

HYDROLASTIC PU-B

Single Component Water Based Bitumen Extended Polyurethane Liquid Waterproofing Membrane

Description:

HYDROLASTIC PU-B is a water based cold applied, single component, modified Polyurethane dispersion extended with bitumen. It has excellent adhesion to most substrates including concrete, plaster, masonry, bituminous roofing felts, metal and asphalt coatings. HYDROLASTIC PU-B cures to form a seamless, high flexible, continuous monolithic membrane. It is ideally recommended as a waterproofing system for buildings including foundations, kitchen and toilet floors, building facades, roofs, foam slabs, masonry, etc.

Uses:

HYDROLASTIC PU-B is designed as a waterproofing suitable for vertical, horizontal and overhead application. Typical uses include:

- Damp proofing of facades.
- Waterproofing concrete panels with potential movement.
- Roofing and corrugated sheets waterproofing.
- Coating for cement pipes and metal.
- Waterproofing of cold store walls.
- Roofing and re-roofing between slab.
- Waterproofing tunnels, planters, plaza decks, etc.
- Retrofit roofing over torch applied membrane, EPDM, PVC, TPO, metal roofs, plywood, spray form and many coatings.
- Wet areas: showers, bathrooms, kitchens, balconies, planters, pools, especially in public used utilities
- Swimming pools and water parks waterproofing, where high features of waterproofing membrane are required.
- Intermediate layer in car parking flooring systems where a flexible membrane is required to create a deck water proof car parking systems for multi store parking area.

Advantages:

- Water based, environmentally friendly product with no odour risk.
- Superior waterproofing membrane.
- Elastomeric, highly flexible.
- Excellent resistant to chloride and sulphate attacks
- Excellent adhesion to substrate
- Ideal maintenance solution for waterproofing damaged roofing membrane
- Easy application due to paintable consistency.
- Ensure great protection against corrosion.
- Resistant to underground soil ground water aggressive effect.
- Forms a seamless and monolithic membrane
- High resistant to puncture and impact
- Environmentally friendly, with VOC free and LEED eligible.

Instructions for Use:

Surface Preparation:

The surface should be cured sound, clean, dry and free from loose and flaking materials, efflorescence, laitance, curing compounds, dirt, oil, rust, grease or other contaminants. In case of contamination, use mechanical methods like grinding or grit captive blasting in order to remove deep contamination.

All shrinkages and nonmoving structural cracks under 1.0 mm shall be filled with not less than 0.5 mm thick pretreatment strip of HYDROLASTIC PU-B extended to 50 mm on both sides of the crack. For parapet walls, columns, make a 45° coving fillet at all corners using LAVAREP F40-fiber reinforced shrinkage compensated repairing mortar. Apply a reinforcing pretreatment strip of HYDROLASTIC PU-B, 250 micron thick extending 100 mm on both sides of the coving. Voids and honeycombs must be patched with concrete repair products.

Usually, for well-prepared surfaces, primer will not be needed. For porous surfaces, a 30% thinned coat of

HYDROLASTIC PU-B

HYDROLASTIC PU-B with water can be applied to serve as a primer.

All metal surfaces to be treated with sand blasting or mechanical preparation method to reach bright steel condition, apply the product directly to prevent steel reaction with air moisture and formation of corrosion.

For expansion joints, treat the expansion joint with MEGASEAL PU – a polyurethane sealant. When the sealant is cured, a layer strip of HYDROLASTIC PU-B, 200 mm wide should be applied centered over all sealed joints. While the membrane is still wet, cover with a correct cut strip of fiber mesh, then apply another coat of HYDROLASTIC PU-B until it is fully covered. Allow the applied strip to cure before applying further coats of the waterproofing membrane.

Mixing:

HYDROLASTIC PU-B is a single component product. Mix the contents in the pail with a slow speed mixer to ensure homogenous mix.

Application:

HYDROLASTIC PU-B can be applied with a roller, trowel, brush or spray machine. For wet areas (kitchen, bathrooms, etc.) it is recommended to apply minimum two coats to achieve a dry film thickness of 1mm in case of roller or brush applications, apply the first coat to the surface in a spread rate of approximately 1.0 kg/m²@ 600micron dry film thickness. The second coat should be applied to the first coat after it cures with the same rate of application preferably in 90-degree direction

For enhanced protection of concrete surfaces, or when the substrate is affected by mechanical loads, it is recommended that all weak areas including surface cracks, joints and areas around pipes and projections, be reinforced by embedding woven fiberglass mesh strips between two coats of HYDROLASTIC PU-B.

Do not leave the applied membrane exposed for elongated periods. Once the membrane cures, apply protection sheets or screed mortar to ensure proper protection.

Tile adhesives can be applied to HYDROLASTIC PU-B membrane after it is completely cured. To provide a good mechanical key with the membrane, spread the final coat

of HYDROLASTIC PU-B with clean silica sand while it is still wet. Finished flooring installations should be carried out as soon as possible after full cure of membrane is established.

Standards:

- ASTM D412, C836, D624, E96
- BS 6949

TECHNICAL PROPERTIES	
Color	Black
Density	1.20 ± 0.03 kg/lit
Solid Content	>60%
Application Temperature	+5°C to +40°C
Touch Dry	12 hours
Full Cure@25°C	7 days
Adhesion to Concrete	>1 N/mm ²
Crack Bridging (ASTM 836)	>2 mm
% Elongation (ASTM D412)	>800%
Tensile Strength (ASTM D412)	2.7 N/mm ²
Tear Strength	24 N/mm ²
Water Vapor Permeability (ASTM E96)	0.26 perms
Service Temperature	-20°C to +70°C

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Coverage:

HYDROLASTIC PU-B achieves coverage of 1.70 kg/m²@ 1.0 mm dry film thickness.

*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

HYDROLASTIC PU-B is available in 20 Kg plastic pails.

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Storage:

Stored in original packing in dry conditions away from direct sunlight and high humidity levels.

Shelf Life:

HYDROLASTIC PUB can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

Clean all tools with clean water before product hardens. Hardened materials can only be removed mechanically.

Health and Safety:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

FIRST AID:

Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.

Skin: Wash skin thoroughly with soap and water

Inhalation: Remove to fresh air, keep patient rested

Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to HYDROLASTIC PU-B Material Safety Data Sheet.

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