HOW TO LAY THICK PROFESSIONAL REINFORCED MEMBRANES WITHOUT TORCHING OR USING OTHER HEAT SOURCES OR HARMFUL ADHESIVES

The aim is to insulate with thick reinforced membranes without using torching, or melted bitumen or adhesives. The problem concerns: special industrial areas with a risk of fire or explosion, where use of torching is forbidden; laying on easily combustible surfaces, but where it is necessary to create a single-layer or standard double-layer ‘stratigraphy’, using thick reinforced membranes (professional single- or double-layer waterproofing).

### ADVANTAGES

- Safer and quickly.
- No special equipment needed.

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**SELFETENE BASE HE POLYESTER**

**MINERAL SELFETENE HE POLYESTER**

ELASTOMERIC DISTILLED POLYMER-BITUMEN SELF-ADHESIVE WATERPROOFING MEMBRANES

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**APPLICATION FIELDS**

membranes, in places where it is forbidden to use naked flames. The membranes are also used on laying surfaces sensitive to heat or easily combustible, such as panels in...
polystyrene foam, wooden roofs, etc. Where using an open flame may be a hazard for operators, such as unventilated or restricted spaces such as excavations for foundations walls, etc., the MINERAL self-protected type is designed to be exposed, whereas BASE POLYESTERE should be used in applications not exposed to light or as a base layer under another membrane.

SELFTENE BASE HE POLYESTER can also be used as vapour control layer directly applied over timber surfaces, thus avoiding the extra cost of a nailed protection felt. Thermal insulation boards are then glued or fastened directly on the VCL.

**METHOD OF USE AND PRECAUTIONS**

- SELFTENE HE membranes stick onto the most commonly used building materials: metal surfaces, Plywood, OSB, polystyrene foam and extruded foam, polyurethane foam coated with polyethylene-coated fibreglass felt, etc. On porous surfaces such as cement and brick, on an old bitumen covering, on old wooden boarding etc., the surface to be covered should be prepared with a coat of 250 to 500 g/m² INDEVER PRIMER E.

- To prevent humidity building up and keep the wood dry and to allow the roof to be disassembled to recover the clean boards and prevent contact with fresh, resinous wood which can stain the underlying material, before gluing the adhesive exposed membrane to the old boards, on wooden roof boards or boards exposed directly to occupied spaces, first cover them with the ROLLBASE HOLLAND vapour separation and diffusion layer nailed on in a staggered pattern with flat head nails every 33 cm and 10 cm on the overlaps. The adhesive membrane is then installed over this layer.

  - Visible sheets applied vertically should be secured mechanically at the end; the same is valid for walls in contact with the ground.
  - Store the rolls in a dry place indoors and take them to the laying location only when about to be applied.
  - Open the package immediately before laying.
  - Polymer bitumen membranes are thermoplastic products and therefore they soften in the hottest hours of summer days whereas they harden in cold weather and the product’s adhesive power is therefore reduced.

  - For slopes over 15% the sets of roof layers including self-adhesive membranes should be carefully designed and if necessary integrated with mechanical fastening.

  - The excellent cold behaviour of SELFTENE HE does not justify the laying of the self-adhesive membrane at low temperatures without precautions. Below +10°C also according to the humidity conditions of the air and the support, particular attention must be paid during laying, if necessary using heating appliances or a “light flame”. The temperature of +5°C remains the laying threshold limit.

In compliance with EN 13707 as the water vapour transmission factor for reinforced polymer bitumen membranes, the value of μ = 20 000 may be assumed. 3 mm thick SELFTENE BASE HE POLYESTER has a permeability to water vapour after artificial aging (EN 1931 ed EN 1296) of μ = 100 000.

**TECHNICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Tech</th>
<th>Standard</th>
<th>T</th>
<th>SELFTENE BASE HE POLYESTER</th>
<th>MINERAL SELFTENE HE POLYESTER</th>
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</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>EN 1849-1</td>
<td>2 mm</td>
<td>“Non-woven” composite polyester stabilized with fiberglass</td>
<td>“Non-woven” composite polyester stabilized with fiberglass</td>
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<td>Mass per unit area</td>
<td>EN 1849-1</td>
<td>4 kg/m²</td>
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<td>Roll size</td>
<td>EN 1849-1</td>
<td>1.5 m x 10 m</td>
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<tr>
<td>Watertightness</td>
<td>EN 1828-4</td>
<td>60 kPa</td>
<td>60 kPa</td>
<td>–</td>
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<tr>
<td>Peel</td>
<td>EN 12316-1</td>
<td>30 N</td>
<td>–</td>
<td>NPD</td>
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<tr>
<td>Shear</td>
<td>EN 12317-1</td>
<td>150/150 N</td>
<td>150/150 N</td>
<td>–</td>
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<tr>
<td>Maximum tensile force</td>
<td>EN 12311-1</td>
<td>450/400 N</td>
<td>450/400 N</td>
<td>450/400 N</td>
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<tr>
<td>Elongation</td>
<td>EN 12311-1</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
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<tr>
<td>Resistance to impact</td>
<td>EN 12691 – A</td>
<td>800 mm</td>
<td>800 mm</td>
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<tr>
<td>Resistance to static loading</td>
<td>EN 12730 – A</td>
<td>10 kg</td>
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<td>Resistance to tearing (nail shank) L/T</td>
<td>EN 12310-1</td>
<td>–</td>
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<td>Flexibility to low temp. after ageing</td>
<td>EN 1109</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Flow resistance at high temperature</td>
<td>EN 1100</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Reaction to fire</td>
<td>EN 13501-1</td>
<td>E</td>
<td>E</td>
<td>–</td>
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<tr>
<td>External fire performance</td>
<td>EN 13501-5</td>
<td>F roof</td>
<td>F roof</td>
<td>–</td>
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</tbody>
</table>

Thermal specifications:

- Thermal conductivity: 0.2 W/mK
- Heat capacity: 2.60 KJ/K
- Moisture resistance: –
- Maximum tensile force: 400 N/50 mm
- Heat resistance: –
- Flow resistance at high temperature: 100°C
- Reaction to fire: E
- External fire performance: F roof
- Thermal conductivity: 0.2 W/mK
- Heat capacity: 3.90 KJ/K
- Moisture resistance: –
- Maximum tensile force: 450 N/50 mm
- Heat resistance: –
- Flow resistance at high temperature: 100°C
- Reaction to fire: E
- External fire performance: F roof
- Thermal conductivity: 0.2 W/mK
- Heat capacity: 4.80 KJ/K
- Moisture resistance: –
- Maximum tensile force: 450 N/50 mm
- Heat resistance: –
- Flow resistance at high temperature: 100°C
- Reaction to fire: E
- External fire performance: F roof

**PRODUCT FINISHING**

“FLAMINA” PE FOIL. Plastic protection film helping prevent coils from sticking to the roll. As it withdraws under the action of the flame right during its installation, it signals the best melting point in order to correctly glue the membrane to the covering. The roll is then disassembled to recover the clean boards.

For any further information or advice on particular applications, contact our technical office. In order to correctly use our products, refer to INDEX technical specifications.