

EverGuard
GAF Extreme TPO
 Fleece-Back Membrane

50, 60, 70, 80 mil



Description:

Durable. Efficient. Proven. GAF knows thermoplastic polyolefin (TPO). In fact, we've sold more than 6 billion square feet. GAF has been producing TPO for more than 20 years and operates 5 manufacturing plants around the United States.

GAF EverGuard Extreme® TPO Fleece-Back Membrane includes an enhanced weathering package that allows GAF to offer a guarantee of up to 35 years*, the longest in the industry.

GAF EverGuard Extreme® TPO leads the industry with the highest reflectivity, emissivity, and SRI of available TPO membranes (white only) based on published CRRC ratings.

Integral polyester fleece backing lets you offer the proven performance of EverGuard Extreme® TPO, while increasing durability and reducing labor:

- Great for high-heat and solar applications.
- Suitable for re-cover applications or where strong protection against foot traffic, punctures, and hail* is paramount
- Offers inherent flexibility, excellent heat-sealable properties, long-term heat and UV resistance, and fungal resistance,†
- GAF EverGuard Extreme® TPO is the leader in the industry with the highest reflectivity, emissivity, and SRI of available TPO membranes (white only).
- Does not require a slip sheet when installed over a variety of existing roof systems
- Guarantees available with coverage up to 35 years‡

EverGuard Extreme® TPO Fleece-Back Membrane comes in 4 different thicknesses to fit a variety of needs

- **50 mil** — Get the warranty of a standard 60 mil TPO with the benefit of the Extreme® heat aging package.
 - **Labor-Saving Tip:** GAF EverGuard Extreme® TPO Fleece-Back Membrane 50 mil can be installed without T-Joint patches and still qualify for 25-year guarantee, unlike 60 mil TPO membrane

- **60 mil** — Can qualify for warranties up to 30 years when installing qualifying adhered and induction-welded systems
- **70 mil** — qualifies for a 30-year guarantee the same as a standard 80 mil TPO
- **80 mil** — Qualifies for guarantees up to 35 years, the longest in the industry

Installation:

Explore installation options. EverGuard Extreme® TPO Fleece-Back Membrane can be installed with a wide range of applications:

- **Mechanically attached** — quick, cost-effective, and available practically year-round
- **Adhered** — effective with EverGuard® WB 181 Bonding Adhesive (water-based) or hot asphalt for a smooth appearance and excellent wind uplift
- **LRF Adhesive O** — low-rise foam that's low-VOC, suitable for minor surface irregularities, and available in a cartridge or 5-gallon container
- **LRF Adhesive M** — low-rise foam that's similar to LRF-O and can also be used for ISO insulation applications
- **GAF LRF Adhesive XF** — 2-part low-rise foam that's low-VOC, suitable for minor or surface irregularities, and can adhere up to 24 squares of Fleece-Back Membrane
- **OlyBond500® Adhesive Fastener** — 2-part low-rise foam that's low-VOC, suitable for minor surface irregularities, and can adhere up to 24 squares of Fleece-Back Membrane

For TPO membrane rolls only§:



MADE IN THE U.S.A.
 WITH DOMESTIC AND IMPORTED MATERIALS.
 AMERICAN JOBS IN AMERICAN FACTORIES.

* GAF warranties and guarantees do not provide coverage against traffic except where GAF walkways are applied, or against hail or other impact. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions. Hail or puncture resistance coverage may be available for purchase for eligible systems. Contact GAF for more information.

† Meets ASTM G21. GAF warranties and guarantees do not provide coverage against fungi or other biological growth. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.

‡ Additional requirements apply. Contact GAF for more information. See applicable guarantee, available at gaf.com, for complete coverage and restrictions.

§ Excludes TPO accessories.

Easy-to-Install Accessories:

Fabricating details on-site can be time-consuming, costly, inconsistent, and even unreliable. EverGuard® TPO prefabricated accessories save you time and labor, deliver consistent performance, and create a uniform aesthetic.

EverGuard Extreme® TPO Split Pourable Sealer Pocket



The low-profile design requires less sealant and can be cut down to size to more tightly fit around penetrations.

EverGuard Extreme® TPO Vent Boot



One standard size of the molded membrane Vent Boot accommodates 1"- 6" (25.4 mm - 152 mm) pipes and conduits. Vent Boots come with stainless steel clamping rings for the top of the penetration.

EverGuard Extreme® TPO Corner Wrap



Constructed from proven, durable EverGuard Extreme® TPO single-ply reinforced membrane and available in four convenient sizes from 13.5" (343 mm) to 31.5" (800 mm).



See our complete line of time-saving prefabricated TPO Accessories

For additional information, contact GAF Design Services at **1-877-423-7663** or designservices@gaf.com

We protect what matters most™

GAF

50, 60, 70, 80 mil

Physical Properties (ASTM D 6878-21) — See notes below¹

Type	ASTM Test Method	ASTM Minimum Values	EverGuard Extreme® TPO Fleece-Back Membrane Test Values (approx.) ²			
			50	60	70	80
TPO Nominal Thickness	ASTM D751	0.039"	0.049" (1.24 mm)	0.056" (1.42 mm)	0.066" (1.68 mm)	0.076" (1.93 mm)
Thickness over Scrim	ASTM D7635	0.015"	20 mil (nominal)	25 mil (nominal)	27 mil (nominal)	33 mil (nominal)
Breaking Strength	ASTM D751 Grab Method MD	220 lbf	480 lbf x 415 lbf (714 x 618 kg/m)	500 lbf x 425 lbf (744 x 632 kg/m)	545 lbf x 465 lbf (811 x 692 kg/m)	570 lbf x 490 lbf (848 x 729 kg/m)
Elongation at Break	ASTM D751	15%	30.60%	30.20%	31.80%	30.60%
Tear Strength	ASTM D751 (8" x 8" Sample)	55 lbf	95 lbf x 160 lbf (141 x 238 kg/m)	80 lbf x 162 lbf (119 x 241 kg/m)	62 lbf x 155 lbf (92 x 231 kg/m)	75 lbf x 165 lbf (112 x 246 kg/m)
Brittleness Point	ASTM D2137	-40°F	-40°F			
Ozone Resistance	ASTM D1149	No cracks @ 7x magnification	Pass	Pass	Pass	Pass
Properties after Heat Aging	ASTM D573	≤1.5% Weight change after 8 weeks @ 275°F; No cracks @ 7x magnification	Pass	Pass	Pass	Pass
Linear Dimensional Change	ASTM D1204	±1%	0.39%	0.22%	0.27%	0.16%
Water Absorption	ASTM D471	±3%	0.14%	0.14%	0.38%	0.17%
Factory Seam Strength (Membrane Failure)	ASTM G751	66 lbf	127 lbf (189 kg/m)	145 lbf (216 kg/m)	155 lbf (231 kg/m)	157 lbf (234 kg/m)
Weather Resistance	ASTM G155	10,080 kJ/m ² at 340 nm; No cracks @ 7x magnification	>48,000 kJ/m ²	>51,000 kJ/m ²		

¹ Certain data is provided in MD (machine direction) x CMD (cross machine direction) format.

² Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide.

Additional Physical Properties: Testing and Aging

Puncture Resistance	FTM 101C Method 2031	Not Established	570 lb. (259 kg)	605 lb. (274 kg)	505 lb. (229 kg)	660.5 lb. (300 kg)
Accelerated UV Exposure	UAWS	Total radiation @ 8400 MJ/m ² UV, no cracking	Pass	Pass	Pass	Pass

Guarantee*

Guarantees up to	25 Years	30 Years	30 Years	35 Years
------------------	----------	----------	----------	----------

* Additional requirements apply. Contact GAF for more information. See sample guarantees at gaf.com for complete coverage and restrictions.

Sustainability Ratings/Certifications

Cool Roof Rating Council (CRRC)							
Color	Rated Product ID#	Initial			Aged		
		Solar Reflectance (ASTM C1549)	Thermal Emittance (ASTM C1371)	Solar Reflectance Index (ASTM E1980)	Solar Reflectance (ASTM C1549)	Thermal Emittance (ASTM C1371)	Solar Reflectance Index (ASTM E1980)
White	0676-0094	0.83	0.84	104	0.72	0.91	90

LEED Information

Manufacturing Locations	Mount Vernon, IN	New Columbia, PA	Cedar City, UT
-------------------------	------------------	------------------	----------------

Note: Product-specific EPD contributes toward satisfying Environmental Product Declaration credit under LEED®.

Applicable Standards/Approvals



CRRC Rated — Can be used to comply with Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations (white only).

	FM Approved (Refer to roofnav.com for actual assemblies.)	UL ER1 306-01
	Miami-Dade County Product Control Approved (Cedar City, UT, Mt Vernon, IN only)	Texas Department of Insurance Report RC-122
	Classified by UL in accordance with ANSI/UL790. Refer to UL Product iQ for specific assemblies.	State of Florida Approved

Product Data

Roll Size	10' Roll Size	10' Roll Weight (Average)	5' Roll Size	5' Roll Weight (Average)
EverGuard Extreme® TPO Fleece-Back Membrane 50 mil	10' x 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	350 lb. (159 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	180 lb. (82 kg)
EverGuard Extreme® TPO Fleece-Back Membrane 60 mil	10' x 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	322 lb. (146 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	162 lb. (73.5 kg)
EverGuard Extreme® TPO Fleece-Back Membrane 70 mil	10' x 100' (3.05 x 30.5 m) (1,000 sq. ft. [92.9 sq.m])	450 lb. (204 kg)	5' x 100' (1.52 x 30.5 m) (500 sq. ft. [46.5 sq.m])	225 lb. (102 kg)
EverGuard Extreme® TPO Fleece-Back Membrane 80 mil	10' x 50' (3.05 x 15.24 m) (500 sq. ft. [46.5 sq.m])	230 lb. (104 kg)	5' x 50' (1.52 x 15.24 m) (250 sq. ft. [23.23 sq.m])	116 lb. (53 kg)
Colors	White, Energy Gray (Cedar City only)			
Storage	Store on pallets in a clean, dry area at temperatures below 100°F (38°C).			
Safety Warning	Membrane rolls are heavy. Employ at least two people to position and install.			

Note: Membrane rolls shipped horizontally on pallets, stacked pyramid-style, and banded.



Visit gaf.com

For additional information, contact GAF Design Services at 1-877-423-7663 or designservices@gaf.com