

HYDROTHANE TR

Elastomeric Polyurethane Based Tar Extended Liquid Applied Waterproofing Membrane

Description:

HYDROTHANE TR is a high build liquid elastomeric waterproofing membrane based on Polyurethane resins modified with coal tar for extra elasticity and harsh environments.

HYDROTHANE TR has excellent adhesion to most substrates including concrete, plaster, masonry, cement render and fibre reinforced cement. Once dry, it cures to form a seamless continuous monolithic membrane that has excellent adhesion to most substrates with extra flexibility and high resistance to chemicals.

Uses:

- Waterproofing solutions in both new construction and refurbishment projects.
- Wet areas; showers, bathrooms, kitchens, balconies, planters, pools, especially in public used utilities.
- Waterproofing concrete panels with potential movement.
- Roofing and corrugated sheets waterproofing.
- Cement pipes and metal.
- Waterproofing membrane underneath hard landscaping or podium areas.
- Bridges, basements, retaining walls.
- Highly compatible in sewage works, wastewater channels and pipes due to its chemical resistance features.

Advantages:

- High build liquid applied membrane in single application.
- Highly flexible, to be applied where movement is expected, without the risk of cracking.
- Self-priming, requires no primer to adhere to substrate.
- Vapor permeable allows substrate to breathe.
- Chemical resistant to detergents, cleaning material, brackish water and salt water.

- Easy applied with excellent workability by manual tools.
- Easy to repair damaged coats.
- High thermal stability. Suitable for Middle East climate.
- Excellent adhesion to most types of substrates.

Instructions for Use:

Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Ensure that concrete surfaces are fully cured before application.

All shrinkages and nonmoving structural cracks under 1.0 mm shall be filled with not less than 1.0 mm thick pretreatment strip of HYDROTHANE TR 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-a fiber reinforced shrinkage compensated repairing mortar. Apply a reinforcing pretreatment strip of HYDROTHANE TR, 1.0 mm thick extending 100mm on both sides of the coving. Voids and honeycombs must be patched with concrete repair products. Allow the patched area to cure before applying the liquid membrane forming coating.

Metal surfaces should be cleaned from rust, oil, paint or any contaminants. For rusted surfaces use mechanical method, or sandblast for removing the rust.

In normal cases, priming is not needed. However, porous surfaces require priming to reduce the risk of blisters caused by air entrapments. Dilute HYDROTHANE TR with 10% ARMOSOLVENT and use as a primer

Primer can also be used for application of new coat on top of old ones.

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Expansion and movement joints should not be covered with a coat of HYDROTHANE TR. Instead, those joints should be sealed with MEGASEAL PU – a polyurethane sealant.

Mixing:

HYDROTHANE TR is a single component ready to use product. Shake the drum well to mix any settled material.

Application:

HYDROTHANE TR can be applied with a roller, trowel, brush or spray machine. It is recommended to apply two coats in case of roller or brush applications. Apply rich coat to the surface in a spread rate of approx. 0.65 Kg/m² per coat. Subsequent coats to be applied to the first coat with same rate of application preferably in 90 degree direction.

Do not allow the coating to be exposed for long periods of time, in order not to eliminate the chance of membrane damage or contamination. It is recommended to cover the membrane once it is completely cured by mortar, tiles or any finishing product as specified.

Do not apply tiles adhesive to HYDROTHANE TR membrane while the coat is still uncured. Provide a good mechanical bonding between tiles and the membrane, by spreading the final coat of HYDROTHANE TR with silica sand while it is still wet.

Standards:

- ASTM D2240, ASTM C836, ASTM D412, ASTM D624

TECHNICAL PROPERTIES	
Color	Black
Density	1.35 ± 0.05 kg/lit
Solid Content	90%
Application Temperature	+5°C to +40°C
Touch Dry	10 hours
Full Dry@25°C	7 days
Adhesion to Concrete (ASTM 4541-02)	>1.0 N/mm ²
Shore A Hardness (ASTM 2240)	50
Tensile Strength	>1.5 N/mm ²

(ASTM D412)	
Elongation (ASTM D412)	>600%
Crack Bridging (ASTM 1305)	>2 mm
Modulus of Elasticity (ASTM D412)	4.4 kPa
Tear Resistance (ASTM D624)	15 N
Water Vapor Transmission (ASTM E96)	>0.31 g/h/m ²
Service Temperature	-5°C to 75°C
Chemical Properties	Good resistance against acidic and alkali solutions, detergents, seawater, brackish water and oils

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

Coverage:

HYDROTHANE TR achieves coverage of 1.35 kg per 1 m² @ 1.0 mm dry film thickness.

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

Packaging:

HYDROTHANE TR is available in 20 Kg pails.

Storage:

HYDROTHANE TR is to be stored in original packing in dry conditions away from direct sunlight and high humidity levels. Stored at +15°C to 25°C

Shelf Life:

HYDROTHANE TR can be utilized within minimum 6 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

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

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Remarks:

- For the best results, the temperature during application should be in the range between 5°C and 35°C. High humidity may affect the curing process.
- Once a pail has been opened, its contents should, if possible, be used up completely, since surface skinning will form in any remaining quantities.
- HYDROTHANE TR should not be applied on surfaces with a risk of rising dampness.
- In order to avoid blistering, it is recommended to apply the coating during falling temperature. Control film thickness during application using a thickness gauge.

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. The product is flammable, keep away from sources of ignition. **DO NOT SMOKE**. Take precautionary measures against static discharge.

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 TR Material Safety Data Sheet

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