Now Featuring X3 Fiber Technology!

SI® Geosolutions

Product Data Sheet

PYRAMAT®

PYRAMAT is manufactured at one of SI Geosolutions' facilities that have achieved ISO-9002 certification for its systematic approach to quality. **PYRAMAT** 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 HPTRM conforms to the property values listed below[1] that have been derived from quality control testing performed by one of SI Geosolutions' GAI-LAP accredited laboratories:

		MARV[2]	
PROPERTY	**TEST METHOD**	**ENGLISH**	**METRIC**
Physical			
Mass/Unit Area	ASTM D6566	13.5 oz/yd^2	455 g/m^2
Thickness	ASTM D6525	0.4 in	10.2 mm
Light Penetration (% Passing)	ASTM D6567	10%	10%
Color	-	Green, Tan	
Mechanical			
Tensile Strength	ASTM D6818	4,000 x 3,000 lb/ft	58.4 x 43.8 kN/m
Tensile Elongation	ASTM D6818	65% (max)	65% (max)
Resiliency	ASTM D6524	80%	80%
Flexibility	ASTM D6575	0.534 in-lb (avg)	615,000 mg-cm (avg)
Durability			
UV Resistance @ 3000 hrs	ASTM D4355	90%	90%
Performance			
Manning's "n" (Unvegetated)	Calculated	0.028	0.028
Shear Stress[3]	Large Scale	12 lb/ft^2	574 Pa
Velocity[3]	Large Scale	25 ft/s	7.6 m/s
Bench Scale Shear[4]	ECTC Draft Method #3	6 lb/ft^2	287 Pa
Seedling Emergence[5]	ECTC Draft Method #4	750%	750%
Roll Size		8.5 ft x 90 ft	2.59 m x 27.4 m

NOTES

1. The property values listed are effective 7/01/2004 and are subject to change without notice.
2. MARV indicates minimum average roll value calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the value reported.
3. Maximum permissible shear stress and velocity have been estimated from actual vegetated testing programs with standard PYRAMAT 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. Large scale tests with PYRAMAT X3 will be completed by Fall 2004. Please contact SI Geosolutions for further information.
4. Calculated as a typical values under unvegetated flow conditions in sand.
5. Calculated as average plant biomass with tall fescue grass seed in sand 14 days after seeding versus traditional round monofilament HPTRMs.

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