



**Material and Performance Specification**

**ECC-2B Double Net Coconut Biodegradable Rolled Erosion Control Product**

**Description:** The ECC-2B is made with uniformly distributed 100% coconut fiber and two organic jute nets securely sewn together with biodegradable 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-2B has functional longevity of approximately 24 months, but will vary depending on soil and climatic conditions, and is suitable for slopes 1:1 and medium to high flow channels.. The ECC-2B meets Type 4 specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration’s (FHWA) FP-03 Section 713.17.

|                   |  |  |                                       |
|-------------------|--|--|---------------------------------------|
| <b>Materials:</b> | <b>Netting – Top and Bottom</b>                                      | <b>Matrix</b>  | <b>Thread</b>                         |
|                   | Organic Leno Weave Jute<br>100% Biodegradable<br>0.5" x 1.0" Opening | 100% Coconut Fiber<br>0.55 lbs/yd <sup>2</sup><br>298.4 g/m <sup>2</sup> | Biodegradable<br>1.50" stitch spacing |

|                    |  |   |
|--------------------|--|---|
| <b>Roll Sizes:</b> | <b>Standard</b>                                  | <b>Mega</b>                                 |
|                    | Width: 7.5 ft (2.3 m)                            | 15.0 ft (4.6 m)                             |
|                    | Length: 120.0 ft (36.6 m)                        | 120.0 ft (36.6 m)                           |
|                    | Weight ±10%: 75.0 lbs (34.0 kg)                  | 150.0 lbs (68.0 kg)                         |
|                    | Area: 100 yd <sup>2</sup> (83.6 m <sup>2</sup> ) | 200 yd <sup>2</sup> (167.2 m <sup>2</sup> ) |
|                    | #/Pallet: 16                                     | 16  |

**Index Value Properties\*:**

| Property            | Test Method | Typical   |
|---------------------|-------------|---|
| Mass/Unit Area      | ASTM D6475  | 12 oz/yd <sup>2</sup> (406.9 g/m <sup>2</sup> ) |
| Thickness           | ASTM D6525  | .31 in (7.9 mm)                                 |
| Tensile Strength-MD | ASTM D6818  | 240 lb/ft (3.5 kN/m)                            |
| Elongation-MD       | ASTM D6818  | 10.9 %  |
| Tensile Strength-TD | ASTM D6818  | 164 lb/ft ( 2.4 kN/m)                           |
| Elongation-TD       | ASTM D6818  | 16.0 %  |
| Light Penetration   | ASTM D6567  | 10 %  |
| Water Absorption    | ASTM D1117  | 225 %   |

\* 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**=14.24             |
|                                | 100mm (4in) / hr-30 min                | SLR**=18.58             |
|                                | 150mm (6in) / hr-30 min                | SLR**=24.25             |
| ECTC Method 3 Shear Resistance | Shear at .50 in soil loss              | 2.72 lb/ft <sup>2</sup> |
| ECTC Method 4 Germination      | Top soil; Fescue;<br>21 day incubation | 414% 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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**Slope Performance Design Values\*:**

| Property                | Test Method  | Value          |              |
|-------------------------|--------------|----------------|--------------|
| Manning’s N             | Calculated   | 0.015          |              |
| <b>C-Factors</b>        | ASTM D6459   |                |              |
| <b>Slope Length (L)</b> | <b>≤ 3:1</b> | <b>3:1-2:1</b> | <b>≥ 2:1</b> |
| < 50 ft (15 m)          | 0.040        | 0.053          | 0.102        |
| 50 ft – 100 ft          | 0.060        | 0.084          | 0.120        |
| >100 ft (30 m)          | 0.094        | 0.114          | 0.134        |

\*Large-Scale Results obtained by 3<sup>rd</sup> Party GAI Accredited Independent Laboratory

**Channel Performance Design Values\*:**

| Property                 | Test Method | Value                             |
|--------------------------|-------------|-----------------------------------|
| Unvegetated Shear Stress | ASTM D 6460 | 2.25 lbs/ft <sup>2</sup> (108 Pa) |
| Unvegetated Velocity     | ASTM D 6460 | 9.0 ft/s ( 2.7 m/s)               |
| Vegetated Shear Stress   | NA          | NA                                |
| Vegetated Velocity       | NA          | NA                                |

\*Large-Scale Results obtained by 3<sup>rd</sup> 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.