EverGuard Extreme®

GAF TPO Fleece-Back Membrane

50, 60, 70, 80 mil

Durable. Efficient. Proven.

GAF knows thermoplastic polyolefin (TPO). In fact, we've sold more than 7 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

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

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

Easy-to-Install Accessories:

EverGuard™ TPO prefabricated accessories save you time and labor, deliver consistent performance, and create a uniform aesthetic.

EverGuard Extreme™ TPO Heat-Weldable Cover Tape

Constructed from EverGuard Extreme® reinforced 45-mil membrane TPO, with a 3" self adhered area and a 3" heat-weldable area.

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 Scuppers

Manufactured with TPO-coated metal and unreinforced membrane for use in waterproofing wall scuppers, eliminating unnecessary flashing to waterproof the wall opening.

See our complete line of time-saving prefabricated TPO Accessories

* 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.

MADE IN THE U.S.A.
WITH DOMESTIC AND IMPORTED MATERIALS.
AMERICAN JOBS IN AMERICAN FACTORIES.
For TPO membrane rolls only§

We protect what matters most™

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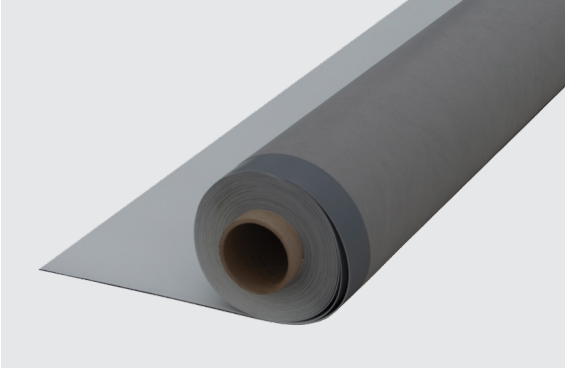

Physical Properties (ASTM D6878-21) — See notes below*

Type	ASTM Test Method	ASTM Minimum Values	EverGuard Extreme® TPO Fleece-Back Membrane Test Values (approx.)†			
			50 mil	60 mil	70 mil	80 mil
TPO Nominal Thickness	ASTM D751	0.039″	0.050" (1.27 mm)	0.060" (1.524 mm)	0.070" (1.78 mm)	0.080" (2.03 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 (978 N)	480 lbf x 415 lbf (2,135 x 1,846 N)	500 lbf x 425 lbf (2,224 x 1,890 N)	545 lbf x 465 lbf (2,424 x 2,068 N)	570 lbf x 490 lbf (2,535 x 2,180 N)
Elongation at Break	ASTM D751	15%	30.60%	30.20%	31.80%	30.60%
Tear Strength	ASTM D751 (8″ x 8″ Sample)	55 lbf (245 N)	95 lbf x 160 lbf (423 x 712 N)	80 lbf x 162 lbf (356 x 721 N)	62 lbf x 155 lbf (276 x 689 N)	75 lbf x 165 lbf (334 x 734 N)
Brittleness Point	ASTM D2137	-40°F (-40°F)	-40°F (-40°F)	-40°F (-40°F)	-40°F (-40°F)	-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 (135°C); 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 (294 N)	127 lbf (565 N)	145 lbf (645 N)	155 lbf (689 N)	157 lbf (698 N)
Weather Resistance	ASTM G155	10,080 kJ/m² at 340 nm; No cracks @ 7x magnification	>48,000 kj/m²	>51,000 kj/m²	>51,000 kj/m²	>51,000 kj/m²

Additional Properties

Puncture Resistance	FTM 101 C 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 @ 8,400 MJ/m2 UV, no cracking	Pass	Pass	Pass	Pass

Available Guarantees‡			Up to 25 Years	Up to 30 Years	Up to 30 Years	Up to 35 Years

* Certain data is provided in MD (machine direction) x CMD (cross machine direction) format.
† Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide.
‡ Additional requirements apply. Contact GAF for more information. See sample guarantees at gaf.com for complete coverage and restrictions.

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

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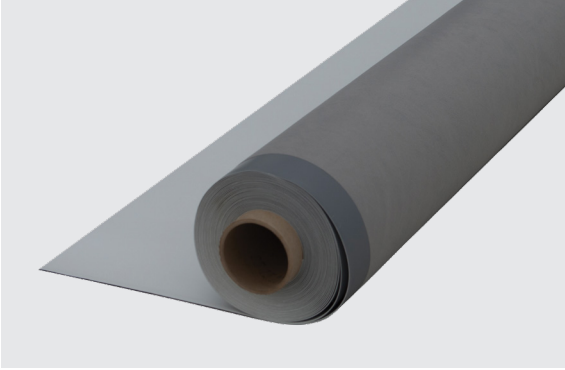

Sustainability Ratings/Certifications

The ratings below are subject to CRRC rating program conditions, requirements, and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating conditions, requirements, and limitations.

Product ID#	Type	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)
	ASTM Test Method	ASTM C1549	ASTM C1371	ASTM E1980
White 0676-0094	Initial	0.83	0.84	104
	Aged 3 yrs	0.72	0.91	90

LEED Information

Manufacturing Location	Mount Vernon, IN, New Columbia, PA, Cedar City, UT

Applicable Standards and Approvals

Classified by UL in accordance with ANSI/UL790, including Class A-rated roofing assemblies. Refer to UL Product iQ for specific assemblies.	FM Approved (Refer to roofnav.com for actual assemblies).	Miami-Dade County Product Control Approved
UL Evaluation Report UL ER1306-01	State of Florida Approved	Texas Department of Insurance Report RC-122

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

Product Data

Roll Size	50 mil	60 mil	70 mil	80 mil
10' Roll Size	10' x 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)	10' x 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)	10' x 50' (3.05 x 15.24 m) 500 sq. ft. (46.5 sq.m)	10' x 50' (3.05 x 15.24 m) 500 sq. ft. (46.5 sq.m)
10' Roll Weight (Average)	322 lb. (146 kg)	350 lb. (159 kg)	189 lb. (86 kg)	230 lb. (104 kg)
5' Roll Size	5' x 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)	5' x 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)	5' x 50' (1.52 x 15.24 m) 250 sq. ft. (23.32 sq.m)	5' x 50' (1.52 x 15.24 m) 250 sq. ft. (23.23 sq.m)
5' Roll Weight (Average)	162 lb. (73.5 kg)	180 lb. (82 kg)	95 lb. (43 kg)	116 lb. (53 kg)
Colors	White			
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.			

* CRRC Rapid Ratings: Interim laboratory-aged values that simulate naturally aged values and will be replaced by the measured three-year naturally aged values upon completion of the weathering process.
Product-specific EPD contributes toward satisfying Environmental Product Declaration credit under LEED®.
Membrane rolls shipped horizontally on pallets, stacked pyramid-style and banded.

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

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