



HIGH PERFORMANCE XR-5® 8130 REINFORCED GEOMEMBRANE

| XR-5® 8130 Reinforced | Standard | Metric |
|--|--|---|
| Base Fabric Type ASTM D3776 | Polyester | |
| Base Fabric Weight (nominal) ASTM D3776 | 6.5 oz/yd ² | 220 g/m ² |
| Thickness ASTM D751 | 30.0 mils min. | 0.76 mm min. |
| Weight ASTM D751 | 30.0 ± 2 oz/yd ² | 1017 ± 70 g/m ² |
| Tear Strength ASTM D4533, Trapezoid Tear | 35/35 lb _f min. | 155/155 N min. |
| Breaking Yield Strength ASTM D751, Grab Tensile | 550/550 lb _f min. | 2447/2447 N min. |
| Low Temperature ASTM D2136, 4 hr - 1/8" mandrel | Pass @ -30 ° F | Pass @ -35 ° C |
| Dimensional Stability ASTM D1204, 212° F - 1 hr | 1.5% max. each direction | |
| Adhesion - Heat Sealed Seam ASTM D751, Dielectric Weld | 35 lb _f /2 in min. | 15 daN/5 cm min. |
| Dead Load - Seam Shear Strength ASTM D751 | 2 in seam, 4 hr, 1 in strip 210 lb _f @ 70° F 105 lb _f @ 160° F | 5 cm seam, 4 hr, 2.5 cm strip 934 N @ 21° C 467 N @ 70° C |
| Bursting Strength ASTM D751 Ball Tip | 650 lb _f min. 800 lb _f typical | 2892 N min. 3560 N typical |
| Hydrostatic Resistance ASTM D751, Method A | 800 psi min. | 5.51 MPa min. |
| Blocking Resistance ASTM D751 (180° F/82° C) | # 2 Rating max. | |
| Adhesion - Ply ASTM D413 | 15 lb _f /in min. or Film Tearing Bond | 13 daN/5 cm min. or Film Tearing Bond |
| Bonded Seam Strength ASTM D751 as modified by NSF 54 | 550 lb _f min. | 2447 N min. |
| Abrasion Resistance ASTM D3389 (H-18 Wheel, 1000 g load) | 2000 cycles (min.) before fabric exposure 50 mg/100 cycles max weight loss | |
| Weathering Resistance ASTM G23 (Carbon-Arc) | 8,000 hrs (min.) - No appreciable changes or stiffening or cracking of coating | |
| Water Absorption ASTM D471, 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 Shelter-Rite® Procedure | 1/8 in max. | 0.3 cm max. |
| Puncture Resistance ASTM D4833 | 250 lb _f min. | 1112 N min. |
| Coefficient of Thermal Expansion/Contraction ASTM D696 | 8 x 10 ⁻⁶ in/in/°F max. | 1.4 x 10 ⁻⁵ cm/cm/°C max. |



HIGH PERFORMANCE XR5® 8138 REINFORCED GEOMEMBRANE

| XR-5® 8138 Reinforced | Standard | Metric |
|--|--|---|
| Base Fabric Type | Polyester | |
| Base Fabric Weight (nominal) ASTM D3776 | 6.5 oz/yd ² | 220 g/m ² |
| Thickness ASTM D751 | 40.0 mils nominal | 1.0 mm nominal |
| Weight ASTM D751 | 38.0 ± 2 oz/yd ² | 1288 ± 70 g/m ² |
| Tear Strength ASTM D4533, Trapezoid Tear | 35/35 lb _f min. | 155/155 N min. |
| Breaking Yield Strength ASTM D751, Grab Tensile | 550/550 lb _f min. | 2447/2447 N min. |
| Low Temperature ASTM D2136 4 hr, 1/8" mandrel | Pass @ -30 ° F | Pass @ -35 ° C |
| Dimensional Stability ASTM D1204, 212° F. 1 hr | 1.5% max. each direction | 1.5% max. each direction |
| Adhesion - Heat Sealed Seam ASTM D751, Dielectric Weld | 35 lb _f /2 in min. | 15 daN/5 cm min. |
| Dead Load Seam Shear Strength ASTM D751 (modified) Para. 4.5.2.19 | 2 in seam, 4 hr, 1 in strip 210 lb _f @ 70° F 105 lb _f @ 160° F | 5 cm seam, 4 hr, 2.5 cm strip 934 N @ 21° C 467 N @ 70° C |
| Bursting Strength ASTM D751 Ball Tip | 650 lb _f min. 800 lb _f typical | 2892 N min. 3560 N typical |
| Hydrostatic Resistance ASTM D751, Method A | 800 psi min. | 5.51 MPa min. |
| Blocking Resistance ASTM D751 (180° F/82° C) | #2 Rating max. | |
| Adhesion - Ply ASTM D413 | 15 lb _f /in min. or Film Tearing Bond | 13 daN/5 cm min. or Film Tearing Bond |
| Bonded Seam Strength ASTM D751, Seam Strength as modified by NSF 54 | 550 lb _f min. | 2447 N min. |
| Abrasion Resistance ASTM D3389, H-18 Wheel, 1000g Load | 2000 cycles (min.) before fabric exposure 50 mg/100 cycles max weight loss | |
| Weathering Resistance ASTM G23 (Carbon-Arc) | 8,000 hrs (min.) No appreciable changes or stiffening or cracking of coating | |
| Water Absorption ASTM D741, 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 Shelter-Rite® Procedure | 1/8 in max. | 0.3 cm max. |
| Puncture Resistance ASTM D4833 | 250 lb _f min. | 1112 N min. |
| Coefficient of Thermal Expansion/Contraction ASTM D696 | 8 x 10 ⁻⁵ in/in/°F max. | 1.4 x 10 ⁻⁵ cm/cm/°C max. |