

Spider P SA

Prefabricated SELF-ADHESIVE bitumen membrane produced using ADESO® technology



SPIDER P SA is a top-quality prefabricated SELF-ADHESIVE bitumen membrane produced using ADESO® technology, the innovative ELASTOMERIC-PLASTOMERIC (Plastomer-Polymer Bitumen) compound laminating system developed by Polyglass SpA. In the ADESO® membranes, the exclusive SEALLap® polyurethane self-adhesive system further improves the bond along the side laps of overlapping membranes as they are applied.

In the mineral versions, the ADESO® membranes feature the FASTLap® system, the head selvedge free from slate chippings, which allows a faster and easier application and a better sealing of the overlaps.

SPIDER P SA is a membrane produced to the standards set by NAT® technology, the production system for the control of polymer matrix ageing in bitumen membranes.

SPIDER P SA has a polyester nonwoven carrier, stabilized with glass strands parallel to the machine direction. The carrier gives good puncture resistance, dimensional stability, and tensile strength in all directions.

**Flexibility at low temperature
-10 °C**

 **PRODUCT COMPLIANT WITH EUROPEAN STANDARD**

 **WATER VAPOUR TRANSMISSION PROPERTIES**

 **DETERMINATION OF WATERTIGHTNESS**

 **REACTION TO FIRE CERTIFICATION CLASS E**

 **CERTIFICATION OF COMPLIANCE WITH BUILDING MATERIAL STANDARDS (SOUTH AFRICA)**

 **CERTIFICATION OF COMPLIANCE WITH BUILDING MATERIAL STANDARDS (NEW ZEALAND)**

INTENDED USE

PRODUCT	EN 13707 ROOFS						EN 13969 FOUNDATIONS			EN 13859-1 UNDERLAY FOR DISCONTINUOUS ROOFING	EN 13970 VAPOUR BARRIER	EN 14695 BRIDGES AND VIADUCTS
	SINGLE-PLY		MULTI-PLY				ROOT BARRIER	RISING DAMP	GROUNDWATER			
	EXPOSED	BALLASTED	EXPOSED		BALLASTED							
				BASE LAYER	CAP SHEET	BASE LAYER	CAP SHEET					
SPIDER P SA 1,5 mm F R			•									
SPIDER P SA 1,8 mm F R			•						•			
SPIDER P SA 2 mm F R			•			•			•		•	
SPIDER P SA 2 mm PP R									•		•	
SPIDER P SA 3 mm F R			•			•			•		•	
SPIDER P SA 3,5 kg G R					•					•		

SPIDER P SA can be applied as part of a MULTI-PLY ROOF, in EXPOSED waterproofing systems, as a BASE LAYER or CAP SHEET, and in BALLASTED waterproofing systems, as a BASE LAYER.

SPIDER P SA can be used as BASE LAYER on insulating panels that are not heat resistant so that torch-on waterproofing bitumen membranes can be applied on top as a SINGLE-PLY solution.

SPIDER P SA is suitable for application on FOUNDATION walls to deal with RISING DAMP or percolating water, as part of a SINGLE or MULTI-PLY system, or as an under-floor MOISTURE BARRIER. **SPIDER P SA** can be applied as UNDERLAY FOR DISCONTINUOUS ROOFING.

SPIDER P SA is a VAPOUR DIFFUSION CONTROL LAYER designed for use under insulating material to ensure it has a long service life. The right VAPOUR DIFFUSION CONTROL LAYER for the job must be determined based on the existing roof build-up, checking for condensation formation (with the aid of a Glaser diagram).

Under no circumstances should roofing tiles be applied directly on top of the bitumen membranes by mortar, adhesives or expanding foam; in fact these would not permit a secure fixing system, as well as the necessary ventilated space under the roofing tiles.

FINISHES

SPIDER P SA comes with a mono-silicone coated polyethylene backing film on its underside: this film is split in two lengthwise to make it easier to peel off as the membrane is applied. The upper surface can be finished with three options: polyethylene film, polypropylene fabric and faced with slate chippings varying in size in a choice of colours. The mineral-surfaced version may undergo variations in colour tones due to time and shelf life. It must be considered a natural phenomenon that, after application, the exposure to atmospheric agents will tend to uniform the colour within a few months.

The membrane versions finished with the polyethylene film must never be exposed to UV rays and can never be painted. The version with polypropylene fabric is resistant to alkaline elements. For further information on other available finishes, please contact the Polyglass SpA Sales Department.

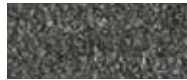
Top finishes



Polyethylene film (F)



Polypropylene fabric (PP)



Chippings (G)

Bottom finishes



Mono-silicone coated polyethylene film (R)

AVAILABLE COLOURS

Slate chippings in a choice of:



Grey



Green



Red



White



* White Reflect Plus

* Highly reflective colours (Cool Roof).

White Reflect Plus - SRI (Solar Reflectance Index): 79,8% <SRI< 82,2%¹; Ri: 67%; E: 88%.

¹ Depending on the wind speed. Initial values according to ASTM, referring to new materials.

REV. 2-23

TECHNICAL CHARACTERISTICS

STANDARD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	NOMINAL VALUES	
			SPIDER P SA	SPIDER P SA G
EN 1848-1	WIDTH	m	≥ 1	≥ 1
EN 1848-1	LENGTH	m	20 (±1%) 10 (±1%)	15 (±1%) 10 (±1%)
EN 1849-1	THICKNESS	mm	1,5 (±0,2) 3,0 (±0,2)	1,8 (±0,2) - 2,0 (±0,2)* 2,0 (±0,2)
EN 1849-1	AREA MASS	kg/m ²	NPD	3,5 (±10%)
EN 1848-1	STRAIGHTNESS	mm/10 m	Meets the requirements	Meets the requirements
EN 1928-B	WATERTIGHTNESS	kPa	Meets the requirements	Meets the requirements
EN 1928	RESISTANCE TO WATER PENETRATION	Class	NPD	W1
EN 1931	WATER VAPOUR PROPERTIES μ	-	20000 (±20%) 120000 (±20%)	120000 (±20%)
EN 13897	WATERTIGHTNESS AFTER STRETCHING AT LOW TEMPERATURE	kPa	NPD	NPD
EN 13501-1	REACTION TO FIRE	Class	E	E
EN 13501-5	EXTERNAL FIRE PERFORMANCE	Class	NPD	NPD
EN 12039	ADHESION OF GRANULES	%	NPD	≤ 30
EN 1850-1	VISIBLE DEFECTS	-	None	None
EN 1107-1	DIMENSIONAL STABILITY	%	≤ 0,3	≤ 0,3
EN 12316-1	PEEL RESISTANCE	N/50 mm	NPD	NPD
EN 12317-1	SHEAR RESISTANCE Longitudinal Transversal	N/50 mm N/50 mm	NPD NPD	NPD NPD
EN 12691-A	RESISTANCE TO IMPACT (RIGID SUPPORT)	mm	≥ 400	≥ 400
EN 12691-B	RESISTANCE TO IMPACT (SOFT SUPPORT)	mm	≥ 500	≥ 500
EN 12730-A	RESISTANCE TO STATIC LOADING (SOFT SUPPORT)	kg	≥ 10	≥ 10
EN 12730-B	RESISTANCE TO STATIC LOADING (RIGID SUPPORT)	kg	≥ 15	≥ 15
EN 12310-1	RESISTANCE TO TEARING Longitudinal Transversal	N N	130 (±30%) 130 (±30%)	130 (±30%) 130 (±30%)
EN 12311-1	TENSILE STRENGTH Longitudinal Transversal ELONGATION AT BREAK Longitudinal Transversal	N/50 mm N/50 mm % %	400 (±20%) 300 (±20%) 35 (±15) 35 (±15)	400 (±20%) 300 (±20%) 35 (±15) 35 (±15)
ASTM D 1000	PEELING	N/10 mm	≥ 20	≥ 20
EN 1109	COLD FLEXIBILITY	°C	≤ -10	≤ -10
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C	≥ 100	≥ 100
DURABILITY AFTER AGEING				
EN 1928-B - EN 1296	WATERTIGHTNESS AGAINST ARTIFICIAL AGEING	kPa	Meets the requirements	Meets the requirements
EN 1928-B - EN 1847	WATERTIGHTNESS AGAINST CHEMICAL	kPa	Meets the requirements	Meets the requirements
EN 1931 - EN 1296	WATER VAPOUR RESISTANCE FACTOR AFTER THERMAL AGEING μ	-	± 50% initial value	± 50% initial value
EN 1931 - EN 1847	WATER VAPOUR RESISTANCE FACTOR AFTER EXPOSURE TO CHEMICAL AGENTS μ	-	± 50% initial value	± 50% initial value
EN 1850-1 - EN 1297	ARTIFICIAL AGEING BY LONG TERM EXPOSURE TO THE COMBINATION OF UV RADIATION, ELEVATED TEMPERATURE AND WATER	-	Meets the requirements	Meets the requirements
EN 1109 - EN 1296	ARTIFICIAL AGEING BEHAVIOUR (COLD FLEXIBILITY)	°C	NPD	NPD
EN 1110 - EN 1296	ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE)	°C	≥ 90	≥ 90
EN 12311-1 - EN 1296 EN 1267	TENSILE STRENGTH AFTER ARTIFICIAL AGEING THROUGH EXPOSURE LONG TERM TO THE COMBINATION OF UV RADIATION, HIGH TEMPERATURE AND WATER Longitudinal Transversal ELONGATION AT BREAK AFTER ARTIFICIAL AGEING THROUGH EXPOSURE LONG TERM TO THE COMBINATION OF UV RADIATION, HIGH TEMPERATURE AND WATER Longitudinal Transversal	N/50 mm N/50 mm % %	±30% initial value ±30% initial value -30% initial value -30% initial value	±30% initial value ±30% initial value -30% initial value -30% initial value
ADDITIONAL DATA				
EN 13583:2012	DETERMINATION OF HAIL RESISTANCE	m/s	NPD	NPD
-	DETERMINATION OF HAIL RESISTANCE - VKP APiB N° 09	Class	NPD	NPD
SP METHOD 3873	PERMEABILITY TO RADON GAS	-	NPD	NPD
SP METHOD 3873	TRANSMITTANCE TO RADON GAS	-	NPD	NPD
BR 2012	TRANSMITTANCE TO METHANE GAS	-	NPD	NPD
IEC 62631-3-1:2016	VOLUMETRIC RESISTIVITY	Ωcm	NPD	NPD
EN 13948	RESISTANCE TO ROOT PENETRATION	-	NPD	NPD
-	THERMAL CONDUCTIVITY	W/mK	0,20	0,20
-	THERMAL CAPACITY	kJ/K	1,20	1,20

* PP fabric version

PACKAGING

PRODUCT	THICKNESS mm	WEIGHT kg/m ²	DIMENSIONS m
SPIDER P SA F R	1,5	-	1x20
SPIDER P SA F R	1,8	-	1x17
SPIDER P SA F R	2	-	1x15
SPIDER P SA PP R	2	-	1x17
SPIDER P SA F R	3	-	1x10
SPIDER P SA G R	-	3,5	1x10

Given the variety of situations in which the product can be used, the diversity of substrates and its multiple possible uses within COMPLEX WATERPROOFING BUILT-UP SYSTEMS, Polyglass SpA cannot be held responsible for the results achieved in terms of either function or looks. Rev. 2-23

Spider P SA

STORAGE

Rolls are packed in cardboard boxes standing upright on shrink-wrapped pallets.

Use always a weight distributing element if you are forced to stack the pallets one on top of each other. A solid distributing element will avoid damages to the rolls underneath. Keep the product in a dry place, out of direct sunlight, protected from heat sources and freezing temperatures, storing the material on wooden pallets raised off the ground until you are ready to start application.

Always keep the rolls of membrane in their original packaging where they are being stored, even when the roll is not entirely used.

Never store or leave rolls of membrane horizontal position this could compromise the application.

Contact with solvents or organic liquids can damage the product.

INSTALLATION TIPS

The surface of any substrate due to be covered with **SPIDER P SA** must be flat, dry, clean, and free of all foreign matter or loose material.

Excessive moisture levels on the surfaces to be waterproofed can result in membranes coming off.

Before applying the membranes, coat the substrate with an adhesion-promoting primer: either solvent-based products such as POLYPRIMER and POLYPRIMER HP or water-based product such as IDROPRIMER. On wooden substrates, it is always advisable to use a water-based primer.

SPIDER P SA is cold applied, without the use of naked flames (propane torch), by peeling off the mono-silicone coated backing film on its underside.

The product must be applied with temperatures higher than 10 °C and, whatever the case, only when weather conditions are favourable.

Membranes installed as the first waterproofing layer should be applied directly over insulating panels or substrate (wood, concrete screed) coated with an adhesion-promoting primer. Instead of being topped with a second self-adhesive membrane, **SPIDER P SA** also offers the option of applying torch-on waterproofing bitumen membranes over the top.

On pitched roofs, the roll must be positioned so that it follows the direction of the slope (at a right angle to the ridge and/or eaves line).

At the top, along the ridge lines, the membrane must fold over onto the opposite side of the pitched roof by approx. 20-30 cm and be fixed mechanically along its end.

Membranes with a smooth surface finish cannot be protected with protective and/or reflective paints.

Mineral-surfaced membranes are naturally subjected to lose slate granules during handling and installation operations. It is also advisable to pay attention to the works following the installation of the product.

For further details on application, please refer to the installation instructions contained in the ADESO® Application Manual, or contact the Polyglass SpA Technical Support Department.

SAFETY RULES

The polymer bitumen membranes, manufactured by Polyglass SpA, are made from bitumen distilled from crude oil and do not contain tar (derived from coal), asbestos or chlorine.

LEGAL RULES

The values given are approximate average data relating to the current product range and may be edited or updated by Polyglass SpA at any time without any prior notice. As Customer or User, it is your responsibility to check that the technical data sheet you have is valid for the batch of product in your hands and, whatever the case, that you have the latest version issued.

Always refer to the latest up-to-date version of the Technical Data Sheet and relevant Declaration of Performance, both of which you can find on our site www.polyglass.com. As the End User, it is your responsibility to check that the product is fit for its intended purpose.

PRODUCT FOR PROFESSIONAL USE.

