

PROMINENT ALU POLYESTER PROMINENT POLYESTER PROMINENT/V

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

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	NAILING

1 PROBLEM

ROOF	<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> Slooped
SUBSTRATE	<input checked="" type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Wood
	<input type="checkbox"/> Previous membrane	<input type="checkbox"/> Metal deck

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

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.

2 SOLUTION

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÷1.5 mm thick, while the embossed parts of the **PROMINENT** membrane protrude by 3÷3.5 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 non-woven 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**

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

EN 13970 - BITUMEN WATER VAPOUR CONTROLLER LAYERS

- PROMINENT ALU POLYESTER
- PROMINENT POLYESTER
- PROMINENT/V

POLYESTER reinforced with composite non-woven 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 **PROMINENT ALU POLYESTER** is used on the roofs of very humid buildings such as laundries or buildings in the textile industry etc. and air-

ADVANTAGES

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

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. THERMOBASE 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.

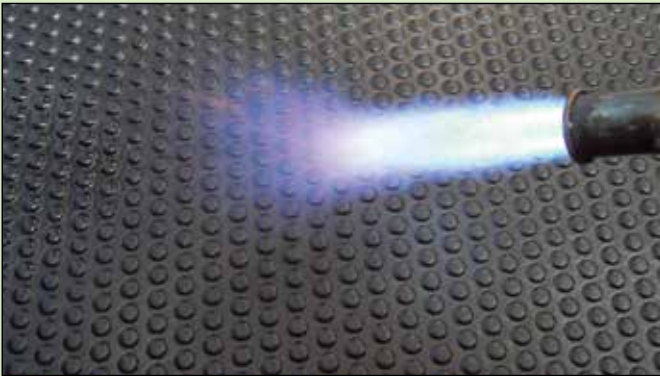
Subsequently, the insulation panels can be bonded to the **PROMINENT** membrane by heating the top face of the membrane with a torch.

For laying on wood boards, dry-lay the **PROMINENT 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

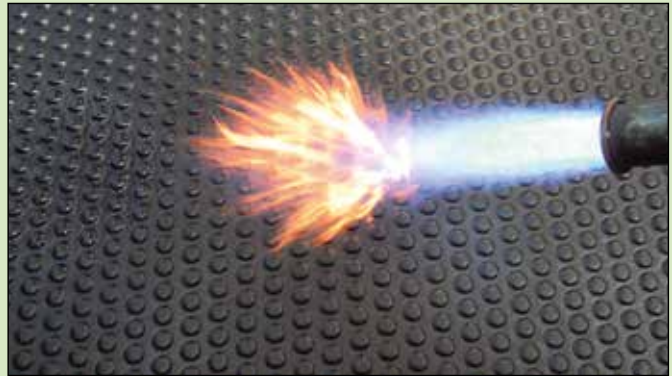
abutting the membrane ends but without overlapping them.

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.**

Insulating boards or THERMOBASE rolls will be laid/unrolled over the just torched surface and will be then easily bond to **PROMINENT** just by walking on them (make sure that the pressure is applied all over the board surface).



Heat insulations in rolls (THERMOBASE)

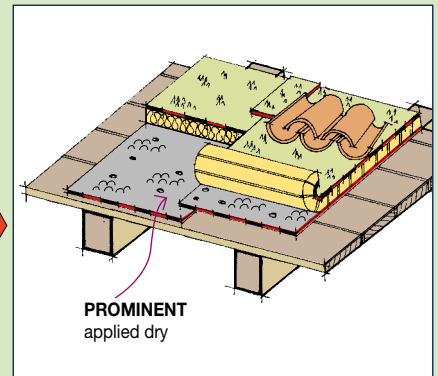
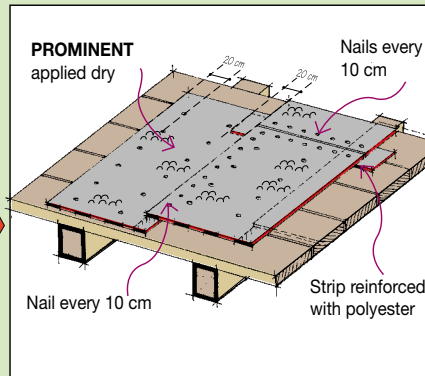


Heat insulations in panels



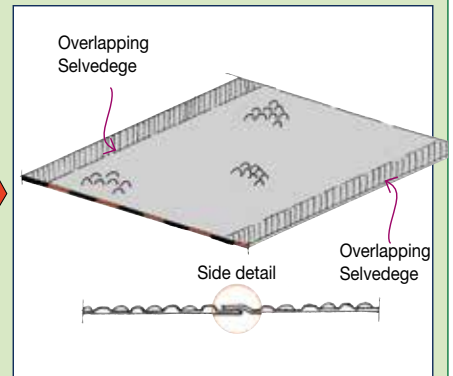
LAYING DETAILS

APPLIED DRY. JOINT NAILING



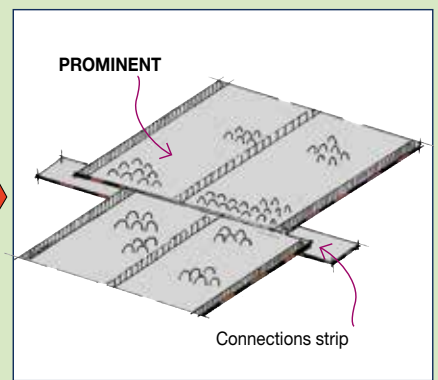
LONGITUDINAL OVERLAPS

The longitudinal overlapping strips form the same thickness between the embossed zone and the overlap.



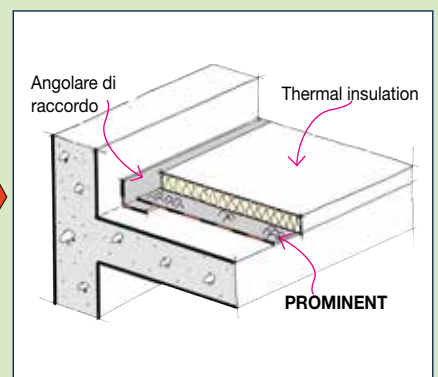
HEAD OVERLAP

On the short side the sheets should be butt jointed and sealed with a 14cm wide strip of membrane (DEFEND 3 mm, NOVA/V 3mm) that has previously been bonded to the support.



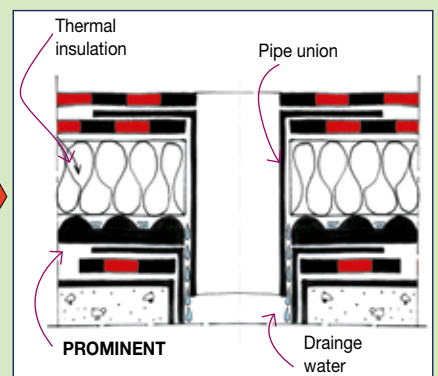
UPSTAND

A 20-cm high strip of membrane will be applied in the corner near the upstands (Defend 3, Nova V3). PROMINENT will be fully bonded on the surface starting from the upstands.



DRAINING VAPOUR BARRIER

Another advantage is the possibility of installing a second vent at the same level as the PROMINENT vapour barrier, which allows any infiltration of water to drain, leaving the insulation dry.



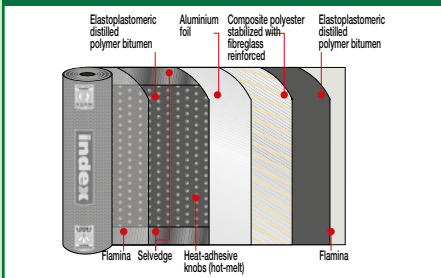
TECHNICAL CHARACTERISTICS

	Standard	T	PROMINENT ALU POLYESTER	PROMINENT POLYESTER	PROMINENT/V	
Reinforcement			Non-woven composite polyester stabilized with fibreglass and aluminium foil (thickness: 12 μ)	Non-woven composite polyester stabilized with fibreglass	Fibreglass	
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%	1.05x7.5 m	1.05x7.5 m	1.05x10 m	1.05x7.5 m
Watertightness	EN 1928 - B	≥	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	≤	NPD	NPD	NPD	
Water vapour transmission • after ageing	EN 1931 EN 1296-1931	-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	Δ _{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

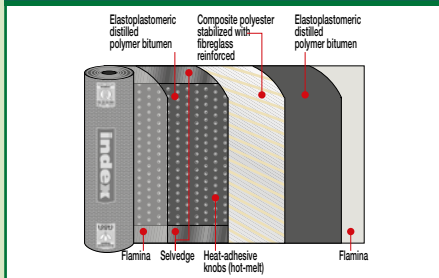
the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged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

COMPOSITION OF THE MEMBRANE

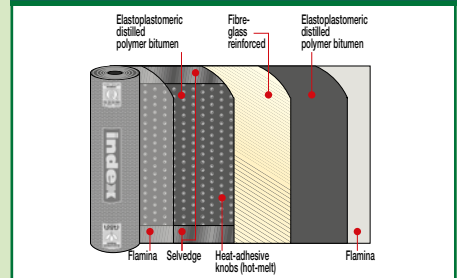
PROMINENT ALU POLYESTER



PROMINENT POLYESTER



PROMINENT/V



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.

• 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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