



Durable. Efficient. Proven.

Short for thermoplastic polyolefin, TPO is a highly engineered single-ply roofing membrane that offers excellent performance at a cost-effective price. Heat-welded seams provide superior strength. TPO's long-term heat, UV, and natural fungal resistance*, plus flexibility without need for plasticizers, also make TPO a reliable low-slope roofing system. GAF EverGuard® TPO — which uses the same core formula installed on more than 7 billion square feet of roof tops — has been proven in the field for more than 20 years.

Features:

EverGuard® TPO offers the following:

- Endures 2 to 2.5 times the industry standard, depending on thickness, in the ASTM D6878 weather-resistance test
- Offers guarantees for eligible systems up to 20 years for 45 mil, 25 years for 60 mil, and 30 years for 80 mil†
- Available in 12' rolls to cover more area with fewer rolls and seams
- Allows for heat-welded seams that provide greater seam strength compared to taped and other seams
- Creates a highly reflective and emissive white roof that can help reduce cooling costs‡ and urban heat island effect. (White, Energy Tan and Energy Gray only).

TPO Field Study: As a relatively new roof technology, TPO performance was proven mostly in lab studies. So when real-world TPO systems started approaching 20-year marks, GAF acquired and analyzed EverGuard® TPO samples across the United States. We found 8- to 16-year-old TPO roofs to be performing well and in most

instances, meeting the current ASTM D 6878-19 requirements for new membranes. [Download](#) the study from GAF.com.

Installation:

EverGuard® TPO is suitable for all types of single-ply systems:

- **Mechanically Attached** — for a quick and cost-effective system that can be installed practically year-round.
- **Induction Welded** — can be applied without using adhesives and installed practically year round. Qualifies for the same guarantee length as an adhered system.†
- **Adhered** — can be installed with EverGuard™ TPO Quick Spray, EverGuard™ TPO Quick Spray LV50, EverGuard™ TPO Low VOC Bonding Adhesive, EverGuard™ TPO 3 Square Low VOC Bonding Adhesive, EverGuard™ TPO SBA 1121 Bonding Adhesive, or EverGuard™ WB 181 Bonding Adhesive for the smoothest appearance.

Help keep the membrane clean during installation:

EverGuard® TPO 60 mil and 80 mil smooth and EverGuard® Fleece-back 60 mil membranes are available with MembraneShield Temporary Dirt-Blocking Film — a monolayer protective sheet adhered to select GAF EverGuard® TPO membranes using a water-insoluble acrylic-based adhesive. The film is designed to be left on during installation of the roof and to be removed after installation is completed or up to 90 days after installation. Only EverGuard® TPO labeled "With MembraneShield Temporary Dirt-Blocking Film" includes this feature.

Easy-to-Install Accessories:

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

EverGuard™ TPO Primerless 6" Cover Tape

Self-adhering patent-pending Primerless EverGuard™ TPO 6" Cover Tape is non-reinforced TPO membrane backed with a butyl tape adhesive.



EverGuard™ 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™ 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™ TPO Scuppers

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



* 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.

‡ Energy cost savings are not guaranteed and the amount of savings may vary based on climate zone, utility rates, radiative properties of roofing products, insulation levels, HVAC equipment, efficiency, and other factors.



See our complete line of time-saving prefabricated TPO Accessories



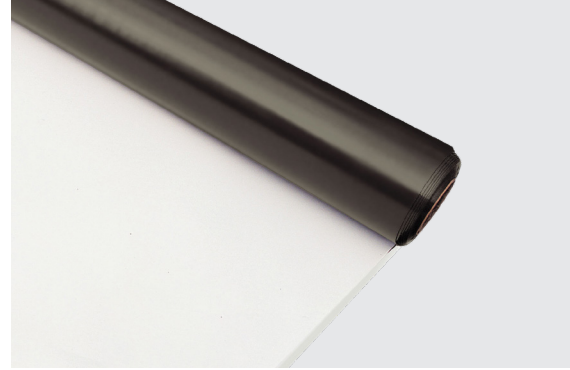
MADE IN THE U.S.A.
WITH DOMESTIC AND IMPORTED MATERIALS.
AMERICAN JOBS IN AMERICAN FACTORIES.

Declare.



We protect what matters most™

GAF



Physical Properties (ASTM D6878)

Type	ASTM Test Method	ASTM D6878 Minimum	EverGuard® TPO Test Values (approx.)*		
			45 mil	60 mil†	80 mil
TPO Nominal Thickness	ASTM D751	0.039"	0.045" (1.14 mm)	0.060" (1.52 mm)	0.080" (2.03 mm)
Thickness over Scrim	ASTM D7635	0.015"	15.8 mil (nominal)	24.1 mil (nominal)	31.4 mil (nominal)
Breaking Strength	ASTM D751 Grab Method MD	220 lbf (978 N)	375 lbf x 330 lbf (1,668 N x 2,188 N)	400 lbf x 360 lbf (1,779 N x 1,601 N)	440 lbf x 390 lbf (1,957 N x 1,735 N)
Elongation at Break	ASTM D751	15%	30%	30%	30%
Tear Strength	ASTM D751 (8" x 8" sample)	55 lbf (245 N)	90 lbf x 120 lbf (400 N x 534 N)	70 lbf x 130 lbf (311 N x 578 N)	100 lbf x 180 lbf (445 N x 801 N)
Brittleness Point	ASTM D2137	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)
Ozone Resistance	ASTM D1149	No cracks @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification
Properties after Heat Aging	ASTM D573	≤1.5% weight change after 8 weeks @ 275°F (135°C); No cracks @ 7X magnification	Pass	Pass	Pass
Linear Dimensional Change	ASTM D1204	±1%	0.2%	0.4%	0.4%
Water Absorption	ASTM D471	±3%	0.7%	0.7%	0.7%
Factory Seam Strength	ASTM D751	66 lbf (294 N)	115 lbf (512 N) (membrane failure)	145 lbf (645 N) (membrane failure)	155 lbf (689 N) (membrane failure)
Weather Resistance	ASTM G155	10,080 kJ(m²•nm) at 340 nm, No cracks @ 7x magnification	>20,000 kJ(m²•nm) at 340 nm	>25,000 kJ(m²•nm) at 340 nm	>25,000 kJ(m²•nm) at 340 nm

Additional Properties

Properties after Heat Aging	UAWS	Total radiation @ 8400 MJ/m² UV, no cracking	Pass	Pass	Pass
Puncture Resistance	FTM 101 C Method 2031	Not established	>350 lb. (159 kg)	>380 lb. (172 kg)	>380 lb. (172 kg)
Dynamic Puncture Resistance	ASTM D5635	Not established	17.5 J	25 J	37.5 J
Air Permeance	ASTM E2178	Not established	<0.02 L/(s•m²)	<0.02 L/(s•m²)	<0.02 L/(s•m²)
Permeance	ASTM E96	Not established	<0.08 Perms	<0.08 Perms	<0.08 Perms

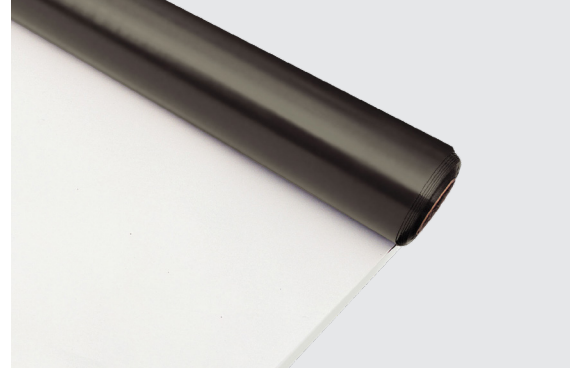
Available Guarantees	Up to 20 years	Up to 25 years	Up to 30 years
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Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide. Certain data is provided in MD (machine direction) x CMD (cross machine direction) format.

* White Membrane only

† Also available in minimum 60 mil thickness.

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



Sustainability Ratings/Certifications



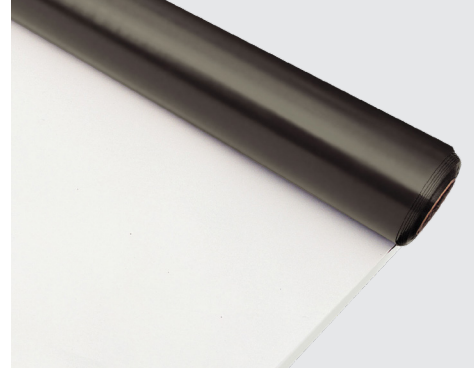
The ratings below are subject to CRRC rating program conditions, requirements, and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating conditions, requirements, and limitations.

Product ID#	Type	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)
	ASTM Test Method	ASTM C1549	ASTM C1371	ASTM E1980
White 0676-0001	Initial	0.81	0.90	101
	Aged 3 yrs*	0.75	0.90	92
Tan 0676-0002	Initial	0.65	0.90	79
	Aged 3 yrs	0.59	0.84	69
Gray 0676-0003	Initial	0.59	0.90	70
	Aged 3 yrs	0.55	0.91	65
Energy Tan 0676-0039	Initial	0.72	0.89	89
	Aged 3 yrs	0.66	0.89	80
Energy Gray 0676-0045	Initial	0.72	0.87	88
	Aged 3 yrs	0.67	0.90	82
Regal Blue 0676-0181	Initial	0.26	0.91	28
	Aged 3 yrs*	0.24	0.91	24
Patina Green 0676-0182	Initial	0.34	0.90	38
	Aged 3 yrs*	0.30	0.90	32
Goldenrod 0676-0183	Initial	0.61	0.90	74
	Aged 3 yrs*	0.51	0.90	60
Desert Tan 0676-0184	Initial	0.45	0.90	52
	Aged 3 yrs*	0.39	0.90	44
Terra Cotta 0676-0186	Initial	0.35	0.90	38
	Aged 3 yrs*	0.31	0.90	33
Regal Red 0676-0187	Initial	0.35	0.90	38
	Aged 3 yrs*	0.30	0.99	33
Dark Bronze 0676-0188	Initial	0.28	0.91	30
	Aged 3 yrs*	0.25	0.91	25
Slate Gray 0676-0189	Initial	0.38	0.90	43
	Aged 3 yrs*	0.33	0.90	36

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



EverGuard®
GAF TPO
 Membrane
 45, 60, 80 mil



LEED Information

Manufacturing Location	Mount Vernon, IN, New Columbia, PA, Cedar City, UT, Gainesville, TX, Valdosta, GA
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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
Meets or exceeds the requirements of ASTM D6878	State of Florida Approved	Meets or exceeds the requirements of the Texas Department of Insurance.
Can be used to comply with the Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations. (White only)	ICC-ES Evaluation Report ESR-4676 (Cedar City, UT only)	UL Evaluation Report UL ER1306-01

Product Data

Roll Size	45 mil	60 mil	80 mil
12' Roll Size	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)	12' x 100' (3.66 x 30.5 m) 1,200 sq. ft. (111.5 sq.m)
12' Roll Weight (Average)	307 lb. (139 kg)	386 lb. (175 kg)	504 lb. (228 kg)
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 100' (3.05 x 30.5 m) 1,000 sq. ft. (92.9 sq.m)
10' Roll Weight (Average)	256 lb. (116 kg)	322 lb. (146 kg)	420 lb. (191 kg)
8' Roll Size	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)	8' x 100' (2.43 x 30.5 m) 800 sq. ft. (74.3 sq.m)
8' Roll Weight (Average)	204 lb. (93 kg)	257 lb. (117 kg)	336 lb. (152 kg)
6' Roll Size	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)	6' x 100' (1.83 x 30.5 m) 600 sq. ft. (55.7 sq.m)
6' Roll Weight (Average)	153 lb. (70 kg)	194 lb. (88 kg)	252 lb. (114 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 100' (1.52 x 30.5 m) 500 sq. ft. (46.5 sq.m)
5' Roll Weight (Average)	128 lb. (58 kg)	162 lb. (74 kg)	210 lb. (95 kg)
Colors	White, Gray, Energy Gray, Slate Gray, Tan, Energy Tan, Desert Tan, Dark Bronze, Dark Brown, Goldenrod, Sky Blue, Regal Blue, Electric Blue, Hartford Green, Patina Green, Regal Red, Terra Cotta.		
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.		

