



TREMguard FBM

Fleece-Backed TPO Membrane

DESCRIPTION

TREMguard FBM Thermoplastic Polyolefin (TPO) Waterproofing Membrane is a flexible waterproofing sheet. It is formulated with high quality TPO resin, supplemented with flame retardants, UV light absorbers, antioxidants and other ingredients. The TPO sheet has a fleece backing on the lower surface. Along one edge along the bottom surface of the sheet there is an 80 mm section without the fleece backing to facilitate heat welding.

BASIC USES

- For fully adhered roofing systems
- New concrete, rock wool sandwich board and foamed cement composite board roof waterproofing.

FEATURES & BENEFITS

- Excellent durability, tear and puncture resistance.
- Excellent weather resistance.
- Long-term flexibility.
- Embedded polyester mesh fabric for high tensile strength, fatigue resistance and puncture resistance.
- Fleece backing facilitates adhesive bonding to the substrate.
- Excellent high and low temperature resistance. Remains flexible at -50°C and retains mechanical strength at high temperature.
- Excellent chemical resistance to acids, bases, and building vent exhaust emissions.
- White colour and smooth surface give high solar reflectivity and reduced dirt pick up.
- Excellent dimensional stability.
- Heat welding yields tightly bonded, fully sealed seams.

ROLL SIZE & MEMBRANE THICKNESS

TPO Thickness	Roll Size
1.2mm	2m x 25m
1.5mm	2m x 25m
1.8mm	2m x 25m
2.0mm	2m x 20m

DIRECTIONS FOR USE

Application

- General steps for application. Please see the TREMguard FBM Method Statement for detailed application instructions.
- Clean substrate > Apply the adhesives > Lay waterproof membrane > Treat the laps > Detail joint treatment > Inspection

Key Points of Construction

- **Substrate:** The substrate should be solid, smooth, clean and dry.
- **Adhesive Application:** The adhesive should be evenly coated on the back of the membrane and the base.
- **Membrane Placement:** TPO waterproof membrane should be laid in the direction of the roof ridge parallel to the roof. The membrane should be laid in such a way to insure that water will flow over or along membrane laps and side laps but not against the laps.
- Care should be taken to keep the membrane sheets parallel to each other and to avoid wrinkling, gaps and uneven placement.
- **Hot air welding of lap joint:** Make sure that the area to be welded is clean and dry. Use an automatic welding machine (or hand-held welding gun) for hot air welding.
- **Treatment of details:** Refer to Tremguard TPO detail drawings for the proper methods to use for applying the system around drains, penetrations, changes in plane, etc.

WARRANTY

Tremco CPG APAC products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG APAC written instructions and (b) in any application recommended by Tremco CPG APAC, but which is proved to be defective, will be replaced free of charge. No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct. Tremco CPG APAC reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

TYPICAL PHYSICAL PROPERTIES			
PROPERTY		TECHNICAL INDEX	TYPICAL VALUES
Overall Thickness		>2.5mm	2.8mm (TPO Membrane Thickness at 1.5mm)
Tensile Strength	At 23 °C	≥ 60 N/cm	140 N/cm
	At 60 °C	≥ 30 N/cm	70 N/cm
Elongation at break	At 23 °C	≥ 400%	800%
	At -20 °C	≥ 300%	400%
Tear resistance	MD Direction	≥ 50 N	110N
	CD Direction		100N
Linear Dimensions Change	MD Direction	Expansion <2mm	Shrinkage 0.5mm
	CD Direction	Shrinkage <4mm	Expansion 0.4mm
Water tightness	0.3MPa for 30 minutes	No Leakage	No Leakage
Cold Brittleness	At -40 °C	No Crack	No Crack
Factory Seam Strength	Peel Strength At Room Temperature	≥ 1.5 N/mm	5.0 N/mm
	Peel Strength Retention rate after immersion (23°C*168h)	≥ 70%	99%
Heat Aging (80 °C for 168h)	Retention of tensile strength	≥ 80%	90%
	Elongation retention at break	≥ 70%	90%
Weather Resistance	Retention of tensile strength	≥ 80%	95%
	Elongation retention at break	≥ 70%	95%

To find your local office address and contact details, visit

www.tremcocpg-asiapacific.com

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