



# PERFORMANCE SPECIFICATION

## SC150



The North American Green SC150 extended-term degradable erosion control blanket is constructed with a 70% agricultural straw and 30% coconut fiber matrix and has a functional longevity of approximately 24 months (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographic location, and elevation). The straw and coconut fibers shall be evenly distributed over the entire area of the mat. The blanket shall be covered on the top with a heavyweight polypropylene netting having ultraviolet additives to delay breakdown and an approximate 0.625 x 0.625 inch (1.59 x 1.59 cm) mesh size. The blanket shall be covered on the bottom with a lightweight polypropylene net having a 0.50 inch x 0.50 inch (1.27 cm x 1.27 cm) mesh size. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The following list contains further physical properties of the SC150 erosion control blanket.

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Thickness	ASTM D5199/ECTC	0.34 in (8.64 mm)
Resiliency	ECTC Guidelines	75%
Mass per Unit Area	ASTM D6475	11.44 oz/yd <sup>2</sup> (388 g/m <sup>2</sup> )
Water Absorption	ASTM D1117/ECTC	200%
Swell	ECTC Guidelines	30%
Stiffness/Flexibility	ASTM D1388/ECTC	1.11 oz-in (12,397 mg-cm)
Light Penetration	ECTC Guidelines	11.70%
Smolder Resistance	ECTC Guidelines	Yes**
MD Tensile Strength	ASTM D5035	205.20 lbs/ft (2.99 kN/m)
MD Elongation	ASTM D5035	28.00%
TD Tensile Strength	ASTM D5035	152.40 lbs/ft (2.22 kN/m)
TD Elongation	ASTM D5035	23.10%

\*\*Material is smolder resistant according to the specified test  
 MD - Machine direction  
 TD - Transverse direction

### Slope Design Data

### Channel Design Data

### Bench Scale Testing†

Cover Factors (C)				Channel Roughness Coefficients	
Slope Length (L)	Slope Gradient (S)			Flow Depth	Manning's 'n'
	≤ 3:1	3:1 - 2:1	≥ 2:1		
≤ 20 ft (6 m)	0.001	0.048	0.100	≤ 0.50 ft (0.15 m)	0.050
20 - 50	0.051	0.079	0.145	0.50-2.00 ft	0.050-0.018
≥ 50 ft (15.2 m)	0.100	0.110	0.190	≥ 2.00 ft (0.60 m)	0.018
				Max. Permissible Shear Stress 2.00 lbs/ft <sup>2</sup> (96.0 Pa)	

Unvegetated Channel	3.9 lbs/ft <sup>2</sup>
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Approximate Max Flow Velocity	8.00 ft/s (2.44 m/s)
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For most accurate design data consult ECMDSTM  
 Manning's 'n' value expressed in English units

### †Bench Scale Performance Testing

Bench scale tests are index property tests. These tests are not indicative of field performance and therefore should not be used in design to establish performance levels for rolled erosion control products. Bench scale tests are performed according to methods developed by the Erosion Control Technology Council (ECTC).