

SUPERTEC AGREEMENT

APP modified waterproofing membrane

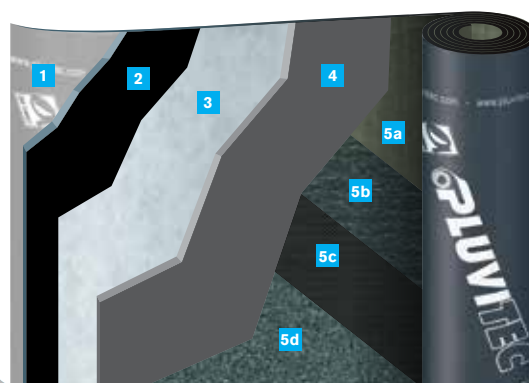
N.S.A.I. n. 7/0294

Description

Prefabricated modified composite polymer-bitumen waterproofing membrane, composed of distilled bitumen and polyolefin elastoplastomeric polymers (APAO) having excellent characteristics. SUPERTEC P & PA are reinforced with a woven non woven single strand composite spunbond polyester fabric, having excellent mechanical characteristics as well as dimensional stability. SUPERTEC PA 4,5 kg/m² is self-protected on the upper face with mineral slates which reduce heat absorption, improving the durability of the membrane, and has a 10 cm side selvedge and 15 cm head selvedge to promote the adhesion between the sheets. Further available finishes include talc, sand, PE film & polypropylene mat, olivine.

Stratigraphy

- | | |
|---|--|
| 1. PE film | 5a. Sand or talc finish / Olivine finish |
| 2. Waterproofing mass | 5b. PE film finish |
| 3. Single strand composite spunbond polyester reinforcement | 5c. Polypropylene mat finish |
| 4. Waterproofing mass | 5d. Mineral finish |



Methods of application

For the application of the membrane the use of heat is generally used by means of a gas torch or specific hot air machine. Use protective devices required by law. The application by heat is not suggested when on heat sensitive materials (polystyrene insulation).

- Coordinate the operations in a way to not cause damage to the construction elements and underground structure. Avoid to leave the structure for the night or for periods of prolonged work interruptions without having been properly sealed.
- The application surface must not have depressions, to avoid the ponding of rain water and must have a sufficient slope to guarantee a regular run off of rain. Normally this is obtained with a slope of 1.5%.
- The water drainage spouts should be sufficiently big enough to allow for rain water to be eliminated in an efficient way.
- Prepare cementitious substrates, including verticals and details, with a bituminous primer either by brush or airless, approx. 300/400 gr/m².

- Allow this preparation layer to dry before proceeding with any other operation.
- With prefabricated constructions, apply a suitable reinforcing strip along all joints. In the presence of construction joints, prefabricated panels or metal decks, suitable expansion joints are to be considered.

The membranes must be applied to the substrate fully bonded. In any case, when in the proximity of the head laps, the membrane must be applied for at least 100 cm; furthermore all details, perimeters, verticals, change of slope as well as projecting area must be fully bonded.

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.

Fields of use



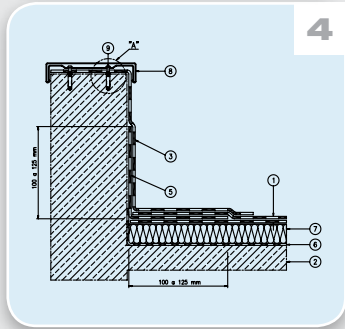
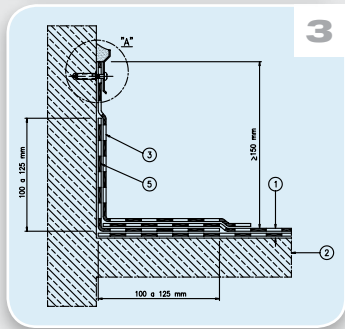
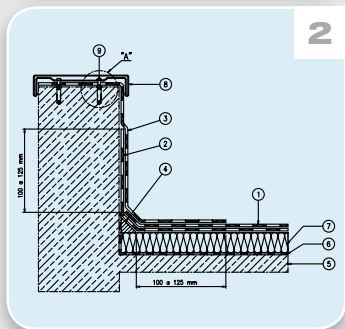
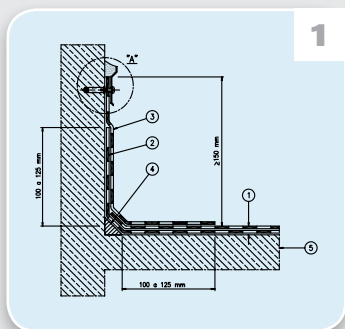
EN13707 *Continuous roofs* (Certificate n° GB14/92056)

	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
SUPERTEC AGREEMENT P 4 MM	▪	▪	▪	▪		▪		▪		▪	▪		▪	▪	▪		
SUPERTEC AGREEMENT PA 4 MM	▪	▪	▪	▪		▪		▪		▪	▪		▪	▪	▪		
SUPERTEC AGREEMENT PA 4,5 KG/M²	▪	▪	▪	▪		▪		▪		▪	▪		▪	▪	▪		

EN13969 *Retaining walls* (Certificate n° GB14/92056)

SUPERTEC AGREEMENT P 4 MM	▪	▪	▪	▪		▪		▪		▪	▪		▪	▪	▪		
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Details


Draw. 1 - 001/0

1. SUPERTEC
2. SUPERTEC
3. SUPERTEC
4. Angle fillet "CantBit"
5. Substrate
6. Flashing
7. Bituminous mastic
8. Mechanical fixing

Draw. 2 - 001/1

1. SUPERTEC
2. SUPERTEC
3. SUPERTEC
4. Angle fillet "CantBit"
5. Substrate
6. Vapor barrier
7. Insulation panel
8. Flashing
9. Mechanical fixing

Draw. 3 - 003/0

1. SUPERTEC
2. Substrate
3. SUPERTEC
5. SUPERTEC
6. Flashing
7. Bituminous mastic
8. Mechanical fixing

Draw. 4 - 003/1

1. SUPERTEC
2. Substrate
3. SUPERTEC
5. SUPERTEC
6. Vapor barrier
7. Insulation panel
8. Flashing
9. Mechanical fixing

Application & recommendations

To best use the technical advantages of the membranes of the SUPERTEC range and therefore obtain the maximum durability and reliability of the projects in which they are used, it is recommended to fulfill the following simple but important rules.

- The rolls are to be stocked vertically and in a suitable premises (covered and ventilated), away from heat sources and avoiding to stack the rolls on each other to avoid possible deformations which may compromise the final application result. The product must be stored at temperatures above 0°C.
- The application surface must be smooth, dry and clean.
- The application surface must be previously primed with PRIMERTEC or ECOPRIMER, to eliminate any superficial dust and promote the adhesion of the membrane.
- The application surface should not have any depressions, to avoid ponding of rain water and must have a minimum slope to allow for the drainage of the same (min. 1,5%).
- In situations where the membrane is applied on verticals which are higher than 2 meters or on very sloped surfaces, apply mechanical fixings along the head laps which will then be sealed by the next sheet.
- The minimum application temperature must be +5°C.
- The application of the membrane must be interrupted in adverse weather conditions (high humidity, imminent rain, etc.).
- In order to increase the performance and durability of the membrane it is strongly suggested to coat the SUPERTEC P 4 mm with either an acrylic (ACRILTEC) or aluminium (ALLUTECH) paint. In which case it is suggested to allow the surface of the membrane to oxidize (3/6 months depending on the exposure and climatic conditions). As an alternative, depending on the type of structure, heavy protection may be used.

PRODUCT CERTIFICATIONS:



Technical data

Technical Characteristics	Measure Units	Reference Norm	P	PA	Tolerances
Type of reinforcement			Single strand spunbond polyester		
Upper face finish			Sand or talc / PE film / PPL mat / Olivine	Mineral slate *	
Lower face finish			PE film		
Length	m	EN 1848-1	10 -1%		
Width	m	EN 1848-1	1 -1%		
Thickness	mm	EN 1849-1	4	4 on overlap	±5%
Mass	kg/m ²	EN 1849-1	-	-	±10%
Artificial U.V. ageing		EN 1297	Pass		
Cold flexibility	°C	EN 1109	-20		
Cold flexibility after ageing 6 months at 70°C	°C	EN 1296	-5		
Flow resistance	°C	EN 1110	140		
Flow resistance after ageing	°C	EN 1296	140		
Shear resistance L/T	N/5 cm	EN 12317-1	750 / 650		
Peel resistance of joints L/T	N	EN 12316-1	45 / 45		
Tensile strength L/T	N/5 cm	EN 12311-1	850 / 750		
Elongation at break L/T	%	EN 12311-1	45 / 45		
Tearing resistance L/T	N	EN 12310-1	150 / 150		
Static puncture resistance	kg	EN 12730	20		
Dynamic puncture resistance	mm	EN 12691	1500		
Dimensional stability	%	EN 1107-1	-0.3		
Fire resistance		EN 13501-5	B _{ROOF} (t1, t2, t4)		
Fire reaction		EN 13501-1	E		
Loss mineral	%	EN 12039	-	30	
Watertightness	kPa	EN 1928	≥ 60		
Impermeability after artificial ageing	kPa	EN 1296	60		
Water vapour permeability	μ	EN 1931	100.000		

* It is impossible to guarantee the color uniformity on self protected mineral membranes as the suppliers of the same do not provide any also. All self protected mineral finished membranes undergo color variations over time due to the exposure to atmospheric agents. Normally these variations in time will gradually become uniform.

Sizes & packing

	P 4 mm	PA 4 mm	PA 4,5 kg/m ²
Rolls size [m]	10x1	10x1	10x1
Rolls per pallet	25	20	23
Square meters per pallet [m²]	250	200	230

Sizes & packing may vary depending on the type of transportation. The technical data given is based on average values obtained during production. Pluvitec reserves 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.