



Seaman Corporation Material Specification

# 8228 XR<sup>®</sup>-PW

## Flexible Reinforced Geomembrane Material for Potable Water

Physical Property	Test Method	Imperial	Metric
Base Fabric	type	Polyester	
Base Fabric Weight	ASTM D751 Nominal	3.0 oz/ yd <sup>2</sup>	102 g/ m <sup>2</sup>
Thickness	ASTM D751	30 mil (minimum)	0.76 mm (minimum)
Weight	ASTM D751	28.0 oz/ yd <sup>2</sup> ±2 oz/ yd <sup>2</sup>	950 g/ m <sup>2</sup> ±70 g/ m <sup>2</sup>
Tear Strength	ASTM D751 Trap Tear - Warp/Fill	30/30 lbf (minimum)	134/134 N (minimum)
Breaking Yield Strength	ASTM D751 Grab Tensile - Warp/Fill	250/200 lbf	1110/890 N
Low Temperature Resistance	ASTM D 2136 Low Temperature Bend	Pass @ -25° F	Pass @ -32° C
Adhesion	ASTM D751 Dielectric Weld	20 lbf/ 2 in	9 daN/ 5 cm
Adhesion Ply	ASTM D413	7.5 lbf/ in (minimum) or film tearing bond	6.5 daN/ 5 cm (minimum) or film tearing bond
Bursting Strength	ASTM D751 Ball Tip	300 lbf	1335 N
Hydrostatic Resistance	ASTM D751 Method A	300 psi (minimum)	2.07 Mpa (minimum)

(continued)



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 XR-5<sup>®</sup> is a product and registered trade name of Seaman Corporation

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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)	50 lbf/ in 100 lbf/ in	222 N/ 2.54 cm 445 N/ 2.54 cm
Blocking Resistance	ASTM D751 180° F (82° C)	#2 Rating (max.)	
Bonded Seam Strength	ASTM D751 Procedure A - Grab	200 lbf (minimum)	890 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 <sup>2</sup> (max.) @ 70° F/ 21° C	
Puncture Resistance	ASTM D4833	50 lbf (minimum)	222 N (minimum)
Coefficient of Thermal Expansion/Contraction	ASTM D696	2.1 10 <sup>-5</sup> in/ in/ °F (max.)	3.8 10 <sup>-5</sup> cm/ cm/ °C (max.)
Dimensional Stability	ASTM D1204 100° C/1 hour	1.0% 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.



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