



# PC-Sealcoat® 220

## Hybrid polyurethane based liquid applied waterproofing membrane

**PC-Sealcoat® 220** represents a solvent-free, single-component liquid polyurethane-based hybrid waterproofing membrane designed for versatile use in indoor and outdoor settings. Upon curing, this product forms a seamless coating, establishing a resilient and adaptable membrane. For enhanced protection, it is advisable to either cover it with a protective screed or embed it within a geo textile membrane.

### FEATURES

- Solvent-free and non-toxic.
- Pre-mixed single-component formula.
- Highly flexible with exceptional crack bridging capabilities.
- Remarkable UV and Heat resistance.
- Excellent adhesion to various surfaces, porous and non-porous alike.
- Forms a continuous waterproofing membrane.
- Easy application process.
- Suitable for compact spaces with minimal odor presence.

### PRODUCTS PROPERTIES

Physical Properties	Typical Value
Form	Polyurethane
Colour	white, Gray
Shore a Hardness	75± 3
Density	1.38 kg/l ± 0.02 kg/l
Elongation at break (ASTM D 412 / EN 527-3)	> 450%
Tensile strength (ASTM D 412 / EN 527-3)	>8.0 N/mm <sup>2</sup>
Water impermeability (DIN 1048)	5 atm
Solar Reflectance (SR)	87%
Heating shrinkage %	-4.0 - +1.0
Solar Reflectance Index(SRI)(ASTM E1980-01)	108
Minimum application temperature	+5°C
Service temperature	from -15°C to +90°C
Adhesion	2.0 N/mm <sup>2</sup>
Permeability to water	7 bar passes
Water ponding test	Passes
Crack bridging	upto 1.5 mm

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. Recommended guidelines for the application of the coating system are as follows:

### USES

- Roofs and terraces
- Podiums
- Floor slabs and balconies
- Wet areas, such as those beneath tiles in bathrooms and kitchens.
- Solar reflecting coating for exposed roof.

### SURFACE PREPARATION

The concrete substrate must exhibit structural integrity, possessing a minimum compressive strength of 20 MPa and a pull-off strength of 1.5 N/mm<sup>2</sup>.

It is imperative that the concrete floor maintains a moisture content below 5% and is devoid of any potential rising moisture or osmosis concerns.

Prior to application, ensure the substrate is both level and clean, devoid of hindering substances like dust, dirt, grease, oil, latitude, or loose particles.

To achieve a textured surface, utilize rotary grinding equipment to mechanically eliminate laitance and deposits on the concrete. Additionally, address any weak concrete areas and surface defects on older concrete substrates attributed to surface contaminants.

### CRACK TREATMENT

All shrinkage and stationary cracks must be incised in a V-shaped groove. Cracks with a thickness below 2 mm require filling with **PC-Conrend®Crack**, while those exceeding 2 mm should be mended using a cement-sand blend fortified with **PC-Conbond®SBR**. Subsequent to crack filling, a coating of **PC-Conrend®Crack** should be applied within a 6-hour window, extending 50 mm on either side of the crack.

### FILLET PREPARATION

All horizontal and vertical joints are to be filled with a 50 mm x 50 mm fillet. Initiate the process by applying a bond coat, formulated by blending equal parts of cement and **PC-Conrend® Mortar**. Subsequently, while the bond coat is in a wet state, position a 50 mm x 50 mm fillet using a mixture of cement sand mortar combined with **PC-Conrend® Mortar**. It is imperative to permit the fillet to cure for a minimum of 12 hours to solidify and dry thoroughly.

### PIPE PENETRATIONS

To ensure water tightness, fill gaps between pipes with polymer modified mortar or non-shrink grout. Treat pipe outlets with **PC-Seal®Tape**, apply **PC-Sealcoat® 220**, and saturate **PC-Seal®Tape** with an additional coat of **PC-Sealcoat® 220**.

## LAYING OF PROTECTIVE SCREED

For the initial application of **PC-Sealcoat® 220**, uniformly cover the designated area with 800 grams per square meter using a roller, while employing a paintbrush for precise application in smaller or intricate sections. Consistency in thickness is paramount to achieving a seamless film. Allow the first coat to dry for 12-16 hours before proceeding to apply the second coat of **PC-Sealcoat® 220** at a rate of 500 grams per square meter, perpendicular to the initial layer.

After the second coat, allow a drying period of 24 hours before installing the geotextile membrane (160 g/m<sup>2</sup>) with a minimum overlap of 100 mm. During the placement of the protective screed, ensure that the rooftop is appropriately sloped to prevent water accumulation.

## PACKAGING

20 kg air tight buckets

## REMARKS

- It is crucial to commence the meticulous application process before waterproofing a flat surface.
- Ensure that the applied coatings remain shielded from moisture until they have fully cured.
- Avoid applying the product when temperatures exceed 40°C or drop below 10°C.
- Apply the product during a decrease in both ambient and substrate temperatures to prevent the formation of air pockets, as applying during rising temperatures may result in this issue.
- Parapet walls should be coated up to a minimum height of 1 foot using **PC-Sealcoat® 220**.
- All joints must be covered with an angular fillet. When incorporating a geotextile membrane, it is recommended to apply **PC-Sealcoat® 220** in 1-meter segments.

## LIMITATIONS

- Excessive surface moisture can result in blister formation, a prevalent problem associated with liquid-applied membrane coatings. It is advisable to refrain from applying this technique on surfaces with escalating moisture levels.
- It is imperative to prevent any pooling between coats until the final coat has fully cured.

## SAFETY

Extended exposure may lead to eye and skin irritation upon contact. If the issue persists, seek medical assistance. It is advisable to use gloves when applying the product.

## PRIMER APPLICATION

For optimal and durable adhesion, start by priming the surface with **PC-Prime®AC**. Follow the prescribed mixing ratio, and utilize a roller for uniform application.

Be attentive to potential dry patches on porous concrete surfaces. In case of such occurrences, consider applying an extra coat of **PC-Prime®AC**. Allow the primer to dry for 4-5 hours before progressing to the subsequent layer. Once the primer achieves a slightly tacky consistency, proceed with the application of **PC-Sealcoat® 220**.

## APPLICATION

To begin, apply the initial coat of **PC-Sealcoat® 220** evenly at a rate of 600 grams per square meter using a roller, covering the entire surface area. For smaller or intricate sections, utilize a paintbrush. Aim for a uniform thickness to establish a seamless film. Allow the first coat to air dry for a span of 12 to 16 hours.

Subsequently, apply the second coat of **PC-Sealcoat® 220** perpendicular to the first layer, maintaining a coverage of 400 grams per square meter. While the second coat is still wet, unfurl a 1-meter-wide glass fiber mesh (45 g/m<sup>2</sup>) smoothly, avoiding any wrinkles or bubbles. Seal the glass fiber mesh with an additional coating of **PC-Sealcoat® 220**, ensuring a minimum 50 mm overlap at the mesh edges. Allow the reinforcement layer to dry for 12-16 hours before proceeding to the final application of **PC-Sealcoat® 220** at 500 grams per square meter.

## SHELF LIFE

24 months from the date of manufacturing if stored in original and unopened packaging in a cool & dry place away from direct sunlight.

## PRECAUTIONS

- Before waterproofing a flat surface, it is essential to begin with a meticulous application process.
- Ensure that the applied coats are shielded from moisture until they are completely cured.
- Avoid applying the product in temperatures exceeding 40°C or falling below 10°C.
- Apply the product as the ambient and substrate temperatures are decreasing to prevent the formation of pinholes, which can result from air rising during application in increasing temperatures.
- Parapet walls should be coated up to a minimum height of 1 ft using **PC-Sealcoat® 220**.
- When covering joints, utilize an angular fillet. For the installation of a geotextile membrane, it is recommended to apply **PC-Sealcoat® 220** in sections with a width of 1 meter.



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](http://www.pc-wc.com)



## PC-WC GLOBAL FZ-LLC

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