



COLD FLEXIBILITY

0 °C

ALUSHIELD

ALUSHIELD is a membrane protected with a strip of aluminium suited to a wide range of aesthetic-technical solutions.



Guaranteed Quality
UNI EN ISO 9001:2008 and
UNI EN ISO 14001:2004



All year membranes



Product in compliance
with European Standards



Polyglass is a member of
Green Building Council

PROFESSIONAL LINE

WATERPROOFING MATERIALS AND INSULATING SYSTEMS

POLYGLASS®

MAPEI
GROUP

Adds value!



TECHNICAL DESCRIPTION

ALUSHIELD is a membrane protected with a strip of aluminium embossed during continuous calandered finishing. Provided with glass fibre reinforcement bonded to a bitumen oxide base with filler (BOF). The special dimensions of the embossing performed with a procedure that permits the free dilatation of the metal combined with the quality of the reinforcement used and its positioning inside the bituminous mass guarantee resistance to even the most abrupt temperature change.

DESTINATION

| PRODUCT | SINGLE LAYER | | MULTI-LAYER | | | | ROOT BARRIER | VAPOUR BARRIER | FOUNDATIONS | | UNDER ROOFING TILES |
|---------|--------------|--------|-------------|--------|------|--------|--------------|----------------|-------------|----|---------------------|
| | E. | U.H.P. | F.L. | | U.L. | | | | R.D. | P. | |
| | | | E. | U.H.P. | E. | U.H.P. | | | | | |
| 4 kg | | | • | | | | | | | | |

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

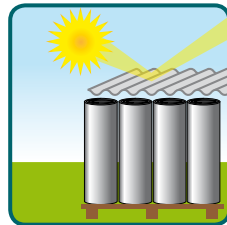
ALUSHIELD is suited for use wherever a particular surface finish is required in addition to the perfect sealing of the waterproofing membrane. **ALUSHIELD** permits a wide range of aesthetic-technical solutions. Thanks to its elevated mechanical characteristics and the protection against UV radiation offered by its metal strip, **ALUSHIELD** can be used with excellent results especially wherever particular configurations (perimeter walls, converse, gutters, etc.) threaten to compromise the use of normal waterproofing membranes.

APPLICATION: INSTRUCTIONS AND RECOMMENDATIONS

ALUSHIELD is provided with its upperside covered with special non-stick polyethylene film to be flamed during laying. The rolls come with selvage strip for easy overlapping provided with a layer of mono-silicone coated polyethylene film to be removed at the time of application. Support surfaces must be dry, clean, and sufficiently smooth and level. Application with complete adhesion is made by light flaming with propane gas. Laying to best aesthetic effect requires particular care. We recommend inserting 1 vent pipe every 30 sqm of surface area. **ALUSHIELD** should not be laid on roofs with less than 5% pitch. In cases of multilayer waterproofing, any underlying bituminous layer must ensure elevated dimensional stability, and for such reason its reinforcement must be composite with aluminium foil inside or glass fibre. Given the product's morphological characteristics, it should never be laid directly over any insulation material.

STOCKING

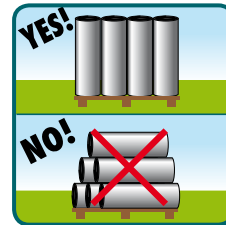
Keep the products packed in the carton box in a dry place, away from direct sunlight. Do not place the pallets, one on top of another and the rolls must always be stocked in a vertical position. The contact with solvents and organic liquids may damage the product. Avoid application if the temperature 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.

ALUSHIELD

TECHNICAL SPECIFICATIONS

| TEST METHOD | TECHNICAL CHARACTERISTICS | UNIT OF MEASURE | NOMINAL VALUES |
|-------------|--|-------------------|-------------------|
| EN 1848-1 | LENGTH | m | 10 (-1%) |
| EN 1848-1 | WIDTH | m | 1 (-1%) |
| EN 1848-1 | STRAIGHTNESS | mm/10 m | Exceeds |
| EN 1849-1 | THICKNESS | mm | NPD |
| EN 1849-1 | MASS PER UNIT AREA | kg/m ² | 4 (±10%) |
| EN 1928-B | WATERTIGHTNESS | kPa | Exceeds |
| EN 13897 | WATERTIGHTNESS AFTER STRETCHING | % | - |
| EN 13501-5 | EXTERNAL FIRE PERFORMANCE | - | F _{Roof} |
| EN 13501-1 | REACTION TO FIRE | Euroclass | F |
| EN 12316 | PEEL RESISTANCE | N/50 mm | - |
| EN 12317 | SHEAR RESISTANCE | N/50 mm | - |
| EN 12311-1 | TENSILE PROPERTIES | | |
| | MAXIMUM LOAD AT BREAK | | |
| | Longitudinal | N/50 mm | 900 (-20%) |
| | Transversal | N/50 mm | 900 (-20%) |
| | ELONGATION AT BREAK | | |
| | Longitudinal | % | 4 (-2) |
| | Transversal | % | 4 (-2) |
| EN 12691-A | RESISTANCE TO IMPACT | mm | - |
| EN 12730-A | RESISTANCE TO STATIC LOADING | kg | - |
| EN 12310-1 | RESISTANCE TO TEARING | | |
| | Longitudinal | N | 100 (-30%) |
| | Transversal | N | 100 (-30%) |
| EN 1107-1 | DIMENSIONAL STABILITY | % | ≤0,3 |
| EN 1108 | FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGE | % | ≤2 |
| EN 1109 | COLD FLEXIBILITY | °C | ≤0 |
| EN 1110 | FLOW RESISTANCE AT ELEVATED TEMPERATURE | °C | ≥80 |
| EN 1110 | ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE) | °C | ≥80 |
| EN 1296 | ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS) | - | - |
| EN 1297 | ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS) | - | - |
| EN 12039 | ADHESION OF GRANULES | % | - |
| EN 1931 | WATER VAPOUR PROPERTIES | μ | 20000* |
| EN 1850-1 | VISIBLE DEFECTS | - | Absent |

ALUSHIELD

Thickness and weight parameters are indicative only for Italian market. In compliance with EN 13707 products standards (layers for roofing).
* Value of the bituminous mass alone.

DIMENSIONS – PACKAGING

| PRODUCT | THICKNESS mm | WEIGHT kg/m ² | DIMENSIONS m |
|-----------|--------------|--------------------------|--------------|
| ALUSHIELD | - | 4 | 1x10 |

Considering the various situations of use, the numerous types of support surfaces and the possibilities for use inside COMPLEX WATERPROOF LAYERING, Polyglass SPA cannot assume any liability for damages derived from the product's results in terms of function or aesthetics.



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

POLYGLASS SPA reserves the right to make any and all modifications required for the ongoing perfection of the product without notice.



Adds value!

POLYGLASS SPA

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