

PARAFOR M4S

PRODUCT DESCRIPTION AND USES

Parafor M4S is very high performance polyester reinforced SBS elastomeric bitumen membrane.

Parafor M4S is approved for:

- waterproofing works as single layer system for roofs under heavy protection, as base layer of a double layers system for not accessible exposed roofs, technical roofs and green roofs. This product is designed for both new works and refurbishment works on roofing approved substrates,
- use on tanking basement waterproofing systems,
- miscellaneous works.

This product must be used in accordance with the relevant technical specifications.

COMPOSITION

Surface	Silica parting agent
Blend	SBS (Styrene-Butadiene-Styrene) elastomeric bitumen
Reinforcement	Nonwoven + grid Polyester
Under face	Polyethylene film

DIMENSIONAL CHARACTERISTICS


	8 m	10 m
Nominal thickness (mm)	4.0	4.0
Nominal width (mm)	1000	1000
Longitudinal selvedge nominal width (mm)	90	90
Roll nominal length (m)	8.00	10.0
Area density (kg/m ²)	4.870	4.870
Mass of a roll (kg)	39.1	48.8

PERFORMANCES

KIND OF TEST	Reference Norm	Units	Average values
Tensile strength	EN 12311-1	N/50 mm	850 x 600
	ASTM D 5147-6	kN/m	13.5 x 10.8
Elongation	EN 12311-1	%	40 x 49
	ASTM D 5147-6	%	54 x 60
Nail tearing resistance	EN 12310-1	N	200 x 220
	ASTM D 4073	N	600 x 480
Cold temperature flexibility	EN 1109	°C	-20
	ASTM D 5147-11	°C	≤ -20
Heat flow test	EN 1110	°C	100
	ASTM D 5147-15	°C	≥ 100
Dimensional stability	EN 1107-1	%	-0.5
	ASTM D 5147-10	%	≤ -0.5
Static puncture resistance (soft substrate)	EN 12730-A	kg	20
Static puncture resistance (hard substrate)	EN 12730-B	kg	20
Impact resistance (hard substrate)	EN 12691-A	mm	800
Impact resistance (soft substrate)	EN 12691-B	mm	1250
Lap shear strength	EN 12317-1	N/50 mm	600 x 900
Waterproofing	EN 1928		Pass
Moisture factor resistance	EN 1931		20000
Water vapour resistance	EN 1931	m ² .s.Pa/kg	1.3E12

ISO 9001 REFERENCE DOCUMENT

Our products are manufactured by certified ISO 9001 plants



PACKAGING

	8 m	10 m
Rolls quantity per truck pallet	25	24
Rolls quantity per container pallet	27	25
Rolls quantity per wooden box	25	20

GENERALITIES ABOUT APPLICATION

Application	The product is torch applied
Overlaps	Minimum 80 mm for side laps Minimum 110 mm for head laps, staggered a minimum 300 mm from beside joints
Slopes	From 1% to 5% as single ply on ballasted roofs Zero slope allowed on double layer system on ballasted roofs. Minimum 3% slope on steel deck roofs Minimum 1% on non-accessible and technical exposed roofs
Approved substrates and systems	Siplast insulated steel roof deck. Siplast insulated and non-insulated concrete roof deck. Concrete substrates are primed with Siplast Primer 0.3 L/m ² . Siplast non-insulated wooden roof deck in combination with SCR Alliance base layer mechanically fixed.
Approved insulation substrates	Mineral Wool or Perlite bitumen faced insulation boards as direct substrates.
Roof upstands design	Base waterproofing layer for exposed upstands, in combination with Paradiol S, Parafor 30 GS or Parafor Solo GS Double waterproofing layer for unexposed upstands. Flashings with Solin CE 63 mm or 73 mm aluminium profiles with PU mastic sealant Parathane mastic.

COMPLEMENTARY INFORMATIONS

Values	Where 2 values for given characteristics are shown, the first is for longitudinal direction and the second is for the cross direction.
Tolerances	The average values derived from standard tests and are subject to the usual production variations. Some slight variations can be noticed as the values are based on the average values obtained from several plants.
Modification(s)	Our company reserves the right to modify its composition as a result of technologic and experiments improvements. This product data sheet supersedes the previous edition, to obtain the up-date technical data sheet, please contact our technical department
Hazardous classification	It is not classified as dangerous according to the international regulation (ADR, RID, IATA, and RTMDR)
Complementary information	This membrane is only a product technical data sheet, regarding each waterproofing design, please, consult the concerned technical agreement and in case of doubt contact our technical department.
Storage	This product is packaged in rolls set up vertically on pallet or wooden box. It must be stored vertically under shelter, away from heat sources.