



PERFORMANCE SPECIFICATION

DS150



The North American Green DS150 straw erosion control blanket is constructed with a 100% agricultural straw fiber matrix and has a functional longevity of approximately 45-60 days. (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 the top and bottom with a lightweight photodegradable polypropylene net having an approximate 0.50 x 0.50 inch (1.27 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 S150 erosion control blanket.

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Thickness	ASTM D5199/ECTC	0.32 in (8.13 mm)
Resiliency	ECTC Guidelines	80.50%
Mass per Unit Area	ASTM D6475	7.59 oz/yd ² (257 g/m ²)
Water Absorption	ASTM D1117/ECTC	318%
Swell	ECTC Guidelines	14.90%
Stiffness/Flexibility	ASTM D1388/ECTC	6.06 oz-in (67,699 mg-cm)
Light Penetration	ECTC Guidelines	17.30%
Smolder Resistance	ECTC Guidelines	Yes**
MD Tensile Strength	ASTM D5035	156 lbs/ft (2.27 kN/m)
MD Elongation	ASTM D5035	23%
TD Tensile Strength	ASTM D5035	108 lbs/ft (1.57 kN/m)
TD Elongation	ASTM D5035	22%

**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)	0.004	0.106	0.50-2.00 ft	0.055-0.021
	20 - 50	0.062	0.118	≥ 2.00 ft (0.60 m)	0.021
≥ 50 ft (15.2 m)	0.120	0.180	Max. Permissible Shear Stress 1.75 lbs/ft ² (84.00 Pa)		

Unvegetated Channel	2.4 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 ECMDS™

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

†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).