



**BITUMAT**  
بيتومات



## POLYFLEX - MS

APP Modified Bitumen Waterproofing Membrane Reinforced with Nonwoven Polyester up to 250 gsm.\*

### DESCRIPTION

BITUMAT POLYFLEX-MS is a uniquely formulated prefabricated waterproofing membrane. It has a high quality special multi-layered design for superior pliability, tensile strength, workability and resistance to extreme climatic conditions.

BITUMAT POLYFLEX-MS waterproofing membrane consists of nonwoven polyester reinforcement, impregnated and coated on both sides with APP modified bitumen. Properly installed, BITUMAT POLYFLEX-MS forms an impervious blanket which accepts normal structural movement without breaking or cracking.

### USES

BITUMAT POLYFLEX-MS membranes are ideal for a wide range of waterproofing applications, including roofs, reservoirs, basements, tunnels and car parks. BITUMAT POLYFLEX-MS may be utilized for both exposed and covered applications.

### OUTSTANDING FEATURES

- Strong membrane with excellent tear resistance
- Very high resistance to impact and puncture
- Total impermeability for complete waterproofing
- Excellent resistance to weathering and aging
- Outstanding bondability and seam integrity
- Stability at high temperatures
- Flexibility at low temperatures

### GENERAL DATA

Nominal Roll length : 10 Mtr.  
Nominal Roll width : 1 Mtr.  
Nominal Thickness : 3, 4, 5, MM

### FINISHES

BITUMAT POLYFLEX-MS is available in three basic finishes:

1. Black smooth finish with polyethylene surfaces for covered applications.
2. Granule surfacing for exposed applications.
3. Fine sanded upper surface for coated systems.

### QUALITY CONTROL

In addition to stringent regular tests by BITUMAT laboratory, our products are tested periodically by Independent Laboratories.

### INSTALLATION TOOLS REQUIRED

Gas torch, Knife, Trowel, Measuring tape, Marking string, Gloves.

### APPLICATION

BITUMAT POLYFLEX-MS is installed by torch welding method, loose-laid or fully bonded to substrate. When loose-laid, only overlaps are bonded together. Peripheres and protrusions are sealed according to specifications.

### COVERAGE RATE (Approx.)

(Rate may vary as per site requirement)  
Flat areas : 1.15 M<sup>2</sup>/M<sup>2</sup> per layer with 10 cms. side laps and 15 cms. end laps.  
Base flashing : 100x35 cms. with 15 cm. end laps, 0.40 M<sup>2</sup>/ Linear Mtr.  
Average wastage : 3 - 5 %

### TORCHING GUIDELINES

The underside of the membrane should be torched just enough to superficially melt the bitumen. Excessive heating may damage the re-inforcement. Overlaps should be reheated from the top and re-sealed with a trowel to ensure seam integrity. For details of installation methods and flashing requirements, consult the relevant *BITUMAT Systems Design and Installation Manual*.



NRCA MEMBER



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## TECHNICAL DATA

MBM26	50-E	R-01	50-P
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	Property	Typical Value	Test Method
1.	Softening point °C	155	ASTM D 36
2.	Penetration, @ 25 °C dmm	18	ASTM D 5
3.	Low temperature flexibility, °C	-4 to-6	ASTM D 5147
4.	Heat resistance, Compound stability @ 115°C for 2 hours & 15 minutes	No flow - Pass	ASTM D 5147
5.	Tensile strength, N/5 cm @ 23±2 °C Longitudinal Transverse	950 720	ASTM D 5147
6.	Tensile strength, N/5 cm @ -18±2 °C Longitudinal Transverse	1200 880	ASTM D 5147
7.	Elongation, % @ 23±2 °C Longitudinal Transverse	50 50	ASTM D 5147
8.	Elongation, % @ -18±2 °C Longitudinal Transverse	24 26	ASTM D 5147
9.	Load strain product @ 23±2 °C Longitudinal Transverse	47,500 36,000	CGSB 37 GP 56M
10.	Load strain product @ -18±2 °C Longitudinal Transverse	28,800 22,880	CGSB 37 GP 56M
11.	Lap joint strength, N/5 cm Longitudinal Transverse	Same as membrane	CGSB 37 GP 56M UEAtc
12.	Tear resistance, N Longitudinal Transverse	550 350	ASTM D 5147 ASTM D 4073
13.	Tear strength, N Longitudinal Transverse	170 180	UEAtc
14.	Puncture Resistance, N Static indentation Dynamic indentation	L <sub>4</sub> I <sub>3</sub>	UEAtc 5.1.9. UEAtc 5.4.1.
15.	Water Absorption, %Wt @ 23 °C 24 hrs.	<0.5	ASTM D 5147
16.	Water Vapour Transmission, g/m <sup>2</sup> /24 hrs.	<0.8	ASTM-E 96, Procedure E. 37.8°C at 90% RH.
17.	Dimensional Stability % Longitudinal Transverse	± 0.8 ± 0.8	ASTM D 5147
18.	Resistance to Leakage at joints	Pass	UEAtc
19.	Resistance to aging & Ultra Violet (U.V.) (Weather-O-meter, 2000 hrs)	No change greater than 20% of the original values	ASTM D 4799 UNI 8202

\* 250 Nonwoven Reinforcement on request.

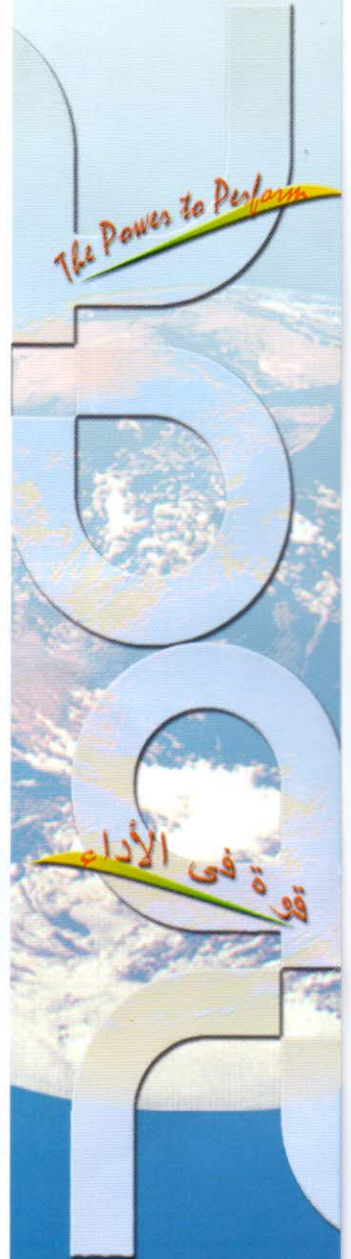
\*\* The information given in this Technical Data Sheet reflects typical median properties based on laboratory test, and practical experience; subject to the tolerance levels of ASTM /DIN / UEAtc directives. However, as the product is often used under conditions beyond our control, we can't warrant but the product itself.

THIS PUBLICATION AUTOMATICALLY SUPERSEDES ALL PREVIOUS PUBLICATIONS RELATING TO THIS PRODUCT.

**BITUMAT COMPANY LIMITED**  
**Corporate Office** : P.O. Box 7487, Dammam 31462, Kingdom of Saudi Arabia Tel. No. (966-13) 8121210 / 8121213 Fax No. (966-13) 8121190  
**Central Region** : P.O. Box 58698, Riyadh 11515, Kingdom of Saudi Arabia Tel. No. (966-11) 4770443 / 4792553 Fax No. (966-11) 4762318  
**Western Region** : P.O. Box 12605, Jeddah 21483, Kingdom of Saudi Arabia Tel. No. (966-12) 6644449 Fax No. (966-12) 6640506  
 Email : marketing@bitumat.com / Website : www.bitumat.com



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