

Material and Performance Specification Sheet

ECX-1 Single Net Excelsior Rolled Erosion Control Product

Description: The ECX-1 is 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 climatic conditions and is suitable for slopes 2:1 to 3:1. 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 – One Side Only	Matrix	Thread
	Lightweight Photodegradable Polypropylene .5" x .5" Opening	100% Aspen Excelsior 0.69 lbs/sq yd 373 g/m ²	Degradable 1.50" stitch spacing

Roll Sizes:	A	Standards	Mega
Width:	3.75 ft (1.15 m)	7.5 ft (2.3 m)	7.5 ft (2.3 m)
Length:	192.0 ft (58.5 m)	96.0 ft (29.3 m)	120.0 ft (36.6 m)
Weight ±10%:	55.0 lbs (24.9 kg)	55.0 lbs (24.9 kg)	68.0 lbs (30.8 kg)
Area:	80 yd ² (66.9 m ²)	80 yd ² (66.9 m ²)	100 yd ² (83.6 m ²)
#/Pallet:	21	20	16
			15.0 ft (4.6 m)
			96.0 ft (29.3 m)
			110.0 lbs (49.9 kg)
			160 yd ² (133.8 m ²)
			25
			<i>Also available in 120 ft</i>

Index Value Properties*:

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	11 oz/yd ² (373 g/m ²)
Thickness	ASTM D5199	.31 In (7.9 mm)
Tensile Strength-MD	ASTM D5035	122 lb/ft (1.8 Kn/m)
Elongation-MD	ASTM D5035	24 %
Tensile Strength-TD	ASTM D5035	67 lb/ft (1.0 Kn/m)
Elongation-TD	ASTM D5035	32 %
Light Penetration	ECTC Guidelines	36 %
Water Absorption	ASTM D1117	220 %
* 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**=2.95
	100mm (4in) / hr-30 min	SLR**=4.33
	150mm (6in) / hr-30 min	SLR**=6.37
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	1.71 lb/ft
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	394% 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	Test Method	Value
Manning's N	Calculated	.027
RUSLE C-Factor	ASTM D6459	.034
Maximum Permissible Sheer Stress	ASTM D6460	1.78 psf (85 Pa)
Maximum Flow Velocity	ASTM D6460	8.5 ft/sec (2.6 m/sec)
*Large-Scale Results obtained by 3 rd Party GAI Accredited Independent Laboratory		