Dr. Fixit Flexshield TPO FB

HIGH PERFORMANCE 115 MIL FLEECE BACK TPO MEMBRANE

Description

Dr. Fixit Flexshield Fleece back TPO membranes are manufactured using a hot-melt extrusion process for complete scrim encapsulation. The TPO is reinforced with a strong, polyester reinforced fabric center (scrim) and a tough thermoplastic polyolefin compounded top ply enhanced with fleece at the bottom, the total sheet thicknesses available is 115mil, creating a very tough, durable and versatile sheet that is ideal for re-roofing and new construction projects. Dr. Fixit Flexshield TPO FB sheets are chlorine free and plasticizer free with excellent chemical resistance to acids, bases, restaurant oils, and greases.

Standard compliance / Specification

- Complies to ASTM D6878: Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing

Areas of Application

- Large commercial roofs

Packaging

Thickness: 115 MIL

Size: 3.66 meter x 25.00 meter
3.66 meter x 30.48 meter

Features and Benefits

- Superior wind uplift performance and ratings (up to an FM 1-945) due to a mechanical bond between fleece and adhesive.
- 75% fewer seams than Modified Bitumen.
- Wide window of weldability.
- Fleece reinforcement adds toughness, durability, and enhanced puncture resistance.
- Greater puncture resistance than Modified Bitumen.
- Dr. Fixit Flexshield TPO FB roofing has surpassed Factory Mutual I-90 wind resistance classification, one of the most stringent standards in the industry, as listed in the FM Approval Guide.

Installation: Horizontal Surface:

- Over the insulation, lay the specially formulated high strength 115mil (2.92mm) four-layer reinforced Dr. Fixit Flexshield Fleece back TPO membrane.
- The membrane shall be loose laid on the horizontal surface, fully bonded on the vertical surface. The overlap of the membrane shall have minimum of 40mm side and end laps, which shall be hot air welded with automatic and manually operated heat welded machine as per site condition and should work wind upliftment according to UL and FM requirement.
- The overlap of the cut membrane ends should be sealed with the sealant.

Vertical Surface:

- The membrane should be fully bonded on the verticle surface by applying bonding contact adhesive on the Parapet wall as well as on the Dr. Fixit Flexshield Fleece back TPO membrane to make fully adhere to the wall. Allow the adhesive to dry until it is tacky but will not string or stick to a dry finger. The membrane shall then be rolled on the coated substrate avoiding any wrinkles. The size of the laid sheet should be as large as possible to minimize the number of joints.
- Adjoining membrane sheets shall be similarly installed with overlapping edges of 40mm side and end laps which shall be hot air welded with automatic heat welded machine & the end should be sealed with sealant.
- The vertical edge should be filled with sealant cum bonding adhesive and terminated with aluminium termination bar and fasteners 200 above the slope screed level and sealed with sealant.

Technical Information

PHYSICAL PROPERTY	TEST METHOD	ASTM D6878 SPEC.(MIN.)	TEST Values
Tolerance on Nominal Thickness, %	ASTMD751	± 10%	± 10%
Thickness over Fleece, min 115-mil (2.92 mm)			0.06 (1.52)
Weight lbm/ft² 115-mil			0.33
Breaking Strength, Min, lbf (KN) 115-mil	ASTMD751 Grab Method	220(1)	450 (2)
Elongation at break of internal fabric, %	ASTMD751	15	25
Tearing Strength, min, lbf(N) 115-mil	ASTMD751 B Tongue Tear	55 (245)	100 (445)
Puncture Resistance, lbf 115-Mil	FTM 101C Method 2031		300
Brittleness point, max, °F (°C)	ASTMD2137	-40(-40)	-50(-46)
Linear Dimensional Change, %	ASTMD1204	± 1 max	-0.2 typical
Field Seam strength, lbf/in.(kN/m ASTMD1876 tested in peel 115-mil	ASTMD1876	25 (4.4)	60 (10.5)
Water Vapor Permeanse, Perms	ASTM E96 Proc B		0.10 Max 0.05 typical
Resistance to Microbial Surface Growth, Rating (1 is very poor, 10 is no growth	ASTMD3274		9-10 typical
Properties after heat aging- ASTMD573, 670 hrs.@240°F Breaking Strength, % retained Elongation reinf, % retained Weight Change, %	ASTMD573	 - - - -	 90 min 90 min 60 min ± 1.0 max
Resistance to Water Absorbtion After 7 days immersion @ 158°F (70°C) Change in mass, max, % (one side)	ASTMD471	± 3.0	0.90

Precautions & Limitations

- Use proper stacking procedures to ensure sufficient stability.
- Exercise caution when walking on wet membrane.
- UV-resistant sunglasses are required when working with Dr. Flexshield Fleece back TPO membranes.
- White surfaces reflect heat and may become slippery due to water accumulation.
- Dr. Flexshield Fleece back TPO membrane rolls must be covered and elevated to keep dry prior to installation. If the fleece gets wet, remove moisture from the fleece. DO NOT INSTALL MEMBRANE IF FLEECE IS WET.
- Dr. Flexshield Fleece back TPO membrane exposed to the weather must be prepared with Weathered Membrane Cleaner prior to hot-air welding.

Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals

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