

# PC42 TRM

## **Specification Sheet**

The ErosionControlBlanket PC42 is a composite turf reinforcement mat made of 67% polypropylene fiber and 33% coconut 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 PC42 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 PC42 comes packaged in clear shrink-wrap with a brown band and includes installation instructions.

### **Product Nomenclature & Properties**

**PC** = 67% polypropylene fiber and 33% coconut fiber matrix

4 = polypropylene/coconut 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	Test Results
		C-TRM (with organic fiber)	Permanent TRM (without organic fiber)
Mass per Unit Area	ASTM D6475	13.76 oz/yd <sup>2</sup>	9.23 oz/yd <sup>2</sup>
UV Stability at 500 hours	ASTM D 4355	90%	84%
Tensile Strength	ASTM D6818	31.3 lb/in @ 31.0% MD 21.4 lb/in @ 27.9% TD	27.4 lb/in @ % MD 18.1 lb/in @ % TD
Thickness	ASTM D6525	0.390 in	0.332 in
Light Penetration / Ground Cover	ASTM D6567	20.3% / 79.7%	20.2% / 79.8%
Unvegetated Bench-Scale Shear Stress (not to be used as a design value)	ASTM D7207	3.3 lbs/ft <sup>2</sup> @ ½ in. soil loss	3.3 lbs/ft <sup>2</sup> @ ½ in. soil loss

<sup>\*</sup>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 = 3.2 lbs/ft<sup>2</sup> (153.6 Pa)
- Vegetated Maximum Permissible Shear Stress = 12 lbs/ft<sup>2</sup> (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
 62.7m² (75yd²)
 125.4m² (150yd²)

 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
 250.8m² (300yd²)
 500m² (600yd²)

 Weight ±10%
 112kg (244 lb)
 224kg (488 lb)