



## PHYSICAL PROPERTIES – POLYPROPYLENE GEOMEMBRANES

PROPERTY	TEST METHOD	SPECIFICATION		
		Certified Value	Certified Value	Certified Value
Gauge (nominal) mills (mm)	--	.036 (0.90)	.045 (1.14)	.060 (1.52)
Plies, reinforcing	--	1	1	1
Thickness, min. 1) Overall - mil (mm) 2) Over Scrim - mil (mm)	ASTM D-751 Optical Method	34 (0.86) 11 (0.28)	41 (1.04) 11 (0.28)	54 (1.37) 11 (0.28)
Breaking Strength-fabric min. lbf (kN)	ASTM D-751 Method A	225 (1.0)	225 (1.0)	250 (1.11)
Low Temp. Flex. °F (°C)	ASTM D-2136 1/8-in. mandrel, 4 hr. pass	-40 (-40)	-40 (-40)	-40 (-40)
Puncture Resistance, min. lbs. (kN)	FTMS 101C Method 2031	300 (1.34)	350 (1.56)	375 (1.67)
Tear Strength, min. lbf (kN)	ASTM D-5884	55 (0.24)	55 (0.24)	55 (0.24)
Dim. Stability (% chg, max.)	ASTM D-1204 180°F/82°C 1 hr.	1.0 (1.0)	1.0 (1.0)	1.0 (1.0)
Hydrostatic resist. min psi (MPa)	ASTM D-751 Method A, Procedure 1	325 (2.2)	350 (2.4)	375 (2.58)
Ply Adhesion, min. lbs/in (kN/m)	ASTM D-413 Machine method modified	20 (3.5)	20 (3.5)	20 (3.5)
Water Absorption max, % wt. chg.	ASTM D-471, 30 days @70°F (21°C)	<1%	<1%	<1%
ESCR (Env. Stress Crack Resist) min. hrs w/o failure	ASTM D-1693 3000 hours	Not affected by ESC	Not affected by ESC	Not affected by ESC
UV Resistance	ASTM G26 Xenon Arc 80°C/4000 hrs	Pass	Pass	Pass

### TYPICAL FABRICATED SEAM PROPERTIES\*\*

Bonded seam strength, min.	ASTM D-751, modified	175 (0.78)	200 (0.89)	220 (0.98)
Peel Adhesion, min.	ASTM D-413, modified	20 (3.5) or FTB	20 (3.5) or FTB	20 (3.5) or FTB