



## Material and Performance Specification Sheet

### ECSC-2 Double Net Straw/Coconut Rolled Erosion Control Product

**Description:** The ECSC-2 is made with uniformly distributed 70% agricultural straw, 30% coconut fiber and two polypropylene nets securely sewn together with degradable thread. The tightly compressed blankets are placed inside vented bags and include a product label, code and installation guide. The blankets are palletized for easy transportation.

The ECSC-2 has functional longevity of approximately 24 months, but will vary depending on soil and climatic conditions and is suitable for slopes 2:1 to 1:1. The ECSC-2 meets Type 3.B specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

**Materials:**

**Netting**

*Top*

Heavyweight UV Stabilized Polypropylene  
.75" x .75" Opening

*Bottom*

Lightweight Photodegradable Polypropylene  
.5" x .5" Opening

**Matrix**

70% Agricultural Straw  
0.385 lbs/sq yd

30% Coconut Fiber  
0.165 lbs/sq yd

**Thread**

Degradable  
1.50" stitch spacing

**Roll Sizes:**

Width: 7.5 ft (2.3 m)  
Length: 96.0 ft (29.3 m)  
Weight  $\pm 10\%$ : 48.0 lbs (20.4 kg)  
Area: 80 yd<sup>2</sup> (66.9 m<sup>2</sup>)  
#/Pallet: 20

**Standards**

7.5 ft (2.3 m)  
120.0 ft (36.6 m)  
60.0 lbs (27.2 kg)  
100 yd<sup>2</sup> (83.6 m<sup>2</sup>)  
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**Index Value Properties\*:**

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	9.45 oz/yd <sup>2</sup>
Thickness	ASTM D5199	.29 in
Tensile Strength-MD	ASTM D5035	185 lb/ft
Elongation-MD	ASTM D5035	16.9 %
Tensile Strength-TD	ASTM D5035	167 lb/ft
Elongation-TD	ASTM D5035	20.5 %
Light Penetration	ECTC Guidelines	11.5 %
Water Absorption	ASTM D1117	326 %
* 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**=5.18
	100mm (4in) / hr-30 min	SLR**=5.90
	150mm (6in) / hr-30 min	SLR**=6.71
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.12 lb/ft
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	658% 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	Value
Manning's N	.015
RUSLE C-Factor	.17
Maximum Permissible Sheer Stress	2.6 psf (125 Pa)
Maximum Flow Velocity	6.75 ft/sec (2.06 m/sec)

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