



## S31 BD

### Specification Sheet

The ErosionControlBlanket S31 BD is a short-term 100% biodegradable straw fiber erosion control blanket designed for use on mild slope and channel applications requiring erosion control for up to 12 months depending on moisture, light, and environmental conditions. The blanket is sewn together on 1.5 inch (38.1 mm) centers. The S31 BD meets all requirements established in the FHWA FP-03 as a Type 2C erosion control blanket for use on slopes with gradients not exceeding 3:1 (h:v) and has been tested by the National Transportation Product Evaluation Program (NTPEP). The S31 BD comes packaged in green shrink-wrap with a blue band and includes installation instructions.

### Product Nomenclature & Properties

- S** = 100% agricultural straw fiber matrix
- 3** = straw fiber matrix applied at a rate of 0.5 lbs/yd<sup>2</sup> (270 g/m<sup>2</sup>)
- 1** = a single biodegradable leno woven top net with a mesh size of 0.5 x 1.0 in (1.3 x 2.54 cm)
- BD** = 100% biodegradable net, thread, and matrix to ensure consistent functional longevity

### Index & Bench Scale Testing

Test Description	Test Method	Test Results
Mass per Unit Area	ASTM D6475	6.21 oz/yd <sup>2</sup>
Tensile Strength	ASTM D6818	10.9 lbs/in @ 11.3% MD 6.6 lbs/in @ 13.1% TD
Thickness	ASTM D6525	0.329 in
Light Penetration / Ground Cover	ASTM D6567	15.7% / 84.3%
Water Absorption	ASTM D 1117 & ECTCTASC 00197	417%
Unvegetated Bench-Scale Rain Splash and Runoff (not to be used as a design value)	ASTM D7101	Soil Loss Ratio* = 8.88 Soil Loss Ratio* = 9.02 Soil Loss Ratio* = 9.16
Unvegetated Bench-Scale Shear Stress (not to be used as design value)	ASTM D7207	1.30 lbs/ft <sup>2</sup> @ ½ in. soil loss
Seed Germination and Plant Growth Under Bench-Scale Conditions	ASTM D7322	436% Improvement (increased biomass)

\*Soil Loss Ratio = Soil Loss Bare Soil / Soil Loss with RECP = 1 / C-Factor (Note: Soil loss is based on regression analysis)

### Design Values

- "C" factor = 0.03
- Maximum Permissible Shear Stress = 1.5 lbs/ft<sup>2</sup> (72 Pa)
- Maximum Permissible Velocity = 5 ft./sec. (1.52 m/s)
- Manning's "n" = 0.027

### Standard Roll Details

Width	2.44m (8 ft)	4.88m (16 ft)
Standard Length	34.3m (112.5 ft)	34.3m (112.5 ft)
Area	83.61m <sup>2</sup> (100 yd <sup>2</sup> )	167.22m <sup>2</sup> (200 yd <sup>2</sup> )
Weight ± 10%	27.2 kg (60 lb)	54.4 kg (120 lb)

### "Big Daddy" Roll Details

Width	2.44m (8 ft)	4.88m (16 ft)
Standard Length	102.8m (337.5 ft)	102.8m (337.5 ft)
Area	250.8m <sup>2</sup> (300 yd <sup>2</sup> )	501.6m <sup>2</sup> (600 yd <sup>2</sup> )
Weight ± 10%	81.6kg (180 lb)	163.2kg (360 lb)