- Sewage and water treatment plants
- Channels
- Reservoirs
- Bridges, dams and roads.

MIXING

Mix in a clean container 6.5- 7.5 liters of water and 25 kg of dry mix **PC-Sealcoat® Penetration**. Slowly pour the powder into the water, stirring continuously with an electric drill with a mixing nozzle, until a homogeneous solution is obtained without lumps. It is not recommended to mix the solution manually. The resulting solution is allowed to stand for at least 5 minutes. After repeated mixing, the product is ready to use too fast drying of the waterproofing solution. Possible excess water is removed from the surface with a sponge or compressed air.

APPLYING THE COMPOSITION

Apply **PC-Sealcoat® Penetration** solution using a brush or a smooth stainless-steel spatula. Apply the material in two cross layers with a total thickness of not less than 1.5 mm and not more than 4 mm. The second layer is applied after the first layer has dried, after about 5 to 6 hours, but not more than 24 hours. It is necessary to carefully process the corners and fillets. During setting and drying of the solution **PC-Sealcoat® Penetration** no additional wetting of the waterproofing surface is required.

ADVANTAGE

- Imparts permeability to water and dampness to coated surfaces
- Gives surfaces that are efflorescence-free, moss-resistant and resistant to fungus growth
- Maintains the breathing properties of concrete,
- Penetrate 1000 MM depth in concrete seal permanently.
- Due to excellent adhesion and thixotropic properties, vertical and inclined surfaces can be easy applied
- Possesses high flexural and tensile strengths and provides for thermal movements
- Is free of chlorides, water-soluble halogens and corrosive substances
- System protects cementitious substrates against freeze-thaw cycles.
- Seals hairline and shrinkage cracks up top 500 microns
- Can be applied from either the positive or negative side
- Protects embedded steel

SURFACE PREPARATION

Before applying waterproofing, make sure that the base is sufficiently maintained. The surfaces to be treated must be dry, clean, strong, dense and not subject to deformation. The surface of the base must be dust-free and free of cement milk, rust, oils, paint residues, putty, bitumen, and anything else that may interfere with the good adhesion of **PC-Sealcoat® Penetration** solution to the base.

Flimsy and loose areas of the base must be removed mechanically, using sandblasting or pressurized water, and repaired with suitable repair solutions. Cracks in the base must be stitched and repaired with suitable repair solutions. Pre-leveling of the bases, if necessary, should be performed at least 14 days before applying waterproofing. Absorbent surfaces (cement screeds and plaster, concrete, etc.) must be moistened with clean cold water using a spray gun or a wet sponge before applying **PC-Sealcoat® Penetration**. This will prevent the waterproofing solution from drying out too quickly. Possible excess water from the surface is removed with a sponge or compressed air.

RECOMMENDED APPLICATIONS

Work should be performed at a base and ambient temperature of +6 °C to +40 °C. To avoid shrinkage and dryness. Materials should be stored under 45 °C non exposed storage.

PRODUCTS PROPERTIES

Physical Properties	Typical Value
Appearance	Grey powder
Density	1.20 kg /L
Toxicity	0.16
Proportions in the preparation of the composition	0.26 l of water per 1 kg 6.5 l of water per 25 kg
The maturation of a solution	5 min
Specific volume mass of the solution	60 min
Use time at t +23°C	From +5°C to +35°C
Application temperature	> 2,0 MPa
Adhesion after 28 days	> 2,0 MPa
Bending resistance after 28days	≥7,5 MPa
Compression resistance after 28 days	≥25 MPa
Water absorption coefficient by capillarity	0,0 kg/(m ² /min)
Water resistance at positive and negative water pressure after 7 days under standard conditions	5 bar
Adhesion after freezing/thawing cycles (EH 1348)	> 1,0 MPa
Ability to walk through	24-48 hours
Working load (final solidification)	After 7 days
Temperature resistance 28 days after installation	From -30°C to +90°C
Theoretical consumption	2,20 kg/m ² per 1 mm thickness
The minimum thickness of the coating	1,5 mm
Maximum thickness of a single layer	2,5 mm
Maximum thickness	4 mm

SHELF LIFE

The guaranteed shelf life in sealed packaging is 12 months from the date of manufacture.



PC-WC GLOBAL FZ-LLC

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TECHNICAL DATA SHEET UPDATED IN
SEPTEMBER 2020
TDS/PC-SEALCOAT® PENETRATION/20

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our website www.pc-wc.com