PU 510WB

Pure Polyurethane Waterproofing Liquid Membrane System

Product Description

PU 510WB is **one-component** brushable, fibre reinforced, water-based Polyurethane Aliphatic Dispersion polymer waterproofing liquid membrane and cures into a tough elastic waterproofing membrane, **PU 510WB** has excellent weathering resistance, elongation and crack bridging properties. **PU 510WB** offering:

- It cures in reaction with the atmospheric humidity to form a high elastic and full bonded monolithic waterproofing membrane with excellent mechanical as well as chemical properties. Due to its excellent adhesion to several types of substrates and its resistance to the UV and weathering, it is an ideal solution for exposed waterproofing applications.
- A uniform, elastic, waterproof, vapor-permeable sealing layer, without forming seams or joints.
- Excellent bonding to various substrates like concrete, cement-mortars and most waterproofing layers.
- Able to take foot traffic when full cured.
- Applicability even on irregular substrates.
- An affordable and reliable solution for waterproofing.

Fields of Application

PU 510WB is suitable for waterproofing & protection and designed to use either as exposed or concealed waterproofing membrane for:

- Flat roofs and balconies
- Underneath tiles or over tiles layers in kitchens, bathrooms, balconies, verandas and flat roofs, as long as quartz sand has been broadcasted on its last layer.
- Under thermal insulation boards on flat roofs.
- In construction works, such as highways, bridge decks, tunnels etc.
- Foundations.
- Gypsum and Cement Boards.
- Existing or old layers of bituminous membranes for refurbishment and protection
- Membranes EPDM, PVC, TPO
- Polyurethane Foam.
- Car Parks
- Wooden Surfaces
- Irrigation Channels
- Can be tiled over

Technical data & Properties

Typical properties at 25 °C and 50% Relative Humidity conditions and environment

Color	**Grey**	Elongation at break ASTM D 412	**> 500%**
Resin	**Polyurethane Dispersions Polymer**	Crack bridging ASTM C 836	**No cracking at 2mm width**
Density	**Approx. 1.25kg/ liter**	Hardness (Shore A) ASTM D 2240	**> 50**
Solid Content	**Approx.60% by weight**	QUV accelerated weathering @ 2000 cycles ASTM G 53	**No color change** **No blistering**
Water absorption BS 1881: Part 122	**≤ 3.3%**	Re-coating time	**≥ 60 mins**
Water vapour transmission (ASTM E96)	**≤ 3.15 g/m²/ 24hr**	Drying Time	**24 hours depending on temperature and RH**
Adhesion to concrete ASTM D 4541	**> 0.5N /mm²**	Toxic	**No Toxic**
Tensile strength ASTM D 412	**> 5.0N /mm²**	Fire Resistance	**Non-Flammable**

Specification are subjected to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods, site conditions and use environment.

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Surface Preparation

All substrate should be free from oil, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Spelled and deeply disintegrated concrete should be removed to sound concrete and repaired.

Newly placed concrete should be cured for minimum 14 days before application.

All Joints shall be prepared and filled with suitable filler or sealant.

Application

Stir PU 510WB to an even smooth paste emulsion consistency before use.

Dampened the surface with sprinkled water. Apply first neat coat at 1.kg/m² by roller, brush or squeegee to the substrate. Suitable airless spray can also be used for the application of **PU 510WB.**

Allow the first neat coat to cure approximately 4 hours before applying the second coat.

Third coat application is necessary for external building area.

Recommended Coverage

Minimum Estimated Consumption: 2kg//m²,
2 layers at 1.0kg - 1.5 kg/m²/layer

Storage

Minimum 12 months from production date, if stored in original, unopened packaging, at temperatures between +5˚C and + 35˚C. Protect from direct sun exposure and frost.

Packaging

PU 510WB in **20 kg/pail**.

Priming

Prime substrate surfaces with POLYCELL's primer - FYLLATEX 8005 Latex based admixture on top of the cement/concrete as a primer at the rate of 5~8m² per liter depending of the substrate condition prior to **PU 510WB** application.

Curing

For optimum performance, the entire **PU 510WB** system should be allowed to cure for 72 hours before laying protective screed or water ponding test/water sheet test at least 25˚C. During that time, precautions must be taken to avoid damaging the coating.

When **PU 510WB** use as concealed waterproofing membrane. Protection boards or sheet must be used to protect the waterproofing membrane before back filling or topping with mortar or concrete.

Prior Application

Please consult Product' Technical Data Sheet (TDS) and Safety Data Sheet (SDS)

Remarks

In case of application by spraying, it may be diluted, depending on the weather conditions up to 10%.

Clean Up

All tool, equipment's and surrounding areas can be cleaned with clean water before the product sets.