

TORCHSEAL

APP Modified Waterproofing Membrane
with Nonwoven Polyester Reinforcement

DESCRIPTION

BITUMAT TORCHSEAL is a uniquely formulated prefabricated waterproofing membrane with a special multilayered design for superior pliability, tensile strength, workability and resistance to elements.

The multilayered design consists of a spunbonded 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.

Properly installed, BITUMAT TORCHSEAL forms an impervious, permanently flexible waterproof blanket which accepts normal structural movement without breaking or cracking.

USES

BITUMAT TORCHSEAL membranes are ideal for a wide range of waterproofing applications, including roofs, reservoirs, basements, tunnels and car parks.

BITUMAT TORCHSEAL may be utilized in exposed and covered applications.

OUTSTANDING FEATURES

- Total impermeability
- Excellent resistance to aging and weathering.
- Outstanding bondability and seam integrity.
- Stability at high temperatures.
- Very high resistance to impact & puncture.
- Simple, single-layer installation reduces labour & errors.
- Variety of finishes for exposed and covered applications.

GENERAL DATA

Nominal Weight : 3,4 or 5 kg/M²
Nominal Thickness : 3,4 or 5 MM
Nominal Roll Size : 1 x 10 Mts.

Reinforcement

Robust, isotropic, spunbonded, nonwoven polyester core.

FINISHES

BITUMAT TORCHSEAL is available in three basic finishes:

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

STANDARDS

BITUMAT TORCHSEAL complies with the performance requirements and tolerance levels of the listed standards. Some of which modified to better suit the various climatic conditions around the world.

1. American Society for Testing and Material ASTM D 6222 Type I.
2. European Union of Technical Agreement (UEAtc)
3. Canadian General Standard Board (CGSB 37-GP 56M - July 1980).
4. German Standard (DIN 52133).

INSTALLATION TOOLS REQUIRED:

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

APPLICATION

BITUMAT TORCHSEAL is installed by torch welding method, loose-laid or fully bonded to substrate. When loose-laid, only overlaps are bonded together. Peripheres, protrusions and other flashing details are installed 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 M

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 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*.

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TECHNICAL DATA

MBM05	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	18+5	ASTM D 5
3.	Cold Flexibility, °C	0-4	ASTM D 5147
4.	Tensile Strength, N/5cm @ 23+2°C Longitudinal Transverse	700 (14 KN/m) 600 (12 KN/m)	ASTM D 5147
5.	Tensile Strength, N/5cm @ -18+2°C Longitudinal Transverse	840 (16.8 KN/m) 720 (14.4 KN/m)	ASTM D 5147
6.	Elongation, % @ 23+2°C Longitudinal Transverse	45 45	ASTM D 5147
7.	Elongation, % @ -18+2°C Longitudinal Transverse	24 24	ASTM D 5147
8.	Tear Resistance, N Longitudinal Transverse	400 350	ASTM D 5147
9.	Puncture Resistance Static Indentation Dynamic Indentation	L3 I3	UEAtc 5.1.9. UEAtc 5.1.4.
10.	Heat Resistance 110°C., 2 Hrs	No flow	ASTM D 5147
11.	Load Strain Product @ 23+2°C Longitudinal Transverse	31,500 27,000	CGSB-37-GP-56M
12.	Load Strain Product @ -18+2°C Longitudinal Transverse	20,160 17,280	CGSB-37-GP-56M
13.	Lap Joint Strength N/5cm Longitudinal Transverse	700 600	CGSB-37-GP-56M UEAtc
14.	Water Absorption, % WT @ 23°C 24 hrs.	< 1.0	ASTM D 5147
15.	Dimensional Stability % Longitudinal Transverse	+ 0.5 + 0.5	ASTM D 5147

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.