

Western AG

Enterprises, Inc.

High Performance XR-5 8130 Reinforced Geomembrane Specification Sheet

XR-5® 8130 Reinforced	Test Method	Standard	Metric
Base Fabric Type Base Fabric Weight (nominal)		Polyester 6.5 oz/yd ²	Polyester 220 g/m ²
Thickness	ASTM D 751	30.0 mils min	0.75 mm min
Weight	ASTM D 751	30.0 ± 2 oz/yd ²	1020 ± 70 g/m ²
Tear Strength	ASTM D 4533 Trapezoid Tear	35/35 lb min	155/155 N min
Breaking Yield Strength	ASTM D 751 Grab Tensile Procedure A	550/550 lb min	2450/2450 N min
Low Temperature	ASTM D 2136 4-hr 1/8" mandrel	Pass @ -30°F	Pass @ -35°C
Dimensional Stability	ASTM D 1204 212 °F - 1 hr	1.5% max each direction	1.5% max each direction
Adhesion Heat Sealed Seam	ASTM D 751 Dielectric Weld	35 lb/2 in min	150 N/5 cm min
Dead Load Seam Shear Sealed	ASTM D 751 Dielectric Weld	2 in seam, 1 in strip 210 lb @ 70°F 105 lb @ 160°F	5 cm seam, 2.5 cm strip 935 N @ 21°C 465 N @ 70°C
Bursting Strength	ASTM D 751 4-hour test	650 lb min 800 lb typical	2890 N min 3560 N typical
Hydrostatic Resistance	ASTM D 751 Ball Tip	800 psi min	540 N/sq cm min
Blocking Resistance	ASTM D 751 Method A	#2 Rating max	
Adhesion - Ply	ASTM D 413 Type A	15 lb/in min Or Film Tearing Bond	65 N/2.5 cm min or Film Tearing Bond
Bonded Seam Strength	ASTM D 751 Grab Test Method Procedure A	550 lb min	2450 N min
Abrasion Resistance	ASTM D 3389 H-18 Wheel 1000 g Load	2000 cycles (min) before fabric exposure 50 mg/100 cycles max weight loss	
Weathering Resistance	ASTM G153 (Carbon - Arc)	8000 hrs (min)-No appreciable changes or stiffening or cracking of coating	
Water Absorption	ASTN D 471 Section 12 7 Days	0.025 kg/m ² max @ 70°F/21°C 0.14 kg/m ² max @ 212°F/100°C	
Wicking	ASTM D 751	1/8 in max	0.3 cm max
Puncture Resistance	ASTM D 4833	250 lb min	110 N min
Coefficient of Thermal Expansion/Contraction	ASTM D 696	8 x 10 ⁻⁶ in/in/°F max	1.4 x 10 ⁻⁵ cm/cm/°C max

Seaming: Thermal welding methods are recommended. No glues or solvents are suggested.