



ECS-2B Double Net Straw Biodegradable Rolled Erosion Control Product

The ECS-2B is an erosion control blanket made with uniformly distributed 100% agricultural straw and two 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 ECS-2B has functional longevity of approximately 12 months, but will vary depending on soil and climate conditions, and is suitable for slopes 3:1 to 2:1 and low to medium flow channels. The ECS-2B meets Type 2.D specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Materials: Netting – Top and Bottom

Organic Leno Weave Jute
0.50" x 1.0" Opening
Color: Natural

Matrix

100% Straw

Thread

Biodegradable Thread
Color: Natural

Roll Sizes:

	Standard	"A" Size	Mega
Width:	8.0 ft (2.4 m)	4 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 $\pm 10\%$:	59.0 lbs (26.8 kg)	59 lbs 26.8 kg	118.0 lbs (53.5 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	9.00 oz/yd ² 305.1 g/m ²
Thickness	ASTM D6525	.30 in (7.62 mm)
Tensile Strength-MD	ASTM D6818	190 lb/ft (2.77 kN/m)
Elongation-MD	ASTM D6818	10 %
Tensile Strength-TD	ASTM D6818	130 lb/ft (1.90 kN/m)
Elongation-TD	ASTM D6818	16.8 %
Light Penetration	ASTM D6567	20 %
Density / Specific Gravity	ASTM D792	N/A g/cm ³
Water Absorption	ASTM D1117	510 %

* 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**= 10.70
	100mm (4in) / hr-30 min	SLR**= 12.27
	150mm (6in) / hr-30 min	SLR**= 13.98
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	1.87 lb/ft ²
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	370%

*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	0.01
Slope Length (L)	$\leq 3:1$	3:1 – 2:1 $\geq 2:1$
	< 50 ft (15m)	0.007 0.045 N/A
	50 ft – 100 ft	0.020 0.050 N/A
	> 100 ft (30 m)	0.035 0.058 N/A

*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	1.75 lbs/ft ² (83.79 Pa)
Unvegetated Velocity	ASTM D 6460	6.0 ft/s (1.83 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

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