



# Material and Performance Specification Sheet

North American Green  
 14649 Highway 41 North  
 Evansville, IN 47725  
 800-772-2040  
 FAX: 812-867-0247  
[www.nagreen.com](http://www.nagreen.com)

A **tensar** Company

## S75 Erosion Control Blanket

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a lightweight photodegradable polypropylene netting having an approximate 0.50 x 0.50 (1.27 x 1.27 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread.

The S75 shall meet requirements established by the Erosion Control Technology Council (ECTC) Specification and the US Department of Transportation, Federal Highway Administration's (FHWA) *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-03 Section 713.17* as a type 2.C Short-term Single Net Erosion Control Blanket.

The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

Material Content		
<b>Matrix</b>	100% Straw Fiber	0.5 lbs/yd <sup>2</sup> (0.27 kg/m <sup>2</sup> )
<b>Nettings</b>	Top side only, lightweight photodegradable	1.5 lb/1000 ft <sup>2</sup> ( 0.73 kg/100 m <sup>2</sup> ) approx. weight
<b>Thread</b>	degradable	

S75 is available in the following standard roll sizes:

<b>Width</b>	4.0 ft (1.2 m)	6.67 ft (2.03 m)	16 ft (4.87 m)
<b>Length</b>	135 ft (41.14 m)	108 ft (32.92 m)	108 ft (32.92 m)
<b>Weight ± 10%</b>	30 lbs (13.6 kg)	40 lbs (18.14 kg)	96 lbs (43.54 kg)
<b>Area</b>	60 yd <sup>2</sup> (50.16 m <sup>2</sup> )	80.0 yd <sup>2</sup> (66.9 m <sup>2</sup> )	192 yd <sup>2</sup> (165.5 m <sup>2</sup> )

### Index Value Properties:

Property	Test Method	Typical
Thickness	ASTM D6525	0.37 in (9.4 mm)
Resiliency	ECTC Guidelines	78.8%
Water Absorbency	ASTM D1117	426%
Mass/Unit Area	ASTM 6475	11.97 oz/yd <sup>2</sup> (407 g/m <sup>2</sup> )
Swell	ECTC Guidelines	15%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	6.31 oz-in
Light Penetration	ECTC Guidelines	7.3%
Tensile Strength – MD	ASTM D6818	130.8 lbs/ft (1.94 kN/m)
Elongation – MD	ASTM D6818	24.4%
Tensile Strength – TD	ASTM D6818	85.2 lbs/ft (1.26 kN/m)
Elongation – TD	ASTM D6818	26.8%

### Performance Design Values:

Maximum Permissible Shear Stress	
Unvegetated Shear Stress	1.55 lbs/ft <sup>2</sup> (74 Pa)
Unvegetated Velocity	5.00 ft/s (1.52 m/s)

Slope Design Data: C Factors			
	Slope Gradients (S)		
Slope Length (L)	≤ 3:1	3:1 – 2:1	≥ 2:1
≤ 20 ft (6 m)	0.029	NA	NA
20-50 ft	0.11	NA	NA
≥ 50 ft (15.2 m)	0.19	NA	NA

### Bench Scale Testing\* (NTPEP):

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50 mm (2 in)/hr for 30 min	SLR** = 8.80
	100mm (4 in)/hr for 30 min	SLR** = 8.16
	150 mm (6 in)/hr for 30 min	SLR** = 7.81
ECTC Method 3 Shear Resistance	<b>Shear at 0.50 inch soil loss</b>	<b>1.80 lbs/ft<sup>2</sup></b>
ECTC Method 4 Germination	Top Soil, Fescue, 21 day incubation	228% improvement of biomass

\* Bench Scale tests should not be used for design purposes  
 \*\* Soil Loss Ratio = Soil loss with Bare Soil/Soil Loss with RECP (soil loss is based on regression analysis)

Roughness Coefficients- Unveg.	
Flow Depth	Manning's n
≤ 0.50 ft (0.15 m)	0.055
0.50 – 2.0 ft	0.055 – 0.021
≥ 2.0 ft (0.60 m)	0.021

Product Participant of:

