

TITAN XR-5 40

40mil REINFORCED GEOMEMBRANE LINER



XR Reinforced Geomembranes are the strongest, most durable geomembranes in use today. They are chemically resistant to acids and oils and are specifically engineered to provide protection against a wide range of climates. XR products are a reinforced woven synthetic fabric made from an ethylene interpolymer alloy (EIA). Whether used in very hot or extremely cold temperatures, XR geomembranes retain their flexibility and perform better than any other geomembrane available. (High Performance Reinforced Geomembrane)

Base Fabric Type: Polyester

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Thickness	ASTM D 751	mil (mm)	40 (1.0)
Basic Fabric Weight (Nominal)	ASTM D 751	oz/yd ² (g/m ²)	6.5 (220)
Weight	ASTM D 751	oz/yd ² (g/m ²)	38.0 ±2 (1288 ±70)
Tear Strength (Trapezoid Tear)	ASTM D 4533	lbs (N) min	40/55 (175/245)
Breaking Yield Strength (Grab Tensile)	ASTM D 751	lbs (min)	550/550 (2448/2448)
Low Temperature (4hr - 1/8" mandrel)	ASTM D 2136	Pass	@ -30°F (-34°C)
Dimensional Stability (212°F - 1 hr)	ASTM D 1204	%	0.5 @ max each direction
Adhesion Heat Sealed Seam (Dielectric Weld)	ASTM D 751	lbf/in (N/cm) min	40/2 (17.5)
Dead Load - Seam Shear Strength	ASTM D 751		2" (5 cm) seam, 4hr, 1" (2.5 cm) strip 240 lb (1068 N/2.54cm) @ 70 °F (21 °C) 120 lb (534 N/2.54cm) @ 160 °F (70 °C)
Busting Strength (Ball Tip)	ASTM D 751	lbs (N) min lbs (N) typical	750 (3330) 800 (3560)
Hydrostatic Resistance (Method A)	ASTM D 751	psi (N) min	800 (540)
Blocking Resistance (180°F /82°C)	ASTM D 1204		#2 Rating Max
Abrasion - Ply	ASTM D 413	lbs/in (daN/cm) min of Film Tearing Bond	15 (65/2.5)
Bonded Seam Strength (as modified by NSF 54)	ASTM D 751	lbs (N) min	550 (2450)
Abrasion Resistance(H-18 Wheel 1000g load)	ASTM D 3389		2000 cycles (min) before fabric exposure 50 mg/100 cycles max weight loss
Weathering Resistance (Carbon-arc)	ASTM G-23		8000 hrs(min) – No appreciable changes or stiffening or cracking of coating
Water Absorption (Section 12, 7 days)	ASTM D 471		0.025 kg/m ² @ 70 °F/21 °C 0.14 kg/m ² max @ 212 °F/100 °C
Wicking	ASTM D 751		1/8" (0.3cm) Max
Puncture Resistance	ASTM D 4833	lbs (N) min	275 (1200)
Coefficient of Thermal Expansion/ Contraction	ASTM D 696		8 x 10 ⁻⁶ in/in °F (1.4 x 10 ⁻⁵ cm/cm/°C) max

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