

## Mineral finished composite waterproofing membrane

### Description

Prefabricated modified composite polymer-bitumen waterproofing membrane composed of distilled bitumen and differentiated waterproofing masses, specifically designed for use over old bituminous waterproofing membranes.

The upper face compound is composed of distilled bitumen and elasto-plastomers while the lower face compound is composed of distilled bitumen and special polymers which provide particular characteristics of adhesion & workability.

A special waterproofing mass is used to bond the upper & lower compounds.

PLURA R is reinforced with a woven non woven single strand composite polyester fabric, with very good mechanical characteristics and exceptional dimensional stability.

The P version has a woven non woven polypropylene mat with very good resistance to foot traffic and dynamic & static puncture resistance. The PA version is self-protected with mineral slates which reduce heat absorption and improve the durability of the membrane.

PLURA R PA has a 10 cm side selvedge and a 15 cm head selvedge which promotes the adhesion between the various sheets.

### Methods of application

The application of the membrane is generally obtained by heat, using either a gas or hot air torch making sure to provide for side laps of 10 cm and head laps of 15 cm.

Considering the particular areas of usage the product must be applied fully bonded to the existing membrane, the same must also be done for those areas such as the perimeter, verticals and change of slope.

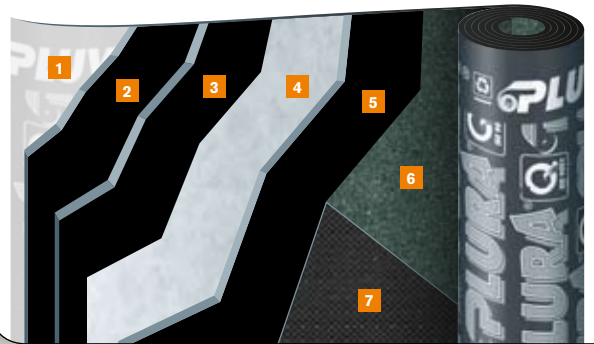
For further information we recommend to consult PLUVITEC's technical literature.

### Fields of use


PLURA R is specifically indicated for use as a refurbishment layer over existing old bituminous waterproofing membranes, especially those with mineral slate finish considering the excellent characteristics of adhesion and workability. PLURA R is compatible and can be applied with all PLUVITEC membranes, both APP & SBS.

### Stratigraphy

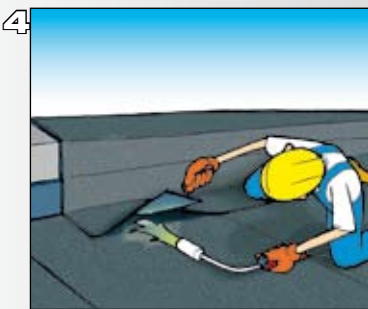
1. Polyethylene film
2. R compound
3. Waterproofing mass
4. Woven non woven single strand composite polyester reinforcement
5. Waterproofing mass
6. PA self-protected mineral surface
7. P self-protected polypropylene mat



### Fields of use

 Certificate N. 0958-CPD-DK029 Certificate N. 0958-CPD-DK030 <b>INTRON</b> CERTIFICATE Certification body 0958	CE Certification		N° layers		Method of application				Type of app.			Type										
	EW13707 Continuous Roofs	EW13859-1 Under Roof Tile	EW13970 Vapor Barrier	EW13969 Retaining Walls	Other Uses	Single Layer	Double Layer	Multilayer	Torch	Hot Air	Mixed (Torch/Air)	Cold Bond Glue	Mechanical Fixing	Thermo Ad / Self Adhesive	Fully Bonded	Partially Bonded	Loose Laid	Complimentary Layer	Top Layer	Heavy Protection	Anti-root	Other Uses
<b>PLURA R P 4 MM + POLYPROPYLENE</b>	•					•	•	•	•					•				•	•	•		
<b>PLURA R PA 5 KG/M<sup>2</sup></b>	•	•				•	•	•	•					•					•			

**How to apply**



**Sizes & packing\***

Description PLURA R	P 4 mm + POLYPROPYLENE	PA 5 kg/m <sup>2</sup>
Rolls size (m)	10 x 1	8 x 1
Rolls per pallet	20	23
Square meters per pallet	200	184

\*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.

**Application & recommendations**

- Clean the application surface.
- Apply by gas or hot air torch a 25 cm strip along all the vertical up stands.
- Position the membrane always starting from the lowest point, in order to have all the overlaps with the slope.
- Apply and position the membranes staggered to avoid creating areas where the membrane overlap against the slope and in the direction of the drains.
- Cut the corners of the membrane which will be applied under the next sheet with a 45° angle.
- After having positioned the roll, re-roll the material for half of its length and begin application; repeat the same operation for the remaining half of the roll. (Fig. 1)
- It is necessary to heat the entire surface, except the overlaps, of the lower face to obtain a full adhesion to the application surface.
- During the application by torch, the material needs to be heated to a point where the compound starts to flow in such a way that it fully saturates the application surface. The melted flow of compound obtained by torching is the R mass. (Fig. 2)
- Torch the side laps (10 cm) and head laps (15 cm) with a torch for overlaps. During this stage the overlaps should be pressed by using a roller (15 kg) from which a bead of compound should flow. Do not iron the overlaps. (Fig. 3)
- Apply the membrane on the verticals making sure that they overlap on the horizontal surface at least 10 cm, make sure that they are fully bonded using a trowel to squeeze a bead of compound from underneath. (Fig. 4)
- The height of the vertical must be equivalent or superior to the finished surface by at least 15 cm.

**Technical data**

Technical Characteristics	Measure Units	Reference Norm	P	PA	Tol.
Type of reinforcement			Single strand polyester		
Upper face finish			Polypropylene	Mineral	
Lower face finish			P.E. film		
Length	m	EN 1848-1	10 -1%	8 -1%	
Width	m	EN 1848-1	1 -1%		
Thickness	mm	EN 1849-1	4		-5%
Mass	kg/m <sup>2</sup>	EN 1849-1		5	-10%
Cold flexibility	°C	EN 1109	-10		
Flow resistance	°C	EN 1110	130		
Flow resistance after ageing	°C	EN 1296	120		
Artificial U.V. ageing		EN 1297	pass		
Shear resistance L/T	N / 5 cm	EN 12317-1	500/400		
Tensile strength L/T	N / 5 cm	EN 12311-1	600/500		
Elongation at break L/T	%	EN 12311-1	35/35		
Tearing resistance L/T	N	EN 12310-1	150/150		
Static puncture resistance	kg	EN 12730	15		
Dynamic puncture resistance	mm	EN 12691	900		
Dimensional stability	%	EN 1107-1	0.3	0.3	
Loss mineral	%	EN 12039	30		
Fire resistance		EN 13501-5	F ROOF		
Fire reaction		EN 13501-1	F		
Tensile strength after ageing L/T	N / 5 cm	EN 1296		NPD	-20%
Elongation at break after ageing L/T	%	EN 1296		NPD	-20%
Impermeability after artificial ageing	Kpa	EN 1296	60	60	
Watertightness	Kpa	EN 1928	60		

Technical data sheet

No tree has been cut.  
100% recycled paper.