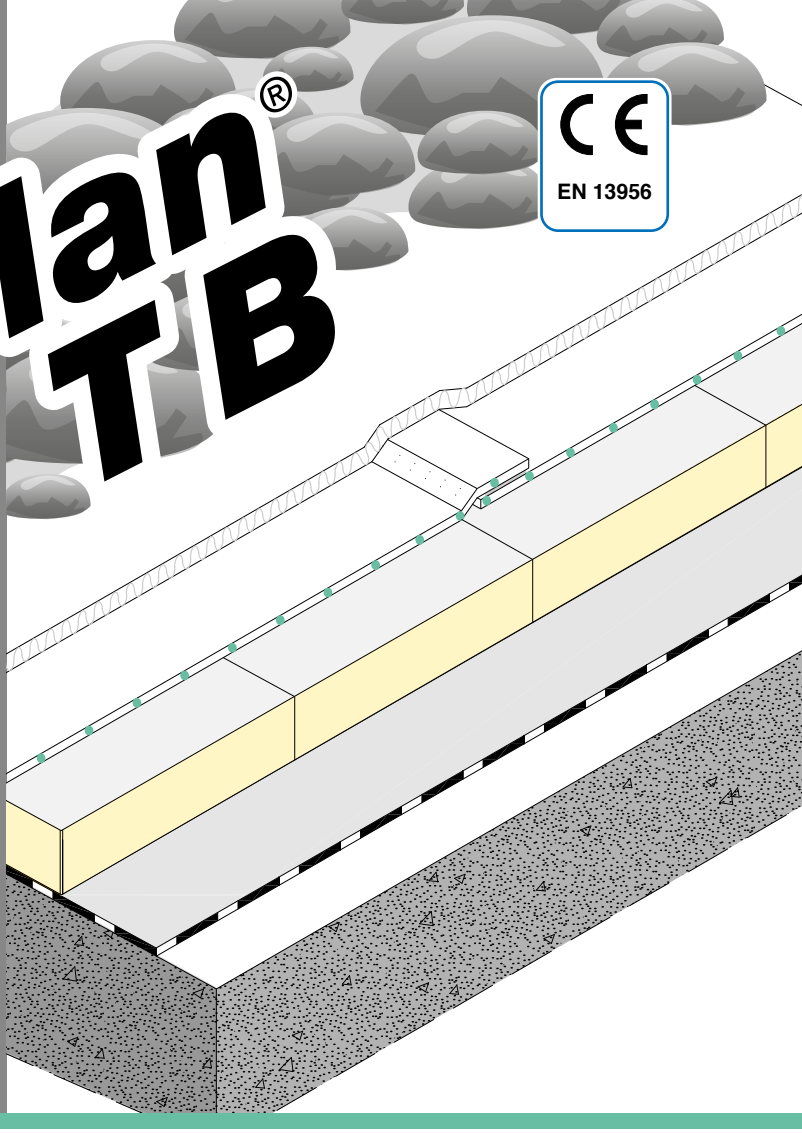
Mapeplan® T B

Roofing and waterproofing synthetic membrane



DESCRIPTION
Mapeplan® T B is a synthetic roofing waterproofing membrane in flexible polyolefin FPO/TPO produced in one **multi-extrusion coating process**, with high quality raw materials, reinforced with glass mat.
Mapeplan® T B is conform to EN 13956 standard.

APPLICATION FIELDS
Mapeplan® T B is suitable for loose laid ballasted, utility deck (pedestrian - parking) and roof garden systems. Also it can be directly adhered onto suitable substrates like plywood and concrete.
It is resistant to ultraviolet rays.

NORMS AND CERTIFICATIONS
CE conformity marking according to EN 13956 standard.
ISO 9001 quality system certification.
ISO 14001 environmental system certification.
BBA Agrément Certification.
FLL root resistance certification.
Mapeplan® T B can contribute in the collection of LEED (Leadership in Energy and Environmental Design) Credits.
Mapeplan® T B is part of the CO_2 Fully Offset in the Entire Life Cycle line of products.

TECHNICAL CHARACTERISTICS
Mapeplan® T B is a high standard quality product; it performs very good mechanical properties, best workability as well as excellent welding characteristics.

- **High solar reflectance**
- 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
- Vapour permeability
- Formulation without plasticizers

PACKAGING

PALLET	14 rolls per pallet
LENGTH OF ROLLS	20 m 15 m (according to the thickness)
WIDTH OF ROLLS	2,10 m

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

SAFETY INSTRUCTIONS
Mapeplan® T B 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.

Mapeplan® T B

TECHNICAL DATA

PRODUCT PROPERTIES

Product	Waterproofing membrane in FPO/TPO (flexible polyolefin), reinforced with glass mat.
Colour	Top layer: high reflectance Smart White* Bottom layer: black
European standard	EN 13956 Certificate also EN 13361 - EN 13362 - EN 13491 - EN 13492

CHARACTERISTICS STANDARDS - M.U.		Mapeplan® T B 15	Mapeplan® T B 18	Mapeplan® T B 20
Visible defects	EN 1850-2	None	None	None
Length (m)	EN 1848-2	20 (-0/+5%)	15 (-0/+5%)	15 (-0/+5%)
Width (m)	EN 1848-2	2,10 (-0,5/+1%)	2,10 (-0,5/+1%)	2,10 (-0,5/+1%)
Straightness (mm)	EN 1848-2	≤ 30	≤ 30	≤ 30
Flatness (mm)	EN 1848-2	≤ 10	≤ 10	≤ 10
Mass per unit area (kg/m²)	EN 1849-2	1,5 (-5/+10%)	1,8 (-5/+10%)	2,0 (-5/+10%)
Effective thickness (mm)	EN 1849-2	1,5 (-5/+10%)	1,8 (-5/+10%)	2,0 (-5/+10%)

TECHNICAL CHARACTERISTICS	Mapeplan® T B 15	Mapeplan® T B 18	Mapeplan® T B 20
Watertightness EN 1928 B Method	Watertight	Watertight	Watertight
Reaction to fire EN 13501-1	Class E	Class E	Class E
Joint peel resistance EN 12316-2 (N/50mm)	≥ 300	≥ 300	≥ 300
Joint shear resistance EN 12317-2 (N/50mm)	≥ 500	≥ 500	≥ 500
Vapour diffusion resistance EN 1931 (μ)	150000	150000	150000
Tensile strength EN 12311-2 (N/mm²)	≥ 9	≥ 9	≥ 9
Elongation at break EN 12311-2 (%)	≥ 550	≥ 550	≥ 550
Resistance to impact - rigid support (A method) - flexible support (B method) EN 12691 (mm)	≥ 600 ≥ 1100	≥ 800 ≥ 1500	≥ 900 ≥ 1750
Resistance to static load - flexible support (A method) - rigid support (B method) EN 12730 (kg)	≥ 15 ≥ 20	≥ 15 ≥ 25	≥ 15 ≥ 30
Tear resistance EN 12310-2 (N)	≥ 150	≥ 150	≥ 150
Dimensional stability EN 1107-2 (%)	≤ 0,2	≤ 0,2	≤ 0,2
Foldability at low temperatures EN 495-5 (°C)	≤ -40	≤ -40	≤ -40
UV exposure EN 1297 (5000 h)	grade 0 - passes	grade 0 - passes	grade 0 - passes
Exposure/compatibility to aged bitumen (possible colour variations)	compatible	compatible	compatible
Resistance to root penetration EN 13948 - Test FLL	conform	conform	conform
SRI (Solar Reflectance Index) ASTM E1980	102	102	102

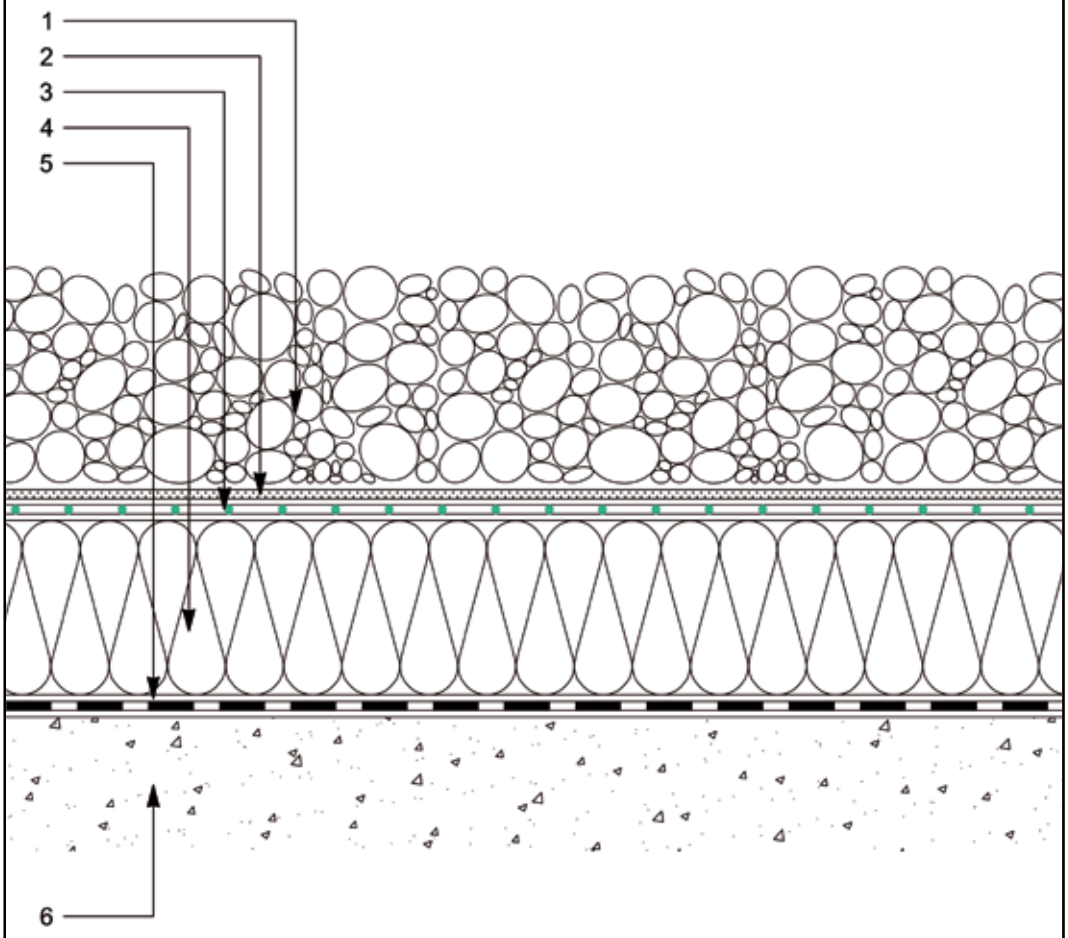
* Available on request in light grey color RAL 7035 or lead grey RAL 7012.

MAPEPLAN® T accessories

- **Mapeplan® T D**, membrane for details and particulars
- **Mapeplan® T**, metal sheets coupled to **Mapeplan® T** membrane
- **Mapeplan® T**, internal and external prefabricated corners
- **Mapeplan® ADS 300** and **ADS 310**, contact adhesives
- **Mapeplan® T Seam Prep**, liquid preparation overlaps
- **Mapeplan® T Cleaner**, liquid for cleaning
- **Mapeplan® T**, outlets and special prefabricated pieces

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.

MAPEPLAN® T B ROOF BUILD-UP



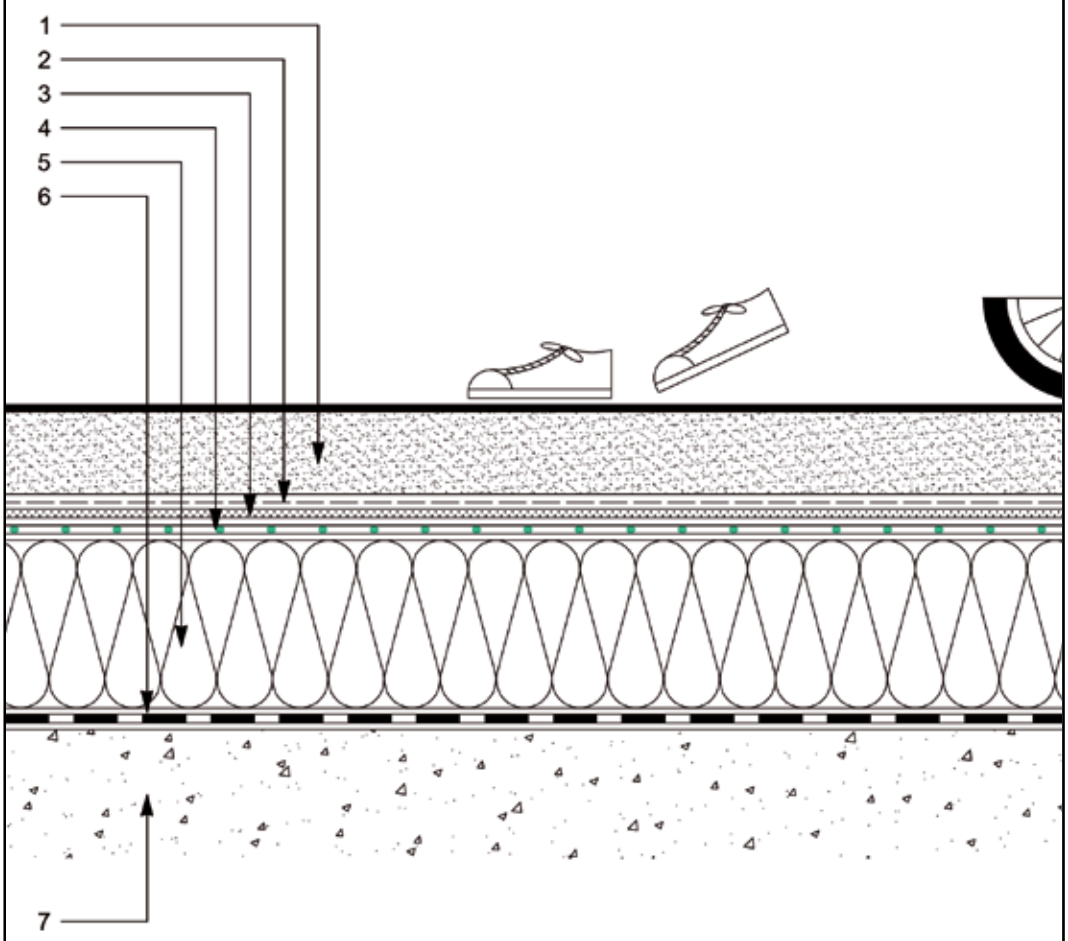
- ***High solar reflectance***
- *Environmental friendly*
- *Resistant to ageing processes*
- *Root-resistant*
- *Resistant to microbiological attacks*
- *Flexible at low temperatures*
- *Puncture resistant*
- *UV-resistant*
- *High workability and weldability*
- *Vapour permeable*
- *Formulation without plasticizers*
- *Dimensionally stable*
- *Excellent fire behaviour*

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

LEGEND

1. *Layer of ballast, gravel*
2. *Protective layer (for example POLYDREN)*
3. *MAPEPLAN® T B, roofing membrane*
4. *Thermal insulation*
5. *Vapour control layer (for example POLYVAP)*
6. *Substrate*

MAPEPLAN® T B ROOF BUILD-UP



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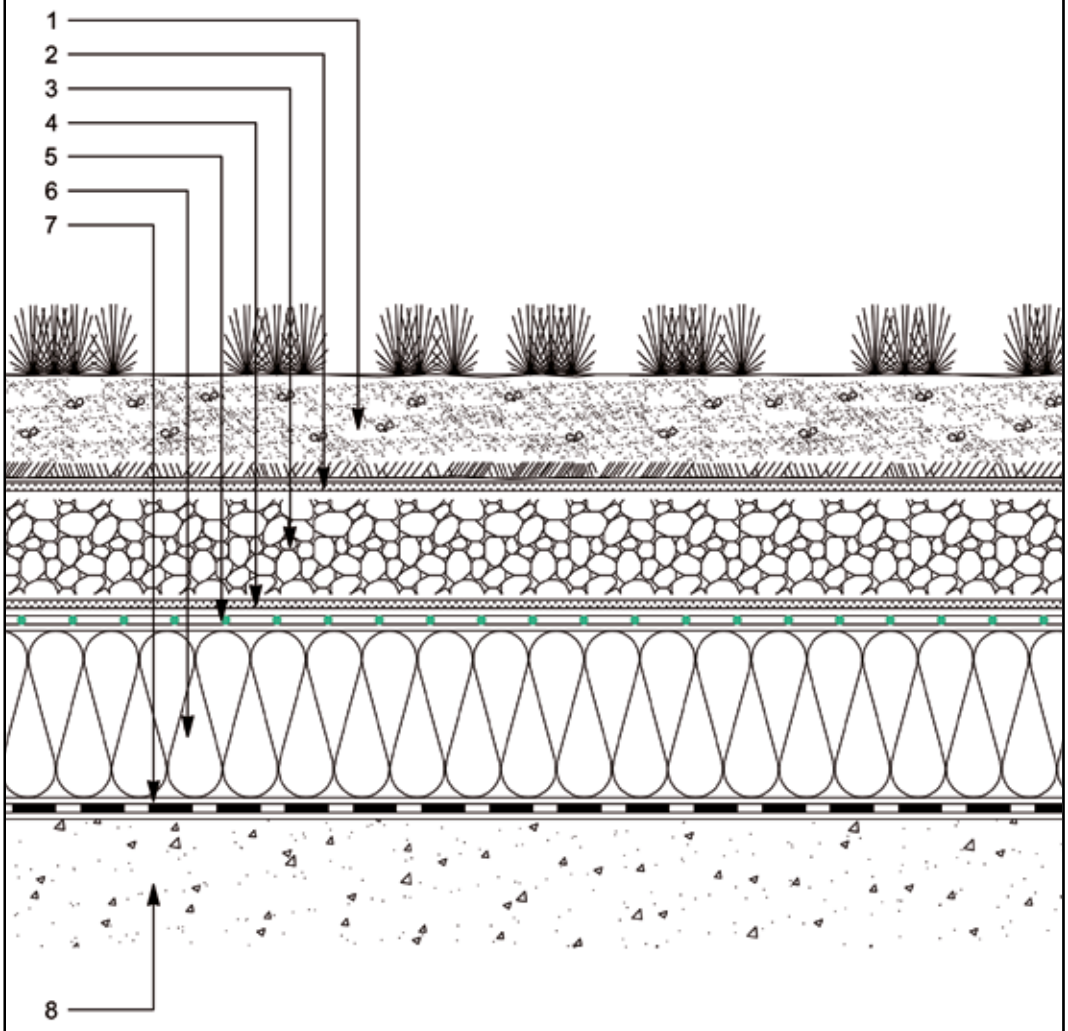
LEGEND

1. *Layer driveway, cement screed with a wear layer*
2. *Antisoaking layer (for example MAPEPLAN® PE micro-perforated)*
3. *Protection layer (for example POLYDREN)*
4. *MAPEPLAN® T B, roofing membrane*
5. *Thermal insulation*
6. *Vapour control layer (for example POLYVAP)*
7. *Substrate*

MAPEPLAN® T B ROOF BUILD-UP



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LEGEND
1. *Growth medium*
2. *Filter layer (for example POLYDREN)*
3. *Drainage layer*
4. *Protective layer (for example POLYDREN)*
5. *MAPEPLAN® T B, roofing membrane*
6. *Thermal insulation*
7. *Vapour control layer (for example POLYVAP)*
8. *Substrate*

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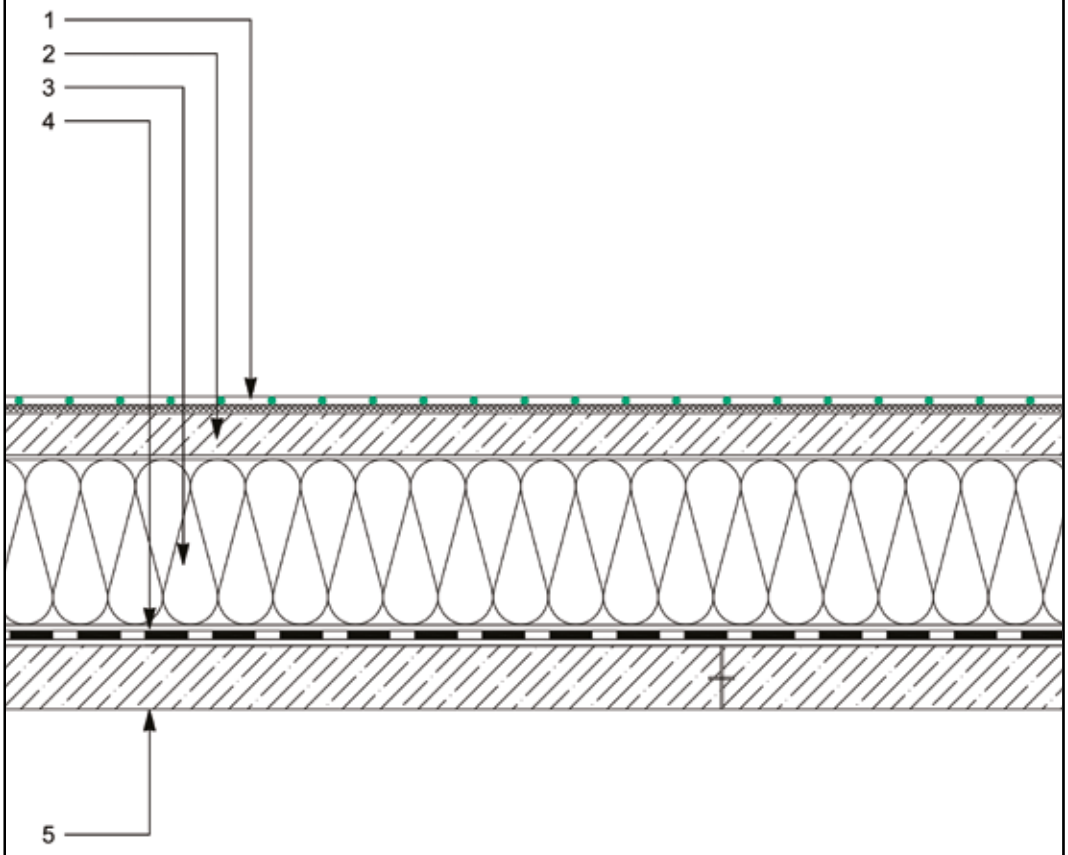

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LEGEND
1. *Mapeplan® T B adhered, roofing membrane*
2. *Wood substrate*
3. *Thermal insulation*
4. *Vapour barrier (for example Polyvap SA)*
5. *Wood substrate*

Mapeplan® TB

2115 - 04/24

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MAPEI®

www.mapei.com

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POLYGLASS®

MAPEI GROUP

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