

Titan R45 (LLDPE-R)

45mil Scrim Reinforced Geomembrane



Titan R Series is a flexible geomembrane that incorporates polyester scrim, fully enclosed between two layers of linear lowdensity polyethylene (LLDPE). This design results in exceptional toughness, offering high tensile and puncture strength. The combination of premium high-strength LLDPE and dense scrim reinforcement contributes to its impressive durability. Additionally, the geomembrane features a highly stabilized formulation with antioxidants, UV stabilizers, and carbon black, providing excellent long-term protection for exposed and or barrier applications

Coated Fabric Specifications*

Total Thickness	45 ± 4mils (1.02 - 0.14 mm)
Total Weight (Nominal)	28 oz/yd ² (923 g/m ²)
Coating Type	Polyethylene
Sealing Properties	Thermal

TESTED PROPERTY	TEST METHOD		UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)	
				MINIMUM	TYPICAL
Grab Tensile	ASTM D751A	Warp	lbf (N)	275 (1223)	350 (1557)
		Fill		275 (1223)	350 (1557)
Grab Elongation	ASTM D751A	Warp	%	22	30
		Fill		22	30
Tear Strength, Tongue	ASTM D5884	Warp	lbf (N)	100 (445)	135 (601)
		Fill		100 (445)	135 (601)
Puncture, Rod	ASTM D4833		lbf (N)	108 (480)	125 (556)
Ply Adhesion Strength	ASTM D751		lbs/in (N/cm)	20 (35)	35 (61)
Low-Temperature Bend	ASTM D2136		° F (° C)	-70 (-57)	-70 (-57)
Abrasion Resistance (H18/1kg)	ASTM D3389		Cycles	20,000	30,000
Ozone Resistance (100pphm @40 °C)	ASTM D1149			PASS	
Oxidative Induction Time	ASTM D3895		Minutes	100	150
Hydraulic Conductivity	ASTM E96		cm/sec	1.47 x 10 ⁻¹⁰	
Seam Shear Strength	ASTM D7747		lbs/in (N/cm)	100 (175)	110 (192)
Seam Peel Strength	ASTM D6636		lbs/in (N/cm)	20 (35)	85 (149)

NOTES:

*This product is certified to AS4020 and NSF Std 61 for potable water containment.

*This product meets the requirements of GRI GM-25 (Category 3 – Standard) specification.

This data is provided for informational purposes only. Titan Environmental Containment Ltd. makes no warranties as to the suitability or the fitness for a specific use or merchantability of the products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability from resulting loss or damage. This information is subject to change without notice, please check with Titan Environmental Containment Ltd. for current updates.

Titan Environmental Containment

Toll free: 1-866-327-1957 | info@titanenviro.com | TitanEnviro.com