



ECC-3 Coconut Turf Reinforcement Mat

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 suitable for 1:1 slopes and high-flow channels.

Materials:	Netting – Top / Middle / Bottom	Matrix	Thread
	Medium 8#/Heavy 24# Medium 8# PMSF UV Stabilized Polypropylene, Black .5" x .5" / .4" x .5" / .5" x .5"	100% Coconut	UV Stabilized

Roll Sizes:	Standard	"A" Size	Mega
Width:	8.0 ft (2.4 m)	4.0 ft (1.2 m)	16.0 ft (4.9 m)
Length:	112.5 ft (34.3 m)	225.0 ft (68.6 m)	112.5 ft (34.3 m)
Weight ±10%:	92.0 lbs (41.7 kg)	92.0 lbs (41.7 kg)	184.0 lbs (83.5 kg)
Area:	100 yd ² (83.6 m ²)	100 yd ² (83.6 m ²)	200 yd ² (167.2 m ²)
#/Pallet:	9	4	9

Index Value Properties*:

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	13.25 oz/yd ² (449.2 g/m ²)
Thickness	ASTM D6525	.34 In (8.64 mm)
Tensile Strength-MD	ASTM D6818	802 lb/ft (11.70 Kn/m)
Elongation-MD	ASTM D6818	25 %
Tensile Strength-TD	ASTM D6818	643 lb/ft (9.38 Kn/m)
Elongation-TD	ASTM D6818	15.7 %
Light Penetration	ASTM D6567	14 %
Density / Specific Gravity	ASTM D7912	0.888 g/cm ³
Water Absorption	ASTM D1117	113 %
Resiliency	ASTM D6524	N/A %
UV Resistance	ASTM D4355	98 % (1000 hr)
* May differ depending upon raw material variations		

Slope Performance Design Values*:

Property	Test Method	Value	
C-Factors	ASTM D6459	0.00	
Slope Length (L)	≤ 3:1	3:1-2:1	≥ 2:1
< 50 ft (15m)	0.001	0.007	0.047
50 ft – 100 ft	0.008	0.015	0.069
> 100 ft (30 m)	0.027	0.050	0.089
*Large-Scale Results obtained by 3 rd Party GAI Accredited Independent Laboratory			

Bench-Scale Testing* (NTPEP*):**

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50mm (2in) / hr-30 min	SLR**=7.70
	100mm (4in) / hr-30 min	SLR**=10.43
	150mm (6in) / hr-30 min	SLR**=14.18
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	3.13 lb/ft ²
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	364% 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		
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Channel Performance Design Values*:

Property	Test Method	Value
Unvegetated Shear Stress	ASTM D 6460	3.20 lbs/ft ² (153.22 Pa)
Unvegetated Velocity	ASTM D 6460	11.5 ft/s (3.51 m/s)
Vegetated Shear Stress	ASTM D 6460	12.0lbs/ ft ² (574.56 Pa)
Vegetated Velocity	ASTM D 6460	25.0 ft/s (7.62 m/s)
Manning's N (Value Represents a Range)	Calculated	0.024
*Large-Scale Results obtained by 3 rd Party GAI Accredited Independent Laboratory		

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