



PRODUCT DATA SHEET
TRINET® STRAW/COCONUT

DESCRIPTION

TriNet Straw/Coconut is a three dimensional biocomposite Turf Reinforcement Mat (TRM) that consists of a blend of 70% straw and 30% coconut fibers. The straw fibers used in the product are the finest available agricultural straw with 75% four-inch fibers or greater fiber length. The blended 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 Straw/Coconut shall be manufactured in the U.S.A.

TriNet Straw/Coconut has a design soil loss ratio (event-based RUSLE C factor) of .026 and is typically suitable for slopes up to .5H:1V. TriNet Straw/Coconut is rated for channel flows up to 15.0 ft/s (4.57 m/s) and 10.0 lb/ft² (480 Pa) shear stress.

PHYSICAL PROPERTIES

TriNet Straw/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		64.48 lb (29.248 kg)	128.96 lb (58.495 kg)
Straw/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%)		0.806 lb/yd ² (0.437 kg/m ²)	0.806 lb/yd ² (0.437 kg/m ²)
Net Openings	Top - Heavy Duty Polypropylene (UV-Stabilized)	0.5 in x 0.51 in (12.7 mm x 13.0 mm)	0.5 in x 0.51 in (12.7 mm x 13.0 mm)
	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 - Heavy Duty Polypropylene (UV-Stabilized)	0.5 in x 0.51 in (12.7 mm x 13.0 mm)	0.5 in x 0.51 in (12.7 mm x 13.0 mm)

TYPICAL INDEX VALUES

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.344 in (8.74 mm)
Light Penetration	ASTM D 6567	8.5%
Resiliency	ASTM D 1777/ECTC	83%
Mass per Unit Area	ASTM D 6475	0.779 lb/yd ² (0.423 kg/m ²)
MD-Tensile Strength Max.	ASTM D 6818	600.0 lb/ft (8.76 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	450.0 lb/ft (6.57 kN/m)
MD-Elongation	ASTM D 6818	18.0%
TD-Elongation	ASTM D 6818	15.0%
Swell	ECTC Procedure	31%
Water Absorption	ASTM D 1117/ECTC	438.6%
UV Stability	ASTM D 4355 (1,000 hr)	90% minimum
Porosity	ECTC Procedure	96.95%
Stiffness	ASTM D6575	1.04 oz-in
Bench-Scale Rain Splash	ASTM D 7101	SLR = 14.14 @ 2 in/hr ^{b,c}
Bench-Scale Rain Splash	ASTM D 7101	SLR = 14.47 @ 4 in/hr ^{b,c}
Bench-Scale Rain Splash	ASTM D 7101	SLR = 17.05 @ 6 in/hr ^{b,c}
Bench-Scale Shear	ASTM D 7207	3.99 lb/ft ² @ 0.5 in soil loss ^c
Germination Improvement	ASTM D 7322	206%

^a Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content Straw and Coconut fibers are 15% and 20%, respectively.

