

Technical Information Sheet



UltraPly™ TPO XR 135 Membrane

Item Description	Item Number
UltraPly TPO XR 135 (80 mil)	
White Membrane: 10' x 50' (3.0 x 15.2 m) - 80 mil	W56TXR3MY99
Tan (HR) Membrane: 10' x 50' (3.0 x 15.2 m) - 80 mil	W56TXRLTM3T99
Gray Membrane: 10' x 50' (3.0 x 15.2 m) - 80 mil	W56TXR3GR99
<i>Meets or exceeds ASTM D 6878</i>	

Description

Elevate UltraPly 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 is a heat weldable UltraPly TPO membrane with 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 rough surfaces that can damage the membrane shall be repaired as specified to offer a smooth substrate.
3. All surface voids greater than 1/4" (6.4 mm) wide shall be properly filled with an acceptable fill material.
4. UltraPly TPO XR membrane may be fully adhered using I.S.O. Spray™ R Insulation Adhesive, Jet Bond Spray Adhesive or hot asphalt; adhered in adhesive beads using XR Stick™ Adhesive; or adhered in adhesive beads or spatter pattern using Twin Jet. UltraPly TPO XR 135 Membrane can also be mechanically attached. UltraPly TPO XR Membrane may also be adhered using SEBS Mopping Asphalt (TIS 811) to an approved substrate or modified bitumen sheet.

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

- Review Safety Data Sheets (SDS) for safety information.
- Exercise caution when lifting, moving, transporting, storing, or handling membrane rolls to avoid sources of punctures and possible physical damage.
- Contact a Regional Technical Coordinator at 1-800-428-4511 for specific recommendations regarding chemical or waste product compatibility with Elevate UltraPly TPO XR Membrane.

LEED® Information

Post-Consumer Recycled Content: 0%

Post Industrial Recycled Content: 15%

Manufacturing Location: Tuscumbia, AL

NOTE: LEED® is a registered trademark of the U.S. Green Building Council



Typical Properties			
Properties	ASTM Standard	Performance Minimum	Typical Performance 80 mil
Overall Thickness (Thickness Above Fleece)	0.039" (1.0 mm)	0.039" (1.0 mm)	0.080" (2.03 mm) ± 10%
Coating over Scrim	0.015" (0.381 mm)	0.015" (0.381 mm)	0.033" (0.84 mm)
Breaking Strength	220 lbf (979 N)	220 lbf (979 N)	460 lbf (2,046 N)
Elongation of Reinforcement Break	15%	15%	25%
Tearing Strength	55 lbf (245 N)	55 lbf (245 N)	120 lbf (534 N)
Brittleness Point	-40 °F (-40 °C)	-40 °F (-40 °C)	Pass
Ozone Resistance, No Cracks	Pass	Pass	Pass
Properties After Heat Aging (Retained Values) ASTM D 573-5376 h (224 days or 32 weeks) 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	G 155	> 60,000 kJ/m ²	> 60,000 kJ/m ²
176 °F (80 °C) Black Panel, no cracking, crazing when wrapped around a 3" (76.2 mm) mandrel and inspected at 7X magnification			
Puncture Resistance	FTM 101C Method 2031	---	450 lbf (2,002 N)

Typical Properties (Continued)

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)
Air Permeance (Material)	E 2178*	< 0.004 ft ³ /ft ² (0.02 L/(s*m ²))	Pass

1. The ASTM 2178 values listed above are for the air permeance of the UltraPly TPO Membrane component only.
2. When system design includes an air barrier, please consult a Regional Technical Coordinator for additional roof system securement enhancements.
3. Consult the Designer / Architect, Code Agency or Authority having Jurisdiction (AHJ) for requirements regarding the selection and use of an appropriate air barrier material, and its installation into the building envelope.

Radiative Properties

Cool Roof Rating Council (CRRC): Initial / 3 yr	White	Light Tan (HR)	Gray
Solar Reflectance	0.79 / 0.69	0.73 / 0.66	0.34 / 0.34
Thermal Emittance	0.85 / 0.83	0.90 / 0.91	0.89 / 0.88
Solar Reflectance Index (SRI)	98 / 83	90 / 81	37 / 36
Rated Product ID	0008	0091	0032
Licensed Manufacturer ID	0608	0608	0608
Classification	Production Line	Production Line	Production Line
LEED®	White	Tan	Gray
Initial Solar Reflectance Index (SRI)	Pass (98)	---	---
3 yr Aged Solar Reflectance Index (SRI)	Pass (83)	---	---

Product Sizes

Membrane Thickness	0.080" (2.03 mm)
Membrane Weight	0.42 lb/ft ² (2.1 kg/m ²)
Available Size	10' x 50' (3.0 x 15.2 m)

Please contact Holcim Technical Services at 800-428-4511 for further information.

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