

GLASFLAME

APP Modified Membrane With Nonwoven
Glassfibre Reinforcement

DESCRIPTION

BITUMAT GLASFLAME is a superior, high performance, prefabricated, modified bitumen membrane, consisting of proprietary waterproofing compound, reinforced with spunbonded non-woven glassfibre mat.

The BITUMAT proprietary waterproofing compound is formulated with select bitumen modified with Attactic Polypropylene (APP) for greater elasticity, flexibility, and further enhanced with a blend of Thermoplastic Polymer (TP) and Elastoplastic Copolymer (EPC) for high heat resistance, greater elongation and low temperature flexibility. The compound is then stabilized with opaque Mineral Stabilizers (MS) for impact resistance, UV resistance and durability.

The superior waterproofing compound is reinforced with a strong, dimensionally stable, rot proof & spunbonded glass fiber, which is further reinforced with continuous strands of glass threads for increased strength.

The proprietary compound, the unique reinforcement, combined with the famous BITUMAT process technology and rigid quality assurance procedures, yields a very reliable and dependable waterproofing membrane.

USES

GLASFLAME is a universal, all purpose membrane, excellent in a single layer or multi layer roofing systems, underground waterproofing, multi-story car parks, pond lining, irrigation canals lining, swimming pools or any structure that requires high performance waterproofing. It is most suited as the first layer in a multi-layer system.

OUTSTANDING FEATURES

- Total impermeability for total waterproofing.
- Excellent resistance to aging and weathering.
- Outstanding bondability and seam integrity.
- Flexibility at low temperature.
- Stability at high temperature.
- Application friendly (labour cost savings)
- Variety of finishes for exposed and covered applications.
- Dimensional stability
- Rot-proof
- Inert base layer for multi-layer specifications
- Aluminum foil finish ideal for exposed flashings

GENERAL DATA

Nominal Roll length : 10 M
Nominal Roll width : 1 M
Nominal Thickness : 3, 4, 5, MM
Reinforcement : 50/60 gm/m² glassfibre mat
Other weights on request

FINISHES

GLASFLAME is available in four basic finishes:

1. Black smooth finish with polyethylene surfaces for covered applications.
2. Coloured granule surfacing for exposed applications.
3. Embossed aluminium foil surfacing for exposed applications.
4. Black fine sanded upper surface for coated applications.

QUALITY CONTROL

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

STANDARDS

GLASFLAME complies with the requirements and tolerance levels of UEAtc (European Union of Technical Agreement) MOAT 27-1983 and MOAT 30-1984 and CGSB (Canadian General Standards Board) 37-GP-56M - July 1980.

INSTALLATION TOOLS REQUIRED:

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

APPLICATION

GLASFLAME 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 M²/M² per layer with 10 cms. side laps and 15 cms. end laps.

Base flashing : 100x35 cms. with 15 cm. end laps, 0.40 M²/ 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 reinforcement. Overlaps should be re-heated from the top and resealed with a trowel to ensure seam integrity. For details of installation methods and flashing requirements, consult the relevant *BITUMAT Systems Design and Installation Manual*.

GLASFLAME

APP Modified Membrane With Nonwoven
Glassfibre Reinforcement

TECHNICAL DATA

MBM02	MAY04	R-00	00
-------	-------	------	----

	Property	Typical Value	Test Method
1.	Softening point °C	155	ASTM D 36
2.	Penetration, @ 25 °C dmm	20	ASTM D 5
3.	Low temperature flexibility, °C	-6 to -10	ASTM D 5147
4.	Heat resistance, Compound stability for 2 hours & 15 minutes	No flow @ 120°C	ASTM D 5147
5.	Tensile strength, N/5 cm @ 23°C Longitudinal Transverse	350 (7 KN/m) 300 (6 KN/m)	ASTM D 5147
6.	Tensile strength, N/5 cm @ -18°C Longitudinal Transverse	425 (8.5 KN/m) 350 (7 KN/m)	ASTM D 5147
7.	Elongation, % @ 23°C Longitudinal Transverse	3.5 3.5	ASTM D 5147
8.	Elongation, % @ -18°C Longitudinal Transverse	1.5 1.5	ASTM D 5147
9.	Load strain product @ 23°C Longitudinal Transverse	1,225 1,050	CGSB-37-GP-56M
10.	Load strain product @ -18°C Longitudinal Transverse	637 525	CGSB-37-GP-56M
11.	Lap joint strength N/5 cm Longitudinal Transverse	400 350	CGSB-37-GP-56M UEAtc
12.	Tear resistance, N Longitudinal Transverse	300 200	ASTM D 5147
13.	Puncture Resistance, N Static indentation Dynamic indentation	350 L ₂ I ₂	ASTM E 154 UEAtc 5.1.9. UEAtc 5.4.1.
14.	Water Absorption, %Wt @ 23 °C 24 hrs.	<1	ASTM D 5147
15.	Water Vapour Transmission, g/m ² /24 hrs.	<0.5	ASTM-E 96, Procedure E. 37.8°C at 90% RH.
16.	Dimensional Stability % Longitudinal Transverse	- 0.1 + 0.1	ASTM D 5147
17.	Resistance to Leakage at joints	Pass	UEAtc
18.	Resistance to aging & U.V. (Weather-O-meter, 2000 hrs)	No change greater than 20% of the original values	ASTM D 4799-97 according to G53 Practice Procedure UNI 8202

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 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.