

EverGuard® TPO 80 mil Membrane Information Sheet

Updated: 6/18



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



EVERGUARD® TPO

MEMBRANE

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MEMBRANE

80

80

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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 30 years when using EverGuard® 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® TPO 80 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.



California Title 24 Compliant



TPO membranes meet the performance requirements of ICC ER-6030

EverGuard® TPO 80 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) | 0.080" (2.03 mm) |
| Breaking Strength | ASTM D751 Grab Method | 220 lbf/in. (38.5 kn/m) | 335 lbf x 320 lbf (499 x 477 kg/m) |
| Factory Seam Strength | ASTM D751 | 66 lbf (98.34 kg/m) | 160 lbf (membrane failure) (238.4 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) | 65 lbf x 160 lbf (96.85 x 238.4 kg/m) |
| Puncture Resistance | FTM 101C Method 2031 | Not Established | >380 lb. (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 |
| 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 | >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 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 | 210 lb. (95.3 kg) | 252 lb. (114.3 kg) | 336 lb. (152.4 kg) | 420 lb. (190.5 kg) | 504 lb. (228.6 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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