

DIFFUSER ALU POLYESTER

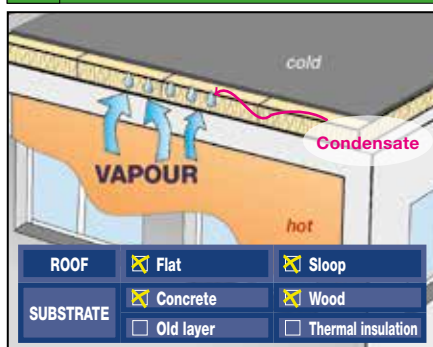
ELASTOPLASTOMERIC DISTILLED POLYMER-BITUMEN WATERPROOFING MEMBRANE BITUMEN KNOBS ON THE UNDERSIDE, MADE WITH DISTILLED BITUMEN, PLASTOMERS AND ELASTOMERS



GRANTS *LEED* CREDITS

CATEGORY	CHARACTERISTICS				ENVIRONMENTAL						METHOD OF USE	
SPECIAL ELASTOPLASTOMERIC FOR SPECIFIC USES	WATERPROOF	VAPOUR BARRIER	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	TORCH APPLICATION	HOT AIR APPLICATION

1 PROBLEM



HOW TO KEEP THE INSULATION OF A ROOF DRY AND DRAIN THE CONDENSATE FROM UNDER THE VAPOUR BARRIER

The vapour barriers used to insulate very damp substrates such as swimming pools, laundrettes, dyeworks and industries with productive cycles that produce a great amount of vapour are normally reinforced with aluminium foil which is a highly effective vapour barrier. However, condensate can form in the space between the vapour barrier and the substrate and be trapped in the layer build up.

2 SOLUTION



DIFFUSER ALU POLYESTER is the vapour barrier membrane designed by INDEX to solve the problems of draining the humidity that condenses behind the vapour barrier.

The lower side of **DIFFUSER ALU POLYESTER** has a series of very thick bitumen knobs, which cover approximately 35% of the surface (1 472 embossments/m²) with the exception of a 70 mm smooth overlapping side strip. The knobs protrude from the membrane 3.5 mm and once they have been heated with the torch, they become very thick adhesive bitumen knobs that form a strong bond with the support. In this way an interspace is left between the membrane and the laying surface with a series of voluminous

ADVANTAGES

- One product that can be used as a vapour barrier and vapour draining layer.
- The high adhesive surface makes it resistant to wind and the product can be installed without using nails even on steeply sloping surfaces.

and very efficient water vapour diffusion channels; it can be connected to aerators, so that the condensate drains easily along the slope without meeting any obstacles, and preventing dangerous water stagnation. The resulting adhesive surface is approximately 40% of the total surface area which solves any problems with strong winds and what is more, the high heat-resistant qualities of the membrane make it possible to lay it without fixing it mechanically on surfaces with slopes of up to 40%.

DIFFUSER ALU POLYESTER is reinforced with non-woven composite polyester fabric stabilised with fibreglass combined with a 12 micron aluminium foil, which forms an absolute barrier against vapour migration. Both are soaked and covered by a waterproofing mass of distilled bitumen selected for industrial use; a high content of elastomeric and plastomeric polymers is added to it, in order to obtain a phase inversion alloy whose continuous phase is formed by polymers in which the bitumen is dispersed. The performance of the bitumen is therefore incremented along with the durability and the resistance to high temperatures while the already optimum adhesive and waterproofing qualities of the bitumen remain unchanged. Both sides of the membrane are lined with Flamina, a film that melts when torched guaranteeing rapid laying and reliable adhesion.

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

EN 13970 - BITUMEN WATER VAPOUR CONTROL LAYERS
- DIFFUSER ALU POLYESTER

APPLICATION FIELDS

DIFFUSER ALU POLYESTER can be used as a draining vapour barrier on roofs of scarcely ventilated rooms with very high relative humidity, where the risk of water vapour condensing behind the vapour barrier is high. Furthermore, **DIFFUSER ALU POLYESTER** also absorbs the differential movements of the laying surface, protecting the build-up above from any mechanical stress which could damage it.

METHOD OF USE AND PRECAUTIONS

DIFFUSER ALU POLYESTER should be bonded to the substrate by torching the rusticated indentations on the underside and also along with the longitudinal overlaps that should be torched together.

Crosswise the membranes are abutted and not overlapped along the joints where a strip of smooth membrane (3-mm thickness), at least 14 cm wide should be bonded over the traversal joints.

TECHNICAL CHARACTERISTICS

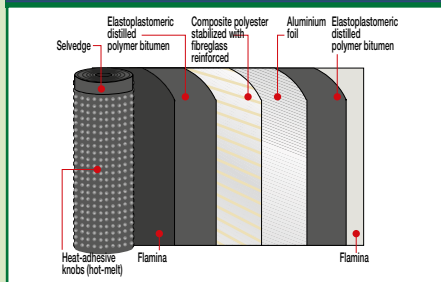
	Standard	T	DIFFUSER ALU POLIESTERE
Armatura			Tessuto non tessuto di poliestere composito e lamina d'alluminio (spessore 12 µ)
Massa areica	EN 1849-1	±15%	4.0 kg/m ²
Dimensioni rotoli	EN 1848-1	-1%	1x7.5 m
Impermeabilità	EN 1928 - B	≥	60 kPa
Forza a trazione massima L/T	EN 12311-1	-20%	250/120 N/50 mm
Allungamento a trazione L/T	EN 12311-1	-15% V.A.	12/20%
Resistenza al punzonamento dinamico	EN 12691 - A		NPD
Resistenza alla lacerazione con il chiodo L/T	EN 12310-1	-30%	100/100 N
Flessibilità a freddo	EN 1109	≤	-10°C (*)
Permeabilità al vapore acqueo • dopo invecchiamento	EN 1931 EN 1296-1931	-20% -20%	µ = 1 500 000 NPD
Euroclasse di reazione al fuoco	EN 13501-1		E
Comportamento al fuoco esterno	EN 13501-5		F roof
Caratteristiche termiche			
Conduttività termica			0.2 W/mK
Capacità termica			5.20 KJ/K

(*) Cold flexibility of the membrane before embossing.

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

DIFFUSER ALU 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.



FLAMINA ON HEAT-ADHESIVE BITUMEN KNOBS.

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 •

<p style="font-weight: bold; margin: 0;">Construction Systems and Products</p> <p style="font-size: small; margin: 0;">Via G. Rossini, 22 - 37060 Castel D'Azzano (VR) - Italy - C.P.67 T. +39 045 8546201 - F. +39 045 518390</p>	<p>Internet: www.index-spa.com Informazioni Tecniche Commerciali tecom@indexspa.it Amministrazione e Segreteria index@indexspa.it Index Export Dept. index.export@indexspa.it</p>		<p style="font-size: x-small;">UNI EN ISO 9001</p>	<p style="font-size: x-small;">UNI EN ISO 14001</p>	<p style="font-size: x-small;">socio del GBC Italia</p>
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