

Product Data	Test Method	LLDPE Values	HDPE Values
Thickness (nominal), mil (mm)	ASTM D5994	50 (1.25)	50 (1.25)
Thickness (min. avg.), mil (mm)	ASTM D5994	47.5 (1.19)	47.5 (1.19)
Thickness (lowest indiv.), mil (mm)	ASTM D5994	42.5 (1.06)	42.5 (1.06)
Drainage Stud Height (min. avg.), mil (mm)	ASTM D7466	130 (3.30)	130 (3.30)
Friction Spike Height (min. avg.), mil (mm)	ASTM D7466	175 (4.45)	175 (4.45)
Density, g/cc	ASTM D792, Method B	0.94 (max.)	0.94 (min.)
Tensile Properties (avg. both directions)	ASTM D6693, Type IV		
Strength @Yield (min. avg.), lb/in. width (N/mm)	ASTM D6693, Type IV	N/A	110 (19.3)
Elongation @ Yield (min. avg.), % (GL=1.3 in.)	ASTM D6693, Type IV	N/A	13
Strength@Break (min. avg.), lb./in. width (N/mm)	ASTM D6693, Type IV	105 (18.4)	110 (19.3)
Elongation@Break (min. avg.), lbs. %(GL=2.0 in.)	ASTM D6693, Type IV	300	200
Tear Resistance (min. avg.), lbs. (N)	ASTM D1004	30 (133)	38 (169)
Puncture Resistance (min. avg.) lbs. (N)	ASTM D4833	55 (245)	80 (356)
Carbon Black Content (range %)	ASTM D 4218	2-3	2-3
Carbon Black Dispersion (Category)	ASTM D5596	Only near spherical agglomerates for 10 views in Cat. 1 or 2	
Stress Crack Resistance (Single Point NCTL), hours	ASTM D5397, Appendix	N/A	500
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O <sub>2</sub>	≥140	≥140

Agru America's geomembranes are certified to pass Low Temp. Brittleness via. ASTM D746 (-80°C), and Dimensional Stability via. ASTM D1204 (± 2% @ 100°C)

**ENGINEERED TURF COMPONENT**

Product Data	Test Method	Values
CBR Puncture	ASTM D6241	800 lb. (MARV)
Tensile Product (MD/XD)	ASTM D4595	1,000 lb./ft. min. (MARV)
Rainfall Induced Erosion	ASTM D6459	0.04% Infill Loss 6 in./hr.
Aerodynamic Evaluation	GTRI Wind Tunnel	120 mph with max. uplift of 0.12 lb/sf
Engineered Turf Fiber Tuft UV Stability	ASTM G147	>60% retained tensile strength at 100 yrs. (projected)
Backing System UV Stability Index Test (Single Geotextile Fully Exposed)	ASTM G1545 Modified Cycle 1.UVA340	110 lbs./ft. retained tensile strength at 6500 hrs
Steady State Hydraulic Overtopping (ClosureTurf® w/ HydroBinder®)	ASTM D7277/D7276	5 ft. overtopping resulting in 29 ft/s velocity and 8.8 psf shear stress for Manning's N Value of 0.02
Full Scale Wave Overtopping Test Cumulative Volume (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	165,000 ft <sup>3</sup> /ft
Full Scale Wave Overtopping Test Discharge (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	4.0 ft <sup>3</sup> /s/ft
Internal Friction of Combined Components	ASTM D5321	35°, min.
ArmorFill™ Infill	ASTM D6913	ASTM C-33 Fine Aggregates w/ Pozzolanic Binder
Yarn Weight (Total Product Weight)	ASTM D5261	≥19 oz. / sq. yd. (≥ 24 oz. / sq. yd.)
Tensile Strength of Yarn	ASTM D2256	15 lbs. min.

**SUPPLY INFORMATION (Standard Roll Dimensions)**

	Thickness		Width		Length		Area (approx.)		Weight (avg.)	
	mil	mm	ft.	m	ft.	m	ft <sup>2</sup>	m <sup>2</sup>	lbs	kg
Super Gripnet®	50	1.25	23	7	300	91.4	6,900	640	~3000	~1360
Turf Component	N/A	N/A	15	4.6	300	91.4	4500	418	840	381

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