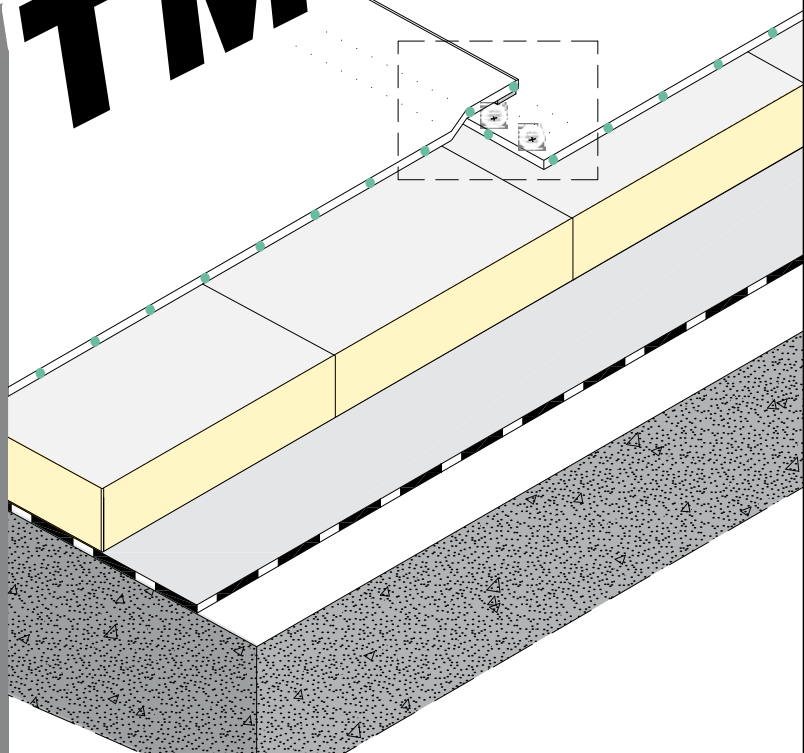


Mapeplan[®] T M



Roofing and waterproofing synthetic membrane



DESCRIPTION

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

APPLICATION FIELDS

Mapeplan[®] T M is suitable for exposed roof installations and for mechanical fixing. It is resistant to ultraviolet rays and may be exposed to all weather conditions.

NORMS AND CERTIFICATIONS

CE conformity marking according to EN 13956 standard
ISO 9001 quality system certification
ISO 14001 environmental system certification
Leed Certification (Leadership in Energy and Environmental Design)



TECHNICAL CHARACTERISTICS

Mapeplan[®] T M 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
- 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 | 25 m 20 m 15 m (according to the thickness) |
| WIDTH OF ROLLS | 2,10 m 1,60 m 1,05 m |

STORAGE

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

SAFETY INSTRUCTIONS

Mapeplan[®] T M 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.

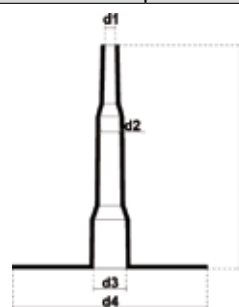
TECHNICAL DATA

PRODUCT PROPERTIES

| Product | Waterproofing membrane in TPO/FPO (flexible polyolefin), reinforced with polyester net | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|
| Colour | Top layer: high reflectance Smart White Bottom layer: black | | | | |
| European standard | EN 13956 | | | | |
| CHARACTERISTICS STANDARDS - M.U. | | Mapeplan [®] T M 12 | Mapeplan [®] T M 15 | Mapeplan [®] T M 18 | Mapeplan [®] T M 20 |
| Visible defects | EN 1850-2 | None | None | None | None |
| Length (m) | EN 1848-2 | 25 (-0/+5%) | 20 (-0/+5%) | 15 (-0/+5%) | 15 (-0/+5%) |
| Width (m) | EN 1848-2 | 2,10/1,60/1,05 (-0,5/+1%) | 2,10/1,60/1,05 (-0,5/+1%) | 2,10/1,60/1,05 (-0,5/+1%) | 2,10/1,60/1,05 (-0,5/+1%) |
| Straightness (mm) | EN 1848-2 | ≤ 30 | ≤ 30 | ≤ 30 | ≤ 30 |
| Flatness (mm) | EN 1848-2 | ≤ 10 | ≤ 10 | ≤ 10 | ≤ 10 |
| Mass per unit area (kg/m ²) | EN 1849-2 | 1,2 (-5/+10%) | 1,5 (-5/+10%) | 1,8 (-5/+10%) | 2,0 (-5/+10%) |
| Effective thickness (mm) | EN 1849-2 | 1,2 (-5/+10%) | 1,5 (-5/+10%) | 1,8 (-5/+10%) | 2,0 (-5/+10%) |
| TECHNICAL CHARACTERISTICS | | Mapeplan [®] T M 12 | Mapeplan [®] T M 15 | Mapeplan [®] T M 18 | Mapeplan [®] T M 20 |
| Water tightness (kPa/72h) | EN 1928 | ≥ 400 | ≥ 400 | ≥ 400 | ≥ 400 |
| Reaction to fire | EN 13501-1 | Class E | Class E | Class E | Class E |
| External fire performance | Broof (t1) | passes < 20° | passes < 20° | passes < 20° | passes < 20° |
| Joint peel resistance | EN 12316-2 (N/50mm) | ≥ 300 | ≥ 300 | ≥ 300 | ≥ 300 |
| Joint shear resistance | EN 12317-2 (N/50mm) | ≥ 650 | ≥ 650 | ≥ 650 | ≥ 650 |
| Vapour diffusion resistance | EN 1931 (μ) | 150.000 | 150.000 | 150.000 | 150.000 |
| Hail resistance | - rigid support | ≥ 18 | ≥ 22 | ≥ 25 | ≥ 28 |
| | - flexible support EN 13583 (m/s) | ≥ 25 | ≥ 30 | ≥ 33 | ≥ 36 |
| Tensile strength (N/50mm) | EN 12311-2 | ≥ 1100 | ≥ 1100 | ≥ 1100 | ≥ 1100 |
| Elongation | EN 12311-2 (%) | ≥ 15 | ≥ 15 | ≥ 15 | ≥ 15 |
| Resistance to impact | - rigid support | ≥ 400 | ≥ 600 | ≥ 800 | ≥ 900 |
| | - flexible support | ≥ 800 | ≥ 900 | ≥ 1000 | ≥ 1100 |
| Resistance to static load | EN 12691 (mm) | | | | |
| | EN 12730-B (kg) | ≥ 20 | ≥ 20 | ≥ 20 | ≥ 20 |
| Tear resistance | EN 12310-2 (N) | ≥ 200 | ≥ 200 | ≥ 200 | ≥ 200 |
| Dimensional stability | EN 1107-2 (%) | ≤ 0,3 | ≤ 0,3 | ≤ 0,3 | ≤ 0,3 |
| Foldability at low temperatures | EN 495-5 (°C) | ≤ -35 | ≤ -35 | ≤ -35 | ≤ -35 |
| UV exposure | EN 1297 | grade 0 - passes | grade 0 - passes | grade 0 - passes | grade 0 - passes |
| Exposure/compatibility to aged bitumen (possible colour variations) | | compatible | compatible | compatible | compatible |
| SRI (Solar Reflectance Index) | ASTM E1980 | 102 | 102 | 102 | 102 |

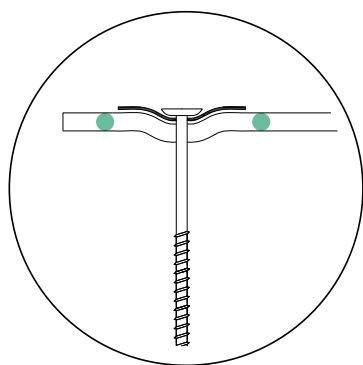
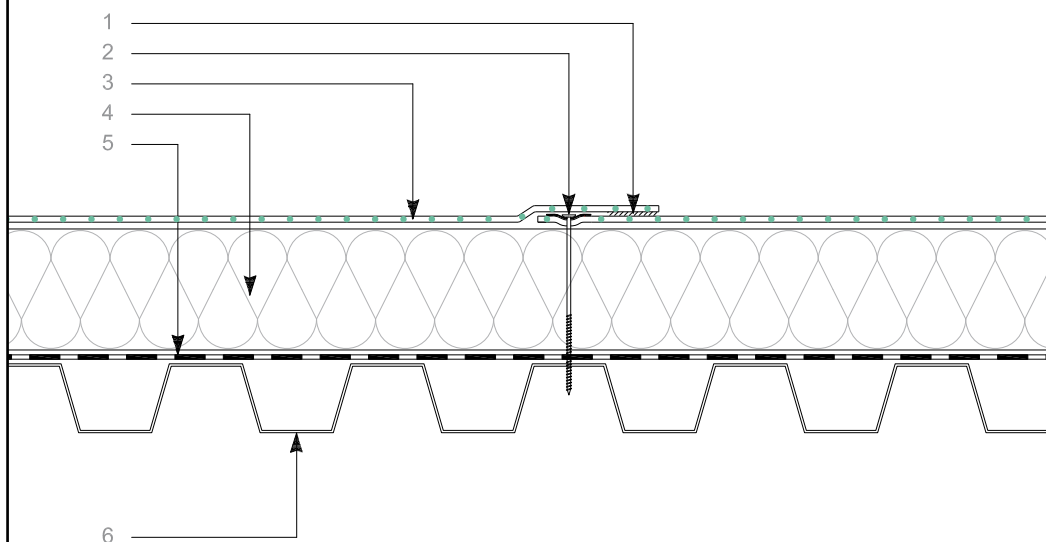
MAPEPLAN[®] T ACCESSORIES

- 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, contact adhesives
- Mapeplan[®] T Cleaner, cleaning liquid
- Mapeplan[®] T, outlets and special prefabricated pieces



CONNECTOR

MAPEPLAN® T M LAYERING



- **High solar reflectance**
- *Environmental friendly*
- *Resistant to ageing processes*
- *Flexible at low temperatures*
- *Puncture resistant*
- *Hail resistant*
- *UV-resistant*
- *High workability and weldability*
- *Formulation without plasticizers*
- *Vapour permeable*
- *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. *Overlap/Hot air welding*
2. *Mechanical fixing system*
3. *Mapeplan® T M, roofing membrane*
4. *Thermal insulation (mechanically fixed)*
5. *Vapour control layer
(for example Mapeplan® VB PE)*
6. *Substrate*

Mapeplan[®]
TM



www.mapei.com

MAPEPLAN range is produced by:



Registered Office - Viale Jenner, 4 - 20159 MILANO

Head Office - Via dell'Artigianato, 34 - 31047 Ponte di Piave (TV) - Italia
Tel. +39 04227547 - Fax +39 0422854118 - www.polyglass.com - info@polyglass.it