

EverGuard® TPO 45 mil Membrane Information Sheet

Updated: 6/18



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



EVERGUARD® TPO

MEMBRANE

45 MIL

Why TPO

- Great Value—Excellent performance at a cost-effective price
- Excellent 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
- CREST Energy Savings Calculator—See your potential savings at cool.gaf.com
- Versatile Application Method

Why GAF EverGuard® TPO

- 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® 60 mil 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 20 years when using EverGuard® TPO 45 mil Membrane.*
- Easier to install due to:
 - Large welding window
 - Most complete line of accessories
 - 10' (3.05 m) wide sheets

Installation

EverGuard® TPO 45 mil Membrane is suitable for all types of single-ply systems:

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



Fall River Courthouse, Fall River, Massachusetts

- RhinoBond® Application...can be applied without using adhesives and installed practically year round. Qualifies for the same guarantee length as an adhered system.*
- Adhered Application...can be installed with EverGuard® 1121 Bonding Adhesive (solvent-based), EverGuard® Low VOC Adhesive, or EverGuard® WB181 Bonding Adhesive (water-based) for the smoothest appearance. Provides excellent wind uplift performance.

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.

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U.S. only



California Title 24 Compliant



TPO membranes meet the performance requirements of ICC ER-6030

EverGuard® TPO 45 mil Membrane

Applicable Standards

UL Listed, FM Approved, Miami-Dade County Product Control Approved, State of Florida Approved, CRRC Rated, Title 24 Compliant*, ENERGY STAR® Certified**, 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)	0.045" (1.14 mm)
Breaking Strength	ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	280 lbf x 270 lbf (417.2 x 402.3 kg/m)
Factory Seam Strength	ASTM D751	66 lbf (98.34 kg/m)	110 lbf (membrane failure) (163.9 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 120 lbf (149 x 178.8 kg/m)
Puncture Resistance	FTM 101C Method 2031	Not Established	290 lb. (131 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% max.	0.7%
Hydrostatic Resistance	ASTM D751 Method D	Not Established	380 psi
Ozone Resistance	ASTM D1149	No visible deterioration @ 7 x magnification	No visible deterioration @ 7 x magnification
SRI (Solar Reflectance Index) Initial/Aged	N/A	N/A	94/81 83 Aged Title 24
Reflectivity (white) Initial/Aged	ASTM C1549 ASTM E903	N/A N/A	0.76/0.68 81.9% Reflectance
Emissivity (white) Initial/Aged	ASTM C1371 ASTM E403	N/A N/A	0.90/0.83 0.94
Weather Resistance	ASTM G155/D6878	10,080 KJ/(m ² · nm) at 340 nm	>20,000 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	15.8 mil (Nominal)
Guarantee			
Up to 20 years			

*White Membrane Only

**ENERGY STAR® only valid in the U.S.

Product Data

Roll Size	5' x 100'	6' x 100'	8' x 100'	10' x 100'	12' x 100'
	(1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	(1.83 x 30.5 m) (600 sq. ft. [55.74 sq.m])	(2.44 x 30.5 m) (800 sq. ft. [74.3 sq.m])	(3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	(3.65 x 30.5 m) (1,200 sq. ft. [111.484 sq.m])
Roll Weight	128 lb. (58.1 kg)	153.6 lb. (69.7 kg)	204 lb. (93 kg)	256 lb. (116.1 kg)	307.2 lb. (139.3 kg)
Colors	White, Tan, Gray				
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.				
Note:	Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded. Product sizes, dimensions, and widths are nominal values and are subject to normal manufacturing/packaging tolerance and variation.				

RhinoBond® is a registered trademark of OMG.



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