

HYDROLASTIC BP2000

Water Based Bitumen Extended Hybrid Polyurethane Membrane

Description:

HYDROLASTIC BP2000 is VOC-Free water based cold applied, single component, advanced technology 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 BP2000 cures to form a seamless, highly flexible, continuous monolithic membrane. It is ideally recommended as a superior waterproofing application for building structures including foundations, kitchen and toilet floors, building facades and roofs.

Uses:

HYDROLASTIC BP2000 is designed as a waterproofing suitable for vertical, horizontal and overhead application. Typical uses include:

- Damp proofing of facades.
- Wet areas, kitchens and bathrooms waterproofing.
- Damp proofing of cement sheets.
- Water proofing concrete panels with potential movement.
- Roofing and corrugated sheets waterproofing.
- Coating for cement pipes and metal.
- Water proofing of cold store walls.
- Roofing & re-roofing between slab
- Waterproofing tunnels, planters, plaza decks, etc.
- Retrofit roofing over torch applied membrane, EPDM, PVC, TPO, metal roofs, plywood, spray foam and many coatings.

Advantages:

- Water based, environmentally friendly product with no odour risk.
- Superior water proofing membrane.
- Elastomeric, highly flexibility more than 2000%.
- 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.
- Highly elastic, with full recovery
- Excellent thermal cycling

Instructions for Use:

Surface Preparation:

The surface should be sound, clean, dry and free from loose and flaking materials, efflorescence, laitance, curing compounds, dirt, oil, rust, grease or other contaminants. Concrete should be cured for at least 28 days and have moisture content less than 7%. 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 BP2000 extended to 50 mm on both sides of the crack. For parapet walls, columns, make a 45°C coving fillet at all corners using LAVAREP F40-a fiber reinforced shrinkage compensated repairing mortar. Apply a reinforcing pretreatment strip of HYDROLASTIC BP2000 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 50% thinned coat of HYDROLASTIC BP2000 with water can be applied to serve as a primer.

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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 BP2000, 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 BP2000 until it is fully covered. Allow the applied strip to cure before applying further coats of the waterproofing membrane.

Mixing:

HYDROLASTIC BP2000 is a single component product. Mix the contents in the pail with a slow speed mixer to ensure homogenous mix.

Application:

HYDROLASTIC BP2000 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 500 micron. In case of roller or brush applications, apply the first coat to the surface in a spread rate of approximate 0.5 kg per square meter. 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 BP2000.

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 BP2000 membrane after it is completely cured. To provide a good mechanical key with the membrane, spread the final coat of HYDROLASTIC BP2000 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.

HYDROLASTIC BP2000 may be applied to damp but not wet surfaces, dampen brushes before and occasionally during use to avoid clogging and ease of application.

During hot, dry weather application may be assisted by dampening the surfaces to be treated.

Standards:

- ASTM 836, D412, D624, D2240, D3746, ASTM E96
- EN 14891, BS 6949

| TECHNICAL PROPERTIES | |
|---|------------------------|
| Color | Black |
| Density | 1.20 ± 0.03 kg/lit |
| Solid Content | >60% |
| Application Temperature | +5°C to +35°C |
| Touch Dry | 12 hours |
| Full Dry | 3 days |
| Adhesion to Concrete (ASTM D4541-02) | >1.0 N/mm ² |
| Shore A Hardness (ASTM D2240) | 40 |
| %Elongation (ASTM D412) | >2000% |
| Tensile Strength (ASTM D412) | 3.40 N/mm ² |
| Tear Resistance (ASTM D624) | 8.1 N/mm ² |
| Crack Bridging (ASTM 836) | >2 mm |
| Impact Resistance (ASTM D3746) | No Effect |
| Water Vapor Permeability (ASTM E96) | 0.26 perms |
| Service Temperature | -20°C to +80°C |

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

Coverage:

20 kg unit of HYDROLASTIC BP2000 achieves coverage of 67 square meter @ 250µ dry film thickness.

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

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Packaging:

HYDROLASTIC BP2000 is available in 20 Kg plastic pails.

Storage:

HYDROLASTIC BP2000 can be stored in dry condition in original packaging at temperatures between +5°C and +30°C. Protect from direct sunlight and frost.

Shelf Life:

HYDROLASTIC BP2000 can be utilized within 12 months minimum from date of production if stored properly in original, unopened and undamaged sealed packaging.

Cleaning:

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

Remarks:

- Normally good quality concrete substrates do not require priming. However, porous surfaces require priming. To reduce blisters caused by air entrapment on rough and porous surfaces, use HYDROLASTIC BP2000 thinned with 50% water as a primer.
- To apply tile adhesives over HYDROLASTIC BP2000 membrane, spread the final wet coat of HYDROLASTIC BP2000 WITH sufficient clean silica sand.
- Extended periods of exposure require protection to eliminate possible surface damage or to avoid contamination, by applying screed mortar bedding or protection boards. Tiling or finished flooring installations should be carried out as soon as possible after full cure of membrane is established

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 BP2000 Material Safety Data Sheet.

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