

POLYBOND

Oxidized Bitumen Membrane With Non-woven Polyester Re-inforcement

INTRODUCTION

BITUMAT POLYBOND is an oxidized bitumen waterproofing membrane suitable for application by gas torch or with hot bitumen. The multi-layered design provides good pliability, tensile strength, workability and resistance to Middle Eastern climatic conditions.

DESCRIPTION

BITUMAT POLYBOND waterproofing membrane consists of a non-woven polyester reinforcement, impregnated and coated on both sides with oxidized bitumen. Properly installed BITUMAT POLYBOND forms an impervious waterproofing blanket which accepts normal structural movement without breaking or cracking.

OUTSTANDING FEATURES

- Excellent cost performance ratio.
- Good resistance to fatigue and tear.
- Outstanding bondability and seam integrity.
- Impact and puncture resistant.
- Single layer installation reduces costs.

GENERAL DATA

Nominal Roll Length : 10 M
Nominal Roll Width : 1M
Nominal Thickness : 3,4, or 5 mm

FINISHES

Black finish with thin, heat fusible, polyethylene film on both sides.

INSTALLATION TOOLS REQUIRED

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

APPLICATION

BITUMAT POLYBOND is installed by torch welding method, loose-laid or fully bonded to substrate. When loose-laid, only laps are bonded together. Peripheries and protrusions are sealed according to specification.

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*.

POLYBOND

Oxidized Bitumen Membrane With Non-woven Polyester Re-inforcement

TECHNICAL DATA

OBM01	MAY04	R-00	00
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	<i>Property</i>	<i>Test Value</i>	<i>Test Method</i>
1.	Softening Point °C	115 + 5	ASTM-D-36
2.	Penetration, @ 25°C., dmm	20 - 35	ASTM-D-5
3.	Cold flexibility, °C	+5 to 0	UEAtc
4.	Tensile Strength, N/5cms. Longitudinal Transverse	520 490	UEAtc, ASTM-D-412 UEAtc, ASTM-D-412
5.	Elongation, (re-inforcement), % Longitudinal Transverse	40 50	ASTM-D-412 ASTM-D-412
6.	Tear Resistance, N Longitudinal Transverse	120 130	UEAtc UEAtc
7.	Puncture Resistance Static Indentation Dynamic Indentation	L3 I3	UEAtc UEAtc
8.	Load Strain Product Longitudinal Transverse	20,800 24,500	CG8B-37-GP-56M CG8B-37-GP-56M
9.	Water Vapour Permeability Transmission (gm/m ² /24hr) Permeance (perms)	0.28 0.01	ASTM-E-96 ASTM-E-96
10.	Heat Resistance (2 hours °C)	70	UEAtc

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.

POLYFLEX

APP Modified Waterproofing Membrane

DESCRIPTION

BITUMAT POLYFLEX is a uniquely formulated, prefabricated waterproofing membrane with a special multi-layered design for superior pliability, tensile strength, workability and resistance to elements. The multi-layered design consists of a polyester core coated on both sides with APP modified bitumen. The polyester core gives the membrane high tensile strength, elongation and superior lap joint strength.

USES

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

OUTSTANDING FEATURES

- Total impermeability for total waterproofing
- Dimensional stability
- Excellent resistance to aging & weathering.
- Outstanding bondability & seam integrity.
- Very high resistance to impact & puncture.
- Stability at high temperatures & flexibility at low temperatures.

GENERAL DATA

Nominal Roll Length : 10 M
Nominal Roll Width : 1 M
Nominal Thickness : 3,4 or 5 mm

PACKAGING

- 3mm - 28 rolls / pallet
- 4mm - 23 rolls / pallet
- 5mm - 18 rolls / pallet

FINISHES

BITUMAT POLYFLEX is available in two basic finishes:

- Black smooth finish with polyethylene surfaces for covered applications.
- Coloured granule surfacing for exposed applications.

QUALITY CONTROL

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

STANDARDS

BITUMAT POLYFLEX - complies with the requirements and tolerance levels of:

1. The American Society for Testing & Material ASTM-D-8222 Type I.
2. UEAtc (European Union of Technical Agreement).
3. MOAT 27 - 1983 and MOAT 30 - 1984.
4. CGSB (Canadian General Standards Board) 37-GP56M-July 1980.

INSTALLATION TOLLS REQUIRED:

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

APPLICATION

BITUMAT POLYFLEX is installed by torch welding method, loose-laid or fully bonded to substrate. When loose-laid, only laps are bonded together. Peripheres and protusions 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 re-inforcement.

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*.

POLYFLEX

APP Modified Waterproofing Membrane

TECHNICAL DATA

MBMD4	MAY04	R-00	00
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	Property	Typical Value	Test Method
1.	Softening point, °C	155	ASTM-D-36
2.	Penetration, @ 25 °C, dmm	20+5	ASTM-D-5
3.	Low temperature flexibility, °C	-2 to -4	ASTM-D-5147
4.	Heat resistance, compound stability @ 110 °C for 2 hours & 15 minutes	No flow - Pass	ASTM-D-5147
5.	Tensile strength, N/5 cm @ 23+2 °C Longitudinal Transverse	850 (17 KN/m) 700 (14 KN/m)	ASTM-D-5147
6.	Elongation, @ 23+2 °C Longitudinal Transverse	45 50	ASTM-D-5147
7.	Load strain product, @ 23+2 °C Longitudinal Transverse	38,250 35,000	CGSB-37-GP-56M
8.	Lap joint strength, @ 23+2 °C Longitudinal Transverse	Same as membrane	CGSB-37-GP-56M UEAtc
9.	Tear resistance, N @ 25+1 °C Longitudinal Transverse	320 315	ASTM-D-5147
10.	Puncture Resistance, N @ 25+1 °C Longitudinal Dynamic indentation	800 L ₃ B	ASTM E 154. UEAtc 5.1.9. UEAtc 5.1.10
11.	Water Absorption, %Wt @ 23 °C 24 hrs.	<1.0	ASTM-D-5147
12.	Water Vapour Transmission, g/m ² /24 hrs.	<0.50	ASTM E 90 procedure E 37.8 °C at 90% RH

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TORCHBOND

Oxidized Bitumen Membrane with
Glassfibre Matt Reinforcement

DESCRIPTION

BITUMAT TORCHBOND is a prefabricated waterproofing membrane with a special multilayered design for outstanding pliability, tensile strength, workability and resistance to elements. The multilayered design consists of a glassfibre core coated on both sides with bitumen. The bitumen is a catalytically air blown asphalt. The glassfibre core gives the membrane good tensile strength and excellent dimensional stability.

BITUMAT TORCHBOND combines the proven waterproofing quality of bitumen and the sureness and simplicity of torch-on application. Properly installed, BITUMAT TORCHBOND forms an impervious, flexible and waterproof blanket which accepts normal structural movement without breaking or cracking.

USES

BITUMAT TORCHBOND membranes may be used for a wide range of waterproofing applications including roofs, reservoirs, basements, tunnels and car parks.

OUTSTANDING FEATURES

- Excellent cost performance ratio.
- Good resistance to fatigue and tear.
- Outstanding bondability & seam integrity.
- Impact and puncture resistant.
- Single layer installation reduces costs.

GENERAL DATA

Nominal Weight	: 3,4 or 5 kg/M ²
Nominal Thickness	: 3,4 or 5MM
Nominal Roll Size	: 1x10 Mt.
Re-inforcement	: 50-60 gms/M ² Nonwoven glassmat

FINISHES

Black finish with thin, heat fusible, polyethylene film on both sides.

STANDARDS AND CONTROL

BITUMAT TORCHBOND complies with the requirement and tolerance level of the following standards:

NF P 84314 Type 40 V V(France)
DIN 52131 V60 S4 (West Germany)

In addition to stringent regular tests by BITUMAT laboratory, periodic visits and Quality Control Tests are performed by SOCOTEC, Paris, France.

INSTALLATION TOOLS REQUIRED

1. Gas Torch
2. Knife
3. Trowel
4. Measuring Tape
5. Marking String
6. Gloves

APPLICATION

BITUMAT TORCHBOND is installed by torch welding method, loose-laid or fully bonded to substrate. When loose-laid, only laps are bonded together.

Peripheries and protrusions are sealed according to specifications.

COVERAGE RATE (Approx.)

(Rate may vary as per site requirement)

Flat areas	: 1.15 M ² /M ² per layer with 10 cms. side laps and 15 cms. end laps.
Base flashing	: 100x35 cms. with 15 cm. end laps, 0.40 M ² /linear M.
Average wastage	: 3 - 5 %

TORCHING GUIDELINES

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

TORCHBOND

Oxidized Bitumen Membrane with
Glassfibre Matt Reinforcement

TECHNICAL DATA

OBM02	MAY04	R-00	00
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	<i>Property</i>	<i>Typical Value</i>	<i>Test Method</i>
1.	Softening point, °C	110-115	ASTM D 36
2.	Penetration @ 25°C., dmm	20 - 35	ASTM D 5
3.	Low temperature flexibility, °C	+5 to 0	UEAtc
4.	Heat resistance, 2 hours, °C	70	UEAtc
5.	Tensile strength, N/5 cm Longitudinal Transverse	350 300	UEAtc ASTM D 146
6.	Elongation, % Longitudinal Transverse	3.5 3	UEAtc ASTM D 146
7.	Tear resistance, N Longitudinal Transverse	Min. 60 Min. 80	UEAtc

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