

Product Technical Information

ITA/567
07202D Spc2 v10 22/11/13
Rev.3 - 20/06/2014
Page 1/3

PARAFOR SOLO GFM

Product Description and uses

High performance reinforced SBS elastomeric bitumen membrane.

This membrane is used in a single layer mechanically fixed waterproofing system for not accessible roof and technical roofs over steel deck insulated structures with 3% minimum slope.

Parafor Solo GFM allows an easy mechanically fixed installation thanks to the mark-line with graduations along side laps. Side lap are torched.

This product is designed for new works and refurbishment works on approved substrates

Product Approvals:

Parafor Solo GFM is approved by CSTB (Parafor Solo FM Document Technique d'Application for use in Siplast insulated steel roof deck constructions and insulated and non-insulated concrete roof deck constructions as mechanically fixed, single layer, built-up roof waterproofing system on flat and pitched roofs.

ASTM Classification: Parafor Solo GFM meets or exceeds the requirements of ASTM D 6164 Grade G, type I for SBS-modified bituminous sheet materials using polyester reinforcements.

FM Approval: Parafor Solo GFM is approved by FM Approvals (FM Standard 4470) for use in Siplast Class 1 insulated steel roof deck constructions, subject to FM conditions and limitations.

Fire rating

Paradiene FM it is classified B_{Roof} T3 according with EN 13501-5 for Roofs External Fire performance on a system build as follow:

- Steel deck or concrete deck insulated with mineral wool and protected with Parafor Solo GFM single layer system.

Composition

Top surfacing: mineral granules or mineral slates

Bitumen compound: SBS (Styrene-Butadiene-Styrene) elastomeric bitumen with fire retardant agent

Reinforcement: Polyester 180 gr/m²

Back surfacing: Silica Parting Agent.



Dimensions

Nominal Values	Mineral Granules	Mineral Slates
Thickness on longitudinal seldge (mm)	4.0	4.0
Thickness main surface (mm)	4.8	5.0
Roll length and width (m)	7 x 1	1x7

Packaging

	Granules	Slates
Rolls per truck pallet	24	24
Rolls per container pallet	25	27
Rolls per wooden box	23	24
Nominal weight (kg/m ²)	6.4	6.0
Roll weight (kg)	43.5	41.5

ISO 9001 REFERENCE DOCUMENT

Our company has been awarded the ISO 9001 certificate for all its establishments in France.

Our company reserves the right to modify its composition as a result of technological and experimental improvements.

To obtain the up-date technical data sheet, please contact Siplast



Product Technical Information

ITA/567
07202D Spc2 v10 22/11/13
Rev.3 - 20/06/2014
Page 2/3

Parafor Solo GFM

Physical and Mechanical Properties

According with EN 13707

Property (as Manufactured)	Test Method	Units	Nominal values
Tensile strength at max	EN 12 311-1	N/50mm	850 x 600
Elongation at max	EN 12 311-1	%	40 x 49
Nail tearing resistance	EN 12 310-1	N	300 x 350
Cold temperature flexibility	EN 1109	°C	≤ - 20
Heat flow test	EN 1110	°C	≥ 100
Dimensional stability	EN 1107-1	%	≤ - 0.3
	EN 12317-1	N/50mm	600 x 900
Static Puncture resistance (soft substrate)	EN 12730 A	kg	20
Impact resistance (soft substrate)	EN 12691 B	mm	1250
External Fire performance	EN 13501-5		BRoof (T3)
Waterproofing	EN 1928	-	Pass

According with ASTM D 5147

Property (as Manufactured)	Test Method	Units	Nominal values
Tensile strength at max	ASTM D 5147 section 6	kN/m	16.3 x 11.7
Elongation at max	ASTM D 5147 section 6	%	54 x 66
Cold temperature flexibility	ASTM D 5147 section 11	°C	≤ - 20
Heat flow test	ASTM D 5147 section 15	°C	≥ 100
Dimensional stability	ASTM D 5147 section 10	%	≤ - 0.3

Product Technical Information

ITA/567
07202D Spc2 v10 22/11/13
Rev.3 - 20/06/2014
Page 3/3

Other 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. The indicated average values comply with the UEAtc standard and EN 13707. The nominal value tolerances comply with the UEAtc standards. 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, et RTMDR)
Divers	This product 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.

Generalities

Using	The generalities about the product using are set out in the ZSA STANDARD
Application	Over steel deck insulated roof: The product is mechanically fixed. Density and distance between fixations have to be calculated according with upload wind force on the roof. Distance between fixations is never less than 18cm. Mechanical fixation is realised with screws according with method of calculation and Siplast SCR 40x40mm galvanised washers. Angles, edges with outlets and valleys are reinforced using Paradiene FM mechanically fixed as base layer + Parafor Solo GFM torched. Upstands with a minimum high of 150mm are realised as double layer system using Parequerre or Paradiene 35 SR5 as torch applied base layer and Parafor Solo GFM as top layer. Insulation allowed is. Over concrete and wooden deck roof contact Siplast technical Service.
Overlaps	120 mm on side lap 100 mm head lap Laps are torched after mineral surfacing is removed by heating and sinking them into the bitumen.
Slopes	Minimal allowed slope is: 3% over steel deck roof. 1% over concrete roof deck, apart from tropical regions where it is 2%. 3% over wooden roof deck. In case of slope > 100% 4 mechanical fixations are needed along head laps.