



Seaman Corporation Material Specification

8138 XR-5[®]

Flexible Reinforced Geomembrane

| 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 | 40 mil (minimum) | 1.016 mm (minimum) |
| Weight | ASTM D751 | 38.0 oz/ yd ² ±2 oz/ yd ² | 1290 g/ m ² ±70 g/ m ² |
| Tear Strength | ASTM D4533 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 @ -30° F | Pass @ -34° C |
| Adhesion-Heat Welded | ASTM D751 Dielectric Weld | 40 lbf/ 2 in | 17.5 daN/ 5 cm |
| Bursting Strength | ASTM D751 Ball Tip | 750 lbf | 3340 N |
| Hydrostatic Resistance | ASTM D751 Procedure A | 800 psi (minimum) | 5.52 Mpa (minimum) |

(continued)



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 XR[®]-PW is a product and trade name of Seaman Corporation

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|--|---|--|---------------------------------|
| Dead Load Seam Strength 2" (50.8mm) seam, 1" (25.4mm) strip | ASTM D751 | 120 lbf/ in | 534 N/ 2.54 cm |
| | 4 hour test @ 160° F (71° C) 4 hour test @ 70° F (21° C) | 240 lbf/ in | 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 D471 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 | 3.8 10 ⁻⁵ cm/ cm/ °C |
| 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.



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