# TECHNICAL INFORMATION SHEET



# **UltraPly™ TPO XR 135 Membrane**

<u>Item Description</u>
UltraPly TPO XR 135 (80 mil) Membrane
10' x 50' (3.0 x 15.2 m)

**Item Number** 

W56TXR3Y99

## **Product Information**

### **Description:**

Firestone UltraPly<sup>™</sup> TPO XR 135 Membrane is a flexible Thermoplastic Polyolefin (TPO) roofing membrane that is produced with polyester weft-inserted reinforcement and an 8 ounce polyester fleece backing. UltraPly TPO XR 135 Membrane meets or exceeds all requirements for ASTM D 6878 Specification. This heat weldable UltraPly TPO membrane has a thickness of 80 mil (2.03 mm). This membrane is ideal for a variety of new or re-roofing applications.

### **Method of Application:**

- 1. Substrates must be clean, dry, smooth, and free of sharp edges, fins, loose or foreign materials, oil, grease, and other materials that may damage the membrane.
- 2. All roughened surfaces that can damage the membrane shall be repaired as specified to offer a smooth substrate.
- 3. All surface voids greater than 1/4" (6.3 mm) wide shall be properly filled with an acceptable fill material.
- 4. UltraPly TPO XR 135 Membrane may be fully adhered or adhered with adhesive beads using Firestone XR Bonding Adhesive, XR Stick™ Adhesive, I.S.O.Spray™ S Insulation Adhesive, or hot asphalt. UltraPly TPO XR 135 Membrane can also be mechanically attached.

### Storage:

- Store away from sources of punctures and physical damage.
- Assure that structural decking will support the loads incurred by material when stored on rooftop. The deck load limitations should be specified by the project designer.
- Store away from ignition sources as membrane will burn when exposed to open flame.

#### **Precautions:**

- 1. Review Material Safety Data Sheets (MSDS) for safety information.
- 2. Exercise caution when lifting, moving, transporting, storing or handling membrane rolls to avoid sources of punctures and possible physical damage.
- 3. Contact your Roof Systems Advisor at 1-800-428-4511 for specific recommendations regarding chemical or waste product compatibility with Firestone UltraPly TPO XR Membrane.

#### **LEED® Information:**

Post Consumer Recycled Content: 0% Pre Consumer Recycled Content: 15%

Manufacturing Location: Muscle Shoals, AL







ESR-2831



# **UltraPly™ TPO XR 135 Membrane**

## **Product Sizes**

<u>Membrane Thickness</u>: 0.080" (2.03 mm) <u>Membrane Weight:</u> 0.42 lb/ft² (2.1 kg/m²)

Available Sizes		Available Colors
10' x 50'	(3.0 x 15.2 m)	White

Physical Properties					
<u>Property</u>	ASTM Standard	Performance Minimum	<u>Typical Performance</u> <u>80 mil</u>		
Overall Thickness:	D 751	0.039" (1.0 mm)	0.080" (2.03 mm) ± 10%		
Coating over Scrim:	D 7635	0.015" (0.381 mm)	0.033" (0.84 mm)		
Breaking Strength:	D 751, Grab Method	220 lbf (979 N)	460 lbf (2,046 N)		
Elongation of Reinforcement Break:	D 751, Grab Method	15%	25%		
Tearing Strength:	D 751	55 lbf (245 N)	120 lbf (534 N)		
Brittleness Point:	D 2137	-40 °F (-40 °C)	Pass		
Ozone Resistance, No Cracks:	D 1149	Pass	Pass		
Properties After Heat Aging (Retained Values) (ASTM D 573 670 h at 240 °F (116 °C)):					
Breaking Strength:	D 751, Grab Method	90% Minimum	> 90%		
Elongation at Break:	D 751, Grab Method	90% Minimum	> 90%		
Tearing Strength:	D 751	60% Minimum	> 60%		
Weight of Change:		± 1% Maximum	< 1%		
Linear Dimension Change:	D 1204, 6 h at 158 °F (70 °C)	± 1% Maximum	< 1%		
Water Absorption:	D 471	± 3% Maximum	< 3%		
Weather Resistance, 80 °C Black Panel, no cracking, crazing when wrapped around a 3" mandrel and inspected at 7X magnification::	G 155	10,800 kJ/m <sup>2</sup> Minimum	> 20,160 kJ/m <sup>2</sup>		
Puncture Resistance:	FTM 101C, Method 2031		450 lbf (2,002 N)		
Dynamic Puncture Resistance MD:	D 5635		Pass (60 J)		
Dynamic Puncture Resistance CD:	D 5635		Pass (60 J)		
Static Puncture Resistance:	D 5602		Pass (25 kg)		



# **UltraPly™ TPO XR 135 Membrane**

## **Radiative Properties**

Cool Roof Rating Council (CRRC): Initial / 3 yr	<u>White</u>			
Solar Reflectance	0.79 / 0.68			
Thermal Emittance	0.85 / 0.83			
Solar Reflectance Index (SRI)	98 / 81			
Rated Product ID	0008			
Licensed Manufacturer ID	0608			
Classification	Production Line			
ENERGY STAR®: Initial / 3 yr	<u>White</u>			
Solar Reflectance	0.79 / 0.78*			
Thermal Emittance	0.85			
* White membrane sample cleaned prior to age test.				
<u>LEED®</u>	<u>White</u>			
Solar Reflectance – ASTM E 903	0.81			
Thermal Emittance – ASTM E 408	0.95			
Solar Reflectance Index (SRI) – ASTM E 1980	102			





ENERGY STAR is only valid in the United States



Please contact your Firestone Roof Systems Advisor at 1-800-428-4511 for further information.

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