



# REOXTHENE TECHNOLOGY®

**WATERPROOFING MEMBRANE WITH REVOLUTIONARY TECHNOLOGY**



**INNOVATIVE  
BITUMINOUS  
POLYMER  
COMPOUND**



**INCREDIBLY  
LIGHTWEIGHT**  
(up to 4 mm = 40 kg)



**INCREASED  
PRODUCT  
PERFORMANCE**



**EXCEPTIONALLY  
EASY TO APPLY;  
HIGHER DAILY  
OUTPUT**

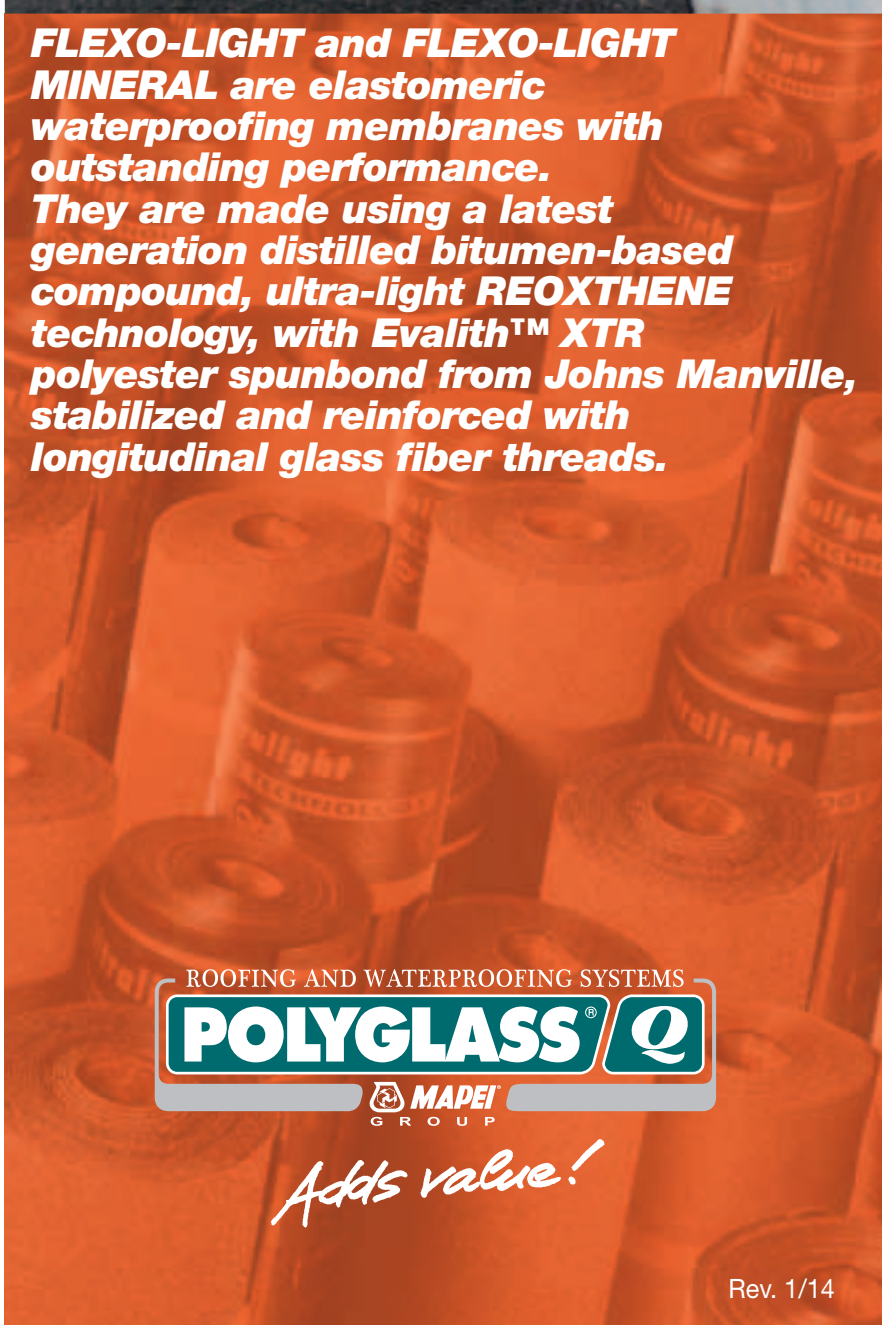


**COLD FLEXIBILITY -20 °C**



## **FLEXO-LIGHT**

***FLEXO-LIGHT and FLEXO-LIGHT MINERAL are elastomeric 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.***



*Adds value!*

# 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.



*Adds value!*



## TECHNICAL DESCRIPTION

FLEXO-LIGHT and FLEXO-LIGHT MINERAL are elastomeric 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, 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 (-20 °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				•	•	•			•		
4 mm FT				•	•	•			•		
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

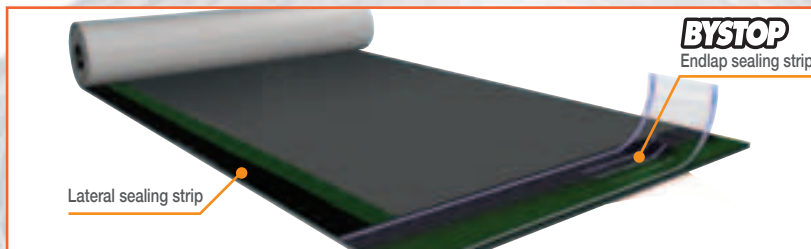
The excellent features of flexibility, resulting from the presence of polymer SBS, make FLEXO-LIGHT and FLEXO-LIGHT MINERAL particularly appropriate for the waterproofing of structures (metal or prefabricated structures, walkable or non walkable terraces, domes or shed roofs) subject to cyclical movements or with considerable variations in size.

The high mechanical chemical and physical properties ensure perfect adhesion to the substrate and between layers. 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 with single-layer membranes (where provided by products) or in multiple layers with minimum thicknesses of 7 mm (4+3 mm).

## TYPES OF FINISH AND SUGGESTIONS FOR LAYING

FLEXO-LIGHT has a top surface coated with an upperside covered in a special anti-adhesive transparent polythene film, or a lightweight polypropylene. 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.

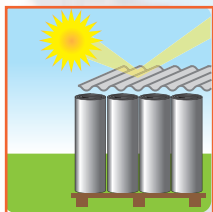
It has the (**BYSTOP** patent pending) overlapping sealing strip at side and end lap.

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 depth 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

## AVAILABLE COLOURS

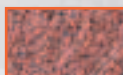
Surfaces protected by coloured mineral granules:



Grey



Green



Red



White



Brown

(Other colours available on request)



# TECHNICAL CHARACTERISTICS

TEST METHOD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	NOMINAL VALUES	NOMINAL VALUES
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/m <sup>2</sup>	NPD	NPD
EN 1928-B	WATERPROOFING	kPa	Exceeds	Exceeds
EN 13897	WATERTIGHTNESS AFTER STRETCHING	%	NPD	NPD
EN 13501-5	EXTERNAL FIRE PERFORMANCE	-	FRoof	FRoof
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	N/50 mm	650 (-20%)	650 (-20%)
	Transversal	N/50 mm	450 (-20%)	450 (-20%)
	ELONGATION AT BREAK			
	Longitudinal	%	50 (-15)	50 (-15)
	Transversal	%	50 (-15)	50 (-15)
EN 12691-A	RESISTANCE TO IMPACT	mm	≥900	≥900
EN 12730-A	RESISTANCE TO STATIC LOADING	kg	≥15	≥15
EN 12310-1	RESISTANCE TO TEARING			
	Longitudinal	N	180 (-30%)	180 (-30%)
	Transversal	N	220 (-30%)	220 (-30%)
EN 1107-1	DIMENSIONAL STABILITY	%	≤0,3	≤0,3
EN 1108	FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGES	%	-	-
EN 1109	COLD FLEXIBILITY	°C	≤-20	≤-20
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C	≥100	≥100
EN 1109	ARTIFICIAL AGEING BEHAVIOUR			
EN 1296	(COLD FLEXIBILITY)	°C	≤-5	≤-5
EN 1297	ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS)	-	-	-
EN 12039	ADHESION OF GRANULES	%	-	≤30
EN 1931	WATER VAPOUR PROPERTIES	μ	20000	20000
EN 1850-1	VISIBLE DEFECTS	-	ABSENT	ABSENT

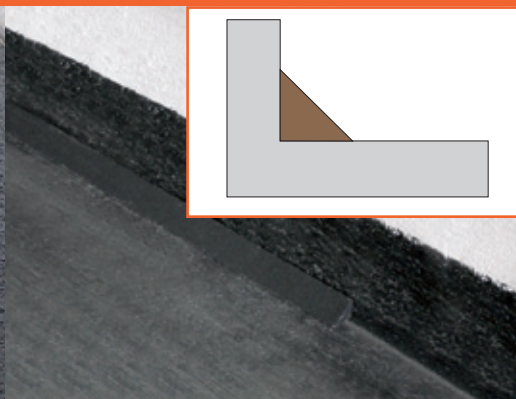
In compliance with EN 13707 product standards (layers for roofing) and EN 13969 TYPE T product standards (layers for foundations).

## PACKAGE DIMENSIONS

PRODUCT	THICKNESS mm	WEIGHT kg/m <sup>2</sup>	DIMENSIONS m
FLEXO-LIGHT 3 mm	3	-	1x10
FLEXO-LIGHT 4 mm	4	-	1x10
FLEXO-LIGHT 4 mm FT	4	-	1x10
FLEXO-LIGHT 4,5 mm MINERAL Grey	4,5	-	1x10
FLEXO-LIGHT 4,5 MINERAL Other colours	4,5	-	1x10

Rev. 1/14

# LAYING FLEXO-LIGHT



**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.



# REOXTHENE

# REOXTHENE TECHNOLOGY®

**WATERPROOFING MEMBRANE WITH REVOLUTIONARY TECHNOLOGY**

REOXTHENE TECHNOLOGY membranes use carrier from  Johns Manville.

05/14



*Adds value!*

## POLYGLASS SPA

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