

ENVIROSLOPE STACKED GEOWEB

The EnviroSlope™ System with stacked (tiered) Geoweb® sections is an economical solution to create attractive vegetated reinforced soil slopes and is recommended for slopes up to 70 degrees. The facing material for this option is the Geoweb cellular confinement material 150 mm high at each level, three cells deep, and stacked and stepped back each layer to create the slope required. The front cells are filled with seeded topsoil during construction. Uniaxial geogrid soil reinforcement is typically installed as required by the design to construct the steepened slope to the required slope angle. The EnviroSlope steepened slope structures provide advantages in right of way and reduced space that could not be achieved with the slope of an unreinforced embankment. The system offers environmental advantages over typical MSE block walls by allowing stormwater to collect in the open front facia.

April 2023		Geoweb	
Material Properties		ASTM	Product Type
	Material		UV Stabilized Polyethylene
	UV Stabilization		1.5% Carbon Black or 1% HALS
	Material Thickness	D5199	1.27 mm (50 mil)
	Density	D1505	0.935 g/cm ³ (58.4 lbs/ft ³)
	Short Term Peel Strength		2130 N (480 lbs)
	10,000 Hr. Seam Peel Strength		716 N (160 lbs)
	ESCR	D1693	5000 hours
	Cell Length		267 mm (10.5 inches) +/-10%
	Cell Width		330 mm (13 inches) +/- 10%
	Nominal Depth		150 mm (6 inches)
	Front Fascia Colors Available		Tan or Green
	Section size (3 cell X 8 cell)		0.8 m X 2.64 m X 0.15 m
	Section size (4 cell X 8 cell)		1.07 m X 2.64 m X 0.15 m

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April 2023		Mirafi Uniaxial Geogrids -Metric Values									
Material Properties		ASTM	2XT ²	3XT	5XT	7XT	8XT	10XT	20XT	22XT	24XT
	Wide Width (kN/m) MD	D6637 Ultimate	29	51	68	86	108	139	200	300	400
	Creep Reduced Strength(kN/m)	D5262	18	32	43	55	68	88	127	190	253
	LTDS (kN/m) ¹	GRI GG4 (b)									
	Sand, Silt, Clay ¹		16	28	38	47	59	76	110	164	219
	Roll Width (m)		3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	Roll Length (m)		46	46	46	61	61	61	61	61	61
	Roll Weight(kg)		46	54	56	75	85	107	157	226	261

Note1 Refer to manufacturers Long Term Design Strength (LTDS) Reduction factors listed on Layfield website.

Note2 Values shown for 2XT are both machine and cross-machine direction. Values for other products are machine direction only.

April 2023		E'Grid Uni-axial Geogrids (HDPE)						
Material Properties		ASTM	E'GRID 50R	E'GRID 65R	E'GRID 90R	E'GRID 110R	E'GRID 130R	E'GRID 170R
	Wide Width (kN/m) MD	D6637 Ultimate	29	51	68	86	108	139
	Creep Reduced Strength(kN/m)	D5262	18	32	43	55	68	88
	LTDS (kN/m)	ISO 13431 + ISO TR 20432						
	Sand, Silt and Clay		20.7	26.3	34.5	43.6	54.3	65.0
	Roll Size (m)		1.0 x 50	1.0 x 50	1.0 x 50	1.0 x 50	1.0 x 50	1.0 x 50
	Roll Weight Typical (kg)		15	20	28	39	46	55

NOTE: The Long-Term Design Strengths (LTDS) are calculated using product specific reduction factors based on independent testing. Carbon black minimum content is 2% for high UV light resistance.

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