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CATEGORY CHARACTERISTICS ENVIRONRMENTAL METHOD OF USE EPP Image: Characteristics Image: Charateristics Image: Characteristics Im

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HOW TO BOND HEAT INSULATION ON VAPOUR BARRIERS WITHOUT USING MOLTEN OXIDISED BITUMEN OR COLD ADHESIVES OR NAILING

PROMINENT ALU POLYEST

ELASTOPLASTOMERIC DISTILLED POLYMER-BITUMEN WATERPROOFING VAPOUR BARRIER MEMBRANE WITH EMBOSSED UPPER FACE FOR BONDING HEAT INSULATION PANELS

It is not always possible to fix a thermal insulating layer mechanically and molten bitumen is used less and less these days, for both practical and safety reasons. Cold adhesives take a long time to set and contain solvents that evaporate in the environment. Therefore installers often bond insulation panels by torching the top face of the vapour barrier with a flame. Often this operation is unsatisfactory, because the laying surface is uneven or the membrane has insufficient bituminous thickness. The result is a covering build-up (set of layers) with visible top layer that can easily deform or be blown away in strong winds.



PROMINENT is the vapour barrier membrane designed by INDEX to resolve the problem of waterproofing where insulation panels must be bonded without using

molten oxidised bitumen or cold adhesives or mechanical fastening. The knobs of the embossed top face (>1 300 knobs/m²) of the **PROMINENT** membrane contain glue. This glue is a special hot-melt thermoplastic adhesive which melts quickly when torched and forms a strong bond with the insulation panels pressed onto the membrane. With PROMINENT there will be no more time wasted waiting for cold bond adhesives to set or risks of burns when installing molten bitumen, along with a significant reduction in waste and pollution, and long setting times of cold glues.

The top face of a normal vapour barrier membrane has a layer of bitumen covering the reinforcement which is no more than $1\div1.5$ mm thick, while the embossed parts of the **PROMI-NENT** membrane protrude by $3\div3.5$ mm (about 2.5 mm for the 3 kg/m2 type) like an adhesive applied with a toothed spatula. Once the flame has softened the adhesive it is easier to flatten the insulating panel with better results, because with a greater thickness to work with, it is easier to level off the prominent zones with the torch, making up for any unevenness in the substrate. **PROMINENT** has two longitudinal overlapping strips which, when overlapped, form almost the same thickness between the embossed part and the overlap, therefore avoiding the "up and down" effect of panels installed on the overlaps. The high softening point of the embossed part of the **PROMINENT** membranes is over 140°C, higher than that of the oxidised bitumens normally used for bonding insulating panels, along with the high adhesive surface area which can be obtained (around 40%), ensure reliable installation on any slope. With **PROMINENT** you don't need other materials, because you get an adhesive and a vapour barrier in one single product.

PROMINENT ALU POLYESTER is a membrane with high resistance to the diffusion of water vapour, reinforced with composite nonwoven polyester fabric stabilised with fibre glass, combined with a 60 micron aluminium foil: a total vapour barrier.

PROMINENT/V is reinforced with rot-proof strengthened fibreglass mat. **PROMINENT**

ADVANTAGES

- Easy to glue also on slopes.
- Free from kettle encumbrance.
- Risk of scalding, fumes and odours eliminated during application.



INTENDED USE OF "CE" MARKING SPECIFIED ACCORDING TO THE AISPEC-MBP GUIDLINES EN 13970 - BITUMEN WATER VAPOUR CONTROLLER LAYERS - PROMINENT ALU POLYESTER - PROMINENT ALU POLYESTER - PROMINENT POLYESTER - PROMINENT/V

POLYESTER reinforced with composite nonwoven polyester fabric, stabilised with fibre glass. It is used in applications where a mechanical resistance greater than that of the glass film reinforced versions is required..

Both faces are coated with Flamina, a hot-melt plastic film.

APPLICATION FIELDS

PROMINENT is used as a vapour barrier for insulation panels or stave-coupled insulation such as THERMOBASE which can be bonded to the membrane by heating the top face of the membrane with a torch. It is better to use heat resistant thermal insulation panels, dense enough to guarantee a reliable and long-lasting bond.

PROMINENT/V is used for roofs of places with a standard level of humidity, while **PROMI-NENT ALU POLYESTER** is used on the roofs of very humid buildings such as laundries or buildings in the textile industry etc. and air-



conditioned buildings with relative humidity of over 80% at 20°C.

PROMINENT POLYESTER: as it is more resistant and can take nails, it can be used on roofs of residential buildings with a wood floor. THER-MOBASE PUR TEGOLA should be bonded over by torching, preventing the application of the protective layer from the surface plane.

METHOD OF USE AND PRECAUTIONS

PROMINENT should be full bonded to the laying surface with a torch, overlapping and welding the sheets along the zones on the sheet. On the short side, the sheets should be abutted and not overlapped and torch bonded onto a strip of membrane (Defend 3, Nova V3) at least 14 cm wide which has previously been bonded to the laying surface.

Subsequently, the insulation panels can be bonded to the **PROMINENT** membrane by heating the top face of the membrane with a torch.

For laying on wood boards, dry-lay the **PROMI-NENT POLYESTER** sheets at right-angles to the gutter line. Furthermore, for flame resistance, nail the sheet overlaps every 10 cm with flat head nails suitable for bituminous tiles. Also nail them every 20 cm along two parallel rows, equidistant with respect to each other and from the sheet edges. To join the ends, drive in nails (in the same way as soon as above) along a strip of 14 cm wall-cutting polyester, after just abutting the membrane ends but without overlapping them.

PROMINENT POLYESTER's polymer-bitumen mix also contains elastomers, and, therefore, it is self-adhesive and the nail holes will not allow vapour to pass through. To ensure a vapour seal by the barrier, in normal thermohygrometric humidity conditions, in a residential building, overlapping is sufficient without welding. In particularly difficult cases, the overlap seal can be obtained by applying a coat of MASTIPOL bituminous bond to the ends before nailing.

METHOD OF USE AND PRECAUTIONS



When you start warming-up the PROMINENT dimpled face, the flame of gas burner will be bluish.



By keeping on torching in the same area, flame colour will turn from bluish into red/orange: this means that the **PROMINENT surface is ready for application of the insulating boards.**



LAYING DETAILS



water

TECHNICAL CHARACTERISTICS						
Reinforcement	Standard	т	PROMINENT ALU POLYESTER	PROMINENT POLYESTER	PROMINENT/V	
nemorcement			fibreglass and aluminium foil (thickness: 12μ)	stabilized with fibreglass	Tibicyidos	
Mass per unit area	EN 1849-1	±10%	4 kg/m ²	4 kg/m ²	3 kg/m ²	4 kg/m ²
Roll size	EN 1848-1	≥	1.05×7.5 m	1.05×7.5 m	1.05×10 m	1.05×7.5 m
Watertightness	EN 1928 - B	2	60 kPa	60 kPa	60 kPa	
Shear resistance L/T	EN 12317-1	-20%	250/120 N/50 mm	450/400 N/50 mm	300/200 N/50 mm	
Maximum tensile force L/T	EN 12311-1	-20%	250/120 N/50 mm	450/400 N/50 mm	300/200 N/50 mm	
Elongation L/T	EN 12311-1	-15% V.A.	15/20%	40/40%	2/2%	
Resistance to impact	EN 12691 - A		NPD	800 mm	NPD	
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	100/100 N	150/150 N	70/70 N	
Flexibility to low temperature	EN 1109	٤	NPD	NPD	NPD	
Water vapour transmission after ageing 	EN 1931 EN 1296-1931	-20% -20%	μ = 1 500 000	μ = 100 000	μ = 100 000	
Reaction to fire Euroclass	EN 13501-1		E	E	E	
External fire performance	EN 13501-5		F roof	F roof	F roof	
Technical specification for resistance to wind (EN 16002)						
Resistance to wind lifting - with polyurethane	EN 16002		Δ_{adm} = 10 000 N/m ²	$\Delta_{ m adm}$ = 10 000 N/m ²	Δ_{adm} = 10 000 N/m ²	
Thermal specifications						
Thermal conductivity			0.2 W/mK	0.2 W/mK	0.2 W/mK	0.2 W/mK
Heat capacity			5.20 KJ/K	5.20 KJ/K	3.90 KJ/K	5.20 KJ/K

