



S31

Specification Sheet

The ErosionControlBlanket S31 is a short-term 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 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 comes packaged in clear shrink-wrap with a yellow 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/yd² (270 g/m²)
- 1** = a single photodegradable top net with a mesh size of 0.588 x 0.5 in (1.49 x 1.3 cm)
= photodegradable net and thread to ensure consistent functional longevity

Index & Bench Scale Testing

| Test Description | Test Method | Test Results |
|---|------------------------------|---|
| Mass per Unit Area | ASTM D6475 | 8.56 oz/yd ² |
| Tensile Strength | ASTM D6818 | 12.2 lbs/in @ 24.3% MD 3.9 lbs/in @ 25.6% TD |
| Thickness | ASTM D6525 | 0.351 in |
| Light Penetration / Ground Cover | ASTM D6567 | 11.7% / 88.3% |
| Water Absorption | ASTM D 1117 & ECTCTASC 00197 | 502% |
| Unvegetated Bench-Scale Rain Splash and Runoff (not to be used as a design value) | ASTM D7101 | Soil Loss Ratio* = 8.57 Soil Loss Ratio* = 10.89 Soil Loss Ratio* = 13.83 |
| Unvegetated Bench-Scale Shear Stress (not to be used as design value) | ASTM D7207 | 1.5 lbs/ft ² @ ½ in. soil loss |
| Seed Germination and Plant Growth Under Bench-Scale Conditions | ASTM D7322 | 367% 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/ft² (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 ² (100 yd ²) | 167.23m ² (200 yd ²) |
| Weight ±10% | 24kg (52 lb) | 48kg (104 lb) |

Highway Roll Details

| | | |
|-----------------|--|---|
| Width | 2.44m (8 ft) | 4.88m (16 ft) |
| Standard Length | 171.5m (562.5ft) | 171.5m (562.5ft) |
| Area | 418m ² (500 yd ²) | 836.1m ² (1000 yd ²) |
| Weight ±10% | 117.93kg (260 lb) | 235.87kg (520 lb) |