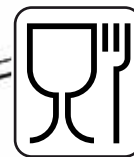


# Mapeplan® T WT



## Waterproofing synthetic membrane for hydraulic works

### DESCRIPTION

Mapeplan® T WT is a synthetic waterproofing membrane in flexible polyolefin TPO/FPO produced in one multi-extrusion coating process, with high quality raw materials with glass mat reinforcement. Mapeplan® T WT is conform to EN 13361, EN 13362, EN 13491, EN 13492 and EN 13967.

### APPLICATION FIELDS

Mapeplan® T WT is suitable for waterproof tanks, reservoirs, basins, cisterns, 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, EN 13362, EN 13491, EN 13492 and EN 13967. 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 and BS 6920:2000. Suitable for contact with drinking water Ph >4,5 according to Italian Regulation D.M. 26/04/1993 and updates.

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



### TECHNICAL CHARACTERISTICS

Mapeplan® T 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 leaching
- Excellent resistance to UV rays and to weathering
- Formulation without plasticizers
- Formulation without dangerous or harmful substances for human health and for the environment

### PACKAGING

<b>PALLET</b>	14 rolls per pallet
<b>LENGTH OF ROLLS</b>	25 m 20 m (according to the thickness)
<b>WIDTH OF ROLLS</b>	2,00 m

### STORAGE

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

### SAFETY INSTRUCTIONS

Mapeplan® T 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.

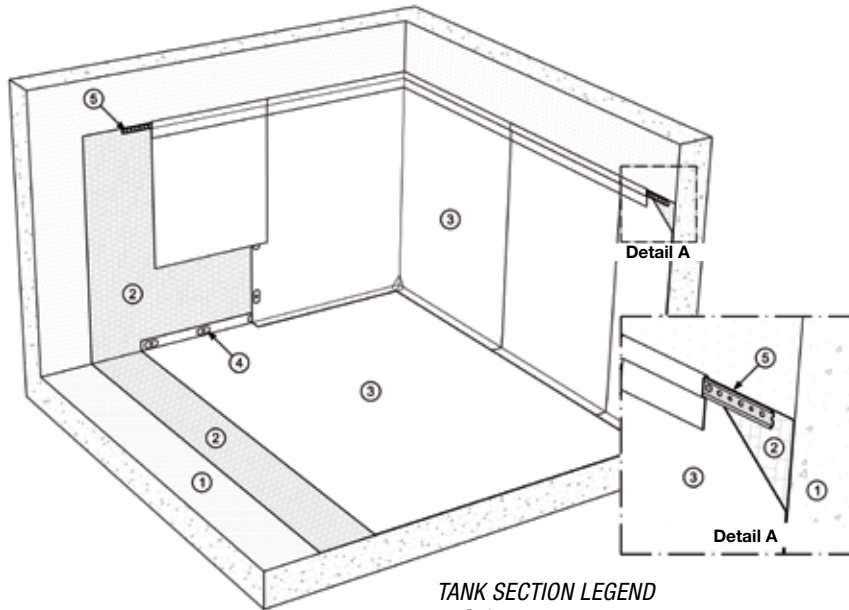
TECHNICAL DATA				
PRODUCT PROPERTIES				
Product	Waterproofing membrane in TPO/FPO (flexible polyolefin), with glass mat reinforcement.			
Colour	Top layer: light green Bottom layer: black			
European standard	EN 13361, EN 13362, EN 13491, EN 13492 and EN 13967			
CHARACTERISTICS STANDARDS - M.U.	Mapeplan® T WT 13	Mapeplan® T WT 15	Mapeplan® T WT 20	Mapeplan® T WT 25
Effective thickness (mm) EN 1849-2	1,3 (-5/+10%)	1,5 (-5/+10%)	2,0 (-5/+10%)	2,5 (-5/+10%)
Length (m) EN 1848-2	25 (-0/+5%)	20 (-0/+5%)	20 (-0/+5%)	15 (-0/+5%)
Width (m) EN 1848-2	2,00 (-0,5/+1%)	2,00 (-0,5/+1%)	2,00 (-0,5/+1%)	2,00 (-0,5/+1%)
Mass per unit area (kg/m²) EN 1849-2	1,3 (-5/+10%)	1,5 (-5/+10%)	2,0 (-5/+10%)	2,5 (-5/+10%)
TECHNICAL CHARACTERISTICS	Mapeplan® T WT 13	Mapeplan® T WT 15	Mapeplan® T WT 20	Mapeplan® T WT 25
Water permeability (liquid tightness) EN 14150	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$	$< 10^{-7} \text{ m}^3 \times \text{m}^2 \times \text{d}^{-1}$
Tensile strength ISO R 527 (N/mm²)	≥ 10	≥ 10	≥ 10	≥ 10
Elongation at break ISO R 527 (%)	≥ 500	≥ 500	≥ 500	≥ 500
Resistance to static punching EN ISO 12236 (kN)	1,5 (±0,4)	1,5 (±0,4)	2,0 (±0,4)	3,0 (±0,4)
Burst strength EN 14151 (%)	≥ 50	≥ 50	≥ 50	≥ 50
Tear resistance - longitudinal - transversal ISO 34-1 (kN/m)	≥ 50 ≥ 50	≥ 50 ≥ 50	≥ 50 ≥ 50	≥ 50 ≥ 50
Foldability at low temperature EN 495-5 (°C)	≤ -40	≤ -40	≤ -40	≤ -40
Thermal expansion ASTM D 696-91 1/K	$82 \times 10^{-6}$ (±30 x 10 <sup>-6</sup> )	$82 \times 10^{-6}$ (±30 x 10 <sup>-6</sup> )	$82 \times 10^{-6}$ (±30 x 10 <sup>-6</sup> )	$82 \times 10^{-6}$ (±30 x 10 <sup>-6</sup> )
Resistance to weathering (charge and elongation at break) EN 12224 (%)	≥ 75	≥ 75	≥ 75	≥ 75
Microbiological resistance (charge variation / elongation at break) EN 12225 (%)	≤ 10 / ≤ 10	≤ 10 / ≤ 10	≤ 10 / ≤ 10	≤ 10 / ≤ 10
Resistance to oxidation (charge variation / elongation at break) EN 14575 (%)	≤ 25 / ≤ 25	≤ 25 / ≤ 25	≤ 25 / ≤ 25	≤ 25 / ≤ 25
Resistance to environmental stress cracking ASTM D 5397-99 (h)	≥ 200	≥ 200	≥ 200	≥ 200
Resistance to leaching, type A (tensile strength variation) EN 14415 (%)	≤ 10	≤ 10	≤ 10	≤ 10
Resistance to leaching, type B (elongation at break variation) EN 14415 (%)	≤ 10	≤ 10	≤ 10	≤ 10
Resistance to leaching, type C (elongation at break variation) EN 14415 (%)	≤ 10	≤ 10	≤ 10	≤ 10
Chemical resistance, type A (elongation at break variation) EN 14414 (%)	≤ 10	≤ 10	≤ 10	≤ 10
Chemical resistance, type B (elongation at break variation) EN 14414 (%)	≤ 10	≤ 10	≤ 10	≤ 10
Chemical resistance, type D (elongation at break variation) EN 14414 (%)	≤ 20	≤ 20	≤ 20	≤ 20
Resistance to root penetration UNI CEN/TS 14416	conform	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. 1/17

## MAPEPLAN® T ACCESSORIES

- Mapeplan® T, metal sheets coupled to Mapeplan® T membrane
- Mapeplan® T Cleaner, cleaning liquid
- Mapeplan® T Seam Prep, liquid preparation overlaps
- Mapeplan® T, special prefabricated pieces

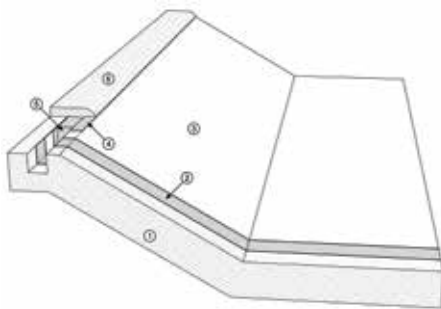
## MAPEPLAN® T WT LAYERING



TANK SECTION

### TANK SECTION LEGEND

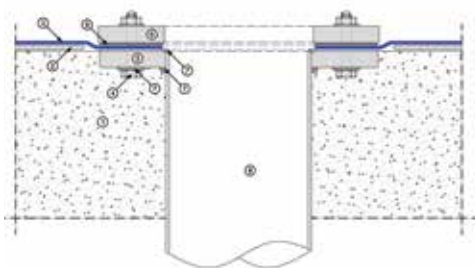
1. Substrate
2. Levelling layer POLYDREN
3. Waterproofing membrane MAPEPLAN® T WT
4. Mechanical fixing with plates
5. Mechanical fixing MAPEPLAN METALBAR



RESERVOIRE SECTION

### RESERVOIRE SECTION LEGEND

1. Soil
2. Levelling layer in POLYDREN
3. MAPEPLAN® T WT waterproofing membrane layer
4. Protection layer POLYDREN
5. Ballast
6. Soil



CLAMPING

### CLAMPING LEGEND

1. Structure
2. Levelling layer POLYDREN
3. Waterproofing membrane MAPEPLAN® T WT
4. Bolts with continuous weld watertight
5. Stainless steel flange fixed with rounded borders
6. Stainless steel counter-flange mobile with rounded borders
7. Continuous weld watertight
8. Pipe
9. Gasket

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](http://www.mapei.it), [www.mapei.com](http://www.mapei.com) and [www.polyglass.com](http://www.polyglass.com)



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**MAPEPLAN range is produced by:**



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