

Mapeplan[®] WT

Waterproofing synthetic membrane for hydraulic works



DESCRIPTION

Mapeplan[®] WT is a synthetic waterproofing membrane in PVC-P produced in one **multi-extrusion process**, with high quality raw materials. **Mapeplan[®] WT** is conform to EN 13361 and EN 13362 standards.

APPLICATION FIELDS

Mapeplan[®] WT is suitable for waterproof tanks reservoirs and canals. It is resistant to ultraviolet rays and may be exposed to all weather conditions.

NORMS AND CERTIFICATIONS

CE conformity marking according to EN 13361 and EN 13362 standards.
ISO 9001 quality system certification.
ISO 14001 environmental system certification.
Suitable for contact with drinking water according to Italian Regulation D.M. 06/04/2004.
Suitable for contact with drinking water Ph >4,5 according to Italian Regulation D.M. 26/04/1993 and updates.

Mapeplan[®] WT can contribute in the collection of LEED (Leadership in Energy and Environmental Design) Credits.



TECHNICAL CHARACTERISTICS

Mapeplan[®] WT is a high standard quality product; it performs very good mechanical properties, best workability as well as excellent welding characteristics.

- Suitable for contact with drinking water

- High workability and weldability
- Resistant to microbiological attacks and root-resistant
- High mechanical resistance
- Excellent flexibility at low temperatures
- Excellent resistance to ageing
- Excellent resistance to UV rays and to weathering
- Formulation without dangerous or harmful substances for human health and for the environment

PACKAGING

PALLET	14 rolls per pallet
LENGTH OF ROLLS	20 m
WIDTH OF ROLLS	2,00/2,10 m

STORAGE

Store horizontally, shelter from sun and bad weather in a dry place.

SAFETY INSTRUCTIONS

Mapeplan[®] WT is not considered dangerous according to the current safety regulation for the classification of goods and substances. The safety datasheet is therefore not compulsory for the purchase, transport and application. Precaution during use: ensure a proper change of air if the application is made in closed working environments.

TECHNICAL DATA

PRODUCT PROPERTIES

Product	Waterproofing membrane in PVC-P, without internal reinforcement		
Colour	Top layer: light grey Bottom layer: light grey		
European standard	EN 13361 e EN 13362		

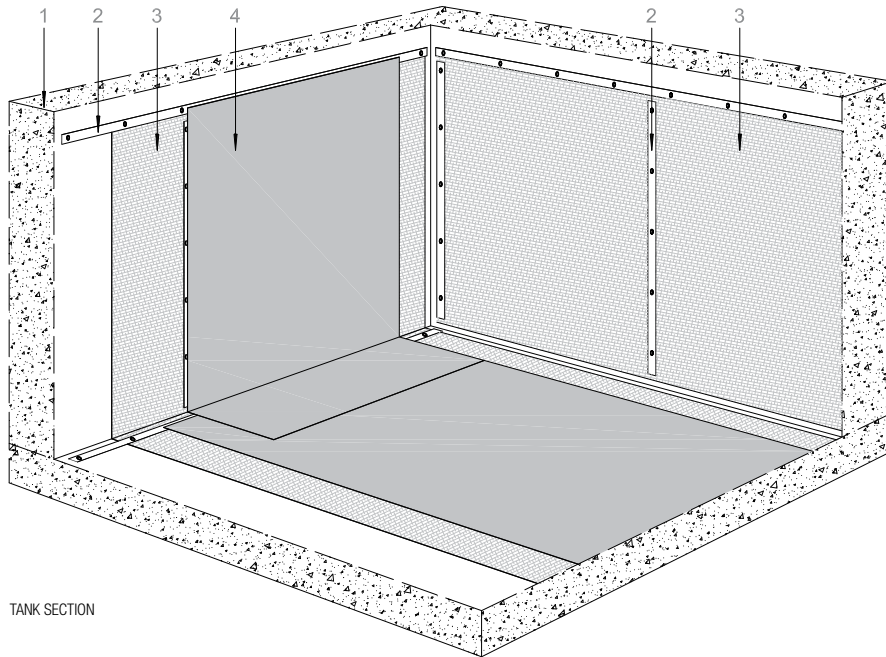
CHARACTERISTICS STANDARDS - M.U.		Mapeplan® WT 12	Mapeplan® WT 15	Mapeplan® WT 20
Effective thickness (m)	EN 1849-2	1,2 (-5/+10%)	1,5 (-5/+10%)	2,0 (-5/+10%)
Length (m)	EN 1848-2	20 (-0/+5%)	20 (-0/+5%)	20 (-0/+5%)
Width (mm)	EN 1848-2	2,00/2,10 (-0,5/+1%)	2,00/2,10 (-0,5/+1%)	2,00/2,10 (-0,5/+1%)
Mass per unit area (Kg/m²)	EN 1849-2	1,5 (-5/+10%)	1,8 (-5/+10%)	2,5 (-5/+10%)
TECHNICAL CHARACTERISTICS		Mapeplan® WT 12	Mapeplan® WT 15	Mapeplan® WT 20
Water permeability (liquid tightness) EN 14150		$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$
Tensile strength ISO R 527 (N/mm²)		≥ 15	≥ 15	≥ 15
Elongation at break ISO R 527 (%)		≥ 250	≥ 250	≥ 250
Resistance to static punching EN ISO 12236 (kN)		1,5 (±0,4)	1,8 (±0,4)	2,5 (±0,4)
Burst strength EN 14151 (%)		≥ 50	≥ 50	≥ 50
Tear resistance - longitudinal - transversal ISO 34-1 (kN/m)		≥ 40 ≥ 40	≥ 40 ≥ 40	≥ 40 ≥ 40
Foldability at low temperature EN 495-5 (°C)		≤ -20	≤ -20	≤ -20
Thermal expansion ASTM D 696-91 1/K		147×10^{-6} ($\pm 50 \times 10^{-6}$)	147×10^{-6} ($\pm 50 \times 10^{-6}$)	147×10^{-6} ($\pm 50 \times 10^{-6}$)
Resistance to weathering (charge and elongation at break) EN 12224 (%)		≥ 75	≥ 75	≥ 75
Microbiological resistance (charge variation / elongation at break) EN 12225 (%)		≤ 15 / ≤ 15	≤ 15 / ≤ 15	≤ 15 / ≤ 15
Resistance to oxidation (charge variation / elongation at break) EN 14575 (%)		≤ 25 / ≤ 25	≤ 25 / ≤ 25	≤ 25 / ≤ 25
Resistance to environmental stress cracking ASTM D 5397-99 (h)		NPD (not significative for PVC-P membranes)	NPD (not significative for PVC-P membranes)	NPD (not significative for PVC-P membranes)
Resistance to leaching, type A (tensile strength variation) EN 14415 (%)		≤ 15	≤ 15	≤ 15
Resistance to leaching, type B (elongation at break variation) EN 14415 (%)		≤ 15	≤ 15	≤ 15
Resistance to leaching, type C (elongation at break variation) EN 14415 (%)		NPD	NPD	NPD
Resistance to root penetration UNI CEN/TS 14416		conform	conform	conform

Considering the various situations of use, the numerous types of support surfaces and the possibilities for use inside COMPLEX WATERPROOF LAYERING, Polyglass SpA cannot assume any liability for damages derived from the product's results in terms of function or aesthetics.
Technical Data Sheet Rev. 1/16

MAPEPLAN® accessories

- Mapeplan®, metal sheets coupled to Mapeplan® membrane
- Mapeplan® Cleaner, cleaning liquid
- Mapeplan®, special prefabricated pieces

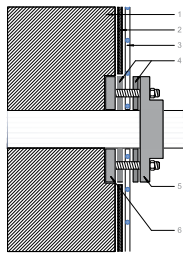
MAPEPLAN® WT LAYERING



TANK SECTION

TANK SECTION LEGEND

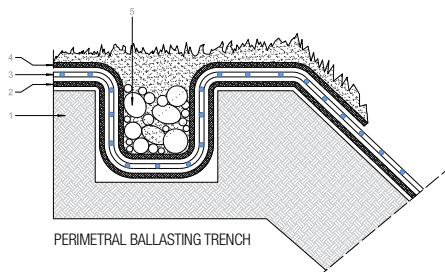
1. Substrate
2. Fixing element Mapeplan® strip profile
3. Regularization layer Polydren PP
4. Waterproofing layer, MAPEPLAN® WT membrane



CLAMPING

CLAMPING LEGEND

1. Substrate
2. Regularization layer Polydren PP
3. Waterproofing layer: MAPEPLAN® WT
4. Gaskets
5. Counter flange
6. Flange with steel prisoners



PERIMETRAL BALLASTING TRENCH

PERIMETRAL BALLASTING TRENCH LEGEND

1. Substrate
2. Regularization layer Polydren PP
3. Waterproofing layer: MAPEPLAN® WT
4. Protection layer Polydren PP
5. Ballast

Technical specifications of product are available on the technical books.
References for this product are available on request and on Mapei and polyglass web sites at the following addresses www.mapei.it, www.mapei.com and www.polyglass.com



MAPEPLAN range is produced by:



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