ARMORMAX KEY PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ENGLISH	METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	100%
PHYSICAL			
Thickness [2]	ASTM D-6525	0.40 in	10.2 mm
Light Penetration (% Passing) [3]	ASTM D-6527	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
PERFORMANCE			
UV Resistance % Retained at 6,000 hrs [4]	ASTM D-4355	90%	90%
UV Resistance % Retained at 10,000 hrs [4]	ASTM D-4355	85%	85%
ENDURANCE			
Velocity (Vegetated) [4, 5]	Large Scale	25 ft/sec	7.6 m/sec
Shear Stress (Vegetated) [4, 5]	Large Scale	16 lb/ft2	766 Pa
Manning's n (Unvegetated) [4, 6]	Calculated	0.028	0.028
USACE / CSU Wave Overtopping	Large Scale	USACE Approved	
Seedling Emergence [4]	ASTM D-7322	296%	296%
ROLL SIZES [7]		8.5 ft x 90 ft 15.0 ft x MR	2.6 m x 27.4 m 4.6 m x MR

PHYSICAL		**ENDURANCE/COMPONENT MATERIALS**	
Anchor Head Length	3.4 in	Anchor Head	Die cast aluminum
Anchor Head Width	1.0 in	Cable Tendon	Zinc-aluminum carbon steel
Anchor Head Bearing Area	2.5 in2	Load Bearing	Die cast zinc
Anchor Head Weight	0.1 lbs	Load-Lock Mechanism	Die cast zinc w/ ceramic roller
PERFORMANCE		Crimped Ferrule	Aluminum
		MECHANICAL	
Load Range (Cohesive through Non Cohesive Soils)	Up to 500 lbs	Ultimate Strength	1,100 lbs
Embedment Depth	Up to 5 ft	Working Load	800 lbs

- ***Material Composition:*** Proprietary ultraviolet protection package in PYRAMAT HPTRM, and the durability of the anchor provides long-term design assurance.
- ***Tensile Strength:*** PYRAMAT HPTRM boasts 4000 x 3000 lb/ft (58.4 x 43.8 kN/m) of tensile strength, which exceeds the U.S. EPA definition of a High Performance Turf Reinforcement Mat.
- ***Seedling Emergence:*** PYRAMAT HPTRM features X3® fiber technology, which offers 40% more fiber surface area to capture the critical sediment and moisture needed to increase seed germination within the first 21 days.
- ***Flexibility:*** Allows the system to conform and maintain intimate contact with the prepared subgrade.
- ***Anchor Loading Capacity:*** Based on anchor size, tendon length and on-site soil parameters the anchor foot provides up to an ultimate of 500 to 3000 lbs of pullout resistance per Earth Engineered Anchor. Actual holding strengths depend upon soil characteristics, anchor type and installation techniques.

NOTES:

1. The property values listed above are effective 07/13/2015 and are subject to change without notice.
2. 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.
3. 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.
4. Typical Value.
5. 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 us for further information.
6. Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.
7. Master Roll (MR) is to be up to 600 feet in length.