

# MONOTEC

## Waterproofing membrane

### Description

Prefabricated modified polymer-bitumen membrane composed of distilled bitumen and elasto-plastomers (APP) reinforced with a woven non woven single strand composite polyester fabric. The upper face of the membrane is coated with the waterproofing mass and protected with a PE film, while the lower face is the exposed reinforcement.

The woven non woven single strand composite polyester reinforcement offers excellent static puncture and tear strength resistance.

The characteristics of the membranes in the MONOTEC range allow them to be used with success as a regularisation layer, as a first layer mechanically fixed to wooden roofs, as a vapour diffusion layer, as a separation layer between bituminous membranes and synthetic ones as well as in several other applications.

In virtue of the particular formulation the membranes of the MONOTEC range are compatible with all the PLUVITEC membranes, both APP & SBS.

### Stratigraphy

1. Single strand composite polyester fabric
2. Waterproofing mass
3. PE film



### Methods of application

The application of the membrane is generally obtained by mechanical fixing using large headed nails on wooden roofs. As an alternative cold adhesive glues can be used and on non heat sensitive substrates the use of oxidized bitumen.

For further information we recommend to consult PLUVITEC's technical literature.

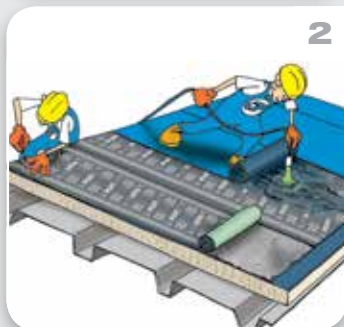
### Fields of use



#### 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
MONOTEC 1.2 KG/M <sup>2</sup>		▪	▪					▪				▪	▪				▪
MONOTEC 1.5 KG/M <sup>2</sup>		▪	▪					▪				▪	▪				▪
MONOTEC 2 KG/M <sup>2</sup>		▪	▪					▪				▪	▪				▪

## How to apply



# MONOTEC

## Application

**MONOTEC AS A SEPARATION AND SLIP SHEET (Draw.1)**  
Monotec is used as a separation layer, reducing or eliminating the physical-mechanical and/or chemical restraints between various elements of the waterproofing system.

In the example shown in the drawing, Monotec is being applied over an old synthetic membrane as a separation layer on which the bituminous one will be applied.

Monotec can also be used as a slip sheet as it prevents movement and tension from being transferred between adjoining layers.

**MONOTEC AS A SEPARATION AND DISTRIBUTION LAYER ON RE-FURBISHMENT (Draw.2)**

Monotec used over old waterproofing systems, acts as a separation and distribution layer as well as a base for the mechanical fixings, guaranteeing as well an excellent bond of the bituminous waterproof membrane used for the refurbishment.

**MONOTEC AS A PROTECTIVE ELEMENT AND DISTRIBUTION ON WOODEN ROOFS (Draw.3)**

Monotec is used over wooden decks and/or heat sensitive materials whereas it is used as a protective layer from the use of open flame; Monotec must be applied loose laid and mechanically fixed with appropriate nails. When used over concrete substrates it is necessary to use an adequate mechanical fixing.

## Recommendations

To best use the technical characteristics of the MONOTEC range of membranes and therefore 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.
- To guarantee impermeability MONOTEC must always be used with another waterproofing membrane reinforced with polyester or dual reinforced and applied fully bonded.
- The application surface must be smooth dry & clean.
- **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.**
- In situations of application on vertical surfaces superior to 1.5%, apply suitable mechanical fixings to the head laps.
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).

## Sizes & packing

	P 1,2 kg/m <sup>2</sup>	P 1,5 kg/m <sup>2</sup>	P 2 kg/m <sup>2</sup>
<b>Rolls size [m]</b>	25x1	25x1	20x1
<b>Rolls per pallet</b>	25	20	25
<b>Square meters per pallet [m<sup>2</sup>]</b>	625	500	500

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.

## Technical data

Technical Characteristics	Measure Units	Reference Norm	P			Tolerance
<b>Type of reinforcement</b>			Single strand polyester			
<b>Upper face finish</b>			PE film			
<b>Lower face finish</b>			Single strand polyester			
<b>Length</b>	m	EN 1848-1	25 -1%	25 -1%	20 -1%	
<b>Width</b>	m	EN 1848-1	1 -1%			
<b>Mass</b>	kg/m <sup>2</sup>	EN 1849-1	1,2	1,5	2	±10%
<b>Cold flexibility</b>	°C	EN 1109	NPD			
<b>Tensile strength L / T</b>	N / 5 cm	EN 12311-1	500/400			-20%
<b>Elongation at break L / T</b>	%	EN 12311-1	35/35			-15
<b>Tearing resistance L / T</b>	N	EN 12310-1	140/140			-30%
<b>Fire resistance</b>		EN 13501-5	F ROOF			
<b>Fire reaction</b>		EN 13501-1	F			
<b>Watertightness</b>	kPa	EN 1928	60			

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