Roofing and waterproofing synthetic membrane

**DESCRIPTION**
Mapeplan® B is a synthetic roofing waterproofing membrane in PVC-P produced in one multiextrusion coating process, with high quality raw materials, reinforced with glass mat. Mapeplan® B is conform to EN 13956 standard.

**APPLICATION FIELDS**
Mapeplan® B is suitable for ballasted, utility deck (pedestrian-parking) and roof garden systems. 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.
FLL root resistance certification.
Mapeplan® B can contribute in the collection of LEED (Leadership in Energy and Environmental Design) Credits.

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

- Resistant to microbiological attacks and root-resistant
- High workability and weldability
- High mechanical resistance
- Excellent flexibility at low temperatures
- Excellent resistance to ageing
- Excellent resistance to UV rays and to weathering
- High vapour permeability

**PACKAGING**

<table>
<thead>
<tr>
<th>PALLET</th>
<th>14 rolls per pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>LENGTH</td>
<td>25 m 20 m 15 m</td>
</tr>
<tr>
<td>OF ROLLS</td>
<td>(according to the thickness)</td>
</tr>
<tr>
<td>WIDTH</td>
<td>2,10 m</td>
</tr>
<tr>
<td>OF ROLLS</td>
<td></td>
</tr>
</tbody>
</table>

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

**SAFETY INSTRUCTION**
Mapeplan® 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.
## TECHNICAL DATA

### PRODUCT PROPERTIES

<table>
<thead>
<tr>
<th>Product</th>
<th>Waterproofing membrane in PVC-P, reinforced with glass mat, specially formulated against the aggression of bacterial flora and microorganisms</th>
</tr>
</thead>
</table>
| Colour  | Top layer: light grey  
   Bottom layer: dark grey |
| European standard | EN 13956 |

### CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>Mapeplan® B 15</th>
<th>Mapeplan® B 18</th>
<th>Mapeplan® B 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible defects EN 1850-2</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Length (m) EN 1848-2</td>
<td>20 (-0/+5%)</td>
<td>15 (-0/+5%)</td>
<td>15 (-0/+5%)</td>
</tr>
<tr>
<td>Width (m) EN 1848-2</td>
<td>2,10 (-0.5/+1%)</td>
<td>2,10 (-0.5/+1%)</td>
<td>2,10 (-0.5/+1%)</td>
</tr>
<tr>
<td>Straightness (mm) EN 1848-2</td>
<td>≤30</td>
<td>≤30</td>
<td>≤30</td>
</tr>
<tr>
<td>Flatness (mm) EN 1848-2</td>
<td>≤10</td>
<td>≤10</td>
<td>≤10</td>
</tr>
<tr>
<td>Mass per unit area (kg/m²) EN 1849-2</td>
<td>1,8 (-5/+10%)</td>
<td>2,2 (-5/+10%)</td>
<td>2,5 (-5/+10%)</td>
</tr>
<tr>
<td>Effective thickness (mm) EN 1849-2</td>
<td>1,5 (-5/+10%)</td>
<td>1,8 (-5/+10%)</td>
<td>2,0 (-5/+10%)</td>
</tr>
</tbody>
</table>

### TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>Mapeplan® B 15</th>
<th>Mapeplan® B 18</th>
<th>Mapeplan® B 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watertightness EN 1928 B Method</td>
<td>Watertight</td>
<td>Watertight</td>
<td>Watertight</td>
</tr>
<tr>
<td>Reaction to fire EN 13501-1</td>
<td>Class E</td>
<td>Class E</td>
<td>Class E</td>
</tr>
<tr>
<td>Joint peel resistance EN 12316-2 (N/50 mm)</td>
<td>≥300</td>
<td>≥300</td>
<td>≥300</td>
</tr>
<tr>
<td>Joint shear resistance EN 12317-2 (N/50 mm)</td>
<td>≥500</td>
<td>≥500</td>
<td>≥500</td>
</tr>
<tr>
<td>Vapour diffusion resistance EN 1931 (µ)</td>
<td>19000</td>
<td>19000</td>
<td>19000</td>
</tr>
<tr>
<td>Tensile strength EN 12311-2 (N/mm²)</td>
<td>≥9</td>
<td>≥9</td>
<td>≥9</td>
</tr>
<tr>
<td>Elongation EN 12311-2 (%)</td>
<td>≥200</td>
<td>≥200</td>
<td>≥200</td>
</tr>
</tbody>
</table>
| Resistance to impact  
   - rigid support (A method)  
   - flexible support (B method) EN 12691 (mm) | ≥400 | ≥1100 | ≥600 | ≥1500 | ≥700 | ≥1750 |
| Resistance to static load  
   - rigid support (A method)  
   - rigid support (B method) EN 12730 (kg) | ≥20 | ≥25 | ≥25 | ≥30 | ≥25 | ≥30 |
| Tear resistance EN 12310-2 (N) | ≥100 | ≥100 | ≥100 |
| Dimensional stability EN 1107-2 (%) | ≤0,2 | ≤0,2 | ≤0,2 |
| Foldability at low temperatures EN 495-5 (°C) | ≤-25 | ≤-25 | ≤-25 |
| UV exposure EN 1297 (5000 h) | grade 0 - passes | grade 0 - passes | grade 0 - passes |
| Resistance to root penetration EN 13948 - Test FLL | conform | conform | conform |

### MAPEPLAN® ACCESSORIES

- Mapeplan® D, membrane for details and particulars
- Mapeplan®, metal sheets coupled to Mapeplan® membrane
- Mapeplan®, internal and external prefabricated corners
- Mapeplan® ADS 200, contact adhesives
- Mapelan® Cleaner, cleaning liquid
- Mapeplan®, outlets and special prefabricated pieces
MAPEPLAN® B LAYERING

• Resistant to ageing processes
• Root action resistant
• Resistant to microbiological attacks
• Flexible at low temperatures
• Puncture resistant
• High workability and weldability
• UV-resistant
• 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. Layer of ballast, gravel
2. Protection layer (for example POLYDREN)
3. MAPEPLAN® B, roofing membrane
4. Separation layer, if necessary (for example POLYDREN)
5. Thermal insulation
6. Vapour control layer (for example Mapeplan® VB PE)
7. Substrate
MAPEPLAN® B LAYERING

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LEGEND
1. Layer driveway, cement screed with a wear layer
2. Antiimbibizione layer
   (for example MAPEPLAN® PE micro-perforated)
3. Protection layer
4. MAPEPLAN® B, roofing membrane
5. Separation layer, if necessary
   (for example POLYDREN)
6. Thermal insulation
7. Vapour control layer
   (for example MAPEPLAN® VB PE)
8. Substrate
MAPEPLAN® B LAYERING

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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® B, roofing membrane
6. Separation layer, if necessary (for example POLYDREN)
7. Thermal insulation
8. Vapour control layer (for example MAPEPLAN® VB PE)
9. Substrate