

EverGuard® Fleece-back TPO 80 mil Membrane Sell Sheet

Updated: 9/15



*Quality You Can Trust...From
North America's Largest Roofing Manufacturer!™*



EverGuard[®]TPO (Fleece-back) SINGLE-PLY ROOFING SYSTEMS

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Quality You Can Trust... From North America's Largest Roofing Manufacturer![™]

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Why TPO

- Great Value—Superior performance at a cost-effective price
- Superior Seam Strength—Heat-welded seams provide greater seam strength to taped and other seams
- Long-Term Weathering—Excellent long-term heat and UV resistance
- Energy-Saving—Highly reflective and emissive white roof can help reduce energy costs and urban heat island effect
- Versatile Application Method

Why GAF EverGuard[®] Fleece-back TPO

- Factory-applied polyester fleece provides additional protection to the membrane, offering a variety of benefits, including:
 - Does not require a slip sheet when recovering over a variety of roofs
 - Provides enhanced puncture resistance, especially in areas more prone to hail
- Increases installation efficiency 2–3 times when installing EverGuard[®] Fleece-back TPO with GAF 2-Part Roofing Adhesive (compared to standard TPO adhesives)
- Outperforms standard TPO in heat aging and UV tests—the best predictors of TPO performance
 - After accelerated heat aging at 275°F (135°C) for 105 days, EverGuard[®] Fleece-back TPO showed no cracking—while every one of the competitors' samples had failed!
 - UV testing—greater than 2.5 times the industry standard (ASTM D6878 weather resistance test)
- Guarantees are available up to 30 years when using EverGuard[®] Fleece-back TPO 80 mil Membrane*
- Easier to install due to:
 - Large welding window
 - Most complete line of accessories
 - 10' (3.05 m) wide sheets

Installation

EverGuard[®] Fleece-back TPO can be installed with a wide range of applications:

- Mechanically Attached Application...for a quick and cost-effective system that can be installed practically year-round.



- Adhered Application... can be installed with EverGuard[®] WB181 Bonding Adhesive (water based) or hot asphalt for the smoothest appearance. Provides superior wind uplift performance.
- LRF-O Adhesive... two-part low-rise polyurethane foam adhesive that is low VOC and accommodates minor surface irregularities. Available in a cartridge or 5-gallon container.
- LRF-M Adhesive... two-part low-rise polyurethane foam adhesive that is low VOC and accommodates minor surface irregularities. Can also be used for ISO insulation applications. Available in a cartridge or 5-gallon container.
- 2-Part Roofing Adhesive... self-contained low-rise foam dispensing kit offering 20 squares per kit so there are fewer changeovers. Cost effective since you don't need spray equipment and no downtime/maintenance worries. Can also be used for ISO insulation applications.

Accessories

Field fabrication of TPO accessories is time-consuming, costly, and inconsistent, and can lead to unreliable details that compromise a watertight roofing system. EverGuard[®] TPO prefabricated accessories deliver consistent quality and eliminate the worry and problems often associated with field fabrication. They can also boost productivity up to 200%,** while reducing installed cost by up to 12%.

*See applicable guarantee for complete coverage and restrictions.
**Based on GAF estimate to field-fabricate flashing details.



U.S. only



California Title 24 Compliant



TPO membranes meet the performance requirements of ICC ER-6030

EverGuard® Fleece-back TPO 80 mil Membrane

Applicable Standards

UL approved for use in the construction of Class A, B, or C roofs; FM Approved, Miami-Dade County Approved, Florida Building Code Approved, CRRC Listed, Title 24 Compliant*, ENERGY STAR® Qualified**, ASTM D6878.

Physical Properties	ASTM Test Method	ASTM D6878 Minimum	EverGuard® Typical Test Data
1. Certain data is provided in MD (machine direction) x CMD (cross machine direction) format. 2. Data is based upon typical product performance, and is subject to normal manufacturing tolerance and variance.			
Nominal Thickness	ASTM D751	0.039" (min.) [0.99 mm]	0.080" [2.03 mm]
Breaking Strength	ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	440 lbf x 390 lbf (656 x 581 kg/m)
Factory Seam Strength	ASTM D751	66 lbf (98.34 kg/m)	155 lbf (membrane failure) (231 kg/m)
Elongation at Break	ASTM D751	15%	30%
Heat Aging	ASTM D573	90% Retention of Breaking Strength and Elongation at Break	100%
Tear Strength	ASTM D751 8" x 8" [203 x 203 mm] Sample	55 lbf (81.95 kg/m)	100 lbf x 180 lbf (149 x 268 kg/m)
Puncture Resistance	FTM 101C Method 2031	Not Established	>380 lbs. (172 kg)
Cold Brittleness	ASTM D2137	-40°C	-40°C
Permeance	ASTM E96	Not Established	0.08 Perms
Dimensional Change	ASTM D1204 @158°F (70°C), 6 hrs.	+/-1%	0.4%
Water Absorption	ASTM D471 @158°F (70°C), 1 week	+/-3.0%	0.7%
Hydrostatic Resistance	ASTM D751 Method D	Not Established	430 psi
Ozone Resistance	ASTM D1149	No visible deterioration @ 7 x magnification	No visible deterioration @ 7 x magnification
Reflectivity (white) Initial/Aged	ASTM C1549	N/A	0.76/0.68
Emissivity (white) Initial/Aged	ASTM C1371	N/A	0.90/0.83
Weather Resistance	ASTM G155/D6878	10,080 KJ/[m ² · nm] at 340 nm	>25,000 KJ/[m ² · nm] at 340 nm
Heat Aging	ASTM D573	240°F (115°C) for 32 weeks	60 weeks
Thickness Above Scrim	ASTM D7635	Min 30% of Total Thickness	31.4 mil (Nominal)
Guarantee			
Up to 30 years			

*White Membrane Only

**ENERGY STAR® only valid in the USA

Product Data

Roll Size	Note: Product sizes, dimensions, and widths are nominal values and are subject to normal manufacturing/packaging tolerance and variation.				
	Colors	Full Size Roll	Full Roll Weight	Half Roll Size	Half Roll Weight
	White, Tan, Gray	10' x 50' (3.05 x 15.24 m) (500 sq. ft. [46.5 sq.m])	238 lbs. (108 kg)	5' x 50' (1.52 x 15.24 m) (250 sq. ft. [23.23 sq.m])	112 lbs. (51 kg)
Note: Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded.					
Storage	Store rolls on their sides on pallets or shelving in a dry area.				
Safety Warning	Membrane rolls are heavy. Position and install by at least two people.				