



COLD FLEXIBILITY  
**-25 °C**

# ELASTOSHIELD TS 4 ELASTOSHIELD TS 4 mineral

**ELASTOSHIELD TS 4 and ELASTOSHIELD TS 4 MINERAL are elastomeric waterproofing membranes with outstanding performance indicated for surfaces subject to cyclical movement.**



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



*All year membranes*



*Product in compliance*  
with European Standards



*Lateral and endlap*  
sealing strips



*Polyglass is a member of*  
Green Building Council



*Easily flamed non-stick*  
polyethylene film



*Bituminous membrane*  
polymeric matrix ageing control.

**PROFESSIONAL LINE**

WATERPROOFING MATERIALS AND INSULATING SYSTEMS

**POLYGLASS®**

*Adds value!*

# ELASTOSHIELD TS 4 ELASTOSHIELD TS 4 mineral



## TECHNICAL DESCRIPTION

**ELASTOSHIELD TS 4** and **ELASTOSHIELD TS 4 MINERAL** are elastomeric waterproofing membranes with outstanding performance, made of a latest generation distilled bitumen-based compound and thermoplastic elastomeric resin (SBS) with elevated elasticity reinforced with a continuous non-woven polyester fabric and longitudinal glass fibre. In addition to being rotproof, this reinforcement gives the membrane excellent mechanical characteristics (in terms of elongation and tensile strength, resistance to puncture, and dimensional stability).

The special elastomeric compound grants exceptional low temperature flexibility.

## DESTINATION

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

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 elasticity provided by SBS polymer suit **ELASTOSHIELD TS 4** and **ELASTOSHIELD TS 4 MINERAL** particularly to the waterproofing of (metal and prefabricated) structures subject to cyclical movement or considerable dimensional variation. Elevated chemical-physical and mechanical properties guarantee **ELASTOSHIELD TS 4 perfect adhesion to the support surfaces and between layers**. **ELASTOSHIELD TS 4 must be protected by suitably heavy protection** against solar radiation. Waterproofing systems under heavy protection can be laid in single layers (whenever permitted by product) or multiple layers with minimum thicknesses of 7 mm (4+3 mm).

## APPLICATION: INSTRUCTIONS AND RECOMMENDATIONS

**ELASTOSHIELD TS 4** has its upperside covered with a special layer of transparent non-stick polyethylene film. Its underside is protected and faced with **POLYFLAM EasyTorch** (reduced printed area increases product adhesion film). The non-stick polyethylene film is flamed during laying.

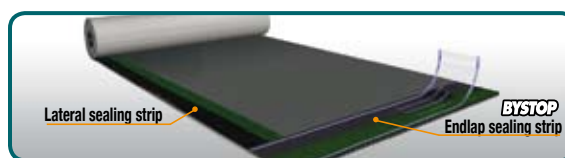
In the **MINERAL** version, the upperside is protected by an even layer of colored or natural mineral slate chips and features (**BYSTOP** patented) lateral and endlap sealing strip for easy overlapping. Support surfaces must be dry, clean, and sufficiently smooth and level. Application is made by light flaming with propane gas. Laying is quick and easy.



Non-stick polyethylene film



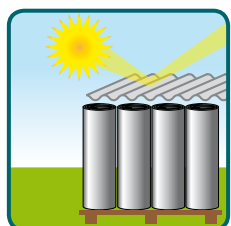
**POLYFLAM EasyTorch**



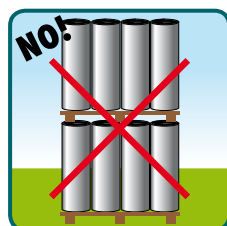
**BYSTOP** (endlap)

## STOCKING

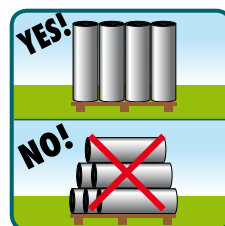
Keep the products packed in the carton box in a dry place, away from direct sunlight. Do not place the pallets, one on top of another and the rolls must always be stocked in a vertical position. The contact with solvents and organic liquids may damage the product. Avoid application if the temperature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

# TECHNICAL SPECIFICATIONS

TEST METHOD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	NOMINAL VALUES	NOMINAL VALUES
EN 1848-1	LENGTH	m	10 (-1%)	10 (-1%)
EN 1848-1	WIDTH	m	1 (-1%)	1 (-1%)
EN 1848-1	STRAIGHTNESS	mm/10 m	Exceeds	Exceeds
EN 1849-1	THICKNESS	mm	4 (-0,2)	4 (-0,2)*
EN 1849-1	MASS PER UNIT AREA	kg/m <sup>2</sup>	NPD	NPD
EN 1928-B	WATERTIGHTNESS	kPa	Exceeds	Exceeds
EN 13897	WATERTIGHTNESS AFTER STRETCHING	%	NPD	NPD
EN 13501-5	EXTERNAL FIRE PERFORMANCE	-	F <sub>Roof</sub>	F <sub>Roof</sub>
EN 13501-1	REACTION TO FIRE	Euroclass	F	F
EN 12316	PEEL RESISTANCE	N/50 mm	NPD	NPD
EN 12317	SHEAR RESISTANCE	N/50 mm	650/500 (-20%)	650/500 (-20%)
EN 12311-1	TENSILE PROPERTIES			
	MAXIMUM LOAD AT BREAK			
	Longitudinal	N/50 mm	860 (-20%)	860 (-20%)
	Transversal	N/50 mm	600 (-20%)	600 (-20%)
	ELONGATION AT BREAK			
	Longitudinal	%	40 (-15)	40 (-15)
	Transversal	%	40 (-15)	40 (-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	150 (-30%)	150 (-30%)
	Transversal	N	150 (-30%)	150 (-30%)
EN 1107-1	DIMENSIONAL STABILITY	%	≤0,3	≤0,3
EN 1108	FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGE	%	-	-
EN 1109	COLD FLEXIBILITY	°C	≤-25	≤-25
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C	≥100	≥100
EN 1109	ARTIFICIAL AGEING BEHAVIOUR (FLOW RESISTANCE)	°C	≤-15	≤-15
EN 1296	ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS)	-	NPD	-
EN 12039	ADHESION OF GRANULES	%	-	≤30
EN 1931	WATER VAPOUR PROPERTIES	μ	20000	20000
EN 1850-1	VISIBLE DEFECTS	-	Absent	Absent

\* Thickness on lapping strip

Thickness and weight parameters are indicative only for Italian market. In compliance with EN 13707 product standards (layers for roofing).

## DIMENSIONS – PACKAGING

PRODUCT	THICKNESS mm	WEIGHT kg/m <sup>2</sup>	DIMENSIONS m
<b>ELASTOSHIELD TS 4</b>	4	-	1x10
<b>ELASTOSHIELD TS 4 MINERAL Grey</b>	4*	-	1x10
<b>ELASTOSHIELD TS 4 MINERAL Other colours</b>	4*	-	1x10

\* Thickness on selvedge

## AVAILABLE COLOURS

Upperside protected with colored mineral slate chips:



Grey



Green



Red



White



Brown

Considering the various situations of use, the numerous types of support surfaces and the possibilities for use, inside de COMPLEX WATERPROOF LAYERING, Polyglass SpA cannot assume any liability for damages derived from the products 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



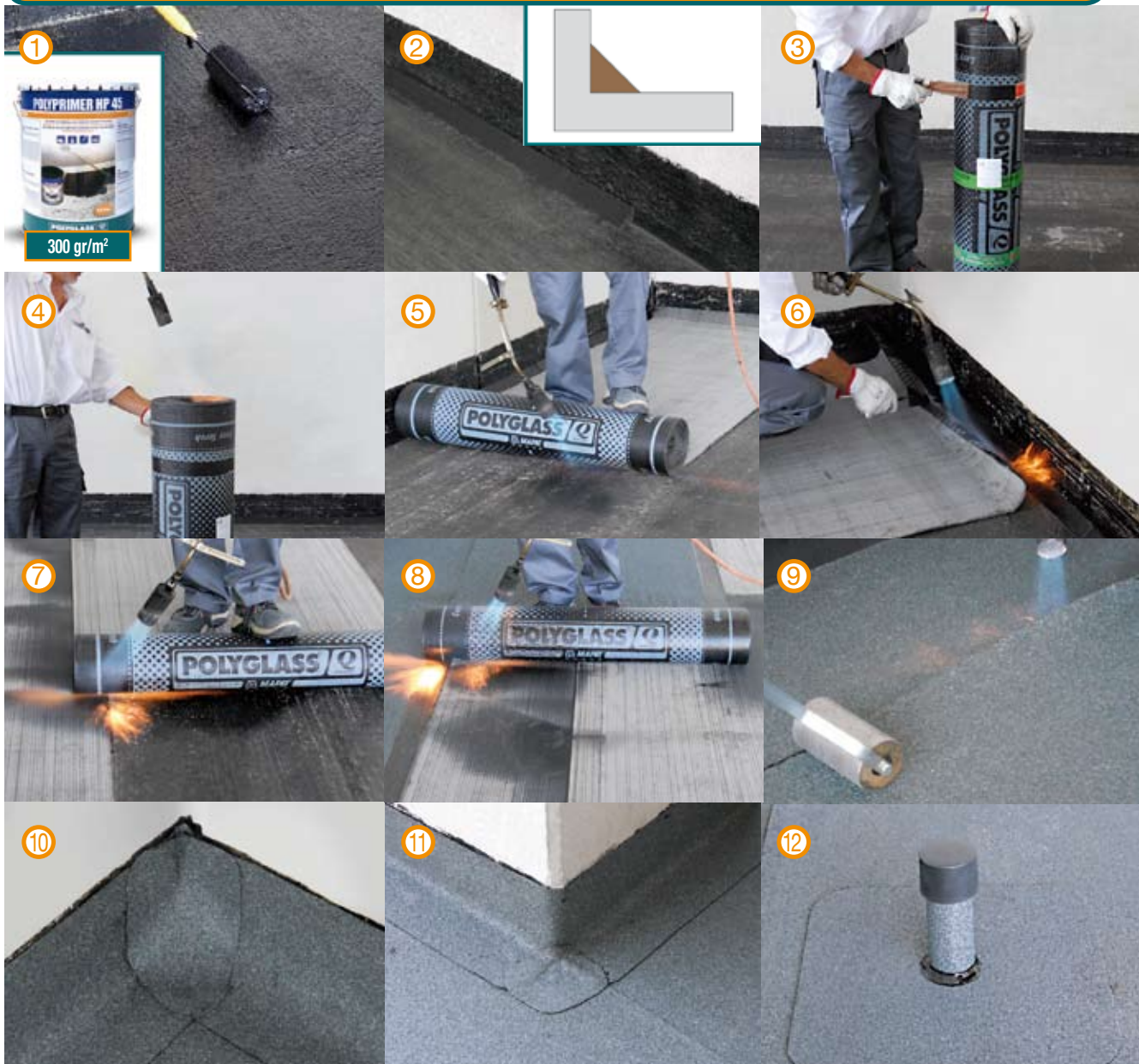
DETAILS



SPECIAL ROOFS

# WATERPROOFING MEMBRANES

## APPLICATION METHOD



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

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

WATERPROOFING MATERIALS AND INSULATING SYSTEMS

**POLYGLASS® Q**

MAPEI  
GROUP

*Adds value!*

**POLYGLASS SPA**

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