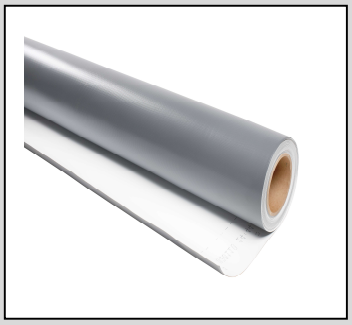
# Technical Information Sheet



## ULTRAPLY™ TPO MEMBRANE

| Item Description | Item Number |
|---|---|
| 1 Roll<br>Meets or exceeds ASTM D 6878. | Various |

## DESCRIPTION

Elevate UltraPly TPO is a flexible Thermoplastic Polyolefin roofing membrane that is produced with polyester weft-inserted reinforcement. UltraPly TPO membrane meets or exceeds all requirements for ASTM D 6878 Specification. This heat weldable TPO membrane is available in 45 mil (1.14 mm) and 60 mil (1.52 mm) thicknesses. This reflective membrane is suitable for a variety of low-slope 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. Elevate UltraPly TPO membrane is installed as continuous roofing or waterproofing layer on the roof. Rolls are overlapped (side laps and end laps) prior to heat welding the seam areas.
5. Install the UltraPly TPO Roofing System in accordance with current Elevate UltraPly TPO specifications, details, and workmanship requirements.

## 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

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

## LEED® INFORMATION

Post-Consumer Recycled Content: 0%
Post Industrial Recycled Content: 15%
Manufacturing Location: Wellford, SC / Tuscumbia, AL

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

## Typical Properties

| Properties | ASTM Standard | Performance Minimum | Typical Performance 45 mil | Typical Performance 60 mil |
|---|---|---|---|---|
| Overall Thickness | D 751 | 0.039" (1 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 | --- | 265 (1,180) | 300 (1,300) |
| Dynamic Puncture Resistance MD | D 5635 | --- | Pass (20 J) | Pass (40 J) |
| Dynamic Puncture Resistance CD | D 5635 | --- | Pass (35 J) | Pass (50 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 |

NOTE:
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 your Elevate Technical Services Advisor 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.

## Color Options

| White | Gray | Tan |
|---|---|---|
|  |  |  |

## Radiative Properties

| Cool Roof Ratings Council (CRRC): Values: Initial / 3 Year | White | Light Tan (HR) | Gray |
|---|---|---|---|
| Solar Reflectance | 0.79 / 0.69 | 0.73 / 0.64 | 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 / 87 | 37 / 36 |
| Rated Product ID | 0008 | TBD | 0032 |
| Licensed Manufacturer ID | 0608 | TBD | 0608 |
| Classification | Production Line | Production Line | Production Line |
| **LEED®** | **White** | **Light Tan (HR)** | **Gray** |
| Initial Solar Reflectance Index (SRI) | Pass (98) | --- | --- |
| 3-year Aged Solar Reflectance Index (SRI) | Pass (83) | --- | --- |

## Product Sizes

Membrane Thickness: 0.045" (1.14 mm)
Membrane Weight: 0.23 lb/ft$^2$ (1.1 kg/m$^2$)

Membrane Thickness: 0.060" (1.52 mm)
Membrane Weight: 0.31 lb/ft$^2$ (1.5 kg/m$^2$)

| Available Sizes | Available Colors | Available Sizes | Available Colors |
|---|---|---|---|
| 5' x 100' (1.5 x 30.5 m) | White, Tan, Gray | 5' x 100' (1.5 x 30.5 m) | White, Tan, Gray |
| 5' x 200' (1.5 x 61 m) | White | 5' x 200' (1.5 x 61 m) | White |
| 6' 2" x 100' (1.9 x 30.5 m) | White, Tan, Gray | 6' 2" x 100' (1.9 x 30.5 m) | White, Tan, Gray |
| 8' x 100' (2.4 x 30.5 m) | White, Tan, Gray | 8' x 100' 2.4 x 30.5 m) | White, Tan, Gray |
| 8' x 200' (2.4 x 61 m) | White | 8' x 200' (2.4 x 61 m) | White |
| 10' x 100' (3.0 x 30.5 m) | White, Tan, Gray | 10' x 100' (3.0 x 30.5 m) | White, Tan, Gray |
| 10' x 200' (3.0 x 61 m) | White | 10' x 200' (3.0 x 61 m) | White |
| 12' 4" x 100' (3.8 x 30.5 m) | White, Tan, Gray | 12' 4" x 100' (3.8 x 30.5 m) | White, Tan, Gray |
| 12' 4" x 200' (3.8 x 61 m) | White | 12' 4" x 200' (3.8 x 61 m) | White |