WATERPROOFING MEMBRANES

POLYBOND HP

POLYBOND HP is a plastomeric waterproofing membrane with outstanding performance indicated for waterproofing of against ground walls, works in groundwater, beneath binders on roads, bridges and viaducts.

- *Guaranteed Quality UNI EN ISO 9001:2008 and UNI EN ISO 14001:2004*
- *Product in compliance with European Standards* (CE 1370)
- *Polyglass is a member of Green Building Council*
- *Bituminous membrane polymeric matrix ageing control.* (NAT No Ageing Technology)
- *All year membranes*
- *Lateral and endlap sealing strips* (BYSTOP)
- *Easily flamed non-stick polyethylene film* (POLYFLAM Easy Torch)

PROFESSIONAL LINE

WATERPROOFING MATERIALS AND INSULATING SYSTEMS

POLYGLASS® MAPEI GROUP

Adds value!

Rev. 1

TECHNICAL DESCRIPTION

POLYBOND HP is a plastomeric waterproofing membrane with outstanding performance, made of a latest generation distilled bitumen-based compound modified with POLYPROPYLENE and continuous thread non-woven polyester fabric with elevated basic weight. In addition to being rotproof, this reinforcement gives the membrane excellent mechanical characteristics in terms of elongation, tensile strength, and resistance to puncture. The special type of compound ensures remarkable characteristics of low temperature flexibility**.**

DESTINATION

PRODUCT	SINGLE LAYER		MULTI-LAYER				ROOT BARRIER	VAPOUR BARRIER	FOUNDATIONS		UNDER ROOFING TILES	BRIDGES AND VIADUCTS	COVERS	
			F.L.		U.L.				R.D.	P.			F.L.	U.L.
	E.	U.H.P.	E.	U.H.P.	E.	U.H.P.							U.H.P.	U.H.P.
4 mm			•	•	•	•			•	•		•	•	
5 mm			•	•	•	•			•	•		•	•	

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

The exceptional characteristics of the reinforcement and the compound suit **POLYBOND HP** particularly to special applications, such as for waterproofing of against ground walls, works in groundwater, beneath binders on roads, bridges and viaducts.

APPLICATION: INSTRUCTIONS AND RECOMMENDATIONS

POLYBOND HP can be provided with its upperside covered with a talc, sand, or a non woven polypropylene fabric. Its underside is protected and faced with **POLYFLAM** *Easy Torch* (reduced printed area increases product adhesion), the special non-stick polyethylene film to be flamed during laying. Support surfaces must be dry, clean, and sufficiently smooth and level. Application is made by light flaming with propane gas. Laying is quick and easy. For the application beneath binders on roads, use proper adhesion promoter for concrete.

Talc

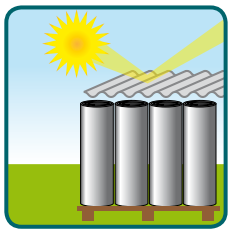
Sand

Non woven polypropylene fabric

POLYFLAM *Easy Torch*

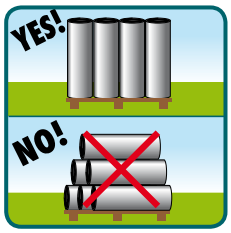
STOCKING

Keep the products packed in the carton box in a dry place, away from direct sunlight. Do not place the pallets, one on top of another and the rolls must always be stocked in a vertical position. The contact with solvents and organic liquids may damage the product. Avoid application if the temperature is excessively low or high, avoid stamping (shoes with crampons, small objects or sharp edges). For further information contact Polyglass SpA Technical Office.



Keep out of direct sunlight.

Avoid stocking pallets without evenly distributing the load.



Keep the rolls standing.

Absolutely avoid puncturing the product.

POLYBOND HP

POLYGLASS MAPEI GROUP

TECHNICAL SPECIFICATIONS

TEST METHOD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	POLYBOND HP NOMINAL VALUES	NOMINAL VALUES
EN 1848-1	LENGTH	m	≥10	
EN 1848-1	WIDTH	m	≥1	
EN 1848-1	STRAIGHTNESS	mm/10 m	Exceeds	
EN 1849-1	THICKNESS	mm	4 (±0,2)	
EN 1849-1	MASS PER UNIT AREA	kg/m²	NPD	
EN 12039	INITIAL AMOUNT OF MINERAL SURFACE PROTECTION	g/m²	(±15%)	
EN 1928-B	WATERTIGHTNESS	kPa	Exceeds	
EN 1928-B EN 1296	WATERTIGHTNES AGAINST ARTIFICIAL AGEING	kPa	Exceeds	
EN 1928-B EN 1847	WATERTIGHTNESS AGAINST CHEMICAL	kPa	Exceeds	
EN 13897	WATERTIGHTNESS AFTER STRETCHING AT LOW TEMPERATURE	%	NPD	
EN 13501-5	EXTERNAL FIRE PERFORMANCE	-	F_{Roof}	
EN 13501-1	REACTION TO FIRE	Euroclass	F	
EN 12316	PEEL RESISTANCE	N/50 mm	NPD	
EN 12317	SHEAR RESISTANCE	N/50 mm	800 (-20%)	
EN 12311-1	TENSILE PROPERTIES MAXIMUM LOAD AT BREAK Longitudinal Transversal ELONGATION AT BREAK Longitudinal Transversal	 N/50 mm N/50 mm % %	 1200 (±20%) 1000 (±20%) 50 (-15) 50 (-15)	
EN 12310-1	RESISTANCE TO TEARING Longitudinal Transversal	 N N	 200 (-30%) 200 (-30%)	
EN 14223	WATER ABSORPTION	%	≤0,5	
EN 1107-1	DIMENSIONAL STABILITY	%	≤0,5	
EN 1109	COLD FLEXIBILITY	°C	≤-15	
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C	≥120	
EN 14695 Annex B	DIMENSIONAL STABILITY (160 °C)	%	≤1	
EN 1296 EN 1109	ARTIFICIAL AGEING BEHAVIOUR (COLD FLEXIBILITY)	°C	≤0	
EN 1296 EN 1110	ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE)	°C	120 (±10)	
EN 13596	BOND STRENGTH	N/mm²	≥0,8	
EN 13653	SHEAR STRENGTH	N/mm²	≥0,3	
EN 14224	CRACK BRIDGING ABILITY	°C	NPD	
EN 14691	COMPATIBILITY BY HEAT CONDITIONING	N/mm²	≥0,4	
EN 14692	RESISTANCE TO COMPACTION OF AN ASPHALT LAYER	-	Waterproof	
EN 14693	BEHAVIOUR OF BITUMEN SHEETS DURING APPLICATION OF MASTIC ASPHALT S Δt i	 % mm n°	 NPD NPD NPD	
EN 14694	WATERTIGHTNESS (500 kPa - 1000 cycles)	-	Exceeds	
EN 1297	ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS)	-	NPD	

Thickness and weight parameters are indicative only for Italian market.
In compliance with EN 13707 products standards (layers for roofing), EN 13969 TYPE T products standards (layers for foundations) and EN 14695 (bridges and viaducts).

DIMENSIONS - PACKAGING

PRODUCT	THICKNESS mm	WEIGHT kg/m²	DIMENSIONS m
POLYBOND HP	4	-	1x10
POLYBOND HP	5	-	1x8


FLAT ROOF WITH PEDESTRIAN ACCESS


FLAT ROOF WITH LIMITED ACCESS


PROFILED METAL DECKS


INDUSTRIAL SAWTOOTH ROOFS


CURVED ROOFS


PITCHED ROOFS


FOUNDATIONS


UNDERGROUND CAR PARK


RAISED CAR PARK


ROOF GARDENS


BRIDGES AND VIADUCTS


RESERVOIRS AND CANALS


GALLERY AND TUNNEL


RENEWAL WATERPROOFING CONVERING ONLY
RELINING WITH INSULATING MATERIAL
SPECIAL RE-ROOFING WORK


DETAILS


SPECIAL ROOFS

WATERPROOFING MEMBRANES

APPLICATION METHOD

1. Treat the area to be waterproofed with adhesion promoter for concrete.
2. Position the “Bordangolo” 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.

WATERPROOFING MATERIALS AND INSULATING SYSTEMS

POLYGLASS® Q

MAPEI GROUP

Adds value!

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