

THE PRODUCT

EverGuard EXTREME TPO 50mil is

a thermoplastic polyolefin single-ply membrane system, engineered to provide superior long-term waterproofing performance and enhanced durability.

It is designed to handle the extreme demands that new roof top applications can place on roofing membranes.

It is a strong flexible membrane suitable for use in all types of singleply systems: Mechanically Attached, Fully Adhered, and Ballasted.

USES

EverGuard EXTREME TPO 50mil can be used in roofing applications with expected long-term service periods, and where high resistance to tear, impact, and puncture is required, while maintaining membrane flexibility and allowing for building movements.

It is also recommended as an energy saving roofing system where its high reflectivity contributes to a reduction in building cooling/heating cost and for roofs with solar panels.

It can be installed on both low slope and steep slope roofs, and in both exposed and protected applications.

EverGuard EXTREME TPO 50mil

Single Ply Membrane System

MAJOR FEATURES

- Superior performance, durability and flexibility
- Fused hot-air welded seams result in excellent seam strength
- Best Performing TPO in heat aging and UV tests
- Energy saving Highly reflective and emissive white roof will help reduce energy costs
- Large rolls reduce number of seams and cut labor cost
- Versatile application method
- Contains no plasticizers, toxic or hazardous ingredients, and is fully recyclable.

APPLICATION

Depending on roofing system design, **EverGuard EXTREME TPO 50mil** can be applied:

- Mechanically attached to substrate using manufacturer approved fasteners and plates.
- Adhered to substrate using manufacturer approved compatible adhesive.
- Loose laid with heat fused seams and mechanical fastening only along roof perimeter and around penetrations. System is ballasted against wind uplift with loose gravel or tiles.

For application details please refer to BituNil technical dept. and **EverGuard TPO** Roofing Systems Design & Application Guidelines.

APPLICABLE STANDARDS

UL listed, FM approved, ASTM D6878, Title 24 Compliant, Miami-Dade County Approved.

STORAGE & HANDLING

Store rolls on their sides on pallets or shelving in a dry ventilated and sheltered area.

Membrane rolls are heavy, and are best positioned and installed by at least two people.

STANDARD SUPPLY DATA

Color	White		
Roll size	10' X 100' (3.0M X 30.5M)	5'X100' (1.5M X 30.5M)	
Roll weight	271lbs (123.0Kg)	136lbs (61.7Kg)	





EverGuard Extreme TPO 50mil

Single Ply Membrane System

Physical Properties	ASTM Test Method	ASTM D6878 Minimum	EverGuard Extreme [®] Typical Test Data	
 Certain data is provided in MD (machine direction) x CMD (cross machine direction) format. Data is based upon typical product performance, and is subject to normal manufacturing tolerance and variance. 				
	ASTM D751	0.039" (min.) (0.99 mm)	0.050" (1.27 mm)	
Breaking Strength	ASTM D751 Grab Method	220 lbf/in. (38.5 kn/m)	305 lbf x 290 lbf (454 x 432.1 kg/m)	
Factory Seam Strength	ASTM D751	66 lbf (98.34 kg/m)	150 lbf (223.5 kg/m) (membrane failure)	
Elongation at Break	ASTM D751	15%	30%	
Heat Aging	ASTM D573	90% Retention of Breaking Strength and Elongation at Break	100%	
Tear Strength	ASTM D751 8" x 8" (203 x 203 mm) Sample	55 lbf (81.95 kg/m)	70 lbf x 110 lbf (104.3 x 163.9 kg/m)	
Puncture Resistance	FTM 101C Method 2031	Not Established	380 (172 kg)	
Cold Brittleness	ASTM D2137	-40°C	-40°C	
Permeance	ASTM E96	Not Established	0.08 Perms	
Dimensional Change	ASTM D1204 @158°F (70°C), 6 hrs.	+/-1%	0.4%	
Water Absorption	ASTM D471 @158°F (70°C), 1 week	+/-3.0% (top coating only)	0.7%	
Hydrostatic Resistance	ASTM D751 Method D	Not Established	430 psi	
Ozone Resistance	ASTM D1149	No visible deterioration @ 7 x magnification	No visible deterioration @ 7 x magnification	
Reflectivity (white) Initial/Aged	ASTM C1549	N/A	0.835/0.72	
Emissivity (white) Initial/Aged	ASTM C1371	N/A	0.84/0.91	
Weather Resistance	ASTM G155/D6878	10,080 KJ/(m2 . nm) at 340 nm	>46,000 KJ/(m2 . nm) at 340 nm	
Heat Aging	ASTM D573	240°F (115°C) for 32 weeks	128 weeks	
Thickness Above Scrim	ASTM D7635	Min 30% of Total Thickness	17.9 mil (Nominal)	

Product sizes, dimensions, and widths are nominal values and subject to normal manufacturing/packing tolerance and variation. (This version supersedes all previous versions). V1-05-13

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