



Material and Performance Specification Sheet

ECC-3 Coconut Turf Reinforcement Mat

Description: The ECC-3 is made with uniformly distributed 100% coconut fiber and three polypropylene nets securely sewn together with UV stabilized thread. The tightly compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation.

The ECC-3 is a permanent turf reinforcement mat and is suited for 1:1 slopes and high-flow channels. The ECC-3 meets Type 5.A, 5.B and 5.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Materials:

Netting

Top and Bottom

Heavyweight 8 PMSF UV Stabilized Polypropylene
 .5" x .5" Opening

Middle

Heavyweight 24# PMSF UV Stabilized Polypropylene
 .4" x .5" Opening

Matrix

100% Coconut Fiber
 0.55 lbs/sq yd
 298.4 g/m²

Thread

UV Stabilized
 1.50" stitch spacing

Roll Sizes:

Width:	7.5 ft (2.3 m)	7.5 ft (2.3 m)
Length:	96.0 ft (29.3 m)	120.0 ft (36.6 m)
Weight $\pm 10\%$:	74.0 lbs(33.6 kg)	92.5 lbs (42.0 kg)
Area:	80 yd ² (66.9 m ²)	100 yd ² (83.6 m ²)
#/Pallet:	16	16

Standards

Index Value Properties*:

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	14.8 oz/yd ² (501.8 g/m ²)
Thickness	ASTM D6525	.29 In (7.4 mm)
Tensile Strength-MD	ASTM D6818	960 lb/ft (14.1 kN/m)
Elongation-MD	ASTM D6818	15.6 %
Tensile Strength-TD	ASTM D6818	675 lb/ft (9.9 kN/m)
Elongation-TD	ASTM D6818	11.7 %
Light Penetration	ASTM D6567	8 %
UV Resistance	ASTM D4355 - 500 hr	80 %

* May differ depending upon raw material variations

Bench-Scale Testing* (NTPEP):

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50mm (2in) / hr-30 min	SLR**=6.89
	100mm (4in) / hr-30 min	SLR**=11.32
	150mm (6in) / hr-30 min	SLR**=18.60
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	3.71 lb/ft
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	335% improvement

*Bench scale tests should not be used for design purposes.
 **Soil Loss Ratio=Soil Loss Bare Soil/Soil Loss with RECP=1/C-Factor (soil loss is based on regression analysis).

Design Values:

Property	Test Method	Value
Unvegetated Maximum Permissible Sheer Stress	ASTM 6460	3.70 psf (177 Pa)
Unvegetated Maximum Flow Velocity	ASTM 6460	13.8 ft/sec
Vegetated Maximum Permissible Sheer Stress	ASTM 6460	12.0 psf (574 Pa)
Vegetated Maximum Flow Velocity	ASTM 6460	25.0 ft/sec

*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory

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