

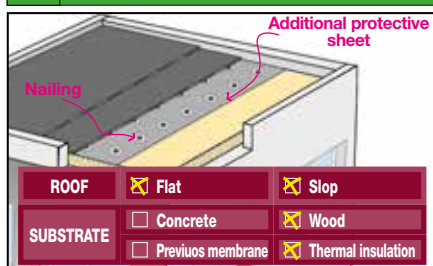
AUTOTENE BASE EP POLYESTER AUTOTENE BASE EP/V

ELASTOPLASTOMERIC DISTILLED POLYMER-BITUMEN
THERMALLY-SELF-ADHESIVE WATERPROOFING
FIRST LAYER MEMBRANES

GRANTS **LEED** CREDITS

CATEGORY	CHARACTERISTICS			ENVIRONMENTAL							METHOD OF USE	
 SPECIAL ELASTOPLASTOMERIC	 WATERPROOF	 SUPER-ADHESIVE	 REACTION TO FIRE	 ECO GREEN	 ASBESTOS FREE	 TAR FREE	 CHLORINE FREE	 RECYCLABLE	 NON DANGEROUS WASTE	 EXHAUSTED OIL FREE	 INDIRECT HEAT APPLICATION	 NAILING

1 PROBLEM



HOW TO GLUE A DOUBLE-LAYER WATERPROOFING COAT ON POLYSTYRENE FOAM WITHOUT PROTECTIVE SHEETS AND WITHOUT BURNING IT

When the thermal insulation of a roof consists of polystyrene panels, before the waterproofing membranes are laid, the insulation must be protected with an additional layer. This layer will protect the insulation against the reflection of the flame used for applying the waterproofing layers above. The layer must also be mechanically fixed if it's top layer. If glues are used instead, this means long setting time, creation of difficult to dispose of site waste, and emission of solvents.

2 SOLUTION



AUTOTENE BASE EP is the membrane designed by INDEX to solve the problem of direct laying on polystyrene foam panels without using additional sheets. The lower face of **AUTOTENE BASE EP** is spreaded with a special heat-activated adhesive. When the membrane is placed on the insulating panel, without the silicone coated film that protects the adhesive face, the indirect heat generated from the torch bonding of the overlying layer is enough to cause the adhesion of the base layer in contact with the polystyrene foam on which it is resting and on the overlaps, at the same time, resulting in long-lasting and safe adhesion. With the energy needed for applying one layer, two can be bonded using **AUTOTENE BASE EP** limiting the emission of fumes and smells, preventing the exhalation of solvents and the production of waste that is difficult to dispose of. This also avoids the use of an additional layer, with the benefit of using an economically advantageous type of thermal insulation. Last but not least, by eliminating a heating step, the amount of time that the operators are exposed to heat is halved, which is an excellent advantage, especially in summer. **AUTOTENE BASE EP** is a

waterproofing membrane made of distilled bitumen selected for industrial use, with the addition of a high content of elastomeric and plastomeric polymers. The performance of bitumen is therefore increased, durability and resistance to low and high temperatures are improved, thus maintaining the bitumen's already excellent adhesion and waterproofing qualities. The **BASE EP/V** membrane is strengthened with longitudinally reinforced, rot-proof fibreglass felt with high dimensional stability, while the **BASE EP POLYESTER** membrane has composite rot-proof reinforcement, made up of polyester non-woven fabric stabilised with fibreglass, which combines the elasticity and resistance of the polyester fibre with the stability of the glass. The lower face of both membranes is spreaded with a special "hot melt" heat-adhesive mix based on elastomers and tackifying resins, elastic also at low temperatures and which is protected by a peel-off silicone coated film divided into two overlapping halves. The upper face of both membranes is sand-blasted and has a special self-edge spreaded with the same heat-adhesive mix, protected by a double sided silicone coated strip, which allows extremely strong self-bonding of the overlaps.



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

EN 13707 - REINFORCED BITUMEN SHEETS FOR ROOF WATERPROOFING

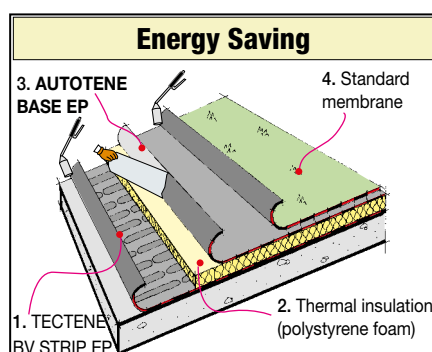
- Under layer or intermediate layer in multi-layer systems without permanent heavy surface protection
- AUTOTENE BASE EP POLYESTER
- AUTOTENE BASE EP/V
- Under heavy protection in multi-layer systems
- AUTOTENE BASE EP POLYESTER

EN 13970 - BITUMEN WATER VAPOUR CONTROL LAYERS

- AUTOTENE BASE EP POLYESTER
- AUTOTENE BASE EP/V

APPLICATION FIELDS

AUTOTENE BASE EP is the first layer of the "energy saving" double layer waterproofing and insulation system, which allows the economically advantageous use of polystyrene foam thermal insulation. Along with the TECTENE BV STRIP EP, vapour barrier, onto which the insulating panels are stuck without using hot bitumen or adhesives, the use of **AUTOTENE BASE EP** implies the construction of a layered arrangement with minimum energy consumption and lower environmental impact. The system is used on both flat and sloping roofs. **For roof gradients of over 15%, bonding has to be integrated with mechanical fixing methods and/or battens inserted between insulated panels. This technique is also used in particularly windy areas.**



ADVANTAGES

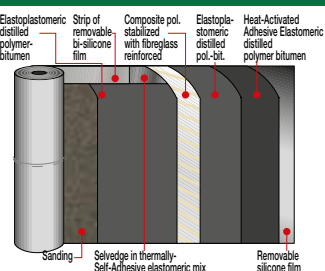
- The waterproofing coat is glued onto the polystyrene foam, without nails and adhesives.
- It doesn't need the protective layer on polystyrene foam.
- Two layers can be layed simultaneously.

TECHNICAL CHARACTERISTICS

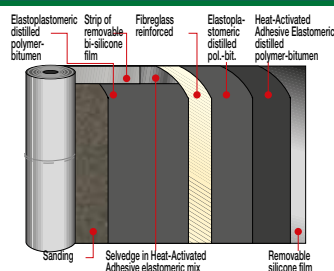
	Standard	T	AUTOTENE BASE EP POLYESTER	AUTOTENE BASE EP/V
Reinforcement			"Non-woven" composite polyester stabilized with fibreglass	Fibreglass
Thickness	EN 1849-1	±0,2	3 mm	3 mm
Roll size	EN 1848-1	≥	1×10 m	1×10 m
Watertightness	EN 1928 - B	≥	60 kPa	60 kPa
Shear resistance L/T	EN 12317-1	-20%	350/250 N/50 mm	NPD
Maximum tensile force L/T	EN 12311-1	-20%	400/300 N/50 mm	300/200 N/50 mm
Elongation • after ageing	EN 12311-1	-15% V.A.	40/40% NPD	2/2% -
Resistance to impact	EN 12691 - A		700 mm	800 mm
Resistance to static loading	EN 12730 - A		10 kg	-
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	140/140 N	70/70 N
Dimensional stability L/T	EN 1107-1	≤	-0.25/+0.10%	-
Flexibility to low temperature	EN 1109	≤	-15°C	-15°C
Flow resistance at high temperature	EN 1110	≥	100°C	100°C
Water vapour transmission • after ageing	EN 1931 EN 1296-1931	-20% -20%	μ = 100 000 NPD	μ = 100 000 NPD
Res. to water penetration • after ageing	EN 1928 EN 1296-1928		W1 W1	- -
Reaction to fire Euroclass	EN 13501-1		E	E
External fire performance	EN 13501-5		F roof	F roof
Technical specification for resistance to wind (EN 16002)				
with polystyrene foam ≥100	EN 16002		Δ _{adm} = 6 000 N/m ²	Δ _{adm} = 6 000 N/m ²
with extruded polystyrene	EN 16002		Δ _{adm} = 6 000 N/m ²	Δ _{adm} = 6 000 N/m ²
Thermal specifications				
Thermal conductivity			0.2 W/mK	0.2 W/mK
Heat capacity			3.90 KJ/K	3.90 KJ/K

COMPOSITION OF THE MEMBRANE

AUTOTENE BASE EP POLYESTER



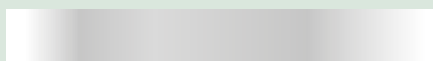
AUTOTENE BASE EP/V



PRODUCT FINISHING



SAND BLASTING. It is carried out by means of the hot adhesion of sand from minerals which are free from free willow, avoids the gluing of the coil turns and acts as adhesion intermediate agent for hot and cold applied paints and adhesives.



REMOVABLE SILICONE-COATED FILM. The lower face of the membrane is covered in a silicone-coated film which preserves the adhesive mix.

• 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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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