GAF®

MEMBRANE

50MIL

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

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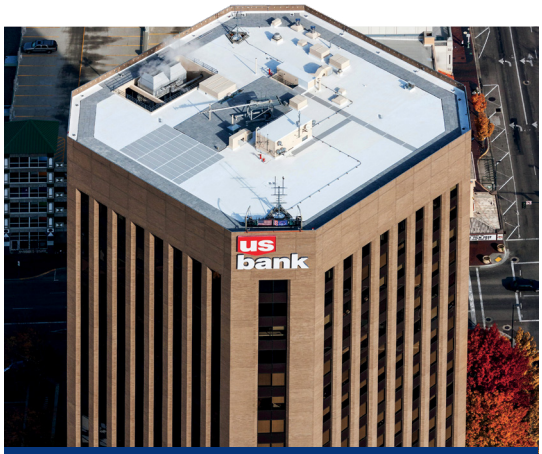
EverGuard EXTREME®

Advanced Protection® TPO



U.S. Bank Building, Boise, Idaho

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 Extreme® TPO

- Get the performance beyond a 60 mil TPO in a 50 mil product!
- Best performing TPO in heat aging and UV tests–the best predictors of TPO performance
  - After accelerated heat aging at 275°F (135°C) for 190 days, EverGuard Extreme® TPO showed no cracking—while every one of the competitors' samples had failed!
  - UV testing–Greater than 4.6x the industry standard (ASTM D6878 weather resistance test)
- Guarantees are available up to 25 years when using EverGuard® TPO 50 mil Membrane*
- High 3-year aged reflectance of 0.72 can help reduce energy costs
- Easier to install due to:
  - Large welding window
  - Most complete line of accessories
  - 10' (3.05 m) wide sheets

Installation

EverGuard Extreme® TPO 50 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 TPO Bonding 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 Extreme® 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.

LEARN MORE AT energystar.gov
U.S. only

California Title 24 Compliant

FM APPROVED

CLASSIFIED UL

MIAMI-DADE COUNTY APPROVED

TPO membranes meet the performance requirements of ICC ER-6030

EverGuard Extreme® TPO 50 mil Membrane

Applicable Standards

UL Listed, FM Approved, ASTM D6878, Title 24 Compliant, Miami-Dade County Approved, Florida Building Code Approved, ENERGY STAR® Qualified.*

Physical Properties	ASTM Test Method	ASTM D6878 Minimum	EverGuard Extreme® 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)	0.050" (1.27 mm)
Breaking Strength	ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	305 lbf x 290 lbf (454 x 432.1 kg/m)
Factory Seam Strength	ASTM D751	66 lbf (98.34 kg/m)	150 lbf (223.5 kg/m) (membrane failure)
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)	70 lbf x 110 lbf (104.3 x 163.9 kg/m)
Puncture Resistance	FTM 101C Method 2031	Not Established	380 (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% (top coating only)	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	0.835/0.72
Emissivity (white) Initial/Aged	ASTM C1371	N/A	0.84/0.91
Weather Resistance	ASTM G155/D6878	10,080 KJ/(m^2 · nm) at 340 nm	>46,000 KJ/(m^2 · nm) at 340 nm
Heat Aging	ASTM D573	240°F (115°C) for 32 weeks	128 weeks
Thickness Above Scrim	ASTM D7635	Min 30% of Total Thickness	17.9 mil (Nominal)
Guarantee			
Up to 25 years			

*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	10' x 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	271 lbs. (123 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	136 lbs. (61.7 kg)
		8' x 100' (2.44 x 30.5 m) (800 sq. ft. [74.3 sq.m])	217 lbs. (98.4 kg)	4' x 100' (1.21 x 30.5 m) (400 sq. ft. [37.1 sq.m])	108 lbs. (49 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.				

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