

HELASTOPOL POLYESTER MINERAL HELASTOPOL POLYESTER

ELASTOMERIC WATERPROOFING MEMBRANE
BASED ON THERMOPLASTIC RADIAL STYRENE-BUTADIENE RUBBER

GRANTS *LEED* CREDITS

| CATEGORY | CHARACTERISTICS | | ENVIRONMENTAL | | | | | | METHOD OF USE | | | | | |
|---|--|---|---|---|--|---|--|--|--|---|---|---|---|---|
|  ELASTOMERIC |  WATERPROOF |  REAZIONE AL FUOCO REACTION TO FIRE |  ECO GREEN |  ASBESTOS FREE |  TAR FREE |  CHLORINE FREE |  RECYCLABLE |  NON DANGEROUS WASTE |  EXHAUSTED OIL FREE |  TORCH APPLICATION |  HOT AIR APPLICATION |  NAILING |  COLD ADHESIVE BONDING |  APPLICATION WITH MOLTEN BLOWN BITUMEN |

* For waterproofing membranes with TEXLAMINA underface finish only

DESCRIPTION

HELASTOPOL POLYESTER and **MINERAL HELASTOPOL POLYESTER** are elastomeric polymer-bitumen waterproofing membranes with rot-proof, composite reinforcement made of "non-woven" polyester fabric stabilized with fibreglass to guarantee a dimensional stability which is from two to three times higher than that of normal "non-woven" polyester fabric.

The mix used in **HELASTOPOL POLYESTER** membranes is based on distilled bitumen and "phase inversion" thermoplastic rubber, in which the elastomer constitutes the continuous polymeric matrix and the bitumen the dispersed phase.

The thermoplastic rubber, made up of a block copolymer of radial styrene-butadiene-styrene (SBS), gives the mix high elasticity and flexibility at low temperatures.

The polyolefins are added to the SBS-bitumen mix to increase the heat resistance and rigidity so as to make the membrane easier to lay in the summer season whilst maintaining most of the exceptional elasticity characteristics of the rubber-bitumen compound. Both faces of **HELASTOPOL POLYESTER** are covered in Flamina hot-melt film, which guarantees the sealing of the joints and fast, secure adhesion to the laying surface.

MINERAL HELASTOPOL POLYESTER is produced with its upper face self-protected by slate granules and its lower face covered in the aforementioned hot-melt film.

The **MINERAL** membranes have a black lateral overlapping slate-free strip.


APPLICATION FIELDS

The **HELASTOPOL** membranes can be used for a wide variety of applications. Thanks to their elasticity at low temperatures they can be used in cold climates where traditional bituminous membranes are unsuitable. Waterproofing systems using **HELASTOPOL** membranes can be used for both sloping and flat roofs, concrete tile or concrete surfaces, single slab or prefabricated, on metal decks, timber structures and stressed structures. They are also suitable for use on thermal insulation elements and inverted roofs.

Can be used both on thermal insulation elements and on inverted roofs. Can be left exposed (type: **MINERAL**) or under heavy gravel protection or floors.

The **MINERAL** version is also available in the **MINERAL HELASTOPOL FIRESTOP POLYESTER** version containing harmless inorganic flame retardant additives distributed throughout the thickness of the membrane tested on sintered polystyrene foam, in compliance with the standard on reactions to external fire of Scandinavian countries, **Nord Test Method-Resistance to fire spread according to SS 02 48 24 - NT FIRE 006 recognised as the European method UNI ENV**





INTENDED USE OF "CE" MARKING SPECIFIED ACCORDING TO THE AISPEC-MBP GUIDELINES

EN 13707 - REINFORCED BITUMEN SHEETS FOR ROOF WATERPROOFING

- Under layer or intermediate layer in multi-layer systems without permanent heavy surface protection
- HELASTOPOL POLYESTER
- Upper layer in multi-layer systems without permanent heavy surface protection
- MINERAL HELASTOPOL POLYESTER
- Under heavy protection in multi-layer systems
- HELASTOPOL POLYESTER

EN 13969 - BITUMEN DAMP PROOF SHEET INCLUDING BITUMEN BASEMENT TANKING SHEETS

- Membranes for foundations
- HELASTOPOL POLYESTER

1187/2. Furthermore, they have been classified as **B_{roof}(t2)**, in compliance with UNI EN 13501-5, on both combustible and incombustible substrates. The technical data can be found in the specific technical data sheet.

HELASTOPOL membranes can be used for refurbishments as they are compatible with old bitumen coverings.

TECHNICAL CHARACTERISTICS

| | Standard | T | HELASTOPOL POLYESTER | | | MINERAL HELASTOPOL POLYESTER | | |
|---|--------------|-----------|--|-----------|-----------------------|--|-----------------------|-----------------------|
| Reinforcement | | | "Non-woven" composite polyester stabilized with fibreglass | | | "Non-woven" composite polyester stabilized with fibreglass | | |
| Thickness | EN 1849-1 | ±0,2 | 3 mm | 4 mm | - | - | - | - |
| Mass per unit area | EN 1849-1 | ±10% | - | - | 4.0 kg/m ² | - | - | - |
| Mass per unit area MINERAL | EN 1849-1 | ±15% | - | - | - | 3.5 kg/m ² | 4.0 kg/m ² | 4.5 kg/m ² |
| Roll size | EN 1848-1 | -1% | 1x10 m | 1x10 m | 1x10 m | 1x10 m | 1x10 m | 1x10 m |
| Watertightness | EN 1928 - B | ≥ | 60 kPa | | | 60 kPa | | |
| • after ageing | EN 1926-1928 | ≥ | 60 kPa | | | 60 kPa | | |
| Shear resistance L/T | EN 12317-1 | -20% | 350/250 N/50 mm | | | - | | |
| Maximum tensile force L/T | EN 12311-1 | -20% | 400/300 N/50 mm | | | 400/300 N/50 mm | | |
| Elongation L/T | EN 12311-1 | -15% V.A. | 35/40% | | | 40/40% | | |
| Resistance to impact | EN 12691 - A | | 1 000 mm | | | - | | |
| Resistance to static loading | EN 12730 - A | | 10 kg | | | - | | |
| Resistance to tearing (nail shank) L/T | EN 12310-1 | -30% | 120/120 N | | | 120/120 N | | |
| Dimensional stability L/T | EN 1107-1 | ≤ | NPD | | | -0.25/+0.10% | | |
| Flexibility to low temp. • after ageing | EN 1109 | ≤ | -15°C | | | -15°C | | |
| | EN 1296-1109 | +15°C | NPD | | | -15°C | | |
| Flow resistance at high temperature | EN 1110 | ≥ | 100°C | | | 100°C | | |
| Reaction to fire Euroclass | EN 13501-1 | | E | | | E | | |
| External fire performance | EN 13501-5 | | F roof | | | F roof | | |
| Thermal specifications | | | | | | | | |
| Thermal conductivity | | | 0.2 W/mK | 0.2 W/mK | 0.2 W/mK | 0.2 W/mK | 0.2 W/mK | 0.2 W/mK |
| Heat capacity | | | 3.90 KJ/K | 5.20 KJ/K | 4.20 KJ/K | 4.80 KJ/K | 5.40 KJ/K | 5.40 KJ/K |

Compliant with EN 13707 in terms of the resistance factor to steam penetration for reinforced polymer-bitumen membranes, the value of $\mu = 20\ 000$ may be considered, unless declared otherwise.

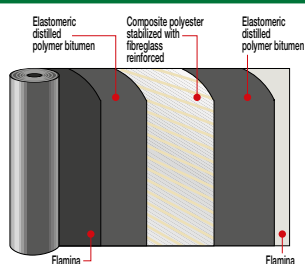
Stated membranes may change colour depending on the storage periods. The colour may change away within 2-3 months from the date of production to their colour in use. The colour change is not an aspect of this type of membrane and cannot be the basis for a complaint. The same is true regarding the maintenance of colour and the different colourings that can occur among the various exposed areas of the covering based on the types of artificial colouring.

the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

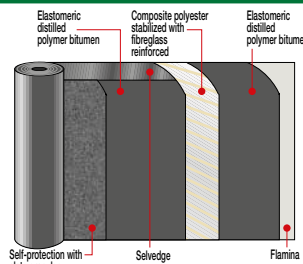
The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best regarding the properties and the use of the product.

COMPOSITION OF THE MEMBRANE

HELASTOPOL POLYESTER



MINERAL HELASTOPOL POLYESTER



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 brackets and rises. When not heated, it can be used as a sliding layer.

SELF-PROTECTION WITH SLATE GRANULES. On the visible face of the membrane, a protective coating made up of slate granules of various colours is hot bonded. This mineral shield protects the membrane from ageing caused by UV rays.

• 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 •

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Construction Systems and Products

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