

CIKOSeal SBS



Torch Applied Bituminous Waterproofing Membrane reinforced with non-woven polyester mat

Description

CIKOseal SBS is a torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with core of non-woven polyester fabric, weighing 160 g/m², rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of CIKOseal SBS makes it suitable for tanking applications where aggressive ground water conditions dominate.

Characteristics & Advantages

Bituminous compound

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movement
- Fast, easy and clean application

Physical Properties

Criteria	Test Method	Unit	Result
Roll length	ASTM D-5147	m	10
Roll width	ASTM D-5147	m	1
Thickness	ASTM D-5147	mm	3.0 & 4.0 (±0.2)
Mass/unit area	ASTM D-5147	Kg/m ²	4.2 ±0.2
Polyester	UEAtc M.O.A.T.30	g/m ²	160
Coating Asphalt Type			SBS Modified
Softening Point (Ring & Ball)	ASTM D-36	°C	≥115
Penetration	ASTM D-5	dmm	15 to 30
Tensile strength (L&T) (23±2)°C	DIN 52123	N/5cm	>650/600
Elongation (L&T) (23±2)°C	DIN 52123	%	40/40
Tear Resistance (L&T)	ASTM D-4073 ASTM D-5147	N	400/350
Puncture Resistance	ASTM E 154	N	≥600
Hydrostatic pressure (5 bar)	ASTM D-5147	°C	No Leakage
Heat Resistance for 2-hours	ASTM D-5147	°C	No Flow @ 100
Cold Flexibility	ASTM D-5147	°C	-5
Dimension Stability(L&T)	ASTM D-5147	%	1
Water Absorption (24 hours)	ASTM D-5147	%	≤0.14
Long term Water Absorption (35 days)	ASTM D-570	%	≤0.9

Application Area

CIKOseal SBS is a torch applied waterproofing membrane that protects against dampness and water leakages recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms and wet areas
- Reservoirs
- Bridges
- Tunnels
- Car park deck slabs

Two layers of CIKOseal SBS might be required depending on application area, site conditions, service and project requirements. Consult CIKO technical department for further support.

Application instructions

Surface preparation

Prior to surface preparation, conduct a full level survey of the top surface. If high spots are present, correct it using an appropriate diamond blade/disk floor grinder to achieve a smooth and regular surface finish that is free of grooves, ruts, nails, grease, and oil and protruding aggregates.

Likewise, excessive depressions in the top surface level besides honeycombing and cracks must be repaired using the suitable material from CIKO wide range of concrete repair materials such as patching mortars, free flowing micro concrete, and epoxy resin based repair putty or mortars. The application instructions of each material must be done strictly as per its respective technical data sheet.

All internal angles shall be smoothly finished with angle fillets using either a prefabricated bituminous-based elastic filler or non-shrink patching mortar used in conjunction with concrete bonding agent.

External right angles are to be treated to form a chamfer.

Application method

Priming

The concrete substrate shall be dry free from any debris or contamination prior to the application of the prime coat. Apply CIKOprime SB or CIKOprimer WB over all areas to receive waterproofing including all horizontal, inclined and vertical areas using a roller or brush at a spreading rate of 5 m²/L. Ensure that the substrate has received enough primer and in case high surface absorption is noticed, apply an additional coat. Keep the applied surface protected for at least 12 hours and maximum 24 hours from any source of dust accumulation and water flow over the uncured surface.

Torching and Installation of membrane

Prior to start of application of waterproofing membrane, all primed areas must be free of dust and other deleterious material. The waterproofing membrane shall be unrolled and properly aligned. The membrane shall then be lightly stretched to remove any wrinkles, then rolled back up to the middle of the sheet. Waterproofing membrane sheets must be laid such that end overlaps of adjacent sheets are staggered and end overlaps is of a minimum of 150-mm. Side edge laps shall be of minimum 100mm.

The membrane is then unrolled and fully torched onto the substrate by applying the butane or propane torch flame to the whole width of the roll in order to burn off completely the polyethylene foil and melt superficially the bitumen. This should be done while gradually unrolling and at the same time pressing the membrane sheet towards the substrate to create a heat weld between the membrane and the substrate. When this section of the roll is securely bonded, re-roll the remaining part of the membrane to the point of application and heat welded in the opposite direction. Leave an extra length of minimum 300 mm of the horizontal membrane to carry up the vertical surface maintaining continuity of the membrane. Secure the seams at overlaps for proper welding by running a heated trowel along the edge. Carry up the membrane on the exposed external vertical surfaces up to minimum laps of 150 mm above the finished ground level and tuck into a continuous groove provided for the same and secured firmly with a sealant. After covering the whole area, recheck to ensure that the membrane is fully heat welded at all laps/joints and around the perimeter.

Tuck the membrane inside joints ready to receive mechanical expansion joints in accordance with the detail required for the proposed type of expansion.

Protect all areas of the membrane exposed above ground with proper flashing.

For foundations and prior to steel reinforcement fixation, cover the membrane by one layer of polythene sheet and 50 mm thick layer of screed.

Packaging

CIKOseal SBS is available in 1 meter by 10 meters rolls stacked on wrapped pallets.

Storage & Shelf Life

CIKOseal SBS has a shelf life of 12 months if stored in a dry place away from direct sunlight and harsh outdoor conditions. Do not place the pallets one on top of another, as the rolls must be always stacked in a vertical position.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Adhesives and bonding agent
- Concrete repair materials
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries