

*Thermal activated composite waterproofing membrane with functions of vapour barrier & adhesive layer for insulation panels*

## Compound

Prefabricated thermal activated composite waterproofing membrane, composed of distilled bitumen and special synthesis polymers, which provide thermal adhesion properties to the lower face waterproofing compound.

The waterproofing compound of the upper face allows for fast heat transmission to the lower face.

The thermal activated waterproofing compound allows the product to be positioned and applied without the initial use of heat and is particularly indicated for those surfaces where the use of direct open flame is not suggested.

PLURA THERMO AD VAPOUR BARRIER is conceived specifically to adhere insulation panels to various types of substrates, providing total adhesion.

## Reinforcement

The reinforcement is a rot proof fiberglass with very high dimensional stability, coupled to an aluminum foil which provides an absolute barrier to the passage of water vapour.

## Finishes

The upper face is protected with a polyethylene film. The lower face is provided with a thermoplastic removable film.

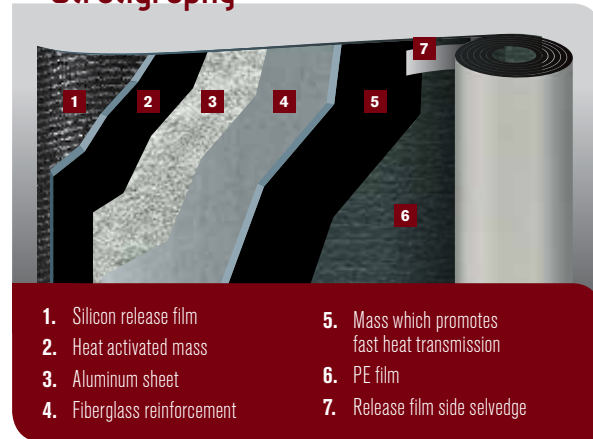
### Advantages in terms of sustainability

- Product ECO 100: product with regenerated raw materials and totally recyclable

### Advantages of PLURA THERMO AD VAPOUR BARRIER

- Possible to use on heat sensitive insulation panels (ex.PSE).
- Possible to use on wooden planks.

## Stratigraphy



1. Silicon release film
2. Heat activated mass
3. Aluminum sheet
4. Fiberglass reinforcement
5. Mass which promotes fast heat transmission
6. PE film
7. Release film side selvage

- Possible to use with any type of insulation.
- The adhesive peculiarities of PLURA THERMO AD VAPOUR BARRIER are such that once the thermoplastic film has been removed the roof is watertight.
- Time saving during the application of the insulation panels.
- The special compounds of PLURA THERMO AD VAPOUR BARRIER behave in a permanent elastic manner, uniformly distributing and accommodating those micro movements of the substrate.
- Progressive increase of the adhesion, due to the particular compound of PLURA THERMO AD VAPOUR BARRIER preserves and maintains in time its characteristics of thermal adhesion. Once the maximum adhesion value has been reached (superior to the intrinsic cohesion of the insulating element) there is no decline with time of the adhesive strength.
- The PLURA THERMO AD VAPOUR BARRIER membrane achieves total adhesion between the substrate and insulation panel, guaranteeing the traceability of any accidental infiltration and assuring an exceptional wind resistance (uplift). See the BDA 1-2-3 report.



EN 13970

## Fields of use



### EN13970 Vapour Barrier

PLURA THERMO AD VAPOUR BARRIER V 2.5 MM	N° layers			Method of application					Type of application			Type					
	Single layer	Double layer	Multilayer	Torch	Hot Air	Mixed (Torch / Air)	Cold Bond Glue	Mechanical Fixing	Thermo Adhesive / Self Adhesive	Fully Bonded	Partially Bonded	Loose Laid	Complimentary Layer	Top Layer	Heavy Protection	Anti-root	Other Uses
	■								■				■				

## Areas of use

PLURA THERMO AD VAPOUR BARRIER can be used as a vapour barrier on many types of substrates, providing total adhesion.

During the laying of the insulation panels the adhesion to the substrate is developed by heating the upper face, on which the insulation panels are then applied.

Heat the surface of the upper face, while the product is still warm, apply the insulation panel with sufficient pressure to promote the adhesion.

When using heat sensitive insulation panels it is necessary to heat an adjoining area sufficiently big enough to not damage the adjacent panel. For further information and news it is recommended to consult the PLUVITEC technical literature; our Technical office is always available to evaluate particular problems and to provide the necessary assistance to best apply our waterproofing membranes.

## Technical data

Technical Characteristics	Measure units	Reference norm	V	Tolerances
Type of reinforcement			Fibreglass + Aluminum	
Upper face finish			PE film	
Lower face finish			Silicon release film	
Length	m	EN 1848-1	10 -1%	≥
Width	m	EN 1848-1	1 -1%	≥
Thickness	mm	EN 1849-1	2,5	-5%
Cold flexibility	°C	EN 1109	NPD	≤
Shear resistance L / T	N/5 cm	EN 12317-1	350/250	-20%
Tensile strength L / T	N/5 cm	EN 12311-1	450/350	-20%
Elongation at break L / T	%	EN 12311-1	2/2	-2
Tearing resistance L / T	N	EN 12310-1	100/100	-30%
Dynamic puncture resistance	mm	EN 12691-B	500	≥
Fire reaction		EN 13501-1	F	
Watertightness	kPa	EN 1928-B	60	≥
Water vapour permeability	μ	EN 1931	1500000	≥
Water vapour permeability after artificial ageing		EN 1296 EN 1931	Pass	
Watertightness with chemical agents		EN 1847 EN 1928-B	Pass	

NPD = No Performance Declared in accordance with the EU Construction Products Directive.

## Other performance data

Technical Characteristics	Measure units	
Specific heat		1.70 KJ/kg°K
Thermal conductivity	λ	0.170 W/m°K

## Sizes & packing

Description	V 2,5 mm
Rolls size [m]	10 x 1
Rolls per pallet	36
Square meters per pallet [m <sup>2</sup> ]	360

Sizes & packing may vary depending on the type of transportation. The technical data given is based on average values obtained during production. We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.

## Applications & Recommendations

- Position, without flame, the rolls on the application surface; on cementitious substrates the adhesion will be further promoted by using the primer PRIMERTEC AD. (Drawing 1)
- Provide for side & head laps respectively of 10 & 15 cm between the sheets. (Drawing 2)
- The height of the verticals must be equivalent to the thickness of the insulation panel plus 5 cm.
- Remove the thermoplastic film on the lower face of the membrane, making sure to also remove the side overlap on the upper face. (Drawing 3)
- With a torch or hot air gun burn the polyethylene film on the upper face of the membrane. (Drawing 4)
- Position the insulation panel over the heated area, simply apply pressure with the hands. (Drawing 5)
- When storing with original packaging, pallets should not be stacked.

**NOTE: If applied following the above recommendations, the resistance of the system (PLURA THERMO AD VAPOUR BARRIER - INSULATION) to wind uplift will not be inferior to 5,0 kPa (500 kg/m<sup>2</sup>). (Official test report "Report BDA 0309-L-03")**

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources. Absolutely avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations which may compromise a perfect installation. It is recommended to store the product at temperatures above 0°C.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer, to eliminate dust and enhance the adhesion of the membrane.
- **The application surface must not have any depressions to avoid the risk of ponding water, the slope must be at least 1.5% on concrete decks and 3% for steel or wooden ones, this to guarantee a proper run off of rainwater.**
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.

