

# TremPly® TPO Single Ply Roofing Systems

*High performance, two-component, polyurethane modified methyl methacrylate base resin*

## FEATURES

Great Value

Excellent Seam Strength

Long-term Weathering

Energy Saving

Inherently Flexible

Fungal Resistant

## BENEFITS

• Excellent performance at a cost-effective price.

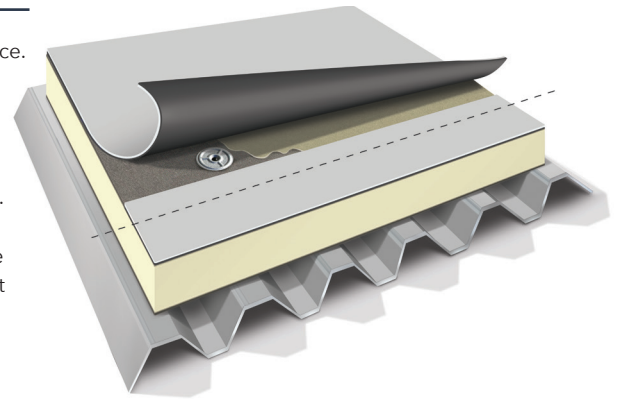
• Heat-welded seams provide greater seam strength to taped and other seams.

• 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 Single Ply Roofing System is a smooth 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 is offered white, gray and tan colors with 45 mil, 60 mil and 80 mil thickness. TremPly TPO is also available in a fleece 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 is offered in 45mil, 60mil, 80mil thicknesses. TremPly Max TPO and Fleeceback 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 is available as a mechanically attached, fully adhered, ballasted, or a heat induction welded systems. 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 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 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)	280 lbf x 270 lbf (417.2 x 402.3 kg/m)	305 lbf x 290 lbf (454 x 432 kg/m)	335 lbf x 320 lbf (499 x 477 kg/m)
Factory Seam Strength ASTM D751	66 lbf (98.34 kg/m)	110 lbf (membrane failure)(163.9 kg/m)	135 lbf (membrane failure)(201.1 kg/m)	160 lbf (membrane failure)(238.4 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)	100 lbf x 120 lbf (149 x 178.8 kg/m)	75 lbf x 130 lbf (111.8 x 193.7 kg/m)	65 lbf x 160 lbf (96.85 x 238.4 kg/m)
Puncture Resistance FTM 101C Method 2031	Not Established	290 lb. (131 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%)	0.40%	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	380 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
SRI (Solar Reflectance Index) Initial/Aged	N/A	94/81, 83 Aged Title 24	94/81, 83 Aged Title 24	94/81, 83 Aged Title 24
Reflectivity (white) initial/aged ASTM C1549, ASTM E903	N/A	0.76/0.68, 81.9% Reflectance	0.76/0.68, 81.9% Reflectance	0.76/0.68, 81.9% Reflectance
Emissivity (white) Initial/aged ASTM C1371, ASTM E403	N/A	0.90/0.83, 0.94	0.90/0.83, 0.94	0.90/0.83, 0.94
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	>25,000 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	60 weeks	60 weeks
Thickness Above Scrim ASTM D7635	Min 30% of Total Thickness	15.8 mil (Nominal)	22.1 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-6870 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 preventative 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.

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

## TECHNICAL SUPPORT



Roofing & Building Maintenance

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3735 Green Road  
Beachwood, Ohio 44122  
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50 Beth Nealson Drive  
Toronto, Ontario M4H 1M6  
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