

# MORTERPLAS SBS FM 3 KG

MORTERPLAS SBS FM 3 Kg is a waterproofing membrane, made of SBS elastomeric bitumen, reinforced with polyester felt (FP), and finished with a thermally bonded film on both the upper and lower side.

#### **ADVANTAGES**

- $\cdot$  The SBS elastomeric mastic provides the membrane with excellent flexibility at low temperatures.
- $\cdot$  The non-woven polyester felt (FP) reinforcement on the inside and the polyester felt on the upper surface confer the best mechanical properties to the membrane:
- · Maximum traction and puncturing resistance (static and dynamic).
- · High tear resistance.
- · Good dimensional stability.
- · Application with mechanical fixing offers the following advantages:
- · Fast installation.
- $\cdot$  Installation is not as affected by the possibility of bad weather.
- $\cdot$  Since the membrane is not adhered, it allows for potential movement of the support.



#### **APPLICATION**

- · Non-trafficable roofs without heavy protection: double-layer application as the bottom membrane of a system installed with mechanical fixing. This application is especially recommended for Deck roofs and restoration.
- · Trafficable or non-trafficable roofs with heavy protection: adhered application, floating or with mechanical fixing made up of double-layer membranes. The two membranes will always be adhered to each other.

#### **REGULATIONS**

- · In accordance with the EN 13707 standard. Certified with CE marking No. 0099/CPD/A85/0087
- · Voluntary certification of the product with AENOR seal according to the same European standard.
- · With DIT No. 06/0018 MORTERPLAS SBS FM DOUBLE-LAYER and ETAG 006
- · Quality System in accordance with ISO:9001

## **Bituminous Waterproofing SBS**



#### **INSTALLATION**

- $\cdot$  SUPPORT: The surface must be dry, firm, even, clean and free of loose materials.
- $\cdot$  When waterproofing metal roofs, it is recommended that you install the fretwork sheet with the greatest surface area on the upper side, in order to allow installation of the insulation and the membrane.
- $\cdot$  The membranes are installed in such a way that no more than three membranes overlap at the same point.
- Overlaps are carried out with flame, with a minimum longitudinal overlap and a minimum transversal overlap of 10 cm, first eliminating the polyester felt from the surface with flame and with the help of a trowel to ensure mastic adherence.
- · The top membrane must be completely adhered to the bottom membrane, and it must be placed in the same direction and so that the overlap lays approximately in the middle of the bottom membrane.
- · We recommend using mechanical fixings with washers with a minimum surface area of 1600 mm2, with a maximum diameter of 5 cm for circular fixings and widths no greater than 4 cm for rectangular fixings. Fixings must have a resistance to static extraction equal to or greater than 1250 N. See Annex 2 of the DIT No. 06/0018, where a series of fixings that meets requirements is listed. The site's wind load, environmental conditions, and local standards must be taken into account with the calculations.
- · Installation and measurements will be conducted in accordance with regulations of the UNE 104401 standard.

## **Bituminous Waterproofing SBS**



## PACKAGING AND STORAGE

	MORTERPLAS SBS FM 3 kg		
Kg/m²	3		
Length (m)	13		
Width (m)	1		
m2/roll	13		
m2/pallet	351		

Storage: Upright on pallet. Store in the original packaging in a dry and cool place, protected against weathering.

## **TECHNICAL PROPERTIES**

CHARACTERISTICS         Test Method         Unit         MORTERPLAS SBS FM 3 kg           External fire behaviour         ENV 1187         -         Broof(t1)           Fire reaction         EN 13501-1:2002 (EN ISO 11925-2)         -         E           Watertightness         EN 1928:2000 (B)         -         Pass (10 kPa)           Maximum tensile strength (L x T)         EN 12311-1         N/50 mm         700 ± 150 450 ± 100           Maximum tensile strength (L x T)         EN 12311-1         %         45 ± 15 45 ± 15           Root penetration resistance         EN 13948         -         NE           Static load resistance         EN 12730 (A)         kg         ≥ 15           Impact resistance         EN 12691:2006         mm         ≥ 1000           Tear strength (nail) (L x T)         EN 12310-1         N         170 x 200 ± 50           Joint peel resistance         EN 12316-1         N/50 mm         NE           Joint shear resistance (L x T)         EN 12317-1         N/50 mm         NE           Artificial ageing by long-term exposure to high temperature and water         EN 1297         EN 1850-1         NE           Flexibility at low temperature and water         EN 1109         °C         ≤ -15				
Fire reaction	CHARACTERISTICS	Test Method	Unit	MORTERPLAS SBS FM 3 kg
Maximum tensile strength (L x T)	External fire behaviour	ENV 1187	-	Broof(t1)
Maximum tensile strength (L x T)EN 12311-1N/50 mm $700 \pm 150 \ 450 \pm 100$ Elongation (L x T)EN 12311-1% $45 \pm 15 \ 45 \pm 15$ Root penetration resistanceEN 13948-NEStatic load resistanceEN 12730 (A)kg≥ 15Impact resistanceEN 12691:2006mm≥ 1000Tear strength (nail) (L x T)EN 12310-1N $170 \times 200 \pm 50$ Joint peel resistanceEN 12316-1N/50 mmNEJoint shear resistance (L x T)EN 12317-1N/50 mmNEArtificial ageing by long-term exposure to high temperatureEN 1296 12 sem/weeksEN 1109 / 1110NEArtificial ageing by long term exposure to the combination of UV radiation, high temperature and waterEN 1297EN 1850-1NE	Fire reaction	•	-	E
T) Elongation (L x T) Elongation (L x T) EN 12311-1  Root penetration resistance EN 13948 - Static load resistance EN 12730 (A)  kg ≥ 15  Impact resistance EN 12691:2006 mm ≥ 1000  Tear strength (nail) (L x T) EN 12310-1 N 170 x 200 ± 50  Joint peel resistance EN 12316-1 N/50 mm NE  Joint shear resistance (L x T) Artificial ageing by long-term exposure to high temperature Artificial ageing by long term exposure to the combination of UV radiation, high temperature and water  EN 1297 EN 1291-1  SN 45 ± 15 45 ± 15  NE  NE  EN 1290 ± 15  NN 170 x 200 ± 50  NN NE  EN 1291-1  NE  EN 1291-1  NE  EN 1296 12 sem/weeks EN 1109 / 1110 NE	Watertightness	EN 1928:2000 (B)	-	Pass (10 kPa)
Root penetration resistance EN 13948 - NE  Static load resistance EN 12730 (A) kg ≥ 15  Impact resistance EN 12691:2006 mm ≥ 1000  Tear strength (nail) (L x T) EN 12310-1 N 170 x 200 ± 50  Joint peel resistance EN 12316-1 N/50 mm NE  Joint shear resistance (L x T) EN 12317-1 N/50 mm NE  Artificial ageing by long-term exposure to high temperature  Artificial ageing by long term exposure to the combination of UV radiation, high temperature and water		EN 12311-1	N/50 mm	700 ± 150 450 ± 100
Static load resistance EN 12730 (A) kg ≥ 15  Impact resistance EN 12691:2006 mm ≥ 1000  Tear strength (nail) (L x T) EN 12310-1 N 170 x 200 ± 50  Joint peel resistance EN 12316-1 N/50 mm NE  Joint shear resistance (L x T) EN 12317-1 N/50 mm NE  Artificial ageing by long-term exposure to high temperature  Artificial ageing by long term exposure to the combination of UV radiation, high temperature and water	Elongation (L x T)	EN 12311-1	%	45 ± 15 45 ± 15
Impact resistanceEN 12691:2006mm≥ 1000Tear strength (nail) (L x T)EN 12310-1N170 x 200 ± 50Joint peel resistanceEN 12316-1N/50 mmNEJoint shear resistance (L x T)EN 12317-1N/50 mmNEArtificial ageing by long-term exposure to high temperatureEN 1296 12 sem/weeksEN 1109 / 1110NEArtificial ageing by long term exposure to the combination of UV radiation, high temperature and waterEN 1297EN 1850-1NE	Root penetration resistance	EN 13948	-	NE
Tear strength (nail) (L x T) EN 12310-1 N 170 x 200 ± 50  Joint peel resistance EN 12316-1 N/50 mm NE  Joint shear resistance (L x T) EN 12317-1 N/50 mm NE  Artificial ageing by long-term exposure to high temperature  Artificial ageing by long term exposure to the combination of UV radiation, high temperature and water  EN 12310-1 N NE  EN 12310-1 NE  EN 12317-1 N/50 mm NE  EN 1109 / 1110 NE  EN 1850-1 NE	Static load resistance	EN 12730 (A)	kg	≥ 15
Joint peel resistance EN 12316-1 N/50 mm NE  Joint shear resistance (L x T) EN 12317-1 N/50 mm NE  Artificial ageing by long-term exposure to high temperature  Artificial ageing by long term exposure to the combination of UV radiation, high temperature and water  EN 12316-1 N/50 mm NE  EN 1296 12 sem/weeks EN 1109 / 1110  NE  EN 1297 EN 1850-1 NE	Impact resistance	EN 12691:2006	mm	≥ 1000
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Artificial ageing by long-term exposure to high temperature  Artificial ageing by long term EN 1297 EN 1850-1 NE exposure to the combination of UV radiation, high temperature and water	Joint peel resistance	EN 12316-1	N/50 mm	NE
exposure to high temperature  Artificial ageing by long term EN 1297 EN 1850-1 NE exposure to the combination of UV radiation, high temperature and water	Joint shear resistance (L x T)	EN 12317-1	N/50 mm	NE
exposure to the combination of UV radiation, high temperature and water		EN 1296 12 sem/weeks	EN 1109 / 1110	NE
Flexibility at low temperature EN 1109 <sup>o</sup> C ≤ -15	exposure to the combination of UV radiation, high temperature	EN 1297	EN 1850-1	NE
	Flexibility at low temperature	EN 1109	ōC	≤ -15
Hazardous substances PND	Hazardous substances			PND

# **Bituminous Waterproofing SBS**



#### OTHER FEATURES

OTHER CHARACTERISTICS	Test Method	Unit	Value
Visible defects	EN 1850-1	-	Pass
Straightness	EN 1848-1	-	Pass (<20 mm/10 m)
Compound per area unit	EN 1849-1	kg/m²	3,00 -5/+10%
Thickness	EN 1849-1	mm	
Watertightness after stretching at low temperature	EN 13897	%	
Dimensional stability	EN 1107-1	%	≤ 0,4
Form stability under cyclic temperature change	EN 1108	mm	NE
High temperature flow resistance	EN 1110	<sup>o</sup> C	≥ 100
Granule adhesion	EN 12039	%	NE
Water vapour transmission properties	EN 1931	μ	20000

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