REOXTHENE Patented TECHNOLOGY

REOXTHENE® TECHNOLOGY

WATERPROOFING MEMBRANE WITH REVOLUTIONARY TECHNOLOGY

INNOVATIVE BITUMINOUS POLYMER COMPOUND

EVEN MORE LIGHTWEIGHT AND POWERFUL (up to 4 mm = 36 kg)

INCREASED PRODUCT PERFORMANCE

EXCEPTIONALY EASY TO APPLY; HIGHER DAILY OUTPUT

CE 1370

COLD FLEXIBILITY **-10 °C**

EVOLIGHT S

EVOLIGHT S and EVOLIGHT S MINERAL are plastomeric waterproofing membranes with outstanding performance.
They are made using a latest generation distilled bitumen-based compound, ultra-light REOXTHENE technology, Evalith™ XTR polyester spunbond from Johns Manville, stabilized and reinforced with longitudinal glass fiber threads.

ROOFING AND WATERPROOFING SYSTEMS

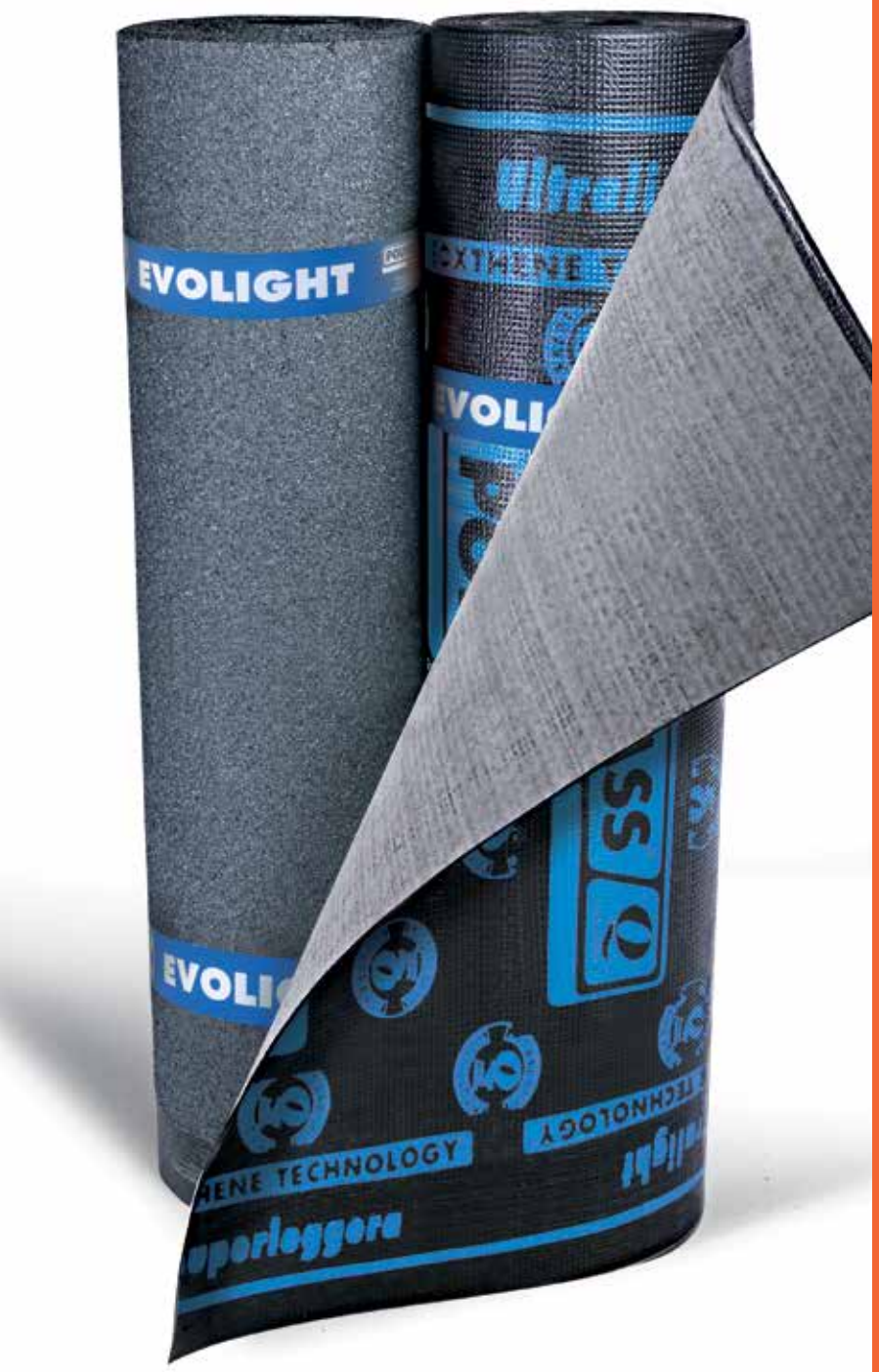
POLYGLASS® Q

MAPEI GROUP

Adds value!

Rev. 1/18

REOXTHENE TECHNOLOGY®



REOXTHENE is the revolutionary technology developed by the POLYGLASS and MAPEI Research & Development laboratories. An innovative approach has revolutionised traditional bituminous compound mixing and compound techniques. This lets us go beyond yesterday's technological limits in the **weight/thickness ratio.**

REOXTHENE TECHNOLOGY lets POLYGLASS produce chemically innovative compounds with specific weights, which can't be achieved using traditional phase inversion methods.

REOXTHENE TECHNOLOGY is protected by a patent which guarantees exclusive POLYGLASS rights.

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TECHNICAL DESCRIPTION

EVOLIGHT S and EVOLIGHT S MINERAL are plastomeric waterproofing membranes with outstanding performance. They are made using a latest generation distilled bitumen-based compound, ultra-light REOXTHENE technology, with Evalith™ XTR polyester spunbond from Johns Manville, stabilized and reinforced with longitudinal glass fiber threads. The special type of compound, which surpasses previous weight/thickness parameters (compound density ≤0,96 g/cm^3 - Test method ISO 1183), and the improved mechanical characteristics of the fabric (excellent elongation, remarkable tensile strength) makes these membranes suitable for the heaviest use. The compound's special formula provides unique cold flexibility (-10 °C). The innovative technology used in membrane production, protected by patent, provides another guarantee of the product's quality, stability, and durability.

INTENDED USE AS PER CE STANDARDS

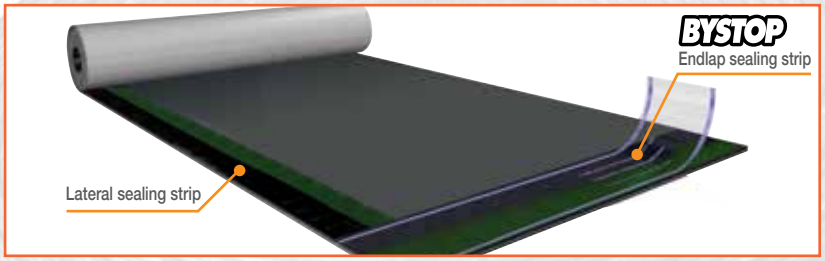
PRODUCT	SINGLE-LAYER		MULTI-LAYER				ROOT BARRIER	VAPOUR BARRIER	FOUNDATIONS		UNDER ROOFING TILES
			F.L.		U.L.				R.D.	G.W.	
	E.	U.H.P.	E.	U.H.P.	E.	U.H.P.					
3 mm				•	•	•					
4 mm			•	•	•	•			•		
5 mm			•	•	•	•			•		
4 mm FT			•	•	•	•			•		
4 mm Mineral			•								
4,5 mm Mineral			•								

F.L.: Finishing Layer - **U.L.**: Underlying Layer - **R.D.**: Rising Damp - **G.**: Ground-water - **E.**: Exposed - **U.H.P.**: Under Heavy Protection

EVOLIGHT S and EVOLIGHT S MINERAL are particularly indicated for traditional waterproofing, with a plasticity that ensures perfect surface adhesion. Their excellent mechanical and dimensional stability characteristics indicate use in civil and industrial waterproofing with all structures (traditional, metal, prefabricated) in which these qualities are required. The top layer of membranes applied in exposed systems must be protected from UV rays with slate chippings (Mineral-surfaced version) or with protective or reflective paint. Waterproofing systems under heavy protection can be laid in multiple layers with minimum thicknesses of 7 mm (4+3 mm).

TYPES OF FINISH AND SUGGESTIONS FOR LAYING

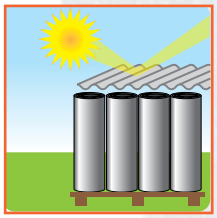
EVOLIGHT S has a top surface coated with talc, sand, or a lightweight polypropylene, non-woven, fabric. The underside is protected and faced with **POLYFLAM** *Easy Torch* the special non-stick polyethylene film which disappears during felt installation.

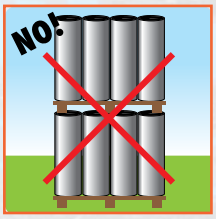


In its MINERAL version, the top surface is finished with a protective layer of natural or coloured granules.
Available also in the high reflective version thanks to the use of special white slate with high solar reflection rate used as top protective layer. It has the (BYSTOP patented) overlapping sealing strip at side and end lap.
The surfaces to be waterproofed must be dry, clean, smooth and level. Application is quick and easy and is done by light flaming with propane gas.
If the waterproofing condensed polymer membrane is employed in combination with an insulating system or panel, and if there are a high depht or peculiar application conditions, a mechanical fixing of the complete system is recommended.

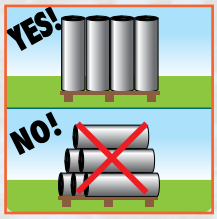
STORAGE METHOD

Store the product in a dry place out of direct sunlight. Never stack pallets on top of each other. Rolls must always be kept standing. Contact with solvents or organic liquids may damage the product. Avoid laying at extreme temperatures and absolutely avoid puncturing the product (by wearing shoes with cleats, concentrating temporary loads in restricted areas, or dropping sharp objects).


Keep out of direct sunlight



Avoid stacking pallets without evenly distributing the load



Keep the rolls standing

Absolutely avoid puncturing the product

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EVOLIGHT S
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Rev. 1/18

TECHNICAL CHARACTERISTICS

TEST METHOD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	EVOLIGHT S	EVOLIGHT S MINERAL
EN 1848-1	LENGTH	m	≥10	≥10
EN 1848-1	WIDTH	m	≥1	≥1
EN 1848-1	STRAIGHTNESS	mm/10 m	Exceeds	Exceeds
EN 1849-1	THICKNESS	mm	4 (-0,2)	4,5 (-0,2) Mineral
EN 1849-1	WEIGHT PER UNIT AREA	kg/m²	NPD	NPD
EN 1928-B	WATERPROOFING	kPa	Exceeds	Exceeds
EN 13897	WATERTIGHTNESS AFTER STRETCHING	%	NPD	NPD
EN 13501-5	EXTERNAL FIRE PERFORMANCE	-	NPD	NPD
EN 13501-1	REACTION TO FIRE	Euroclass	E	E
EN 12316	PEEL RESISTANCE	N/50 mm	NPD	NPD
EN 12317	SHEAR RESISTANCE	N/50 mm	NPD	NPD
EN 12311-1	TENSILE PROPERTIES MAXIMUM LOAD AT BREAK Longitudinal Transversal ELONGATION AT BREAK Longitudinal Transversal	 N/50 mm N/50 mm % %	 650 (±20%) 400 (±20%) 45 (±15) 45 (±15)	 650 (±20%) 400 (±20%) 45 (±15) 45 (±15)
EN 12691-A	RESISTANCE TO IMPACT	mm	≥800	≥800
EN 12730-A	RESISTANCE TO STATIC LOADING	kg	≥10	≥10
EN 12310-1	RESISTANCE TO TEARING Longitudinal Transversal	 N N	 150 (±30%) 170 (±30%)	 150 (±30%) 170 (±30%)
EN 1107-1	DIMENSIONAL STABILITY	%	≤0,3	≤0,3
EN 1108	FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGES	%	-	-
EN 1109	COLD FLEXIBILITY	°C	≤-10	≤-10
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C	≥120	≥120
EN 1110 EN 1296	ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE)	°C	≥110	≥110
EN 1297	ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS)	-	Exceeds	-
EN 12039	ADHESION OF GRANULES	%	-	≤30
EN 1931	WATER VAPOUR PROPERTIES μ	-	20000	20000
EN 1850-1	VISIBLE DEFECTS	-	ABSENT	ABSENT

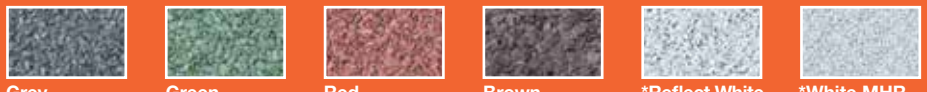
In compliance with EN 13707 product standards (layers for roofing) and EN 13969 TYPE T products standards (layers for foundations).

PACKAGE DIMENSIONS

PRODUCT	THICKNESS mm	WEIGHT kg/m²	DIMENSIONS m
EVOLIGHT S 3 mm	3	-	1x10
EVOLIGHT S 4 mm	4	-	1x10
EVOLIGHT S 5 mm	5	-	1x8
EVOLIGHT S 4 mm FT	4	-	1x10
EVOLIGHT S 4 mm MINERAL Grey	4	-	1x10
EVOLIGHT S 4 mm MINERAL Other colours	4	-	1x10
EVOLIGHT S 4,5 mm MINERAL Grey	4,5	-	1x10
EVOLIGHT S 4,5 mm MINERAL Other colours	4,5	-	1x10

AVAILABLE COLOURS

Surfaces protected by coloured mineral granules:



Grey | Green | Red | Brown | *Reflect White | *White MHR

* High reflection colors (Cool Roof).
Reflect White - SRI (Solar Reflect Index) ASTM E 1980-11: 57%[1]; Ri: 48%; E: 94%.
White MHR - SRI (Solar Reflect Index) ASTM E 1980-11: 85%[1]; Ri: 69%; E: 94%.

[1] *Initial values according to ASTM, referring to new materials.*

Rev. 1/18

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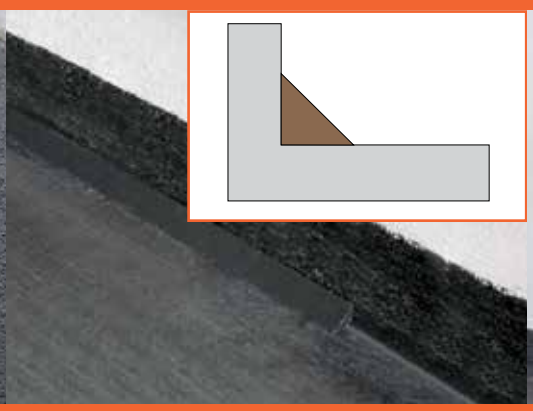
LAYING **EVOLIGHT S**

1 - Treat the area to be waterproofed with bituminous primer (POLYPRIMER HP 45 Professional).



2 - Position the corner border near the horizontal-vertical joint.

3 - Completely strip away the product identification tape.

4 - In the colder months, we recommend heating up the roll of membrane before applying it.

5 - Position and apply the sheet by flaming its bottom surface.

6 - Pull the sheet up to a certain height against vertical surfaces.

7 - Apply the second sheet with adequate overlapping.

8 - Lay the second layer by overlapping. Do not cross the sheets.

9 - Roll the overlapping areas using the special pressing roller.

10 - Example of internal corner.

11 - Example of external corner.

12 - Example of vent pipe.

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REOXTHENE TECHNOLOGY membranes use carrier from Johns Manville.

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