



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

The ECSC-2 is an erosion control blanket 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 wrapped 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 climate conditions, and is suitable for slopes 2:1 to 1:1 and low to medium flow channels. 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 / Bottom**

Med wt UV Sta. PP / Lt wt Photodegradable PP  
0.50" x 0.50" Opening / 0.75" x 0.75" Opening  
Color: Green

**Matrix**

70% Straw  
30% Coconut

**Thread**

Degradable Thread  
Color: White

**Roll Sizes:**

	<b>Standard</b>	<b>"A" Size</b>	<b>Mega</b>
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 ft 68.6 m	112.5 ft (34.3 m)
Weight $\pm 10\%$ :	57.0 lbs (25.9 kg)	57 lbs 25.9 kg	114.0 lbs (51.7 kg)
Area:	100 yd <sup>2</sup> (83.6 m <sup>2</sup> )	100 yd <sup>2</sup> 83.6 m <sup>2</sup>	200 yd <sup>2</sup> (167.2 m <sup>2</sup> )
#/Pallet:	25	9	25

**Index Value Properties\*:**

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	8.00 oz/yd <sup>2</sup> 271.2 g/m <sup>2</sup>
Thickness	ASTM D6525	.30 in (7.62 mm)
Tensile Strength-MD	ASTM D6818	178 lb/ft (2.60 kN/m)
Elongation-MD	ASTM D6818	31 %
Tensile Strength-TD	ASTM D6818	148 lb/ft (2.16 kN/m)
Elongation-TD	ASTM D6818	22.4 %
Light Penetration	ASTM D6567	13 %
Density / Specific Gravity	ASTM D792	N/A g/cm <sup>3</sup>
Water Absorption	ASTM D1117	436 %

\* 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**= 8.52
	100mm (4in) / hr-30 min	SLR**= 11.01
	150mm (6in) / hr-30 min	SLR**= 14.28
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.16 lb/ft <sup>2</sup>
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	503%

\*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
C-Factors		ASTM D6459		0.02
	Slope Length (L)	≤ 3:1	3:1 – 2:1	≥ 2:1
	< 50 ft (15m)	0.015	0.020	0.065
	50 ft – 100 ft	0.020	0.035	0.090
	> 100 ft (30 m)	0.025	0.050	0.110

\*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> (107.73 Pa)
Unvegetated Velocity	ASTM D 6460	8.0 ft/s (2.44 m/s)
Vegetated Shear Stress	NA	NA
Vegetated Velocity	NA	NA
Manning's N	Calculated Range	0.029

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

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