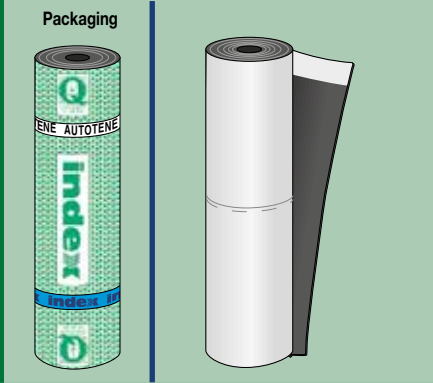


# AUTOTENE BASE HE/V

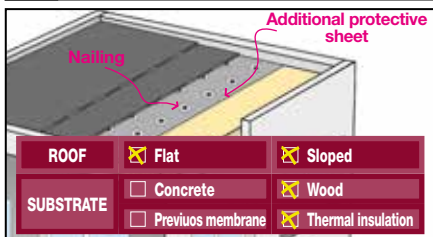
ELASTOMERIC DISTILLED POLYMER-BITUMEN  
THERMALLY-SELF-ADHESIVE WATERPROOFING  
PROTECTION LAYER MEMBRANE



GRANTS **LEED** CREDITS

| CATEGORY   | CHARACTERISTICS                                  | ENVIRONMENTAL |               |          |               |            |                     | METHOD OF USE      |                           |         |
|--|--|---------------|---------------|----------|---------------|------------|---------------------|--------------------|---------------------------|---------|
| <b>HE S</b><br>SPECIAL ELASTOMERIC FOR SPECIFIC USES | WATERPROOF<br>SUPER-ADHESIVE<br>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 SINGLE-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 HE/V** is the basic additional membrane, designed by INDEX to solve the problem of direct laying on the polystyrene foam, without using any nails or glue. The lower face of **AUTOTENE BASE HE/V** 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 heat 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 secure adhesion. With the energy needed for applying one layer, two can be bonded using **AUTOTENE BASE HE/V** limiting the emission of fumes and smells, preventing the exhalation of solvents and the production of waste that is difficult to dispose of. The resulting benefit is the use of an economically advantageous type of thermal insulation. **AUTOTENE BASE HE/V** is a waterproofing membrane made of distilled bitumen selected for industrial use with a high added content of elastomeric polymers such as to obtain a "phase inversion" mix. The continuous phase of this mix consists of the elastomer in which the bitumen is dispersed, where the characteristics are determined

by the polymer matrix and not by the bitumen, even if it is the largest ingredient. The performance of the bitumen is therefore increased, durability, resistance to low and high temperatures and elasticity are improved, thus maintaining the bitumen's already excellent adhesion and waterproofing qualities. **AUTOTENE BASE HE/V** is reinforced longitudinally with rot-proof fibreglass felt with high dimensional stability. The upper face of the membrane is covered with the Flamina hot-melt film, which offers quick shrinkage when the flame of the torch is applied, promoting the adhesion of the bitumen layer above. For excellent bonding of the overlaps on the upper face, there is also a selvedge protected by a double sided silicone coated strip. The lower face is spreaded with a special "hot melt" 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.

**AUTOTENE BASE HE/V** supplied in 14 cm width strips is named **JOINTENE PRO/V**.

## APPLICATION FIELDS

**AUTOTENE BASE HE** is the basic component of the insulation and **single-layer waterproofing** system known as "energy-saving". This system cuts the costs of heat insulation in polystyrene foam. when combined with the TECTENE BV STRIP vapour barrier (on which the insulating panels are glued with hot bitumen or adhesives), the use of **AUTOTENE BASE HE** produces a "stratigraphy" with lower energy consumption and lower environmental impact (see drawing). The system can be used for 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.**

The layer or "stratigraphy" system can also be

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

**EN 13707 - REINFORCED BITUMEN SHEETS FOR ROOF WATERPROOFING**

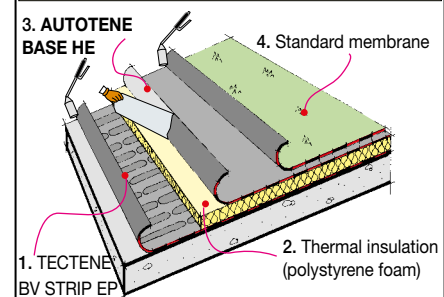
- Under layer or intermediate layer in multi-layer systems without permanent heavy surface protection
- AUTOTENE BASE HE/V

**EN 13970 - BITUMEN WATER VAPOUR CONTROL LAYERS**

- AUTOTENE BASE HE/V

used on surfaces in cement, wood or corrugated metal sheet, for both exposed and heavily protected coats. However, one must check if the flatness of the surface is sufficient to enable the insulation panel to wholly lay on the adhesive strips, avoiding any non glued "bridge areas".

## Energy Saving



## ADVANTAGES

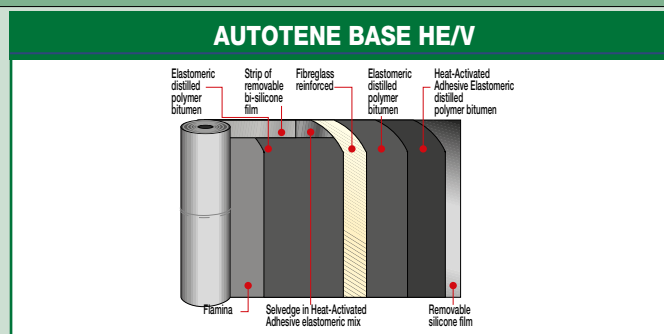
- The waterproofing coat is glued onto the polystyrene foam, without nails and adhesives.
- It doesn't need the protective layer on polystyrene foam.
- Two layers can be layed simultaneously.

# TECHNICAL CHARACTERISTICS

|   | Standard                | T            | AUTOTENE BASE HE/V   |
|---|-------------------------|--------------|--|
| Reinforcement   |                         |              | "Non-woven" composite polyester stabilized with fibreglass |
| Thickness   | EN 1849-1               | ±0,2         | 2.0 kg/m <sup>2</sup>                                      |
| Roll size   | EN 1848-1               | -1%          | 1x15 m   |
| Watertightness  | EN 1928 - B             | ≥            | 60 kPa   |
| Shear resistance L/T                                      | EN 12317-1              | -20%         | NPD  |
| Maximum tensile force L/T                                 | EN 12311-1              | -20%         | 300/200 N/50 mm  |
| Elongation • after ageing                                 | EN 12311-1              | -15% V.A.    | 2/2%<br>-  |
| Resistance to impact                                      | EN 12691 - A            |              | -  |
| Resistance to static loading                              | EN 12730 - A            |              | -  |
| Resistance to tearing (nail shank) L/T                    | EN 12310-1              | -30%         | 70/70 N  |
| Dimensional stability L/T                                 | EN 1107-1               | ≤            | -  |
| Flexibility to low temperature                            | EN 1109                 | ≤            | -25°C  |
| Flow resistance at high temperature                       | EN 1110                 | ≥            | 100°C  |
| Water vapour transmission • after ageing                  | EN 1931<br>EN 1296-1931 | -20%<br>-20% | μ = 100 000<br>NPD   |
| Res. to water penetration • after ageing                  | EN 1928<br>EN 1296-1928 |              | -<br>-   |
| Reaction to fire Euroclass                                | EN 13501-1              |              | E  |
| External fire performance                                 | EN 13501-5              |              | F roof   |
| Technical specification for resistance to wind (EN 16002) |                         |              |  |
| with polystyrene foam ≥100                                | EN 16002                |              | Δ <sub>adm</sub> = 6 000 N/m <sup>2</sup>                  |
| with extruded polystyrene                                 | EN 16002                |              | Δ <sub>adm</sub> = 6 000 N/m <sup>2</sup>                  |
| Thermal specifications                                    |                         |              |  |
| Thermal conductivity                                      |                         |              | 0.2 W/mK   |
| Heat capacity   |                         |              | 3.90 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



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

## 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.

**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 •

**index**  
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