

PARADIENE S R4

PRODUCT DESCRIPTION AND USES

This product is a very high performance reinforced SBS elastomeric bitumen sheet for waterproofing works.

This product is for use as:

- Under layer of a two-layer, self-protected roof waterproofing system,
- Under layer or top layer of a two-layer roof waterproofing system under heavy protection (gravel ballast, slabs on adjustable supports, etc.),
- Vapour barrier on concrete or wooden deck,

It can be also used for miscellaneous works. In either case, this product must be used in accordance with the relevant technical specifications.

COMPOSITION

Surface	Hot melt film
Blend	flerized SBS (Styrene-Butadiene-Styrene) elastomeric bitumen
Reinforcement	Nonwoven polyester
Under face	Hot melt film or sanded

DIMENSIONAL CHARACTERISTICS

	Film/Film 7.5 m	Film/Grésée 7.5 m	Film/Grésée 10 m
Roll nominal length (m)	7.5	7.50	10.0
Nominal thickness (mm)	2.6	2.6	2.6
Nominal width (mm)	1000	1000	1000
Area density (kg/m ²)	3.344	3.390	3.391
Mass per roll (kg)	25.1	25.5	34.0

PERFORMANCES

Test	Standard	Unit	Average value
Tensile strength	EN 12 311-1	N/50mm	700 x 550
	ASTMD 5147-6	kN/m	13.5 x 10.8
Elongation	EN 12 311-1	%	40 x 45
	ASTMD 5147-6	%	54 x 60
Cold temperature flexibility	EN 1109	°C	- 20
	ASTMD 5147-11	°C	≤ - 20
Heat flow test	EN 1110	°C	100
	ASTMD 5147-15	°C	≥ 100
Static puncture resistance	EN 12730-A	kg	20
Nail tearing resistance	EN 12 310-1	N	300 x 320
Impact resistance	EN 12691-B	mm	1500
Waterproofing	EN 1928	-	Pass

ISO 9001 REFERENCE DOCUMENT

<p>Our products are manufactured by certified ISO 9001 plants</p>	
---	---

PACKAGING

	Film/Film 7,5 m	Film/Grésée 7,5 m	Film/Grésée 10 m
Rolls quantity per truck pallet	40	40	30
Rolls quantity per container pallet	42	42	36
Rolls quantity per wooden box	39	42	30

GENERALITIES ABOUT APPLICATION

Using	The generalities about the product using are set out in the ZSA STANDARD
Application	<p>Generally, the layer with the stronger reinforcement is used as underlayer to give a mechanical protection during all the work period.</p> <p>This product used as underlayer or as vapour barrier must be applied according to the following methods of attachment regarding the support: fully bonding with hot bitumen or by torching; partial bonding by means of a perforated felt; partial bonded by spots of cold-applied bitumen based adhesive with bonded laps (in this case, metal-faced cap sheet is not allowed); nailing on wooden deck with bonded laps; loose laying with bonded laps.</p> <p>This product used as top layer is fully bonded with hot bitumen on an underlayer with a sand finished upperface or is fully torched on an underlayer with a hot melt film on upperface. In this last case, the total thickness of bitumen of the two-layer system must be at least 5 mm.</p>
Overlaps	The longitudinal laps and the endlaps must be at least 60 mm wide. The longitudinal laps must be staggered by at least 200 mm in relation to those in the underlayer. The end laps must be staggered by at least 300 mm in relation to those in the underlayer. The end laps in the same layer should not be aligned but must be staggered by at least 500 mm between adjacent sheets.
Slopes	<p>Waterproofing system under heavy protection:</p> <ul style="list-style-type: none"> ➤ On concrete deck and cellular concrete deck, the slope must be between 1% and 5%. However, on concrete deck, flat surface (0% slope) is allowed for system with gravel ballast or with slabs on adjustable supports. ➤ On steel deck or wooden deck, the slope must be between 3% and 5%. <p>Self-protected waterproofing system (granular-faced):</p> <ul style="list-style-type: none"> ➤ On concrete deck, the slope must be > or = 0% ➤ On cellular concrete deck or wooden deck, the slope must be > 1% ➤ On steel deck, the slope must be > 3% ➤ For slope > 20%, partial bonding by spots of cold-applied bitumen based adhesive is not used. ➤ For slope > or = 20%, see the technical data sheet of the cap sheet (fixing specifications). <p>Self-protected waterproofing system (metal-faced):</p> <ul style="list-style-type: none"> ➤ On all deck, the minimum slope is 3% ➤ For slope > or = 20%, see the technical data sheet of the cap sheet (fixing specifications).

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 document 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.