

PYRAMAT® 50 high performance turf reinforcement mat (HPTRM) is a three-dimensional, lofty, woven polypropylene geotextile that is available in green 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.

PYRAMAT® 50 conforms to the property values listed below<sup>1</sup> and is manufactured at a Propex facility having achieved ISO 9001:2008 certification. 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
<b>ORIGIN OF MATERIALS</b>			
% U.S. Manufactured		100%	100%
<b>PHYSICAL</b>			
Mass/Unit Area <sup>4</sup>	ASTM D-6566	11.0 oz/yd <sup>2</sup>	373 g/m <sup>2</sup>
Thickness <sup>2</sup>	ASTM D-6525	0.30 in	7.6 mm
Light Penetration (% Passing) <sup>3</sup>	ASTM D-6567	25%	25%
Color	Visual	Green or Tan	
<b>MECHANICAL</b>			
Tensile Strength <sup>2</sup>	ASTM D-6818	3200 x 3000 lbs/ft	46.7 x 43.8 kN/m
Elongation <sup>2</sup>	ASTM D-6818	30 x 30 %	30 x 30 %
Resiliency <sup>2</sup>	ASTM D-6524	70%	70%
Flexibility <sup>4</sup>	ASTM D-6575	0.195 in-lb	225,000 mg-cm
<b>ENDURANCE</b>			
UV Resistance % Retained at 3,000 hrs <sup>4</sup>	ASTM D-4355	90%	90%
UV Resistance % Retained at 6,000 hrs <sup>4</sup>	ASTM D-4355	90%	90%
<b>PERFORMANCE</b>			
Velocity (Vegetated) <sup>4,5</sup>	Large Scale	22 ft/sec	6.7 m/sec
Shear Stress (Vegetated) <sup>4,5</sup>	Large Scale	14 lb/ft <sup>2</sup>	670 Pa
Manning's n (Unvegetated) <sup>4,6</sup>	Calculated	0.028	0.028
Seedling Emergence <sup>4</sup>	ASTM D-7322	-	-
<b>ROLL SIZES</b>		8.5 ft x 120 ft	2.6 m x 36.6 m
		15.0 ft x 120 ft	4.6 m x 36.6 m

**NOTES:**

- The property values listed above are effective 03/09/2018 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.