



PO Box 6256
 Mobile AL, 36606
 1-800-771-6643

PRODUCT DATA SHEET

TPO Membrane

45 mil

60 mil

DESCRIPTION

TPO membrane is a high quality thermoplastic polyolefin. This white reflective membrane offers the proven flexibility and weathering resistance of rubber and the performance of hot-air welded thermoplastic seams. It meets or exceeds all of the requirements for ASTM D 6878-03. The membrane is reinforced with a 9 x 9, 1000 denier polyester fabric.

INSTALLATION

TPO may be installed as a mechanically attached, a fully adhered, or a ballasted system. Please consult current WeatherStar TPO specifications for specific application needs.

PRODUCT DATA

AVAILABLE COLORS & SIZES	
White	Grey
4' X 100' (1.22 m X 30.48 m)	4' X 100' (1.22 m X 30.48 m)
6.16' X 100' (1.88 m X 30.48 m)	8' X 100' (2.43 m X 30.48 m)
8' X 100' (2.43 m X 30.48 m)	Tan
10' X 100' (3.05 m X 30.48 m)	4' X 100' (1.22 m X 30.48 m)
12.33' X 100' (3.76 m X 30.48 m)	8' X 100' (2.43 m X 30.48 m)

LEED INFORMATION

Reflectivity, % (ASTM C 1549):	
White:	78
Grey:	47
Tan:	65
Emissivity (ASTM C 1371):	
White, Grey, Tan:	0.90 (All colors)
Manufacturing Location:	Tuscumbia, AL



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PREPARATION OF SUBSTRATES

Substrates must be clean, dry, smooth, and free of sharp edges, fins, loose or foreign materials, oil, grease, or other materials which may damage the membrane.

All rough surfaces which could damage the membrane shall be repaired as specified to offer a smooth substrate.

All surface voids greater than 1/4" (6.35 mm) wide shall be properly filled with an acceptable material.

STORAGE

Store in original, unopened packaging and away from sources of punctures and physical damage.

Assure that structural decking will support the loads incurred by the material stored on roof top. The deck load limitations should be specified by the project designer.

SHELF LIFE

Not applicable.

PRECAUTIONARY DATA

- To avoid sources of punctures and physical damage, take care when moving, transporting, or handling.
- Waste products such as petroleum products, greases, animal fats, and oils (mineral and vegetable) should be isolated from the membrane.
- Material Safety Data Sheet available upon request.

WARRANTY

American WeatherStar warrants that the material supplied will meet or exceed physical properties as published. The contractor guarantees that workmanship will be free of defects in coating application. Since performance of previously installed substrate is beyond the control of American WeatherStar or the contractor, requests for additional warranty coverage shall be subject to prior approval by American WeatherStar.



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PHYSICAL PROPERTIES

PROPERTY	ASTM TEST METHOD	MINIMUM	TYPICAL VALUES
Thickness, min., mil (mm):	ASTM D 751	39 (0.99)	45 (1.14) 60 (1.52)
Thickness over scrim, mil (mm): 45 (1.14): 60 (1.52):	ASTM D 6878 Annex A1	12 (0.31)	15 (0.38) 22 (0.56)
Breaking Strength, min., lbf (N):	ASTM D 751	220 (976)	330 (1500)
Elongation at Reinforcement Break, min., %:	ASTM D 751	15	30
Tearing Strength, min., lbf (N):	ASTM D 751	55 (245)	156 (694)
Brittleness Point, max, °F (°C):	ASTM D 2137 Method B	-40 (-40)	-49 (-45)
Ozone Resistance, No Cracks	ASTM D 1149	Pass	Pass
Properties After Heat aging: (retained values):	ASTM D 573		
Breaking Strength, % min.:	ASTM D 751	90	90
Elongation at Reinforcement Break, % min:	ASTM D 751	90	90
Tearing Strength, % min.:	ASTM D 751	60	60
Weight Change (mass), max %:	ASTM D 751	±1	-0.02
Linear Dimensional Change, max, %:	ASTM D 1204	±1	-0.01
Water Absorption, max, mass %:	ASTM D 471	±3	+1.2
Factory Seam Strength, lbf (N):	ASTM D 751	66 (290)	75 (330)
Accelerated Weathering:	ASTM G 151 ASTM G 155	Pass	Pass
Water Vapor Permeance – Perm:	E 96	N/A	0.0122
Puncture Resistance – lbf (N):	FTM 101C Method 2031	200 (890)	337 (1500)