



TOP
WATERPROOFING

MISTRAL – SLATED MISTRAL

PLASTOMERIC - BITUMINOUS MEMBRANE BPP

Technical data sheet

| | |
|---------------------------|---|
| REINFORCEMENT | NON WOVEN POLYESTER FABRIC |
| COMPOUND | BITUMEN – PLASTOMER BPP |
| FINISHING | MISTRAL: SAND; SLATED MISTRAL: NATURAL SLATE |
| APPLICATION METHOD | FLAME WELDING |
| <u>DESTINATION OF USE</u> | |
| SLATED MISTRAL | EN 13707 WATERPROOFING SYSTEM MULTILAYER : FINISHING LAYER EN 13859-1 WATERPROOFING SYSTEM: UNDER TILE |
| MISTRAL | EN 13707 WATERPROOFING SYSTEM MULTILAYER: UNDER LAYER EN 13969 FOUNDATIONS AND UNDERGROUND WALLS |
| FPC CODE | 1370-CPD-0040 |



Description

Monoreinforced waterproofing membrane made up of a compound based on distilled bitumen modified with plastomeric polymers reinforced with non woven polyester fabric.

Stable and long-lasting product with good mechanical properties and high dimensional stability. It can be supplied either polished or self-protected with natural slate flakes.

Fields of application

Due to its technical characteristics providing high versatility, it is suitable for waterproofing flat or vaulted civil and industrial coverings.

Stratigraphy

1. Polypropylene film
2. Compound BPP
3. Non woven polyester fabric
4. Compound BPP
5. Finishing:
 - A. MISTRAL: SAND
 - B. SLATED MISTRAL: NATURAL SLATE




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 Review 0.1
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Technical Features

| Parameter | MISTRAL | SLATED MISTRAL | Unit of measure | Tolerance | Regulations |
|--|--------------------|--------------------|-------------------|--------------|--------------|
| VISIBLE DEFECTS | Exceeds | Exceeds | Visual | - | EN 1850-1 |
| LENGTH | 10 | 10 | m | -1 % | EN 1848-1 |
| WIDTH | 1 | 1 | m | -1 % | EN 1848-1 |
| STRAIGHTNESS | Exceeds < 20mm/10m | Exceeds < 20mm/10m | - | - | EN 1848-1 |
| MASS PER UNIT AREA | NPD | 4,5 | Kg/m ² | - 5 % | EN 1849-1 |
| THICKNESS | 3 - 4 | NPD | mm | - 0,2 | EN 1849-1 |
| WATERTIGHTNESS | Exceeds > 60 | Exceeds > 60 | kPa | - | EN 1928:2000 |
| WATERTIGHTNESS AFTER STRETCHING | NPD | NPD | % | - | EN 13897 |
| EXTERNAL FIRE PERFORMANCE | F ROOF | F ROOF | - | - | EN 13501-5 |
| REACTION TO FIRE | E | E | Classe | - | EN 13501-1 |
| TENSILE PROPERTIES | | | | | |
| MAXIMUM LOAD AT BREAK | | | | | |
| Longitudinal | 400 | 400 | N/50 mm | - 20 % | EN 12311-1 |
| Transversal | 300 | 300 | | - 20 % | |
| ELONGATION AT BREAK | | | | | |
| Longitudinal | 35 | 35 | % | - 15 in ass. | EN 12311-1 |
| Transversal | 40 | 40 | | - 15 in ass. | |
| RESISTANCE TO TEARING (nail method) | | | | | |
| Longitudinal | 140 | 140 | N | - 30 % | EN 12310-1 |
| Transversal | 140 | 140 | | - 30 % | |
| RESISTANCE TO DYNAMIC LOADING | 700 | 700 | mm | ≥ | EN 12691 |
| RESISTANCE TO STATING LOADING | 10 | 10 | Kg | ≥ | EN 12730-1 |
| COLD FLEXIBILITY | -5 | -5 | °C | ≤ | EN 1109 |
| FLOW RESISTANCE AT ELEVATED TEMPERATURE | 110 | 110 | °C | ≥ | EN 1110 |
| DIMENSIONAL STABILITY | 0,3 | 0,3 | % | ≤ | EN 1107-1 |
| FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGE | NPD | NPD | mm | - | EN 1108 |
| ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE) | NPD | NPD | ΔT °C | - | EN 1296 |
| ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS) | Exceeds | Exceeds | - | - | EN 1297 |
| ADHESION OF GRANULES | - | < 30 | % | - 5 in ass. | EN 12039 |
| WATER VAPOUR PROPERTIES | 20000 | 20000 | μ | - | EN 1931 |
| RESISTANCE TO ROOTS | NPD | NPD | - | - | EN 13948 |
| PEEL RESISTANCE | NPD | NPD | N/50 mm | - | EN 12316-1 |
| SHEAR RESISTANCE | NPD | NPD | N/50 mm | - | EN 12317-1 |

Note: NPD = No Performance Declared according to the EU Directive on Construction Products

It is impossible to ensure uniformity of color of slated products, because the only slate manufacturer makes no warranty about. All self-protected products with slate chippings undergo color changes over time as a function of exposure to atmospheric agents. These color variations tend to conform gradually.
AVAILABLE COLOURS OF SLATE: Natural Gray (Standard), Red, Green, White



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Packaging

| PRODUCT | THICKNESS (mm) | WEIGHT (Kg/m ²) | ROLL DIMENSIONS (m) |
|----------------|----------------|-----------------------------|---------------------|
| MISTRAL | 3 - 4 | - | 1x10 |
| SLATED MISTRAL | - | 4,5 | 1x10 |

Rolls packed on wooden pallets, wrapped with polyethylene heat-shrinkable caps.

Warnings

Store vertically, protecting them from atmospheric agents and from too high or too rigid temperatures. Avoid overlapping rolls and pallets. The contact with solvents and organic fluids can damage the product.

The application surface should be smooth, dry and clean.

The application surface must be previously treated with a suitable bituminous primer, VELQUA, VELABASE or VELAFONDO GRIPERM to eliminate dust and enhance the adhesion of the membrane. The application surface must not have depressions, to avoid stagnation of rain water and must have a sufficient slope to ensure the smooth flow of precipitation (min 1.5%). In the case of applications in vertical development exceeding 2 m or media in strong slope surfaces apply suitable mechanical fasteners in the head of the cloth, then sealed with the junction of the head.

Apply the product at temperature higher than +5°C.

The installation should be discontinued in case of adverse weather conditions (high humidity, rain, etc.).

In order to increase the performance and durability of the coat it is strongly recommended, in the case of non self-protected membranes with slate protection with acrylic paint or aluminous VELACOLOR, VELUMIN, or painting ultra-reflecting REFLEX+. In this case, it is appropriate to wait, for the application, the uniform oxidation of the surface layer of the membrane (3-6 months depending on the exposure and the climatic period and in any case have to verify the oxidation).

The above-mentioned values can be subject to update or change. IIVELA S.r.l. reserves the right to modify them at any time without prior notice. For a correct use of our products, see technical specifications. For further information or any special use, please contact our technical department. Any suggestions or technical information provided represent our best knowledge regarding product characteristics and use. Considering different applications and any possible interference of elements beyond our control, the buyer must declare under his own responsibility that the product is suitable for the intended use.