



# EverGuard EXTREME<sup>®</sup>

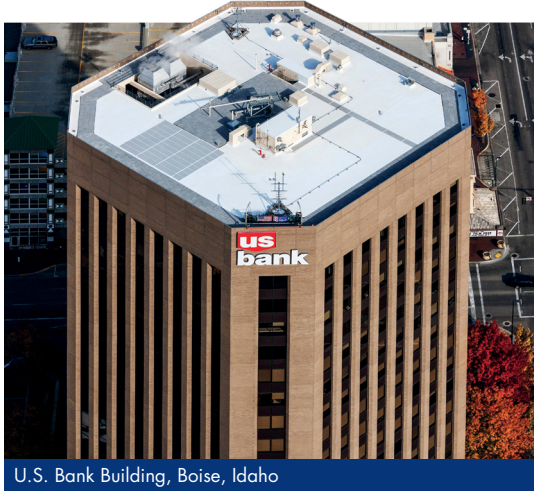
Advanced Protection<sup>®</sup> TPO

MEMBRANE

11 MILLION 80

Quality You Can Trust... From North America's Largest Roofing Manufacturer!<sup>™</sup>

[gaf.com](http://gaf.com)



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](http://cool.gaf.com)
- Versatile Application Method

## Why GAF EverGuard Extreme<sup>®</sup> TPO

- 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<sup>®</sup> 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)

- Longest guarantee in the industry available up to 35 years when using EverGuard Extreme<sup>®</sup> TPO 80 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<sup>®</sup> 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.
- RhinoBond<sup>®</sup> 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<sup>®</sup> 1121 Bonding Adhesive (solvent-based), EverGuard<sup>®</sup> Low VOC TPO Bonding Adhesive, or EverGuard<sup>®</sup> WB181 Bonding Adhesive (water-based) for the smoothest appearance. Provides superior wind uplift performance and qualifies for the longest guarantee available.\*

## Accessories

Field fabrication of TPO accessories is time-consuming, costly, and inconsistent, and can lead to unreliable details that compromise a water-tight roofing system. EverGuard Extreme<sup>®</sup> 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 Extreme® TPO 80 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]	0.080" [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)	165 lbf (456 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)	60 lbf x 150 lbf (89.4 x 223.5 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%	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 <sup>2</sup> · nm] at 340 nm	>46,000 kJ/[m <sup>2</sup> · 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	31.5 mil (Nominal)
<b>Guarantee</b>			
Up to 35 years			

\*ENERGY STAR® only valid in the USA

## Product Data

<b>Roll Size</b>	Note: Product sizes, dimensions, and widths are nominal values and are subject to normal manufacturing/packaging tolerance and variation.				
	<b>Colors</b>	<b>Full Size Roll</b>	<b>Full Roll Weight</b>	<b>Half Roll Size</b>	<b>Half Roll Weight</b>
	White	10' x 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	420 lbs. (191 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	210 lbs. (95 kg)
Note: Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded.					
<b>Storage</b>	Store rolls on their sides on pallets or shelving in a dry area.				
<b>Safety Warning</b>	Membrane rolls are heavy. Position and install by at least two people.				