



Biflex PL 4MM/180

SBS modified bituminous
membrane - Plain

Waterproofing

Leb	Egypt	Jordan	UAE	Qatar	Kuwait	KSA	Oman
1x10m	1x10m	1x10m	1x10m	1x10m	1x10m	1x10m	1x10m

GENERAL

A high performance elastomeric waterproofing membrane which combines the ability to withstand high ambient temperature with the usual characteristics of an SBS membrane of high flexibility at low temperature that makes it easy to apply at sub-zero temperature.

It is suitable for all types of waterproofing works including roofs, terraces, car parks, pile capping, foundation works, basement tankings, where high flexibility and malleability are required.

SPECIAL FEATURES

- Positive vapour barrier to water and dampness
- Excellent resistance to atmospheric agents
- High flexibility during application at sub-zero temperature with no physical strains
- High malleability making it entirely suitable for difficult basement and foundation works
- High softening point allowing it to maintain shape stability at high temperatures
- Withstand thermal shocks
- Accommodates structural movements
- Resistant to chemical attacks and suitable for areas subject to seaside salinity

SIZE AND SURFACE FINISH

Biflex PL 4MM/180 is supplied in 1m wide and 10m length. The surface finish is protected with PE film.

REINFORCEMENT CORE AND COATING MIXTURE

Biflex PL 4MM/180 waterproofing membranes is reinforced with 180 grams non woven spun bond polyester reinforcement that gives the membrane dimensional stability and resistance to puncture. It is coated with a specially formulated mixture of SBS modified bitumen which makes the membrane resistant to water, atmospheric agents, and malleable at low temperature while retaining a high softening point.

INSTRUCTIONS FOR USE

The membrane must first be unrolled and laid down on the area to which it is to be applied. Check the orientation carefully. Adjacent rolls should then be laid, each overlapping the one next to it by 10cm on the side and 15cm at the ends. Taking care not to change the orientation of each roll, reverse the process until each has been re-rolled. When laying the roll, the lower surface should be heated with a propane torch, using sweeping left to right movements. This will melt the lower surface of the membrane and allow it to stick to the substrate... Continue this process for each subsequent roll, remembering that the overlaps must be 10cm for the edges and 15cm at the ends. When the process is complete, carry out an inspection to ensure total adhesion.

When applied in a totally bonded system, a coat of **weberdry prime WB** or **weberdry prime SB** should be applied at the rate of 200 - 300g/m². Allowed the primer to dry thoroughly, in time of high humidity we recommend it should be left overnight.

PROPERTIES		TYPICAL VALUES				
Thickness		4mm±0.2mm	4mm±0.2mm	4mm±0.2mm	4mm±0.2mm	ASTM D 5147
Cold flexibility		-5°C	-10°C	-15°C	-20°C	ASTM D 5147
Reinforcement base		180gms/m ² non-woven polyester	180gms/m ² non-woven polyester	180gms/m ² non-woven polyester	180gms/m ² non-woven polyester	ASTM D 5147
Maximum tensile force* (23±2°C)	• long	800N/5cm (16KN/m)	800N/5cm (16KN/m)	800N/5cm (16KN/m)	800N/5cm (16KN/m)	UEAtc 2001 (ASTM D 5147)
	• trans	600N/5cm (12KN/m)	600N/5cm (12KN/m)	600N/5cm (12KN/m)	600N/5cm (12KN/m)	
Elongation*	• long	50%	50%	50%	50%	UEAtc 2001 (ASTM D 5147)
	• trans	50%	50%	50%	50%	
Shear resistance of joints*	• long	750N/5cm	750N/5cm	750N/5cm	750N/5cm	UEAtc 2001
	• trans	550N/5cm	550N/5cm	550N/5cm	550N/5cm	
Tear strength*	• long	500N	500N	500N	500N	ASTM D 4073
	• trans	400N	400N	400N	400N	
Water absorption (24hrs 23±2°C)		<1%	<1%	<1%	<1%	ASTM D 5147
Puncture resistance static/dynamic		L20/I15	L20/I15	L20/I15 (1750mm)	L20/I15	UEAtc 2001 UEAtc 2001
Resistance to puncture*		800N	800N	800N	800N	ASTM E 154
Penetration (25°C) (mixture)		15-25dmm	20-30dmm	20-30dmm	30-40dmm	ASTM D 5
Softening point (mixture)		150-160°C	130-140°C	120-130°C	115-125°C	ASTM D 36
Biflex membranes are resistant to chlorides, sulphates and phosphates found in ground water						

* Values subject to a variation of ±20% (Except for Resistance to puncture ±10%)

STORAGE

The membranes shall be in its original closed packaging pallets and protected from all sources of heat and extreme temperatures. Do not stack pallets on top of each other. Do not store pallets direct in the sun or in humid area, this may lead to damage its physical properties and reduces its shelf life. The shelf life is 12 months from date of production if stored as per recommendations.

DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

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