



## ECX-1 Single Net Excelsior Rolled Erosion Control Product

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

**Materials: Netting – Top**

Lightweight Photodegradable Polypropylene  
0.50" x 0.50" Opening  
Color: Green

**Matrix**

Aspen Wood Excelsior

**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 $\pm 10\%$ :	62.0 lbs (28.1 kg)	62 lbs 28.1 kg	124.0 lbs (56.2 kg)
Area:	100 yd <sup>2</sup> (83.6 m <sup>2</sup> )	100 ys <sup>2</sup> 83.6 m <sup>2</sup>	200 yd <sup>2</sup> (167.2 m <sup>2</sup> )
#/Pallet:	20	9	20

**Index Value Properties\*:**

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	8.80 oz/yd <sup>2</sup> 298.4 g/m <sup>2</sup>
Thickness	ASTM D6525	.38 in (9.65 mm)
Tensile Strength-MD	ASTM D6818	122 lb/ft (1.78 kN/m)
Elongation-MD	ASTM D6818	33 %
Tensile Strength-TD	ASTM D6818	86 lb/ft (1.26 kN/m)
Elongation-TD	ASTM D6818	33.0 %
Light Penetration	ASTM D6567	36 %
Density / Specific Gravity	ASTM D792	N/A g/cm <sup>3</sup>
Water Absorption	ASTM D1117	184 %

\* 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**= 3.98
	100mm (4in) / hr-30 min	SLR**= 3.64
	150mm (6in) / hr-30 min	SLR**= 3.33
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	1.72 lb/ft <sup>2</sup>
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	519%

\*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
<b>C-Factors</b>	ASTM D6459	0.02
<b>Slope Length (L)</b>	$\leq 3:1$	$3:1 - 2:1$
	$\geq 2:1$	$\geq 2:1$
	< 50 ft (15m)	0.020
	50 ft – 100 ft	0.050
> 100 ft (30 m)	0.070	0.158

\*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	1.78 lbs/ft <sup>2</sup> (85.23 Pa)
Unvegetated Velocity	ASTM D 6460	8.5 ft/s (2.59 m/s)
Vegetated Shear Stress	NA	NA
Vegetated Velocity	NA	NA
Manning's N	Calculated Range	0.028

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

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