

PREMIUM VAPOUR BARRIER

Modified SBS waterproofing membrane for use as a vapour barrier

DESCRIPTION

Pre-fabricated waterproofing membrane for specific use as a total barrier to the passage of vapour. The waterproofing mass is made of distilled bitumen and elastomeric polymers (SBS), reinforced with a rot proof fibre glass reinforcement and aluminium film which allows to obtain a barrier to the transmission of vapour. Due to the characteristics, the membranes of the PREMIUM VAPOUR BARRIER range are used with success in the waterproofing of both civil and industrial works where required, with the use of thermal insulation, as an absolute barrier to the transmission of water vapour. In the stratification of the roof, the PREMIUM VAPOUR BARRIER must be positioned under the insulation, in order to preserve it from phenomena's of water vapour condensation, which surely occurs, with the excursion changes of the thermal conditions of the roof.

METHODS OF APPLICATION

For the application of the membrane the use of heat is generally used by means of a gas torch or specific hot air machine.

The application by heat is not suggested when on heat sensitive materials (polystyrene insulation).

- Coordinate the operations in a way to not cause damage to the construction elements and underground structure. Avoid to leave the structure for the night or for periods of prolonged work interruptions without having been properly sealed.
- **The application surface must not have any depressions to avoid the risk of ponding water, the slope must be at least 1.5% on concrete decks and 3% for steel or wooden ones, this to guarantee a proper run off of rainwater.**
- The water drainage spouts should be sufficiently big enough to allow for rain water to be eliminated in an efficient way.
- Prepare cementitious substrates, including verticals and details, with a bituminous primer either by brush or airless, approx. 300/400 g/m².
- Allow this preparation layer to dry before proceeding with any other operation.
- With prefabricated constructions, apply a suitable reinforcing strip along all joints. In the presence of construction joints, prefabricated panels or metal decks, suitable expansion joints are to be considered.
- The membranes must be applied to the substrate fully bonded.
- All details, perimeters, verticals, change of slope as well as projecting area must be fully bonded.

FIELDS OF USE

| | VAPOUR BARRIER EN13970 | | | | | | | | | | | | | | | | |
|-------------------------------|------------------------|--------------|------------|------------------------|---------|-------------------|----------------|--------------------|---------------------------|---------------------|------------------|------------|---------------------|-----------|------------------|-----------|------------|
| | N. LAYERS | | | METHODS OF APPLICATION | | | | | | TYPE OF APPLICATION | | | TYPE | | | | |
| | SINGLE LAYER | DOUBLE LAYER | MULTILAYER | TORCH | HOT AIR | MIXED (TORCH/AIR) | COLD BOND GLUE | MECHANICAL FIXINGS | THERMO AD / SELF ADHESIVE | FULLY BONDED | PARTIALLY BONDED | LOOSE LAID | COMPLEMENTARY LAYER | TOP LAYER | HEAVY PROTECTION | ANTI-ROOT | OTHER USES |
| PREMIUM VAPOUR BARRIER V 3 MM | | • | • | • | | | | | | • | | | • | | | | |



APPLICATION

- On cementitious surfaces and similar apply, by roller or airless, bituminous primer, approx. consumption 300 g/m².
- Apply by torch application a 25 cm strip of membrane reinforced with polyester along all vertical up stands.
- To have all overlaps with the slope, position the membrane always starting from the lowest point.
- Position the membrane sheets staggered, avoiding to create any overlaps against the slope and the drains.
- Cut the corners of membrane sheet which will be laid under the next sheet at a 45° angle (10 x 10 cm).
- The joints, both side and head, must be respectively overlapped by 10 & 15 cm.
- The second layer of membrane will be applied astride and over the first one, always in the same direction, and approx. 1/4 of its length from the previous sheet.
- The bituminous membrane will be applied with a propane gas torch to the substrate. It is necessary to heat the entire surface, except for the side & head laps, making sure that the compound forms a liquid mass in front of the roll to assure that it saturates any superficial porosity.
- The side laps (10 cm) and head laps (15 cm) will be heat welded with an appropriate torch; during this stage the overlaps should be pressed by using a roller (15 kg) from which a bead of compound should flow and therefore avoiding to have to iron the overlaps.
- Apply the vertical membrane sheet having the same characteristics of the waterproofing membrane and dimensions equal to the width of the roll, making sure that it overlaps the horizontal one by at least 10 cm, heating it with a gas torch and squeezing it with a trowel until a bead of compound appears from underneath.
- The height of the verticals must be equivalent to the thickness of the insulation panel plus 5 cm.

RECOMMENDATIONS

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources. Absolutely avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations which may compromise a perfect installation. It is recommended to store the product at temperatures above 0°C.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer, to eliminate dust and enhance the adhesion of the membrane.
- The application surface must not have any depressions to avoid the risk of ponding water, the slope must be at least 1.5% on concrete decks and 3% for steel or wooden ones, this to guarantee a proper run off of rainwater.
- In situations of application on vertical surfaces superior to 2 meters or on very sloped substrates, apply suitable mechanical fixings to the head laps, after which they will be sealed when torching the head laps.
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.
- For further information it is recommended to consult our Installation Manual.

| Technical data | Measure units | Reference norm | V | Tolerance |
|---------------------------|---------------|----------------|-----------------------|-----------|
| Type of compound | | | SBS | |
| Type of reinforcement | | | Fibre glass+aluminium | |
| Upper face finish | | | Polypropylene mat | |
| Lower face finish | | | PE film | |
| Length | m | EN 1848-1 | 10 -1% | |
| Width | m | EN 1848-1 | 1 -1% | |
| Thickness | mm | EN 1849-1 | 3 | ±5% |
| Cold flexibility | °C | EN 1109 | -10 100 | |
| Tensile strength L/T | N/5 cm | EN 12311-1 | 450 / 350 | -20% |
| Elongation at break L/T | % | EN 12311-1 | 3 / 3 | -2 |
| Dimensional stability | % | EN 1107-1 | -0,3 | |
| Water vapour permeability | μ | EN 1931 | 1500000 | |
| Fire resistance | | EN 13501-5 | F ROOF | |
| Fire reaction | | EN 13501-1 | F | |
| Watertightness | kPa | EN 1928 | 60 | |

| Sizes & packing | V3 MM |
|--------------------------|--------|
| Rolls size (m) | 10 x 1 |
| Rolls per pallet | 25 |
| Square meters per pallet | 250 |