



Product Data

PYRAMAT® 75 HPTRM

PYRAMAT® 75 high performance turf reinforcement mat (HPTRM) is a three-dimensional, lofty, woven polypropylene geotextile that is available in green or tan which is specially designed for erosion control applications on steep slopes and vegetated waterways. The matrix is composed of polypropylene monofilament yarns featuring X3® technology woven into a uniform configuration of resilient pyramid-like projections. The material exhibits very high interlock and reinforcement capacity with both soil and root systems, demonstrates superior UV resistance, and enhances seedling emergence. The expected design life of PYRAMAT® 75 is up to 75 years because of its superior UV resistance, resistance to corrosion, strength, and durability in the most demanding environments.

PYRAMAT® 75 conforms to the property values listed below¹ and is manufactured at a Propex facility having achieved ISO 9001:2008 and ISO 14001:2015 certifications. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

PROPERTY	TEST METHOD	ENGLISH	METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	100%
ENVIRONMENTAL IMPACT			
Carbon Footprint	GHG Protocol ISO 14064:2006 PAS 2050:2011	2.7 kg CO ₂ e/m ²	
PHYSICAL			
Mass/Unit Area ⁴	ASTM D-6566	14.0 oz/yd ²	475 g/m ²
Thickness ²	ASTM D-6525	0.40 in	10.2 mm
Light Penetration (% Passing) ³	ASTM D-6567	10%	10%
Color	Visual	Green or Tan	
MECHANICAL			
Tensile Strength ²	ASTM D-6818	4000 x 3000 lbs/ft	58.4 x 43.8 kN/m
Elongation ²	ASTM D-6818	40 x 35 %	40 x 35 %
Resiliency ²	ASTM D-6524	80%	80%
Flexibility ⁴	ASTM D-6575	0.534 in-lb	616,154 mg-cm
ENDURANCE			
UV Resistance % Retained at 3,000 hrs ⁴	ASTM D-4355	90%	90%
UV Resistance % Retained at 6,000 hrs ⁴	ASTM D-4355	90%	90%
PERFORMANCE			
Velocity (Vegetated) ^{4,5}	Large Scale	25 ft/sec	7.6 m/sec
Shear Stress (Vegetated) ^{4,5}	Large Scale	16 lb/ft ²	766 Pa
Manning's n (Unvegetated) ^{4,6}	Calculated	0.028	0.028
Seedling Emergence ⁴	ASTM D-7322	619%	619%
ROLL SIZES		8.5 ft x 120 ft 15.0 ft x 120 ft	2.6 m x 36.6 m 4.6 m x 36.6 m

NOTES:

- The property values listed above are effective 01/01/2019 and are subject to change without notice. Values represent testing at time of manufacture.
- Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
- Maximum Average Roll Value (MaxARV), calculated as the typical plus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will meet to the value reported.
- Typical Value.
- Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact Propex for further information.
- Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.