

TECHNICAL DATA SHEET

LIQUID-APPLIED POLYURETHANE WATERPROOFING MEMBRANE



POLY TI 150

DESCRIPTION

POLY TI 150 is a premium, liquid-applied, highly permanent elastic, cold applied and cold curing, one component polyurethane membrane used for long-lasting waterproofing. POLY TI 150 is based on pure elastomeric hydrophobic polyurethane resins, which result in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Cures by reaction with ground and air moisture.



ADVANTAGES

- Simple application (roller or airless spray). • When applied forms seamless membrane without joints.
- Resistant to water. • Resistant to frost. • Resistant to root penetration, so it can be used in green roofs.
- Crack-bridging up to 2mm, even at -10°C. • Provides water vapor permeability, so the surface can breathe.
- Provides excellent thermal resistance, it never turns soft. • Provides excellent weather and UV resistance.
- Waterproofs old bitumen-, asphalt felts by covering them, without the need to remove them prior to application.
- Provides high sun reflectivity, contributing to thermoinsulation.
- Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- Provides excellent adhesion to almost any type of surface.
- The waterproofed surface can be used for domestic and public pedestrian and vehicular traffic.
- Resistant to detergents, oils, seawater and domestic chemicals.
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes.
- Does not need the use of open flames (torch) during application. • Over 15 years of positive feedback worldwide.

USES

- Waterproofing of Roofs
- Waterproofing of Balconies, Terraces and Verandas
- Waterproofing of Wet Areas (under-tile) in Bathrooms, Kitchens, Balconies, Auxiliary Rooms, etc
- Waterproofing of Pedestrian and Vehicular traffic Decks
- Waterproofing of Green Roofs, Flowerbeds, Planter Boxes
- Waterproofing of old Bitumen felts, Asphalt felts, EPDM and PVC membranes and old Acrylic coatings.
- Protection of Polyurethane Foam Insulation
- Waterproofing and protection of Concrete constructions like Bridge-Decks, Tunnels, Stadium Stands, Car Parks, etc.

APPLICATIONS

Surface Preparation

Careful surface preparation is essential for optimum finish and durability

Repair of cracks and joints

The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results

Priming

On sound, high quality concrete surfaces no primer is necessary.

Waterproofing membrane

Stir well before using for at least 2-3min. Apply the POLY TI 150 onto the surface by roller or brush, until all surface is covered.

TECHNICAL DATA

PROPERTY	RESULTS	TEST METHOD
Elongation at Break	> 800 %	ASTM D 412 / DIN 52455
Tensile Strength	> 4 N/ mm ²	ASTM D 412 / DIN 52455
Water Vapor Permeability	> 25 gr/m ² /day	ISO 9932:91
Resistance to mechanical damage by static impression	High Resistance (class:P3)	EOTA TR-007
Resistance to mechanical damage by dynamic impression	High Resistance (class:P3)	EOTA TR-006
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Adhesion to concrete	>2,0 N/mm ² (concrete surface failure)	ASTM D 903
Crack Bridging Capability	up to 2 mm crack	EOTA TR-008
Hardness (Shore A Scale)	65	ASTM D 2240 (15")
Resistance to Root Penetration	Resistant	UNE 53420
Solar Reflectance (SR)	0.87	ASTM E903-96
Solar Emittance (ε)	0.89	ASTM E408-71
Thermal Resistance (80°C for 100 days)	Passed - No significant changes	EOTA TR-011
UV accelerated ageing, in the presence of moisture	Passed - No significant changes	EOTA TR-010
Resistance after water aging	Passed	EOTA TR-012
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change	Inhouse Lab
Construction Material Fire class	B2	DIN 4102-1
Resistance to Flying Sparks and Radiating Heat	Passed	DIN 4102-7
Service Temperature	-30°C to +90°C	Inhouse Lab
Shock Temperature (20min)	200°C	Inhouse Lab
Rain Stability Time	4 hours	Conditions: 20°C, 50% RH
Light Pedestrian Traffic Time	12 hours	
Final Curing time	7 days	
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.	

CONSUMPTION

1,4 – 2,5 kg/m² applied in two or three layers.
This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption. In case of POLY TI FABRIC reinforcement, consumption increases.

COLORS

The POLY TI 150 is supplied in white and light grey.
Other colors may be supplied on demand.

ADDITIONAL INFORMATION

Contains isocyanates. May produce an allergic reaction.

PACKAGING

25 Kg. Metal Pail

DANGER

