

Thermal activated composite waterproofing membrane

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.

Reinforcement

The V version has a rot proof fiberglass reinforcement with very high dimensional stability; the P version has a rot proof composite woven non woven single strand polyester reinforcement, with high mechanical characteristics.

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

- Possible to use on heat sensitive insulation panels (ex.PSE).
- Possible to use on wooden planks.
- Possible to use with any type of bituminous membrane or polyolefin.
- The adhesive peculiarities of PLURA THERMO AD are such that once the thermoplastic film has been removed the roof is watertight.

Stratigraphy



1. Silicon release film
2. Thermal activated mass
- 3a. Fiberglass reinforcement
- 3b. Single strand composite polyester reinforcement
4. Mass which promotes fast heat transmission
5. PE film
6. Selvedge release film

- Time saving during the application of two layers because it is only necessary to eliminate, by means of torch, the polyethylene on the membrane, without having to excessively melt the waterproofing compound (superior to 150°C), which could damage the heat sensitive insulation panels.
- With the PLURA THERMO AD products the temperature of 80°C is not exceeded.
- The special compounds of PLURA THERMO AD 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 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.
- No loss of waterproofing mass by melting of the compound, and therefore, maintaining thickness in two layer systems.
- The temperature of thermal activation is 50°C.
- The PLURA THERMO AD 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 13707

Fields of use



EN13707 Continuous roofs (Certificate n° 0958-CPR-2045/1)

	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
PLURA THERMO AD P 2.5 MM		▪	▪						▪				▪				
PLURA THERMO AD V 2.5 MM		▪	▪						▪				▪				

The waterproofing membrane based on distilled bitumen and polymers, as shown in this data sheet does not require the issue of a MSDS, because it does not contain dangerous substances. The information data sheet for the proper use of products is available.

Areas of use

Due to their characteristics, the membranes of the PLURA THERMO AD series can be used with success in a wide range of waterproofing applications in civil and industrial works, for example flat, sloped & barrel roofs, terraces, buried pipes, etc.; particularly suitable for all those structures and applications where the use of direct flame on the substrate is not recommended (ex. polystyrene insulation or wooden roofs).

The particular formulation of the membranes of the PLURA THERMO AD series makes them compatible with all PLUVITEC membranes, be they either APP or SBS based.

PLURA THERMO AD V & P can be used as a vapour shield, in multi-layer systems, where it is applied as the first layer.

Due to the particular thermal activated waterproofing compound, during the application of the second layer by torch or hot air gun, PLURA THERMO AD V & P develop their adhesive properties and adhere to the substrate.

Applications

- On cementitious substrates or similar apply by roller or airless the bituminous primer PRIMERTECAD, approx. consumption 300 g/m².
- Position the rolls on the application surface without the use of heat. (drawing 1)
- Provide for side & head laps respectively of 10 & 15 cm between the sheets, making sure to also remove the side overlap on the upper face. (drawing 2)
- Remove the thermoplastic film on the lower face of the membrane. (drawing 3)
- After having positioned the rolls, apply pressure over the surface using a suitable roller to promote adhesion.
- The adhesion of the PLURA THERMO AD will already start with the heat of the sun and continue during the application by torching for the application of the insulation panels or the finishing second layer waterproofing membrane. (drawing 4)



NOTE: if applied following the above recommendations, the resistance of the system (PLURA THERMO AD - PRATIKO P+V) to wind uplift will not be inferior to 7,0 kPa (700 kg/m²). (Official test report "Report BDA 0256-L-02")

Technical data

Technical Characteristics	Measure units	Reference norm	P	V	Tolerance
Type of reinforcement			Single strand polyester	Fibre glass	
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		≤
Tensile strength L / T	N/5 cm	EN 12311-1	400 / 300	300 / 200	-20%
Elongation at break L / T	%	EN 12311-1	35 / 35	2 / 2	-15 -2
Tearing resistance L / T	N	EN 12310-1	120 / 120	NPD	-30%
Dimensional stability	%	EN 1107-1	-0,3	NPD	≤
Fire resistance		EN 13501-5	F ROOF		
Fire reaction		EN 13501-1	F		
Watertightness	kPa	EN 1928-B	60		≥
Vapour transmission	μ	EN 1931	20000		≥

Other performance data

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

Sizes & packing

Description	P 2,5 mm	V 2,5 mm
Rolls size [m]	10 x 1	10 x 1
Rolls per pallet	36	36
Square meters per pallet [m ²]	360	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.

Recommendations

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.