Polyfabrics Reliability you can build on





TerraMat® PP5 XT™

PP5-Xtreme™ represents the next generation of HP-TRMs. By providing high performance faster, yielding greater performance, and meeting or exceeding all requirements for an HP-TRM, PP5-Xtreme™ is extending the capabilities and reliability of vegetated armour systems.

PP5-Xtreme[™] is a fully synthetic, UV stable, High Performance Turf Reinforcement Mat (HP-TRM) manufactured by weaving continuous, synthetic thread elements by way of a proprietary (patent pending) process to form a lofty, three-dimensional pattern. The product is a woven, homogeneous, single layer HP-TRM that contains no lamination or stitching. The proprietary manufacturing process yields a material that provides outstanding strength at low strain, meaning more strength faster. Finally, PP5-Xtreme[™] is resistant to environmental and climatic conditions.

TerraMat® PP5 XT™ Specifications		
Material Physical (Index) Properties	Test Method	Values
Mass Per Unit Area ²	ASTM D6566	9.2 oz/yd^2 (312 g/m^2)
Thickness ²	ASTM D6525	0.3 in (8 mm)
Light Penetration ²	ASTM D6567	30 % open
Porosity ²	Computed	96%
Mechanical Performance Properties		
Tensile Strength (MD) x (TD) ¹	ASTM D6818	4000 lb/ft (59 kN/m) x 3000 lb/ft (44 kN/m)"
Elongation (MD) x (TD) ²	ASTM D6818	25 % x 20 %
Tensile Strength (M D) x (TD) @ 15% Strain ²	ASTM D6818	3000 lb/ft (44 kN/m) x 3000 lb/ft (44 kN/m)
Initial Tangent Modulus (M D) x (TD) ²	ASTM D6818	10.5 kip/ft (12.8 kN/m) x 17.5 kip/ft (21.3 kN/m)
UV Stability ²	ASTM D4355 ASTM D7238	100% (500hr) 90% (6000hr)"
Vegetation Establishment	ASTM D7322	552%
Hydraulic Performance Properties		
Maximum Permissible Vegetated Shear Stress	ASTM D6460	17 psf (814 PA)
Maximum Permissible Vegetated Velocity	ASTM D6460	25 fps (7.6 m/s)
Permissible Vegetated Shear Stress @ 20-30% Coverage	ASTM D6460	5 psf (239 PA)
Permissible Vegetated Velocity @ 20-30% Coverage	ASTM D6460	12 fps (3.7 m/s)
Permissible Vegetated Shear Stress @ 60-70% Coverage	ASTM D6460	12 psf (575 PA)
Permissible Vegetated Velocity @ 60-70% Coverage	ASTM D6460	16 fps (4.4 m/s)
HEC-15 (Tau-veg/Tau-TRM)	ASTM D6460	0.26
1) MARV/MIN 2)Typical	,	