

HYDROTHANE PU2 CLEAR

Elastomeric Two-Part Polyurethane Clear Waterproofing Membrane

Description:

HYDROTHANE PU2 CLEAR is a solvent free, high build elastomeric two component liquid applied clear waterproofing based on aromatic polyurethane resins for high elasticity and high durability.

HYDROTHANE PU2 CLEAR contains no fillers and cures by chemical reaction between base and hardener. Once cured, it forms high dense, seamless, continuous, monolithic clear membrane with excellent adhesion to most substrates including concrete, plaster, masonry, metal and wooden surfaces.

The cured membrane has high flexibility and high resistance to chemicals. It is recommended for waterproofing application where high flexibility and chemical resistance is required at building structures when the substrate texture or look needs to be maintained.

Uses:

HYDROTHANE PU2 CLEAR can be used only by experienced professionals, as a water proofing clear membrane.

Advantages:

- High build liquid applied seamless waterproof membrane in single application.
- Fast drying chemically cured product.
- Highly flexible to be applied where movement is expected.
- Crack bridging ability, can serve as waterproofing membrane in car park systems.
- Chemical resistant to detergents, cleaning materials, brackish water and salt water.
- Easy applied by manual tools.
- Provides impermeable coating with outstanding mechanical properties.

- Ideal for applications in both new and old substrates, high bond strength.

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. All projections, rough spots, etc should be dressed off to achieve a level surface prior to application. Concrete should be cured for at least 28 days and have moisture content less than 5%. In case of deep contamination, or for application on old or existing surface, use mechanical methods like grinding or grit/ captive blasting in order to remove deep contamination to ensure clean and sound open textured substrate.

All shrinkages and nonmoving structural cracks should be repaired before application. Voids and honeycombs must be patched with concrete repair products. Allow the patched area to cure before applying the liquid membrane coating.

Apply a rich coat of high-performance epoxy primer to enhance mechanical adhesion between the coating and the substrate in case of porous substrates.

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 PU1-single component flexible polyurethane sealant. When the sealant is cured, a layer strip of HYDROTHANE PU2 CLEAR, 200 mm wide should be applied centered over all sealed joints. While the membrane is still wet, cover with a correct

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cut strip of fiber mesh, then apply another coat of HYDROTHANE PU2 CLEAR until it is fully covered. Allow the applied strip to cure before applying further coats of the waterproofing membrane.

Mixing:

The system consists of pre-weighed base & hardener components. Mix the contents of component A (Base) with a low speed mixer for one minute to homogenize the content of the container. Slowly add the contents of part B (Hardener) to Part A container and mix thoroughly the materials with low-speed mixer fitted with a suitable paddle for 3-4 minutes to achieve a homogenous, color consistent, lump free mixture. Over mixing must be avoided to minimize air entrapment. Note that the mixing process is exothermic (heat generating), if excess heat is noticed, avoid excessive mixing, and/or control the speed of mixing machine.

Application:

HYDROTHANE PU2 CLEAR can be applied using a trowel, squeegee, brush, roller or airless spray. Apply two coats or one thick coat of 500 micron to ensure an effective watertight system. Subsequent layers could only be done only after the first layer has been cured tack free. The second coat must be applied once the first coat is completely dry.

While applying the product in wet areas, an additional strip of product to be applied around penetrations such as pipes and conduits to ensure proper sealing and waterproofing features

HYDROTHANE PU2 CLEAR can receive further toppings once it is fully cured.

TECHNICAL PROPERTIES	
Color	Clear
Density	1.05 ± 0.03 kg/lit
Potlife @25°C	20 minutes
Application Temperature	+5°C to +40°C
Touch Dry	24 hours
Full Dry	7 days
Adhesion to Concrete (ASTM 4541-02)	2.5 N/mm ²
Shore A Hardness (ASTM 2240)	73

Tensile Strength (ASTM D412)	>5 N/mm ²
Elongation (ASTM D412)	Above 200%
Crack Bridging (ASTM 1305)	Up to 2 mm, no effect
Modulus of Elasticity (ASTM D412)	>2 N/mm ²
Tear Resistance (ASTM D624)	11 N/mm
Recovery from 100% extension (ASTM D412)	97%
Water Impermeability (EN 12390, part 8)	Impermeable
Water Vapor Transmission (ASTM E96)	0.3 g/h/m ²
Chemical Resistance:	
Acidic solutions	Resistant
Alkali solutions	Resistant
Sea, brackish water	Resistant
Oil and Grease	Resistant
Detergents	Resistant
Thinners and solvents	Moderate resistance

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

Standards:

- ASTM C836, ASTM D412, ASTM D624, ASTM D4541, ASTM D2240, ASTM E96

Coverage:

HYDROTHANE PU2 CLEAR achieves coverage of 1.0 liter per 1 m² @ 1.0 mm wet film thickness.

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

Packaging:

HYDROTHANE PU2 CLEAR is available in a set of 4 and 15 liter supplied in metal dual pack.

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Storage:

Store in original packing in dry conditions away from direct sunlight in a temperature-controlled warehouse. Stored at +5°C to +25°C.

Shelf Life:

HYDROTHANE PU2 CLEAR can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

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

Remarks:

- Relative humidity must be greater than 50% and no more than 85%. The substrate temperature must be at least 3°C above measured dew point temperature.
- In order to avoid blistering, it is recommended to apply the coating during falling temperature. Control film thickness during application using a thickness gauge.
- HYDROTHANE PU2 CLEAR should not be applied on surfaces with a risk of rising dampness.
- Should not be applied at temperature below 5°C,
- Don't apply the product with imminent rain forecast.
- Water test should be run after the membrane is fully cured (min. 7 days).
- Don't mix more material than can be used within the pot life of mixture.
- Incorrect assessment treatment of cracks may lead to a reduced service life and reflective cracking.
- HYDROTHANE PU2 CLEAR is will slightly change in color clarity if applied externally.

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 HYDROTHANE PU2 CLEAR Material Safety Data Sheet

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