



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

The ECSC-2B is an erosion control blanket made with uniformly distributed 70% agricultural straw, 30% 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 ECSC-2B has functional longevity of approximately 18 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-2B 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	Matrix	Thread
	Organic Leno Weave Jute	70% Straw	Biodegradable Thread
	0.50" x 1.0" Opening	30% Coconut	Color: Natural
	Color: Natural		

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 ft 68.6 m	112.5 ft (34.3 m)
Weight $\pm 10\%$:	60.0 lbs (27.2 kg)	60 lbs 27.2 kg	120.0 lbs (54.4 kg)
Area:	100 yd ² (83.6 m ²)	100 yd ² 83.6m ²	200 yd ² (167.2 m ²)
#/Pallet:	20	9	20

Index Value Properties*:

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	9.0 oz/yd ² 305.1 g/m ²
Thickness	ASTM D6525	.28 in (7.11 mm)
Tensile Strength-MD	ASTM D6818	204 lb/ft (2.98 kN/m)
Elongation-MD	ASTM D6818	14 %
Tensile Strength-TD	ASTM D6818	134 lb/ft (1.96 kN/m)
Elongation-TD	ASTM D6818	16.3 %
Light Penetration	ASTM D6567	12 %
Density / Specific Gravity	ASTM D792	N/A g/cm ³
Water Absorption	ASTM D1117	361 %

* 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**= 11.89
	100mm (4in) / hr-30 min	SLR**= 13.60
	150mm (6in) / hr-30 min	SLR**= 15.50
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.46 lb/ft ²
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	671%

*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 by AASHTO

SLOPE Performance Design Values*:

Property	Test Method	Value	
C-Factors	ASTM D6459	0.06	
Slope Length (L)	$\leq 3:1$	$3:1 - 2:1$	$\geq 2:1$
< 50 ft (15m)	0.050	0.060	0.110
50 ft – 100 ft	0.059	0.075	0.130
> 100 ft (30 m)	0.062	0.090	0.150

*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory

CHANNEL Performance Design Values*:

Property	Test Method	Value
Unvegetated Shear Stress	ASTM D 6460	2.00 lbs/ft ² (95.76 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 3rd Party GAI Accredited Independent Laboratory

Effective 02/01/21

Carthage Mills assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. Carthage Mills disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.