Technical Information Sheet

ULTRAPLY™ TPO XR FLEECE-BACKED MEMBRANE

Item Description	Item Number
UltraPly TPO XR 100 (45 mil)	
▪ White Membrane	W56TXRM3099
▪ Tan HR Membrane	W56TXRLT099
▪ Gray Membrane	W56TXRGM099
UltraPly TPO XR 115 (60 mil)	
▪ White Membrane	W56TXR3M699
▪ Tan HR Membrane	W56TXRLM699
▪ Gray Membrane	W56TXRGM699
Meets or exceeds ASTM D 6878.	

DESCRIPTION

Elevate UltraPly TPO XR 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 Membrane meets or exceeds all requirements for ASTM D 6878 Specification. This heat weldable UltraPly TPO membrane is available in 45 mil (1.14 mm) and 60 mil (1.52 mm) thicknesses. 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 ¼" (6.3 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; or adhered in adhesive beads using XR Stick™ Adhesive; or adhered in adhesive beads or spatter pattern using Twin Jet. UltraPly TPO XR 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.

AMRIZE

ENVIRONMENTAL METRICS			
Cool Roof Ratings Council (CRRC): Values: Initial / 3 Year	**White**	**Light Tan (HR)**	**Gray**
Solar Reflectance	0.80 / 0.70	0.73 / 0.66	0.34 / 0.34
Thermal Emittance	0.78 / 0.81	0.90 / 0.91	0.89 / 0.88
Solar Reflectance Index (SRI)	97 / 84	90 / 87	37 / 36
Rated Product ID	0008	0091	0032
Licensed Manufacturer ID	0608	0608	0608
Classification	Production Line	Production Line	Production Line
LEED®	**White**	**Light Tan (HR)**	**Gray**
Initial Solar Reflectance Index (SRI) (Minimum 85)	Pass (97)	Pass (90)	---
3-year Aged Solar Reflectance Index (SRI) (Minimum 64)	Pass (84)	Pass (87)	---
Title 24	**White**	**Light Tan (HR)**	
3-year Aged Solar Reflectance (Minimum 0.63)	0.70	0.66	---
3-year Aged Thermal Emittance (Minimum 0.75)	0.81	0.91	---
3-year Aged Solar Reflectance Index (Minimum 75)	84	87	---
IgCC			
Minimum SRI 3 Year Aged (64)	Pass (98)	Pass (87)	---
Onsite Renewables: Solar Ready	Yes	Yes	Yes
Stormwater Mgmt: Vegetative Ready	Yes	Yes	Yes
Recycled Content			
Post-Consumer	0%		
Post-Industrial	15%		

FM APPROVED

CLASSIFIED C UL US

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CRRC COOL ROOF RATING COUNCIL CHARTER MEMBER

Color Options

White	Gray	Tan

AMRIZE

TYPICAL PROPERTIES (Meets or exceeds ASTM D 6878 Specification)				
Properties	**Test Method**	**Performance Minimum**	**Typical Performance XR 100: 45 mil**	**Typical Performance XR 115: 60 mil**
Overall Thickness (Thickness Above Fleece)	D 751	0.039" (1.0 mm)	0.045" (1.14 mm) ± 10%	0.060" (1.52 mm) ± 10%
Coating Over Scrim	D 7635	0.015" (0.38 mm)	0.017" (0.43 mm)	0.021" (0.53 mm)
Breaking Strength	D 751, Grab Method	220 lbf (979 N)	340 lbf (1,512 N)	390 lbf (1,735 N)
Elongation of Reinforcement Break	D 751, Grab Method	15%	25%	25%
Tearing Strength	D 751	55 lbf (245 N)	120 lbf (534 N)	120 lbf (534 N)
Brittleness Point	D 2137	-40 °F (-40 °C)	Pass	Pass
Ozone Resistance, No Cracks	D 1149	Pass (No Cracks)	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%	> 90%
Elongation at Break	D 751, Grab Method	90% minimum	> 90%	> 90%
Tearing Strength	D 751	60% minimum	> 60%	> 60%
Weight of Change	---	± 1% maximum	< 1%	< 1%
Linear Dimension Change	D 1204, 6 h at 158 °F (70 °C)	± 1% maximum	< 1%	< 1%
Water Absorption	D 471	± 3% Maximum	< 3%	< 3%
Weather Resistance*	G 155	10,800 kJ/m^2 Minimum	> 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	---	---	---
Dynamic Puncture Resistance MD	D 5635	---	Pass (60 J)	Pass (65 J)
Dynamic Puncture Resistance CD	D 5635	---	Pass (55 J)	Pass (65 J)
Static Puncture Resistance	D 5602	---	Pass (25 kg)	Pass (25 kg)
Air Permeance (Material)	E 2178*	<0.004 ft^3/ft^2 (0.02 L/(s·m^2))	Pass	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.

PRODUCT SIZES			
Membrane Thickness: TPO XR 100 – 0.045" (1.14 mm) Membrane Weight: 0.27 lb/ft^2 (1.3 kg/m^2)		Membrane Thickness: TPO XR 115 – 0.060" (1.52 mm) Membrane Weight: 0.32 lb/ft^2 (1.6 kg/m^2)	
Available Sizes	**Available Colors**	**Available Sizes**	**Available Colors**
10' x 100' (3.0 m x 30.5 m)	White, Tan, Gray	10' x 100' (3.0 m x 30.5 m)	White, Tan, Gray

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

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