



Material and Performance Specification

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

| | | | |
|-------------------|---|--|---------------------------------------|
| Materials: | Netting – Top and Bottom | Matrix | Thread |
| | Mediumweight 8# PMSF UV Stabilized Polypropylene 0.50" x 0.50" Opening | 100% Coconut Fiber 0.55 lbs yd ² 298.4 g/m ² | UV Stabilized 1.50" stitch spacing |
| | <i>Middle Net</i> | | |
| | Heavyweight 24# PMSF UV Stabilized Polypropylene 0.40" x 0.50" Opening | | |

| | | | |
|--------------------|-----------------|--|---|
| Roll Sizes: | Standard | Mega | |
| | Width: | 7.5 ft (2.3 m) | 15.0 ft (4.6m) |
| | Length: | 120.0 ft (36.6 m) | 120.0 ft (36.6 m) |
| | Weight ±10%: | 92.5 lbs (42.0 kg) | 185.0 lbs (83.9 kg) |
| | Area: | 100 yd ² (83.6 m ²) | 200 yd ² (167.2 m ²) |
| | #/Pallet: | 9 | |

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 | .43 in (10.9 mm) |
| Tensile Strength-MD | ASTM D6818 | 802 lb/ft (11.7 kN/m) |
| Elongation-MD | ASTM D6818 | 24.7 % |
| Tensile Strength-TD | ASTM D6818 | 790 lb/ft (11.5 kN/m) |
| Elongation-TD | ASTM D6818 | 15.7 % |
| Light Penetration | ASTM D6567 | 13.5 % |
| Water Absorption | ASTM D1117 | 113 % |
| 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 ² |
| 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 | | |
| ***The preceding test data excerpts were reproduced with the permission of AASHTO, however, this does not constitute endorsement or approval of the product, material or device by AASHTO | | |

Slope Performance Design Values*:

| Property | Test Method | Value | |
|--|--------------|----------------|--------------|
| Manning's N | | 0.024 | |
| C-Factors | ASTM D6459 | | |
| Slope Length (L) | ≤ 3:1 | 3:1-2:1 | ≥ 2:1 |
| < 50 ft (15 m) | 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 | | | |

Channel Performance Design Values*:

| Property | Test Method | Value |
|--|-------------|-----------------------------------|
| Unvegetated Shear Stress | ASTM D 6460 | 3.70 lbs/ft ² (177 Pa) |
| Unvegetated Velocity | ASTM D 6460 | 13.8 ft/s (4.2 m/s) |
| Vegetated Shear Stress | ASTM D 6460 | 12.0 lbs/ft ² (574 Pa) |
| Vegetated Velocity | ASTM D 6460 | 25.0 ft/s (7.6 m/s) |
| *Large-Scale Results obtained by 3 rd Party GAI Accredited Independent Laboratory | | |



All Value Properties, Test Results and Design Values were derived from independent laboratory testing. East Coast Erosion Blankets, LLC will not be held liable for any type of damage or losses, directly, or indirectly for failure of this product. Current revision supersedes all previous versions.