

# TremPly® TPO FB Single Ply Roofing Systems

*Environmentally Friendly, Long-Lasting  
Single Ply Roofing System*

## FEATURES

Great Value

Excellent Seam Strength

Long-term Weathering

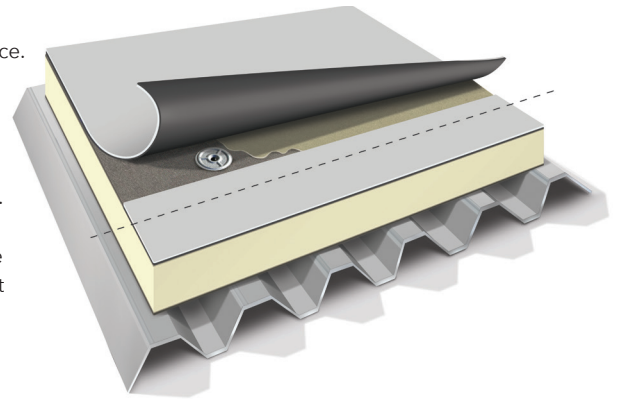
Energy Saving

Inherently Flexible

Fungal Resistant

## BENEFITS

- Excellent performance at a cost-effective price.
- Heat-welded seams provide greater seam strength to taped and other seams.
- Excellent long-term heat and UV resistance.
- Highly reflective and emissive white surface can help reduce energy use and urban heat island effect.
- No need for plasticizers.
- Doesn't require biocides.



## DESCRIPTION

TremPly® TPO FB Single Ply Roofing System is a fleece back thermoplastic roofing membrane. It is offered in 5-foot and 10-foot-wide sheets that feature heat welded seam integrity and overall exceptional value. The TremPly TPO material has been formulated for long term weatherability and exceeds the ASTM heat aging requirement by almost 2 times.

## BASIC USES

TremPly TPO FB is offered white, gray and tan colors with 45 mil, 60 mil and 80 mil thickness. TremPly TPO FB is also available in a smooth back version which is detailed on a separate data sheet. They are excellent choices for roof overlays, replacement and new construction alike. Tremco also offers TremPly Max TPO as a higher performing alternative to the TremPly TPO.

## COLOR

White, Tan, Gray

## GRADE

TremPly TPO FB is offered in 45mil, 60mil, 80mil thicknesses. TremPly Max TPO and original TremPly TPO versions are available and detailed on separate data sheets.

## STORAGE LIFE

Store rolls on their sides on pallets or shelving in a dry area. Jobsite specific be sure to cover or tarp when not in use.

## COVERAGE RATE

Available in 10'x100' (1,000 sq. ft.) and 5'x100' sheets (500 sq. ft.)

## APPLICATIONS

TremPly TPO FB is available as a fully adhered roofing system. Field seaming is accomplished by fusing the thermoplastic membrane with conventional hot air welding equipment. It comes with a full line of readily available, pre-fabricated accessories designed to save time and money. TremPly TPO FB Roofing Systems carry extensive FM Global and Underwriters Laboratories' approvals.

Please refer to Tremco application guides and project specific specifications or consult with your local Tremco Roofing sales representative for project specific application requirements.

## LIMITATIONS

Follow recommendations for applicable adhesives or installation methods in low temperature situations.

# TremPly® TPO FB Single Ply Roofing Systems

## PHYSICAL PROPERTIES

PROPERTY	ASTM D6878 MINIMUM	TPO 45 MIL	TPO 60 MIL	TPO 80 MIL
Normal Thickness ASTM D751	0.039" (min.) (0.99 mm)	0.045" (1.14mm)	0.060" (1.52 mm)	0.080" (2.03 mm)
Breaking Strength ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	375 lbf x 330 lbf (559 x 492 kg/m)	400 lbf x 360 lbf (596 x 536 kg/m)	440 lbf x 390 lbf (656 x 581 kg/m)
Factory Seam Strength ASTM D751	66 lbf (98.34 kg/m)	115 lbf (membrane failure) (171 kg/m)	140 lbf (209 kg/m) (membrane failure)	155 lbf (membrane failure) (231 kg/m)
Elongation at break ASTM D751	15%	30%	30%	30%
Heat Aging ASTM D751	90% retention of Breaking Strength & Elongation at break	100%	100%	100%
Tear Strength ASTM D751 8" x 8" (203 x 203 mm) Sample	55 lbf (81.95 kg/m)	90 lbf x 120 lbf (134 x 179 kg/m)	70 lbf x 130 lbf (104 x 193.7 kg/m)	100 lbf x 180 lbf (149 x 268 kg/m)
Puncture Resistance FTM 101C Method 2031	Not Established	>350 lb. (159 kg)	380 lb. (172 kg)	>380 lb. (172 kg)
Cold Brittleness ASTM D2137	(-40°C)	-40° C	-40° C	-40° C
Permeance ASTM E96	Not Established	0.08 Perms	0.08 Perms	0.08 Perms
Dimensional Change ASTM D1204 @ 158°F (70°C), 6 hrs.	(+/-1%)	0.20%	0.40%	0.40%
Water Absorption ASTM D471 @ 158°F (70°C), 1 week	(+/-3.0%)	0.70%	0.70%	0.70%
Hydrostatic Resistance ASTM D751 Method D	Not Established	390 psi	430 psi	430 psi
Ozone Resistance ASTM 1149	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification	No visible deterioration @ 7x magnification
Reflectivity (white) initial/aged ASTM C1549, ASTM E903	N/A	0.76/0.68	0.84/0.72	0.76/0.68
Emissivity (white) Initial/aged ASTM C1371, ASTM E403	N/A	0.90/0.83	0.84/0.91	0.90/0.83
Weather Resistance ASTM G155/D6878	10,080 KJ/(m <sup>2</sup> x nm) at 340 nm	>20,000 KJ/(m <sup>2</sup> . nm) at 340 nm	>46,000 KJ/(m <sup>2</sup> . nm) at 340 nm	>25,000 KJ/(m <sup>2</sup> . nm) at 340 nm
Heat Aging ASTM D573	240°F (115°C) for 32 weeks	60 weeks	128 weeks	60 weeks
Thickness Above Scrim ASTM D7635	Min 30% of Total Thickness	15.8 mil (Nominal)	21.5 mil (Nominal)	31.4 mil (Nominal)?

**Note:** This data based on typical product performance for 45-mil membrane, and are subject to normal manufacturing tolerances and variances. Certain data are provided in MD (machine direction) x CMD (cross machine direction) format. Visit [www.tremcoroofing.com](http://www.tremcoroofing.com) for latest data. **Important Note:** Tremco TPO membranes meet and/or exceed ASTM D-6878 standards for thermoplastic TPO membranes.

## MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

## PRECAUTIONS

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

## TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.



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