



گروه آرین خاک ایرانیان

## مشخصات فنی ژئوممبران نفتی

| XR-5® 8130 Reinforced                           | Test Method                                   | Standard                                                                            | Metric                                                  |
|-------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------|
| Base Fabric Type Base Fabric Weight (nominal)   |                                               | Polyester 6.5 oz/yd <sup>2</sup>                                                    | Polyester 220 g/m <sup>2</sup>                          |
| Thickness                                       | ASTM D 751                                    | 30.0 mils min                                                                       | 0.75 mm min                                             |
| Weight                                          | ASTM D 751                                    | 30.0 ± 2 oz/yd <sup>2</sup>                                                         | 1020 ± 70 g/m <sup>2</sup>                              |
| Tear Strength                                   | ASTM D 4533<br>Trapezoid Tear                 | 35/35 lb min                                                                        | 155/155 N min                                           |
| Breaking Yield Strength                         | ASTM D 751<br>Grab Tensile<br>Procedure A     | 550/550 lb min                                                                      | 2450/2450 N min                                         |
| Low Temperature                                 | ASTM D 2136<br>4-hr 1/8" mandrel              | Pass @ -30°F                                                                        | Pass @ -35°C                                            |
| Dimensional Stability                           | ASTM D 1204<br>212 °F – 1 hr                  | 1.5% max<br>each direction                                                          | 1.5% max<br>each direction                              |
| Adhesion<br>Heat Sealed Seam                    | ASTM D 751<br>Dielectric Weld                 | 35 lb/2 in min                                                                      | 150 N/5 cm min                                          |
| Dead Load<br>Seam Shear Sealed                  | ASTM D 751<br>Dielectric Weld                 | 2 in seam, 1 in strip<br>210 lb @ 70°F<br>105 lb @ 160°F                            | 5 cm seam, 2.5 cm strip<br>935 N @ 21°C<br>465 N @ 70°C |
| Bursting Strength                               | ASTM D 751<br>4-hour test                     | 650 lb min<br>800 lb typical                                                        | 2890 N min<br>3560 N typical                            |
| Hydrostatic Resistance                          | ASTM D 751<br>Ball Tip                        | 800 psi min                                                                         | 540 N/sq cm min                                         |
| Blocking Resistance                             | ASTM D 751<br>Method A                        | #2 Rating max                                                                       |                                                         |
| Adhesion – Ply                                  | ASTM D 413<br>Type A                          | 15 lb/in min<br>Or Film Tearing Bond                                                | 65 N/2.5 cm min or<br>Film Tearing Bond                 |
| Bonded Seam Strength                            | ASTM D 751<br>Grab Test Method<br>Procedure A | 550 lb min                                                                          | 2450 N min                                              |
| Abrasion Resistance                             | ASTM D 3389<br>H-18 Wheel<br>1000 g Load      | 2000 cycles (min) before fabric exposure<br>50 mg/100 cycles max weight loss        |                                                         |
| Weathering Resistance                           | ASTM G153<br>(Carbon – Arc)                   | 8000 hrs (min)-No appreciable changes or<br>stiffening or cracking of coating       |                                                         |
| Water Absorption                                | ASTN D 471<br>Section 12<br>7 Days            | 0.025 kg/m <sup>2</sup> max @ 70°F/21°C<br>0.14 kg/m <sup>2</sup> max @ 212°F/100°C |                                                         |
| Wicking                                         | ASTM D 751                                    | 1/8 in max                                                                          | 0.3 cm max                                              |
| Puncture Resistance                             | ASTM D 4833                                   | 250 lb min                                                                          | 110 N min                                               |
| Coefficient of Thermal<br>Expansion/Contraction | ASTM D 696                                    | 8 x 10-6 in/in/°F max                                                               | 1.4 x 10-5 cm/cm/°C max                                 |