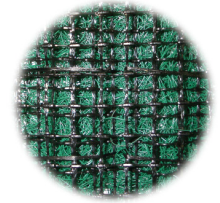




A *tensar* Company

SUPPLEMENTAL SPECIFICATION

P550



The composite turf reinforcement mat (C-TRM) shall be a machine-produced mat of 100% UV stabilized polypropylene fibre matrix incorporated into a permanent three-dimensional turf reinforcement matting.

The matrix shall be evenly distributed across the entire width of the matting and stitch bonded between the bottom and middle ultra heavy duty UV stabilized nettings with 1.27 x 1.27 cm openings and then covered by an ultra heavy duty UV stabilized nettings with 1.27 x 1.27 cm openings. The middle, dramatically corrugated (crimped) netting shall form prominent closely spaced ridges across the entire width of the mat. The three nets shall be stitched together on 3.81 cm centers with UV stabilized polypropylene thread to form a permanent three-dimensional turf reinforcement matting.

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Thickness	ASTM D6525	19.30 mm
Resiliency	ASTM D6524	95 %
Density	ASTM D792	0.913 g/cm ³
Mass per Unit Area	ASTM D6566	728 g/m ²
Porosity	ECTC Guidelines	96 %
Open Volume/Unit Area	ECTC Guidelines	1,684,589 cm ³ /m ²
Stiffness	ASTM D1388/ECTC	4,087,934 mg-cm
Light Penetration	ECTC Guidelines	16 %
UV Stability	ASTM D4355*	100%
MD Tensile Strength	ASTM D6818 [ASTM D5035]	11.15 kN/m (20.15 kN/m)
MD Elongation	ASTM D6818 [ASTM D5035]	10 % [13 %]
TD Tensile Strength	ASTM D6818 [ASTM D5035]	16.55 kN/m (22.23 kN/m)
TD Elongation	ASTM D6818 [ASTM D5035]	11% [13 %]

*ASTM D1682 (100mm strip) Tensile Strength and percent Strength Retention of material following 1000 hrs exposure in Xenon-Arc Weatherometer.

MD – Machine direction

TD – Transverse direction

Bench Scale Testing†

Test Method - Description	Parameters	Results
ECTC Method 2 – Determination of unvegetated RECP's ability to protect soil from rain splash and associated runoff	50 mm/hr for 30 min	Soil loss ratio* = 10.79
	100 mm/hr for 30 min	Soil loss ratio* = 9.98
	150 mm/hr for 30 min	Soil loss ratio* = 9.53
ECTC Method 3 – Determination of unvegetated RECP's ability to protect soil from hydraulically-induced shear stress. Failure criteria = 0.50 inch soil loss	Shear: 4.48 lbs/ft ² for 30 min	Soil loss: 262g
	Shear: 5.14 lbs/ft ² for 30 min	Soil loss: 445g
	Shear: 5.64 lbs/ft ² for 30 min	Soil loss: 645g
	Shear at 0.50 inch soil loss (450g)	5.1 lbs/ft²
ECTC Draft Method 4 – Determination of temporary RECP performance in encouraging seed germination and plant growth	Top soil; Fescue (Kentucky 31); 21 day incubation 27° C ± 2° & approximately 50% RH	Percent improvement = 354% (increased biomass)
* Soil Loss Ratio = Soil Loss with Bare Soil / Soil Loss with RECP (NOTE: Soil loss based on regression analysis)		

†Bench Scale Performance Testing

Bench scale tests are index property tests. These tests are not indicative of field performance and therefore should not be used in design to establish performance levels for rolled erosion control products. Bench scale tests are performed according to methods developed by the Erosion Control Technology Council (ECTC).