



# EverGuard®

## TPO Fleece-Back Membrane 100, 115, 135

Physical Properties (ASTM D 6878-21) see notes below					
Type	ASTM Test Method	ASTM Minimum Values	EverGuard® TPO Fleece-Back Test Values (approx.)		
			100	115	135
TPO Nominal Thickness	ASTM D 751	0.039"	0.045" (1.14 mm)	0.060" (1.52 mm)	0.080" (2.03 mm)
Thickness Over Scrim	ASTM D 7635	0.015"	15.8 mil (Nominal)	22.1 mil (Nominal)	31.4 mil (Nominal)
Breaking Strength	ASTM D 751 Grab Method MD	220 lbf	375 lbf (559 kg/m) x 330 lbf (492 kg/m)	400 lbf (596 kg/m) x 360 lbf (536 kg/m)	440 lbf (656 kg/m) x 390 lbf (581 kg/m)
Elongation At Break	ASTM D 751	15%	30%	30%	30%
Tear Strength	ASTM D 751 (8" x 8" Sample)	55 lbf	90 lbf (134 kg/m) x 120 lbf (179 kg/m)	70 lbf (104 kg/m) x 130 lbf (194 kg/m)	100 lbf (149 kg/m) x 180 lbf (268 kg/m)
Brittleness Point	ASTM D 2137	-40° F			
Ozone Resistance	ASTM D 1149	No cracks @ 7X magnification	No visible deterioration @ 7X magnification	No visible deterioration @ 7X magnification	No visible deterioration @ 7X magnification
Properties After Heat Aging	ASTM D 573	≤1.5% Weight change after 8 weeks @ 275°F; No cracks @ 7X magnification	Pass	Pass	Pass
Linear Dimensional Change	ASTM D 1204	±1%	0.2%	0.4%	0.4%
Water Absorption	ASTM D 471	±3%	0.7%	0.7%	0.7%
Factory Seam Strength (Membrane Failure)	ASTM D 751	66 lbf	115 lbf (171 kg/m)	145 lbf (216 kg/m)	155 lbf (231 kg/m)
Weather Resistance	ASTM G 155	10,080 kJ/m² 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

Note 1: 100, 115, and 135 TPO fleece-back sheets are composed of 45 mil, 60 mil, and 80 mil TPO membrane, respectively, with an integral fleece backing.

Note 2: Physical properties are based on 45, 60, or 80 mil membranes.

Note 3: Certain data is provided in MD (machine direction) x CMD (cross machine direction) format.

Note 4: Data is based upon typical product performance and is subject to normal manufacturing tolerance and variance.

Additional Physical Properties					
Puncture Resistance	FIM 101C Method 2031	Not Established	>350 lbs (159 kg)	>380 lbs (172 kg)	>380 lbs (172 kg)
Permeance	ASTM E 2178	Not Established	<0.02 (L/sm²)	<0.02 (L/sm²)	<0.02 (L/sm²)

### Guarantee\*

EverGuard® TPO Fleece-Back Membrane 100	Up to 20 years
EverGuard® TPO Fleece-Back Membrane 115	Up to 25 years
EverGuard® TPO Fleece-Back Membrane 135	Up to 30 years

\*Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide. GAF warranties and guarantees do not provide coverage against hail or other impact. See applicable guarantee or warranty, available at [gaf.com](http://gaf.com), for complete coverage and restrictions. Hail or puncture resistance coverage may be available for purchase for eligible systems. Contact GAF for more information.

### Sustainability Ratings/Certifications

#### Cool Roof Rating Council (CRRC)

Color	Rated Product ID#	Initial			Aged		
		Solar Reflectance (ASTM C 1549)	Thermal Emittance (ASTM C 1371)	Solar Reflectance Index (ASTM E 1980)	Solar Reflectance (ASTM C 1549)	Thermal Emittance (ASTM C 1371)	Solar Reflectance Index (ASTM E 1980)
White	0676-0027	0.76	0.90	94	0.68	0.83	81

#### LEED Information

Manufacturing Locations	Mount Vernon, IN	New Columbia, PA	Cedar City, UT
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For additional information, contact GAF Design Services at 1-877-423-7663 or [designservices@gaf.com](mailto:designservices@gaf.com)

We protect what matters most™





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## TPO Fleece-Back Membrane 100, 115, 135

### Applicable Standards/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 FM [www.RoofNav.com](http://www.RoofNav.com) for actual assemblies)



CRRCC Rated - Can be used to comply with 2022 Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations (white only)

Meets or exceeds the requirements of ASTM D 6878

### Product Data

Roll Size	12' Roll Size	12' Roll Weight (Average)	10' Roll Size	10' Roll Weight (Average)	8' Roll Size	8' Roll Weight (Average)	6' Roll Size	6' Roll Weight (Average)	5' Roll Size	5' Roll Weight (Average)
<b>EverGuard® TPO Fleece-Back Membrane 100</b>	12' x 100' (3.66 m x 30.5 m) 1,200 sq ft (111.5 sq m)	331 lbs (150 kg)	10' x 100' (3.05 m x 30.5 m) 1,000 sq ft (92.9 sq m)	276 lbs (125 kg)	8' x 100' (2.44 m x 30.5 m) 800 sq ft (74.3 sq m)	221 lbs (100 kg)	6' x 100' (1.83 m x 30.5 m) 600 sq ft (55.7 sq m)	166 lbs (75 kg)	5' x 100' (1.52 m x 30.5 m) 500 sq ft (46.5 sq m)	138 lbs (63 kg)
<b>EverGuard® TPO Fleece-Back Membrane 115</b>	12' x 100' (3.66 m x 30.5 m) 1,200 sq ft (111.5 sq m)	408 lbs (185 kg)	10' x 100' (3.05 m x 30.5 m) 1,000 sq ft (92.9 sq m)	340 lbs (154 kg)	8' x 100' (2.44 m x 30.5 m) 800 sq ft (74.3 sq m)	272 lbs (123 kg)	6' x 100' (1.83 m x 30.5 m) 600 sq ft (55.7 sq m)	204 lbs (93 kg)	5' x 100' (1.52 m x 30.5 m) 500 sq ft (46.5 sq m)	170 lbs (77 kg)
<b>EverGuard® TPO Fleece-Back Membrane 135</b>	12' x 80' (3.66 m x 24.38 m) 960 sq ft (89.2 sq m)	442 lbs (200 kg)	10' x 80' (3.05 m x 24.38 m) 800 sq ft (74.3 sq m)	368 lbs (167 kg)	8' x 80' (2.44 m x 24.38 m) 640 sq ft (59.5 sq m)	295 lbs (133 kg)	6' x 80' (1.83 m x 24.38 m) 480 sq ft (44.6 sq m)	221 lbs (100 kg)	5' x 80' (1.52 m x 24.38 m) 400 sq ft (37.16 sq m)	184 lbs (83 kg)
<b>Colors</b>	White									
<b>Storage</b>	Store on pallets in a clean, dry area at temperatures below 100° F (38° C).									
<b>Safety Warning</b>	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.

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