

MONNELI COLBETOMO SBS

SBS Modified Bitumen Waterproofing Membrane

Product Description

COLBETOMO SBS is a styrene-butadiene-styrene modified bitumen waterproofing membrane reinforced with non woven polyester designed to provide sub-structure concrete surfaces with optimum waterproofing protection. It is reinforced with polyester to provide high tensile strength and elongation. It is impermeable to water, very flexible and easy to work around protrusions and contours.

COLBETOMO SBS is available in double membrane for unexposed application and mineral membrane for exposed applications.

Uses

COLBETOMO SBS can be used as follows:

- Waterproofing of foundations and basement tanking.
- Waterproofing of roof slabs in inverted roof systems.
- Used to dress pile caps and tie beams and for waterproofing of rafts
- For infrastructure and landscaping jobs

Type of Finishes

- Smooth (Double): XP5, YP5, ZP5
- Mineral: XP5-M, YP5-M, ZP5-M
- Polyethylene film (available upon request)

Available Thickness

- 2mm
- 4mm
- 5mm

Advantages

- Superior flexibility
- Excellent elongation and recovery properties
- Enhanced resistance to chemicals
- High bonding strength
- Durable
- Easy installation
- Manufactured to suit hot climate conditions

Instructions for Use

Surface Preparation

The surface to be waterproofed shall be sound, clean and uncontaminated, free from dust, nails or any deleterious matter.

Priming

A coat of ASFABIT must be applied to the concrete surface and must be allowed to dry completely before the application of the membrane.

Application

COLBETOMO SBS are installed by torch welding. Extra care must be taken when applying on the underside or when making a lap joint as SBS membranes are generally soft.

COLBETOMO SBS should be heated from the top to create a thin bead of molten bitumen at the seam. Using a trowel, smoothen the surface to ensure a properly welded joint.

Exposed Application

COLBETOMO SBS mineral membranes which are manufactured with self-protecting layer of natural slates are used for exposed applications, roofing and skirtings. Scrape off 15mm of mineral flakes or press in the slate and expose the bitumen by heating 15cm of the mineral surface sufficiently to make end of roll joints. Next roll will be torched on the exposed bitumen area.

Technical Data

Table 1. Colbetomo SBS 180 g/m² reinforcement.

PROPERTIES		TEST METHOD	COLBETOMO SBS 180
			180 g/m ² reinforcement
Thickness (mm)		EN-1849-1	4
Weight (kg/m ²)		-	3 to 6
Straightness (mm)		-	±10
Available thickness (mm)		-	2 to 5
Roll length (m)		-	10
Roll width (m)		-	1
Softening point (Ring and Ball)		ASTM D-36	≥ 110
Elongation at break	Longitudinal (%)	EN-12311-1	≥ 40
	Transverse (%)	EN-12311-1	≥ 40
Tensile strength	Longitudinal (N/50mm)	EN-12311-1	≥ 950
	Transverse (N/50mm)	EN-12311-1	> 650
Tensile tear strength	Longitudinal (%)	ASTM D-5147, D4073	≥ 750
	Transverse (%)	ASTMD-5147, D4073	≥ 500
Tearing strength	Longitudinal (Nail Shank)	EN-12310-1	≥ 220
	Transverse (Nail Shank)	EN-12310-1	≥ 220
Impact resistance (mm)		EN 12691 Method B	≥ 700
Resistance static to loading (kg)		EN 12730 Method A	≥ 20
Flow resistance at elevated temperature (°C)		EN-1110	≥ 90
Flexibility at low temperature (°C)		EN-1109	-10 to -5
Dimensional stability (%)		EN-1107-1	±0.5
Water impermeability	Low pressure (60 KPa)	EN-1928 Method A	Passed
	High pressure (KPa)	EN-1928 Method B	≥ 300
Water absorption (%)		ASTM D-5147	<1
Vapour permeability (μ)		EN 1931	6000
Shear resistance of joints	Longitudinal (N/50mm)	EN-12317-1	≥ 950
	Transverse (N/50mm)	EN-12317-1	> 950
Resistance to root penetration		EN 13948	NPD

All values are subject to 5-10 % tolerance

Table 2. Colbetomo SBS 180 g/m² reinforcement with high cold flexibility

PROPERTIES		TEST METHOD	COLBETOMO SBS 180	
			180 g/m ² reinforcement	
Thickness (mm)		EN-1849-1	4	
Straightness (mm)		EN-1848-1	±10	
Weight (kg/m ²)		-	3 to 6	
Thickness (mm)		-	2 to 5	
Roll length (M)		-	10	
Roll width		-	1	
Softening point (ring and ball)		ASTM D-36	≥ 110	
Elongation at break	Longitudinal (%)	EN-12311-1	≥ 40	
	Transverse (%)	EN-12311-1	≥ 40	
Tensile strength	Longitudinal (N) (N/50mm)	EN-12311-1	≥ 950	
	Transverse (N) (N/50mm)	EN-12311-1	> 650	
Tensile tear strength	Longitudinal (%)	ASTM D-5147, D4073	≥ 750	
	Transverse (%)	ASTMD-5147, D4073	≥ 500	
Tearing strength	Longitudinal (N) (Nail shank)	EN-12310-1	≥ 220	
	Transverse (N) (Nail shank)	EN-12310-1	≥ 220	
Impact resistance (mm)		EN 12691 Method B	≥ 700	
Resistance static to loading (kg)		EN 12730 Method A	≥ 20	
Flow resistance at elevated temperature (°C)		EN-1110	≥ 90	
Flexibility at low temperature (°C)		EN-1109	-18 to -20	
Dimensional stability (%)		EN-1107-1	±0.5	
Water impermeability	Low pressure (60KPa)	EN-1928 Method A	Passed	
	High pressure (KPa)	EN-1928 Method B	> 300	
Water absorption (%)		ASTM D-5147	<1	
Vapour permeability (μ)		EN 1931	6000	
Shear resistance of joints	Longitudinal (N/50mm)	EN-12317-1	> 950	
	Transverse (N) (N/50mm)	EN-1928 Method B	> 650	> 950
Resistance to root penetration		EN 13948	NPD	

Recommendations

- Avoid excessive and uneven application of heat.
- It is recommended to use protective gloves during installation.

Mineral Colors

- Off-white
- Grey
- Green
- Red

Packaging

COLBETOMO SBS is supplied in rolls.

Available in 3mm, 4mm and 5mm

Roll Dimension: 1m x 10m

Storage

COLBETOMO SBS must be stored in a well ventilated, covered storage area away from any source of direct heat. Rolls must be kept in an upright position at all times. Shelf life is 12 months from the date of production if stored properly in original unopened packing.

Health & Safety

COLBETOMO SBS have no health hazard when used with our standard application recommendations

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