

EverGuard® TPO 45 mil Membrane Sell Sheet

Updated: 9/15



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



EverGuard[®] TPO

SINGLE-PLY ROOFING SYSTEMS

MEMBRANE



Fall River Courthouse, Fall River, Massachusetts

Why TPO

- Great Value—Superior 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[®] 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.
- 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 superior 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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gaf.com



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 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]	0.045" [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 lbs. (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
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/[m² · nm] at 340 nm	>20,000 kJ/[m² · 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 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 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	256 lbs. (116 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	128 lbs. (58 kg)
		8' x 100' (2.44 x 30.5 m) (800 sq. ft. [74.3 sq.m])	204 lbs. (93 kg)	4' x 100' (1.21 x 30.5 m) (400 sq. ft. [37.1 sq.m])	102.4 lbs. (46 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.				