



# PC-Self® XL

## Self-adhesive carrier-less cross laminated SBS-modified bitumen membrane

PC-Self® XL is a self-adhesive carrier-less SBS-modified cross-laminated bitumen membrane is specifically engineered for waterproofing applications in a range of areas such as foundations, engineering structures, indoor and outdoor spaces. This material is manufactured by incorporating a specialized self-adhesive polymer-bitumen binder onto a durable polymer film substrate. The reverse side is protected by a removable film. The innovative adhesive bitumen composition allows this membrane to be applied on surfaces where traditional torch-on methods are impractical, such as expanded or extruded polystyrene or wooden substrates.

### ADVANTAGES

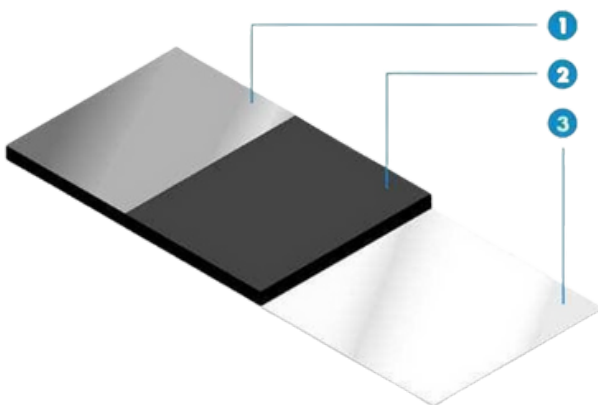
- The factory ensures consistent thickness for uniform application on-site.
- Certified waterproofing for both water and vapor barrier systems.
- Swift and effortless application process.
- Application feasible at room temperature.
- Enduring properties attributed to SBS mass for long-term preservation.
- Exceptional crack bridging capabilities with a compound elongation performance exceeding 300%.
- The material exhibits total flexibility and adeptly conforms to the substrate.
- Ideal adherence to the support for cross-laminated products.
- Superior mechanical properties in all orientations due to the cross-laminated polyethylene film (HDPE) finish.

### AREA OF APPLICATION

- Waterproofing of underground parts of premises and engineering structures.
- Indoor/outdoor waterproofing of premises and buildings.
- Waterproofing of confined area, where standard technologies cannot be applied (e.g. bathroom floor).
- Underlay on pitched roofs and vapor barrier on the corrugated steel sheets and precast concrete slabs.
- Corrosion protection of steel pipes and junctions.

### STANDARDS AND CERTIFICATION

- Meets the requirements of the UNE EN 13970 norm.
- Meets the requirements of the ASTM norm.



#### 1. Cross laminated polyethylene film (HDPE)

Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment, provides dimensional stability.

#### 2. Self-adhesive SBS modified bitumen

The high elasticity of this layer preserves waterproofing undamaged when cracks and splits occur in the foundation.

#### 3. Releasable polyethylene film

Used for underside surface protection from sticking in the roll.

### SCOPE OF WORK

Product used for the waterproofing of underground walls, basement, roof. PC-Self® XL provides Crack Bridging properties for covering concrete cracks due to structural movements of the building.

Membranes thickness tolerance: = -0,1 mm.

| Physical Properties | Unit           | Typical Value |
|---------------------|----------------|---------------|
| Length              | m              | 20            |
| Width               | m              | 1             |
| Roll surface        | m <sup>2</sup> | 20            |
| Rolls per pallet    | Rolls          | 25            |

## INDICATIONS

- Avoid applying **PC-Self® XL** when the temperature falls below -10°.
- Ensure proper storage of the product in a dry location protected from rain, sunlight, extreme heat, and cold temperatures.
- Prolonged exposure to sunlight may complicate the removal of the polyethylene non-stick film. The operational temperature should not surpass 50°C.
- Minimize **PC-Self® XL**'s exposure to sunlight to prevent UV damage. It is recommended to shield **PC-Self® XL** shortly after application.

## MAINTENANCE RECOMMENDATIONS

- Conduct a comprehensive assessment of the waterproofing and roofing components within the designated area.
- Inspect all operational roofing features, encompassing skylights, drains, up stands, penetrations, and other visible elements.
- Maintain unobstructed drains and gutters while removing any roof debris regularly.
- Routinely clear away mildew, moss, vegetation, or any plant growth on the waterproofing.
- Periodically remove accumulated sediments like silt, sludge, or slate granules from the deck resulting from water retention.
- Regularly clear the roof of debris and small objects.
- Ensure the structural soundness of surrounding elements such as eaves, flashings, slate tiles, and brickwork.
- Assess the condition of the waterproofing system, addressing any concerns like blisters, damage, or separations.
- Examine the state of the waterproofing regarding up stands, overlap, and aesthetic quality, rectifying any identified issues.

## TECHNICAL DATA

| Physical Properties                             | Test Method                      | Unit                   | Typical Value |
|---|----------------------------------|------------------------|---------------|
| Reaction to fire                                | UNE-EN 11925-2<br>UNE-EN 13501-1 | -                      | F             |
| Water tightness (>60 KPa)                       | UNE-EN 1928                      | -                      | Pass          |
| Tensile strength (Film Only)                    | ASTM D882                        | MPA                    | 5.17          |
| Transversal tensile strength (Composite)        | ASTM D882                        | MPA                    | 3.79          |
| Longitudinal elongation at break                | ASTM D882                        | %                      | 350           |
| Transversal elongation at break                 | ASTM D882                        | %                      | 322           |
| Resistance to Hydrostatic loading               | ASTM D5385                       | M                      | 60            |
| Resistance to impact (flexible: EPS)            | UNE-EN 12691                     | mm                     | 900           |
| Longitudinal resistance to tearing (nail shank) | UNE-EN 12310-1                   | N                      | 150 ± 50      |
| Transversal resistance to tearing (nail shank)  | UNE-EN 12310-1                   | N                      | 150 ± 50      |
| Tear resistance                                 | ASTM D 1000                      | N/mm                   | 5.50          |
| Puncture resistance                             | ASTM E154-88                     | N                      | 255 ± 5       |
| Resistance to hydrostatic head                  | ASTM D5385                       | m of water             | 60            |
| Flexibility at low temperature                  | ASTM D146                        | °C                     | < 20          |
| Water vapor Transmission (less then)            | ASTM E 96                        | g/m <sup>2</sup> /hour | 0.11          |
| Water Absorption (24 hours) (less then)         | ASTMD 570                        | %                      | 0.31          |
| Bond strength (To primed Concrete)              | ASTM D 1000                      | N/M                    | 4.00          |
| Crack bridging ability (5 mm)                   | UNE-EN 14224                     | °C                     | -5.00         |
| Microbiological resistance (30 weeks)           | UNE-EN 12225                     | -                      | Pass          |
| Resistance to oxidation 85 °C 90 days           | UNE-EN 14575                     | -                      | Pass          |

## ADDITIONAL TECHNICAL DATA

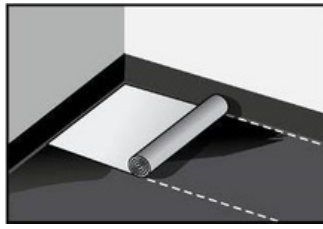
| Physical Properties  | Test Method   | Unit | Typical Value |
|--|---------------|------|---------------|
| Nominal thickness  | --            | mm   | 1.5 (± .10)   |
| Softening Point at elevated temperature                      | UN-EN 1110    | °C   | >99           |
| Dimensional stability at elevated temperature (longitudinal) | UNE-EN 1107-1 | %    | < 0.5         |
| Dimensional stability at elevated temperature (transversal)  | UNE-EN 1107-1 | %    | < 0.5         |

## METHOD OF APPLICATION

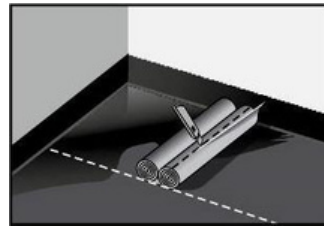
### FLAT ROOF OR INDOOR WATERPROOFING



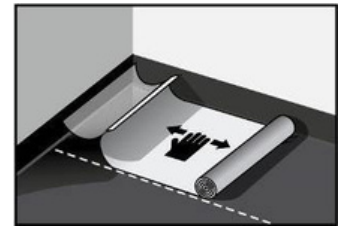
Clean and treat the surface with bitumen primer.



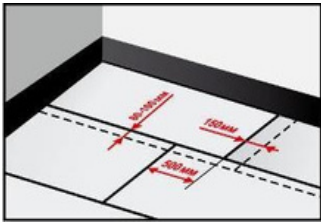
Fit and straighten the membrane to the area of application.



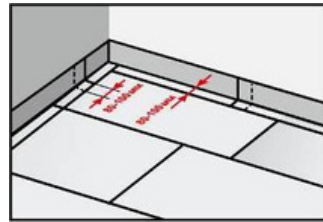
Re-roll the membrane to the center, and pre-cut the protective film.



Remove the protective smooth the membrane.



Longitudinal overlaps – 80-100 mm. End overlaps – 150 mm. Overlaps are to be glued with bitumen mastic of 1 mm thickness.

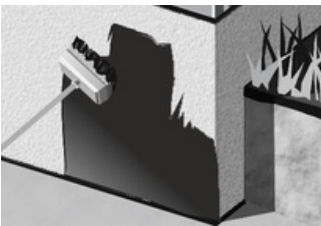


On a vertical surface, the material is to be placed on a height, sufficient according to the thickness of the floor and decoration.

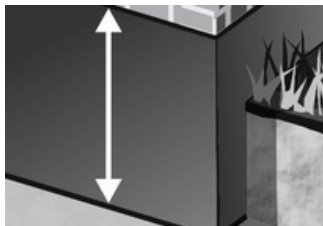
! Self-adhesive materials to be installed at the temperatures above +10 °C.

! Surface must be smooth, dry, clean and with no oil stains.

### FOUNDATION WATERPROOFING



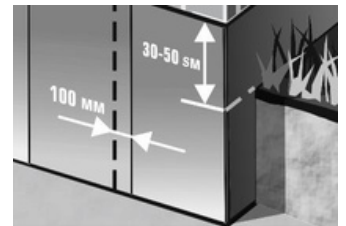
The Surface must be smooth, dry, clean, and with no oil stains. For better adhesion, treat the surface with primer.



Measure the depth of the foundation and cut the material to the required length.



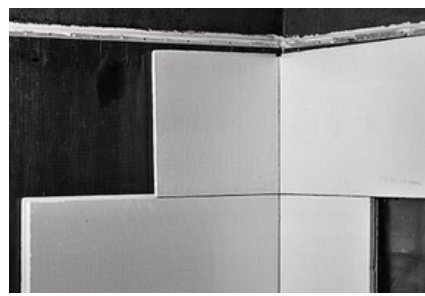
Apply the material from the top downward by gradually removing the protective film, unrolling the membrane and smoothing it to the surface.



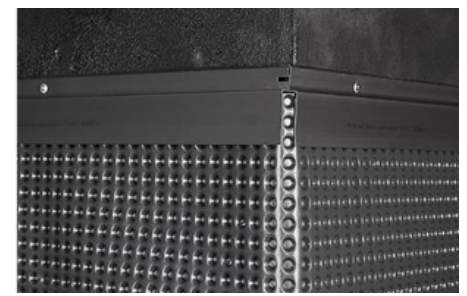
The material to be installed is to the height of 30-50 cm above the ground level. Longitudinal overlaps should be 100 mm, sheet end overlaps - 150 mm.



The top end of the waterproofing membrane is to be fixed at the basement level by a profiled metal edge strip and sealed.



Protect the membrane from mechanical damage by means of thermal insulation or protective slabs.



As a layer protection from mechanical impacts, PC-Plantoper® Geo profiled HDPE membrane is recommended.



### PC-WC GLOBAL FZ-LLC

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TECHNICAL DATA SHEET UPDATED IN  
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TDS/PC-SELF\* XL/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](http://www.pc-wc.com)