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PRODUCT DATA SHEET TRINET[®] COCONUT

DESCRIPTION

TriNet Coconut is a three dimensional biocomposite turf reinforcement mat (TRM) that consists of a coconut fiber matrix. The fibers are evenly distributed throughout the entire area of the TRM. The top, middle, and bottom nets of each TRM are stitched together forming a permanent three dimensional TRM. TriNet Coconut shall be manufactured in the U.S.A.

TriNet Coconut has a design soil loss ratio (event-based RUSLE C factor) of .031 and is typically suitable for slopes up to .5H:1V. TriNet Coconut is rated for channel flows up to 20.0 ft/s (6.1 m/s) and 12 lb/ft² (575 Pa) shear stress.

PHYSICAL PROPERTIES

TriNet Coconut measurements at time of manufacturing:

Width		8.0 ft (2.4 m)	16.0 ft (4.9 m)
Length		90.0 ft (27.4 m)	90.0 ft (27.4 m)
Area		80.0 yd ² (66.9 m ²)	160.0 yd ² (133.8 m ²)
Weight ^a		69.52 lb (31.534 kg)	139.04 lb (63.067 kg)
Coconut Matrix (±10%)		0.500 lb/yd ² (0.271 kg/m ²)	0.500 lb/yd ² (0.271 kg/m ²)
Product Weight (± 10%)		0.869 lb/yd ² (0.471 kg/m ²)	0.869 lb/yd ² (0.471 kg/m ²)
	Top - Super Heavy Duty Polypropylene (UV-Stabilized)	0.5 in x 0.5 in (12.7 mm x 12.7 mm)	0.5 in x 0.5 in (12.7 mm x 12.7 mm)
Net Openings	Middle - Ultra Heavy Duty Polypropylene (UV-Stabilized)	0.45 in x 0.58 in (11.43 mm x 14.73 mm)	0.45 in x 0.58 in (11.43 mm x 14.73 mm)
	Bottom - Super Heavy Duty Polypropylene (UV-Stabilized)	0.5 in x 0.5 in (12.7 mm x 12.7 mm)	0.5 in x 0.5 in (12.7 mm x 12.7 mm)

TYPICAL INDEX VALUES

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.264 in (6.71 mm)
Light Penetration	ASTM D 6567	20.3%
Resiliency	ASTM D 1777/ECTC	89%
Mass per Unit Area	ASTM D 6475	0.761 lb/yd ² (0.413 kg/m ²)
MD-Tensile Strength Max.	ASTM D 6818	750.0 lb/ft (10.95 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	675.0 lb/ft (9.85 kN/m)
MD-Elongation	ASTM D 6818	19.0%
TD-Elongation	ASTM D 6818	16.5%
Swell	ECTC Procedure	18%
Water Absorption	ASTM D 1117/ECTC	244.3%
UV Stability	ASTM D 4355 (1,000 hr)	90% minimum
Porosity	ECTC Procedure	95.58%
Stiffness	ASTM D6575	1.53 oz-in
Bench-Scale Rain Splash	ASTM D 7101	$SLR = 9.00 @ 2 in/hr^{b,c}$
Bench-Scale Rain Splash	ASTM D 7101	SLR = 13.26 @ 4 in/hr ^{b,c}
Bench-Scale Rain Splash	ASTM D 7101	$SLR = 16.54 \ alpha bla 6 \ in/hr^{b,c}$
Bench-Scale Shear	ASTM D 7207	4.53 lb/ft2 @ 0.5 in soil loss °
Germination Improvement	ASTM D 7322	306%
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^a Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Coconut fibers is 20%.

