TremPly® Max TPO FB Single Ply Roofing Systems

Environmentally Friendly, Long-Lasting Single Ply Roofing System

FEATURES

BENEFITS

Great Value

• Excellent performance at a cost-effective price.

Excellent Seam Strength

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

Long-term Weathering

• Excellent long-term heat and UV resistance with four times the industry minimum.

Energy Saving

• Highly reflective and emissive white surface can help reduce energy use and urban heat island effect.

Inherently Flexible

• No need for plasticizers.

Fungal Resistant

• Doesn't require biocides.



DESCRIPTION

TremPly* Max 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 MAX TPO FB material has been formulated for maximum weatherability and exceeds the ASTM heat aging requirement by 4 times.

BASIC USES

TremPly Max TPO FB is offered in white with 50 mil, 60 mil, 70 mil and 80 mil thickness. TremPly Max 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

TPO as a more economical alternative to the TremPly Max TPO.

COLOR

GRADE

White

TremPly Max TPO FB is offered in 50mil, 60mil, 70mil and 80mil thicknesses. TremPly Max TPO smooth and TremPly TPO smooth fleece back 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

APPLICATIONS

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

TremPly Max 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 Max 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.

TremPly® Max TPO FB Single Ply Roofing Systems

PHYSICAL PROPERTIES

Normal Thickness ASTM D751 0.039" (min.) (0.99 mm) 0.050" (1.27 mm) 0.060" (1.52 mm) 0.070" (1.78 mm) 0.080" (2.03 mm) Breaking Strength ASTM D751 220 lbf/in. (38.5 kn/m) 375 lbf x 330 lbf (559 x 949 kg/m) 400 lbf x 360 lbf (96.536 kg/m) 400 lbf x 390 lbf (159 x 536 kg/m) 400 lbf x 390 lbf (596 x 536 kg/m) 160 k5 x 581 kg/m) 140 lbf (209 kg	PROPERTY	ASTM D6878 MINIMUM	TPO 50 MIL	TPO 60 MIL	TPO 70 MIL	TPO 80 MIL
Grab Method (559 x 492 kg/m) (596 x 536 kg/m) (696 x 536 kg/m) (656 x 581 kg/m) Factory Seam Strength ASTM D751 66 lbf (98.34 kg/m) 140 lbf (209 kg/m) (membrane failure) 140 lbf (209 kg/m) (140 kg/m) (140 kg/m) 140 lbf (209 kg/m) (140 kg/m) (140 kg/m) 140 lbf (209 kg/m) (140 kg/m) (140 kg/m) (140 kg/m) 140 lbf (209 kg/m) (140 kg/	Normal Thickness ASTM D751	0.039" (min.) (0.99 mm)	0.050" (1.27 mm)	0.060" (1.52 mm)	0.070" (1.78 mm)	0.080" (2.03 mm)
Factory Seam Strength ASTM D751 66 lbf (98.34 kg/m) 140 lbf (209 kg/m) (membrane failure) (membrane fail	Breaking Strength ASTM D751	220 lbf/in. (38.5 kn/m)	375 lbf x 330 lbf	400 lbf x 360 lbf	400 lbf x 360 lbf	440 lbf x 390 lbf
Communication Communicatio	Grab Method		(559 x 492 kg/m)	(596 x 536 kg/m)	(596 x 536 kg/m)	(656 x 581 kg/m)
Elongation at break ASTM D751 15% 30% 30% 30% 30% 30% 30% 30% 100% 100%	Factory Seam Strength ASTM D751	66 lbf (98.34 kg/m)	140 lbf (209 kg/m)	140 lbf (209 kg/m)	140 lbf (209 kg/m)	140 lbf (209 kg/m)
Heat Aging ASTM D751 90% retention of Breaking Strength & Elongation at break 100% 10			(membrane failure)	(membrane failure)	(membrane failure)	(membrane failure)
Tear Strength ASTM D751 8" x 8" 55 lbf (81.95 kg/m) 70 lbf x 130 lbf 70 lbf x 130 lbf (104 x 194 kg/m) (104 x 194 k	Elongation at break ASTM D751	15%	30%	30%	30%	30%
Tear Strength ASTM D751 8" x 8" 55 lbf (81.95 kg/m) 70 lbf x 130 lbf (104 x 194 kg/m) (104 x 194 k	Heat Aging ASTM D751	90% retention of Breaking	100%	100%	100%	100%
(203 x 203 mm) Sample		Strength & Elongation at break				
Puncture Resistance FTM 101C Not Established 380 (172 kg)	Tear Strength ASTM D751 8" x 8"	55 lbf (81.95 kg/m)	70 lbf x 130 lbf	70 lbf x 130 lbf	70 lbf x 130 lbf	100 lbf x 180 lbf
Method 2031 (-40°C) -40° C -	(203 x 203 mm) Sample		(104 x 194 kg/m)	(104 x 194 kg/m)	(104 x 194 kg/m)	(149 x 268 kg/m)
Cold Brittleness ASTM D2137 (.40°C) .40°C .40°C <t< td=""><td>Puncture Resistance FTM 101C</td><td>Not Established</td><td>380 (172 kg)</td><td>380 (172 kg)</td><td>380 (172 kg)</td><td>380 (172 kg)</td></t<>	Puncture Resistance FTM 101C	Not Established	380 (172 kg)	380 (172 kg)	380 (172 kg)	380 (172 kg)
Permeance ASTM E96 Not Established 0.08 Perms 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% 0.40% Water Absorption ASTM D471 @ 158°F (70°C), 1 week (+/-3.0%) 0.70% 0.70% 0.70% 0.70% Hydrostatic Resistance ASTM D751 Method D Not Established 430 psi 430 psi 430 psi 430 psi Ozone Resistance ASTM 1149 No visible deterioration @ 7x magnification 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.91	Method 2031					
Dimensional Change ASTM D1204 (+/-1%) 0.40% 0.40% 0.40% 0.40% @ 158°F (70°C), 6 hrs. (+/-3.0%) 0.70% 0.70% 0.70% 0.70% Water Absorption ASTM D471 (+/-3.0%) 0.70% 0.70% 0.70% @ 158°F (70°C), 1 week 430 psi 430 psi 430 psi Hydrostatic Resistance ASTM D751 Not Established 430 psi 430 psi Method D No visible deterioration No visible deterioration No visible deterioration No visible deterioration @ 7x magnification @ 7x magnification @ 7x magnification @ 7x magnification Reflectivity (white) initial/aged N/A 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 ASTM C1549, ASTM E903 N/A 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91	Cold Brittleness ASTM D2137	(-40°C)	-40° C	-40° C	-40° C	-40° C
Water Absorption ASTM D471 (+/-3.0%) 0.70%	Permeance ASTM E96	Not Established	0.08 Perms	0.08 Perms	0.08 Perms	0.08 Perms
Water Absorption ASTM D471 (+/-3.0%) 0.70%	Dimensional Change ASTM D1204	(+/-1%)	0.40%	0.40%	0.40%	0.40%
@ 158°F (70°C), 1 week Hydrostatic Resistance ASTM D751 Not Established 430 psi 430 psi 430 psi Method D Ozone Resistance ASTM 1149 No visible deterioration @ 7x magnification @ 7x	@ 158°F (70°C), 6 hrs.					
Hydrostatic Resistance ASTM D751 Not Established 430 psi 430 psi 430 psi 430 psi 430 psi 430 psi Method D Ozone Resistance ASTM 1149 No visible deterioration @ 7x magnification @ 7x m	Water Absorption ASTM D471	(+/-3.0%)	0.70%	0.70%	0.70%	0.70%
Method D Ozone Resistance ASTM 1149 No visible deterioration @ 7x magnification Reflectivity (white) initial/aged ASTM C1549, ASTM E903 Emissivity (white) Initial/aged N/A No visible deterioration @ 7x magnification ### ### ### ### ### ### ### ### ### #	@ 158°F (70°C), 1 week					
Ozone Resistance ASTM 1149 No visible deterioration @ 7x magnification @ 7x magnification @ 7x magnification Reflectivity (white) initial/aged ASTM C1549, ASTM E903 Emissivity (white) Initial/aged N/A No visible deterioration @ 7x magnification 0.84/0.72 0.84/0.72 0.84/0.91 0.84/0.91 0.84/0.91	Hydrostatic Resistance ASTM D751	Not Established	430 psi	430 psi	430 psi	430 psi
@ 7x magnification Reflectivity (white) initial/aged N/A 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 ASTM C1549, ASTM E903 Emissivity (white) Initial/aged N/A 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91	Method D					
Reflectivity (white) initial/aged N/A 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 0.84/0.72 ASTM C1549, ASTM E903 Emissivity (white) Initial/aged N/A 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91	Ozone Resistance ASTM 1149	No visible deterioration	No visible deterioration	No visible deterioration	No visible deterioration	No visible deterioration
ASTM C1549, ASTM E903 Emissivity (white) Initial/aged N/A 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91		@ 7x magnification	@ 7x magnification	@ 7x magnification	@ 7x magnification	@ 7x magnification
Emissivity (white) Initial/aged N/A 0.84/0.91 0.84/0.91 0.84/0.91 0.84/0.91	Reflectivity (white) initial/aged	N/A	0.84/0.72	0.84/0.72	0.84/0.72	0.84/0.72
	ASTM C1549, ASTM E903					
ASTM C1371, ASTM E403	Emissivity (white) Initial/aged	N/A	0.84/0.91	0.84/0.91	0.84/0.91	0.84/0.91
	ASTM C1371, ASTM E403					
Weather Resistance ASTM G155 10,080 KJ/($m^2 \times nm$) >46,000 KJ/($m^2 \times nm$)	Weather Resistance ASTM G155	10,080 KJ/(m ² x nm)	>46,000 KJ/(m² . nm)	>46,000 KJ/(m ² . nm)	>46,000 KJ/(m ² . nm)	>46,000 KJ/(m ² . nm)
/D6878 at 340 nm	/D6878	at 340 nm	at 340 nm	at 340 nm	at 340 nm	at 340 nm
Heat Aging ASTM D573 240°F (115°C) for 32 weeks 128 weeks 128 weeks 128 weeks 128 weeks	Heat Aging ASTM D573	240°F (115°C) for 32 weeks	128 weeks	128 weeks	128 weeks	128 weeks
Thickness Above Scrim ASTM D7635 Min 30% of Total Thickness 17.9 mil (Nominal) 21.5 mil (Nominal) 25.7 mil (Nominal) 31.5 mil (Nominal)	Thickness Above Scrim ASTM D7635	Min 30% of Total Thickness	17.9 mil (Nominal)	21.5 mil (Nominal)	25.7 mil (Nominal)	31.5 mil (Nominal)

MAINTENANCE

TECHNICAL SUPPORT



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50 Beth Nealson Drive Toronto, Ontario M4H 1M6 1.800.668.9879

Note: This data based on typical product performance for each thickness of 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 for latest data. Important Note: Tremco TPO membranes meet and/or exceed ASTM D-6870 standards for thermoplastic TPO membranes.

Your local Tremco Roofing 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

Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the service of the Tremco Service Staff.

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