



PERFORMANCE SPECIFICATION

S150BN



The North American Green S150BN straw erosion control blanket is constructed with a 100% agricultural straw fiber matrix and has a functional longevity of approximately 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographic location, and elevation). The straw fiber shall be evenly distributed over the entire area of the mat. The blanket shall be covered on top and bottom with 100% biodegradable natural organic fiber netting woven with an approximate 0.50 x 1.00 inch (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with biodegradable thread. The following list contains further physical properties of the S150BN erosion control blanket.

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Thickness	ASTM D5199/ECTC	0.31 in (7.87 mm)
Resiliency	ECTC Guidelines	80.60%
Mass per Unit Area	ASTM D6475	9.29 oz/yd ² (315 g/m ²)
Water Absorption	ASTM D1117/ECTC	260%
Swell	ECTC Guidelines	14.50%
Stiffness/Flexibility	ASTM D1388/ECTC	6.23 oz-in (69,544 mg-cm)
Light Penetration	ECTC Guidelines	11.40%
Smolder Resistance	ECTC Guidelines	Yes**
MD Tensile Strength	ASTM D5035	322.80 lbs/ft (4.71 kN/m)
MD Elongation	ASTM D5035	8.80%
TD Tensile Strength	ASTM D5035	237.60 lbs/ft (3.47 kN/m)
TD Elongation	ASTM D5035	3.50%

**Material is smolder resistant according to specified test

MD - Machine direction

TD - Transverse direction

Slope Design Data

Channel Design Data

Bench Scale Testing†

Cover Factors (C)			Channel Roughness Coefficients	
	Slope Gradient (S)		Flow Depth	Manning's 'n'
Slope Length (L)	≤ 3:1	3:1 - 2:1	≤ 0.50 ft (0.15 m)	0.055
≤ 20 ft (6 m)	0.00014	0.039	0.50-2.00 ft	0.055-0.021
20 - 50	0.010	0.070	≥ 2.00 ft (0.60 m)	0.021
≥ 50 ft (15.2 m)	0.020	0.100	Max. Permissible Shear Stress 1.85 lbs/ft ² (88.0 Pa)	

Unvegetated Channel	3.2 lbs/ft ²
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Approximate Max Flow Velocity	6.00 ft/s (1.83 m/s)
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For most accurate design data consult ECMDSTM

Manning's 'n' expressed in English units for unvegetated blankets

†Bench Scale 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).