



PS42 TRM

Specification Sheet

The ErosionControlBlanket PS42 is a composite turf reinforcement mat made of 67% polypropylene fiber and 33% agricultural straw fiber designed for critical slope and channel applications requiring permanent erosion control and turf reinforcement. The matting is sewn together on 1.5 inch (38.1 mm) centers. The PS42 meets all requirements established in the FHWA FP-03 as a Type 5 A, B and C turf reinforcement matting for use on slopes with gradients up to 0.5:1 (h:v), channels, and shorelines. The PS42 comes packaged in clear shrink-wrap with a purple band and includes installation instructions.

Product Nomenclature & Properties

- PS** = 67% polypropylene fiber and 33% agricultural straw fiber matrix
4 = polypropylene/straw fiber matrix applied at a rate of 0.75 lbs/yd² (400 g/m²)
2 = top permanent UV stabilized black net with a mesh size of 0.53 x 0.5 in (1.34 x 1.27 cm)
 = bottom permanent UV stabilized black net with a mesh size of 0.626 x 0.626 in (1.59 x 1.59 cm)
 = permanent UV stabilized black thread

Index & Bench Scale Testing

Test Description	Test Method	Test Results C-TRM (with organic fiber)	Test Results Permanent TRM (without organic fiber)
Mass per Unit Area	ASTM D6475	14.27 oz/yd ²	9.23 oz/yd ²
UV Stability at 500 hours	ASTM D 4355	90%	84%
Tensile Strength	ASTM D6818	30.4 lb/in @ 32.1% MD 22.9 lb/in @ 30.1% TD	27.4 lb/in @ % MD 18.1 lb/in @ % TD
Thickness	ASTM D6525	0.493 in	0.332 in
Light Penetration / Ground Cover	ASTM D6567	12.8% / 87.2%	20.2% / 79.8%
Unvegetated Bench-Scale Shear Stress (not to be used as a design value)	ASTM D7207	3.2 lbs/ft ² @ ½ in. soil loss	3.3 lbs/ft ² @ ½ in. soil loss

*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 = 0.001
- Unvegetated Maximum Permissible Shear Stress = 3.0 lbs/ft² (144 Pa)
- Vegetated Maximum Permissible Shear Stress = 12 lbs/ft² (576 Pa)
- Maximum Flow Velocity Unvegetated = 9.5 ft/s (2.9 m/s)
- Maximum Flow Velocity Vegetated = 16 ft/s (5.06 m/s)
- Unvegetated Manning's "n" = 0.03 (The hydraulic roughness coefficient will vary for vegetated conditions based on vegetation stand height and density)

Standard Roll Details

Width	2.44m (8ft)	4.88m (16ft)
Standard Length	25.7m (84.3ft)	25.7m (84.3ft)
Area	62.7m ² (75yd ²)	125.4m ² (150yd ²)
Weight ±10%	28kg (61lb)	56kg (122lb)

"Big Daddy" Roll Details – Please contact ErosionControlBlanket for Confirmation of Roll Sizes

Width	2.44m (8ft)	4.88m (16ft)
Standard Length	102.8m (337.5ft)	102.8m (337.5ft)
Area	250.8m ² (300yd ²)	500m ² (600yd ²)
Weight ±10%	112kg (244 lb)	224kg (488 lb)