



Seaman Corporation Material Specification

8130 XR[®]-5 ULT

Ultra Low Temperature Flexible Reinforced Geomembrane Material

Physical Property	Test Method	Imperial	Metric
Base Fabric	type	Polyester	
Base Fabric Weight	ASTM D751 Nominal	6.5 oz/ yd ²	220 g/ m ²
Thickness	ASTM D751	30 mil (minimum)	0.76 mm (minimum)
Weight	ASTM D751	30.0 oz/ yd ² ±2 oz/ yd ²	1017 g/ m ² ±70 g/ m ²
Tear Strength	ASTM D751 Trap Tear - Warp/Fill	40/55 lbf (minimum)	178/245 N (minimum)
Breaking Yield Strength	ASTM D751 Grab Tensile - Warp/Fill	550/550 lbf	2450/2450 N
Low Temperature Resistance	ASTM D 2136 Low Temperature Bend	Pass @ -50° F	Pass @ -46° C
Adhesion	ASTM D751 Dielectric Weld	40 lbf/ 2 in	17.5 daN/ 5 cm
Adhesion Ply	ASTM D413	15 lbf/ in (minimum) or film tearing bond	13 daN/ 5 cm (minimum) or film tearing bond
Bursting Strength	ASTM D751 Ball Tip	750 lbf	3340 N
Hydrostatic Resistance	ASTM D751 Method A	800 psi (minimum)	5.52 Mpa (minimum)

(continued)

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Physical Property	Test Method	Imperial	Metric
Dead Load Seam Strength	ASTM D751 4 hour test @ 160° F (71° C) 4 hour test @ 70° F (21° C)	120 lbf/ in 240 lbf/ in	534 N/ 2.54 cm 1068 N/ 2.54 cm
Blocking Resistance	ASTM D751 180° F (82° C)	#2 Rating (max.)	
Bonded Seam Strength	ASTM D751 Procedure A - Grab	550 lbf (minimum)	2450 N (minimum)
Weathering Resistance	ASTM G155 Xenon	8000 hours minimum - no appreciable changes or stiffening or cracking of coating	
Water Absorption	ASTM D751 One-side exposure -7 Days	0.025 kg/m ² (max.) @ 70° F/ 21° C	
Puncture Resistance	ASTM D4833	275 lbf (minimum)	1225 N (minimum)
Coefficient of Thermal Expansion/Contraction	ASTM D696	2.1 10 ⁻⁵ in/ in/ ° F (max.)	3.8 10 ⁻⁵ cm/ cm/ ° C (max.)
Dimensional Stability	ASTM D1204 100° C/1 hour	0.5% max. each direction	

Unless stated otherwise, values presented here represent the minimum expected measurements at the time of manufacture. 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 results and assume no obligation or liability whatsoever in connection with this information.



1000 Venture Blvd. | Wooster, Ohio 44691

Phone: 330.262.1111 | US/Canada toll-free: 800.927.8578 | Fax: 330.263.6950 | www.SeamanCorp.com