

**High Performance XR-5<sup>®</sup> 8130 Reinforced Geomembrane**

XR-5 <sup>®</sup> 8130 Reinforced	Test Method	Standard	Metric
Thickness	ASTM D751	30.0 mils minimum	0.76 mm minimum
Weight	ASTM D751	30.0 ± 2 oz/yd <sup>2</sup>	1017 ± 70 g/m <sup>2</sup>
Tear Strength	ASTM D4533 Trapezoid Tear	35/35 lb <sub>f</sub> minimum	155/155 N minimum
Breaking Yield Strength	ASTM D751 Grab Tensile	550/550 lb <sub>f</sub> minimum	2447/2447 N minimum
Low Temperature	ASTM D2136 4 hrs. - 1/8" mandrel	Pass @ -30° F	Pass @ -35° C
Dimensional Stability	ASTM D1204 212° F - 1 hr	1% maximum each direction	1% maximum each direction
Adhesion Heat Sealed Seam	ASTM D751 Dielectric Weld	35 lb <sub>f</sub> /2 in minimum	15 daN/5 cm minimum
Dead Load Seam Shear Strength	MIL-T-52983E (modified), Para. 4.5.2.19	2 in seam, 4 hrs, 1 in strip 210 lb <sub>f</sub> @ 70° F 105 lb <sub>f</sub> @ 160° F	5 cm seam, 4 hrs, 2.5 cm strip 934 N @ 21° C 467 N @ 70° C
Bursting Strength	ASTM D751 Ball Tip	650 lb <sub>f</sub> minimum 800 lb <sub>f</sub> typical	2892 N minimum 3560 N typical
Hydrostatic Resistance	ASTM D751 Method A	800 psi minimum	5.51 MPa minimum
Blocking Resistance	ASTM D751 180° F/82° C	#2 Rating maximum	
Adhesion - Ply	ASTM D413	15 lb <sub>f</sub> /in minimum or Film Tearing Bond	13 daN/5 cm minimum or Film Tearing Bond
Bonded Seam Strength	ASTM D751 Seam Strength as modified by NSF 54	550 lb <sub>f</sub> minimum	2447 N minimum

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<b>Abrasion Resistance</b>	ASTM D3389 H-18 Wheel 1000 g Load	2000 cycles (min.) before fabric exposure 50 mg/100 cycles maximum weight loss	
<b>Weathering Resistance</b>	ASTM G23 (Carbon-Arc)	8000 hrs (min.)-No appreciable changes or stiffening or cracking of coating	
<b>Water Absorption</b>	ASTM D471 Section 12 7 Days	0.025 kg/m <sup>2</sup> maximum @ 70° F/21° C 0.14 kg/m <sup>2</sup> maximum @ 212° F/100° C	
<b>Wicking</b>	Shelter-Rite <sup>®</sup> Procedure	1/8 in maximum	0.3 cm maximum
<b>Puncture Resistance</b>	ASTM D4833	250 lbf minimum	1112 N minimum
<b>Coefficient Of Thermal Expansion/Contraction</b>	ASTM D696	8 x 10 <sup>-6</sup> in/in/°F maximum	1.4 x 10 <sup>-5</sup> cm/cm/°C maximum

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

We believe this information is the best currently available on the subject. We offer it as a suggestion in any appropriate experimentation you may care to undertake. It is subject to revision as additional knowledge and experience are gained. We make no guarantee of the results and assume no obligation or liability whatsoever in connection with this information. In case of conflict between standard and metric specifications, standard shall apply.

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