



### Stratigraphy

- 1 PE film
- 2 Waterproofing mass
- 3 Single strand composite polyester reinforcement
- 4 Waterproofing mass
- 5 Sand or talc finish

## Characteristics

MT VIADUCTS is a prefabricated membrane made of bitumen distillate modified with elastomeric and plastomeric polymers, and reinforced with woven non woven single strand composite polyester fabric which, given its heavy weight, provides excellent resistance to mechanical stress. It is used with success for the waterproofing of both civil and industrial works, in particular for those with great mechanical stress such as: bridges, viaducts, water works, foundations, parking lots.

The waterproofing compound, obtained through the complete homogenization of bitumen distillate with elastomeric and plastomeric polymers, is added with special additives and offers top features:

- resistance to temperature change
- resistance to chemical corrosion (acids and salts)
- waterproof seal

## Reinforcement

Composed of woven non woven single strand composite polyester fabric, offers:

- high mechanical characteristics
- imputrescibility, elasticity and flexibility
- good isotropy
- resistance to attack by chemical and bacterial agents.

## Methods of application

- The membrane is usually applied by heating the bituminous blend using a gas burner or hot air guns in special cases.
- Always use the individual protection devices specified by law.
- Never use these systems on heat-sensitive supports or insulation.
- If using the membrane for application under hot asphalt, the thickness of the binder course must be minimum 6 cm with a granulometry of 0-15 mm, while for the surface course the thickness must be minimum 4 cm and granulometry of 0-12 mm.
- In case of use on refurbishments, the product must be applied on original support (all existing waterproofing layers must be removed). On the clean application surface it must applied PRIMER EPOX, as indicated in the product technical data sheet.
- Conduct regular maintenance on the roof in order to remove detritus, mud, grass, etc., and to keep the operation of the waterproofing system and accessories (drains, TV antennas, air-conditioning systems, etc.) under control.
- Whenever there is reason to believe that the element to be waterproofed has traces of residual humidity (e.g. during renovations of existing roof coverings, applications after abundant rainfall), vents should be positioned in such way as to permit its elimination.

For more information and instructions, we recommend consulting LARIBIT application manual, remembering that our Technical Support Service is always at your disposal to solve particular problems and provide the assistance necessary in using our waterproofing membranes to best advantage.

## Finishing

The upper face of MT VIADUCTS is finished with a special inorganic and extremely fine release material which is uniformly spread and calibrated in order to prevent the roll from sticking to itself.

The lower face is protected by a burn-off polyethylene film that allows you to check anytime the ideal melting point of the waterproofing compound.

## Fields of use



### EN13707 Continuous roofs (Certificate n° 0958-CPR-2045/1)

|                           | N° LAYERS    |              |            | METHOD OF APPLICATION |         |                     |                |                   |                                 |              | TYPE OF APPLICATION |            |                     | TYPE      |                  |           |            |
|---------------------------|--------------|--------------|------------|-----------------------|---------|---------------------|----------------|-------------------|---------------------------------|--------------|---------------------|------------|---------------------|-----------|------------------|-----------|------------|
|                           | Single Layer | Double Layer | Multilayer | Torch                 | Hot Air | Mixed (Torch / Air) | Cold Bond Glue | Mechanical Fixing | Thermo Adhesive / Self Adhesive | Fully Bonded | Partially Bonded    | Loose Laid | Complimentary Layer | Top Layer | Heavy Protection | Anti-root | Other Uses |
| <b>MT VIADUCTS P 4 MM</b> | •            | •            | •          | •                     | •       | •                   | •              | •                 | •                               | •            | •                   | •          | •                   | •         | •                | •         | •          |
| <b>MT VIADUCTS P 5 MM</b> | •            | •            | •          | •                     | •       | •                   | •              | •                 | •                               | •            | •                   | •          | •                   | •         | •                | •         | •          |

### EN14695 Viaducts (Certificate n° 0958-CPR-2045/1)

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>MT VIADUCTS P 4 MM</b> | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| <b>MT VIADUCTS P 5 MM</b> | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

The waterproofing membrane based on distilled bitumen and polymers, as shown in this data sheet does not require the issue of a MSDS, because it does not contain dangerous substances. The information data sheet for the proper use of products is available.

## Application

- On cementitious surfaces and similar apply, by roller or airless, bituminous primer, approx. consumption 300/400 g/m<sup>2</sup>.
- 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. (Draw. N.1)
- Position the membrane sheets staggered, avoiding to create any overlaps against the slope and the drains. (Draw. N.2)
- Cut the corners of membrane sheet which will be laid under the next sheet at a 45° angle (10 x 10 cm). (Draw. N.3)
- The joints, both side and head, must be respectively overlapped by 10 & 15 cm. (Draw. N.3)
- 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. (Draw. N.4)
- 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 or superior to the finished surface by at least 15 cm.



## MT Viaducts

## Recommendations

- 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 application surface must be smooth, dry, and clean.
- The application surface must be previously treated with the appropriate bituminous primer.
- **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 product must be applied at room temperatures of above + 5°C.
- Application must be suspended during inclement weather (excessive humidity, rain, etc.).
- The pallets supplied are suited only for normal warehouse movement and not for raising heavy loads to height.
- We recommend making correct and regular warehouse rotation.
- For information concerning storage and application of Laribit membranes, please refer to the "Installation manual".

## Technical data

| Technical Characteristics  | Measure Units     | Reference Norm | P                       |       | Tolerance |
|--|-------------------|----------------|-------------------------|-------|-----------|
| Type of reinforcement  |                   |                | Single strand polyester |       |           |
| Upper face finish  |                   |                | Sand or talc            |       |           |
| Lower face finish  |                   |                | PE film                 |       |           |
| Length   | m                 | EN 1848-1      | 10 -1%                  | 8 -1% |           |
| Width  | m                 | EN 1848-1      | 1 -1%                   |       |           |
| Thickness  | mm                | EN 1849-1      | 4                       | 5     | ±5%       |
| Cold flexibility   | °C                | EN 1109        | -10                     |       |           |
| Flow resistance  | °C                | EN 1110        | 120                     |       |           |
| Tensile strength L / T   | N / 5 cm          | EN 12311-1     | 1200/1000               |       | -20%      |
| Elongation at break L / T  | %                 | EN 12311-1     | 45/45                   |       | -15       |
| Tearing resistance L / T   | N                 | EN 12310-1     | 300/300                 |       | -30%      |
| Static puncture resistance                                       | kg                | EN 12730       | 25                      |       |           |
| Dynamic puncture resistance                                      | mm                | EN 12691       | 1750                    |       |           |
| Fire resistance  |                   | EN 13501-5     | F ROOF                  |       |           |
| Fire reaction  |                   | EN 13501-1     | F                       |       |           |
| Dimensional stability  | %                 | EN 1107-1      | -0,5                    |       |           |
| Watertightness   | kPa               | EN 1928        | 60                      |       |           |
| Bond strenght  | N/mm <sup>2</sup> | EN 13596       | 0,49                    |       | ≧         |
| Shear strenght   | N/mm <sup>2</sup> | EN 13653       | 0,23                    |       | ≧         |
| Compatibility by heat conditioning                               | %                 | EN 14691       | 177                     |       | ≧         |
| Crack Bridging Ability   | °C                | EN 14224       | -10                     |       | ≧         |
| Resistance to dynamic water pressure                             |                   | EN 14694       | pass                    |       |           |
| Resistance to compaction of an asphalt layer                     |                   | EN 14692       | pass                    |       |           |
| Behaviour of bitumen sheets during application of mastic asphalt | %, mm, %          | EN 14693       | NPD                     |       |           |

NPD = No Performance Declared in accordance with the EU Construction Products Directive.

## Sizes & packing

|  | P 4 mm | P 5 mm |
|--|--------|--------|
| Rolls size [m]                             | 10x1   | 8x1    |
| Rolls per pallet                           | 24     | 23     |
| Square meters per pallet [m <sup>2</sup> ] | 240    | 184    |

Sizes & packing may vary depending on the type of transportation. The technical data given is based on average values obtained during production. We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.

# Laribit®

Matco S.r.l. - Via Quadrelli 69  
37055 Ronco all'Adige (VR) Italy

Tel. +39 045 8775559 www.laribit.com  
Fax +39 045 8751474 info@laribit.com

