

HELASTOPLAN POLYESTER MINERAL HELASTOPLAN POLYESTER

ELASTOMERIC DISTILLED POLYMER-BITUMEN WATERPROOFING
MEMBRANES MODIFIED WITH THERMOPLASTIC SBS RUBBER AND
POLYOLEFINS

GRANTS *LEED* CREDITS

CATEGORY	CHARACTERISTICS			ENVIRONMENTAL						METHOD OF USE		
												
ELASTOMERIC	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	TORCH APPLICATION	HOT AIR APPLICATION	NAILING

DESCRIPTION

HELASTOPLAN, membranes are made up of an "inversion phase" compound of distilled bitumen, selected for industrial use, SBS rubber and polyolefins.

The elastomer, a thermoplastic rubber made up of radial styrene-butadiene copolymer blocks (SBS) forms the continuous polymeric matrix of the compound and the bitumen forms the dispersed phase. The polyolefins, which have higher heat resistant properties, are added to the compound in the form of bitumen-SBS to increase the rigidity of the membrane and to make it easier to apply during the summer months while most of the elastic properties of the bitumen-rubber compound remain unchanged. The ultimate elongation is higher than 1,500%, the flexibility in cold conditions is -20°C and the high adhesive properties also remain. The compatibility with other bitumen and the peeling strength of the joints is notably higher than that of normal polymer modified bitumen membranes. The membranes are produced in various weights and with various reinforcements.

HELASTOPLAN POLYESTER and **MINERAL HELASTOPLAN POLYESTER** are reinforced with a composite, high weight, rot-proof, "non woven" polyester fabric, stabilized with fibre-glass mat. This reinforcement has a high tensile strength, is flexible and has optimal dimensional stability in hot conditions which reduces the problems of the banana effect and the retraction of head lap joints as it is 2 to 3 times more stable than normal reinforcements in "non woven" polyester fabric.

The **HELASTOPLAN POLYESTER** membranes are coated on both faces with Flamina film, which retracts during torch-on and guarantees the welding of the joints and a fast and reliable adhesion.

Also the underside of **MINERAL HELASTOPLAN POLYESTER** is coated with Flamina film, while the upper face is protected with hot bonded and pressed slate granules, with the exception of a slate free, lateral overlap strip, protected with Flamina film which melts during torch-on.

APPLICATION FIELDS

The **HELASTOPLAN** membranes retain the high elastic properties and the optimal resistance to stress at low temperatures of SBS-bitumen membranes combined with a higher rigidity in hot conditions which allows for easier application even during the summer months or in hot climates where there are more problems with the application of SBS-bitumen membranes. The **HELASTOPLAN POLYESTER** membranes are used in the building trade as a waterproofing element in more difficult situations such as cracking substrates or substrates subject to vibration Both on new work or for refurbishment:

- On all inclined surfaces, on flat, sloping and curved surfaces.
- On different types of surface: cast or pre-fabricated cement substructures, on metal or wood roofing, on the most common heat insulation used in the building industry.
- For the most varied uses: terraces, flat and sloping roofs, stress structures, foundations, car park roofs, under concrete topping, tunnels, subways and undergrounds.



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
 - HELASTOPLAN POLYESTER
- Upper layer in multi-layer systems without permanent heavy surface protection
 - MINERAL HELASTOPLAN POLYESTER
- Under heavy protection in multi-layer systems
 - HELASTOPLAN POLYESTER

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

- Membranes for foundations
 - HELASTOPLAN POLYESTER

TECHNICAL CHARACTERISTICS

	Standard	T	HELASTOPLAN POLYESTER		MINERAL HELASTOPLAN POLYESTER	
			"Non-woven" composite polyester stabilized with fibreglass		"Non-woven" composite polyester stabilized with fibreglass	
Reinforcement						
Thickness	EN 1849-1	±0,2	3 mm	4 mm	-	-
Mass per unit area MINERAL	EN 1849-1	±15%	-	-	4.0 kg/m ²	4.5 kg/m ²
Roll size	EN 1848-1	-1%	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%	600/400 N/50 mm		-	
Maximum tensile force L/T	EN 12311-1	-20%	700/500 N/50 mm		700/500 N/50 mm	
Elongation L/T	EN 12311-1	-15% V.A.	40/45%		40/45%	
Resistance to impact	EN 12691 - A		1 250 mm		-	
Resistance to static loading	EN 12730 - A		15 kg		-	
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	160/200 N		160/200 N	
Dimensional stability L/T	EN 1107-1	≤	-0.25/+0.10%		-0.25/+0.10%	
Flexibility to low temp.	EN 1109	≤	-20°C		-20°C	
• after ageing	EN 1296-1109	+15°C	-		-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
Heat capacity			3.90 KJ/K	5.20 KJ/K	4.80 KJ/K	5.40 KJ/K

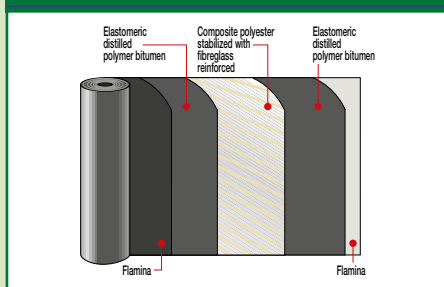
Compliant with EN 13707 in terms of the resistance factor to steam penetration for reinforced polymer-bitumen membranes, the value of $\mu = 20\,000$ may be considered, unless declared otherwise.

Slated membranes may change colour depending on the storage periods. The colour may vary slightly within 2-3 months for membranes for their colour to their original colour. The change of colour in this 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 variously exposed areas of the covering based on the types of artificial colouring.

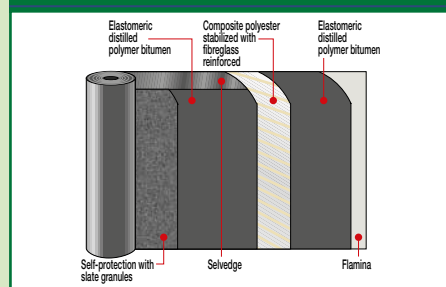
The numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged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

COMPOSITION OF THE MEMBRANE

HELASTOPLAN POLYESTER



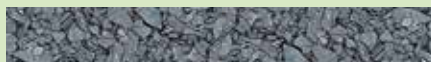
MINERAL HELASTOPLAN POLYESTER



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.

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 knowledge regarding the properties and the use of the product. Considering

• 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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