



ARMORMAX[®]
BY PROPEX

PRODUCT DATA • **ARMORMAX**[®] FOR **SLOPE STABILITY**

The **ArmorMax**[®] Anchor Reinforced Vegetation System (ARVS) is an engineered solution used for permanent erosion protection or surficial slope stability in vegetated and unvegetated applications. It is composed of two components: Pyramat[®] High Performance Turf Reinforcement Mat (HPTRM) and Percussion Driven Earth Anchors (PDEAs). ArmorMax is available in green or tan to provide for an aesthetically pleasing solution with proven performance. The PDEA component is specifically designed and tested for compatibility and performance with Pyramat to provide a system solution. Propex offers several PDEA options to provide the ArmorMax system designed for specific challenges and needs. The expected design life of **ArmorMax** is 50 years because of its superior UV resistance, resistance to corrosion, strength, and durability in the most demanding environments.



The Pyramat component of **ArmorMax**[®] has been tested and conforms to the property values listed below¹ while manufactured at a Propex facility having achieved ISO 9001:2000 certification. Propex also performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI-LAP).

The Type B2 Anchor model is used for surficial slope stability applications and has a working load of up to 3,000 lbs. The Type B2 Anchor consists a hot dip galvanized ductile iron anchor head, a zinc plated steel 3/8" all thread rod, and a galvanized sheet steel load bearing plate. The Type B2 Anchor is also designed with a recessed cavity so the top of the rigid tendon can be cut below the surface being protected.



PYRAMAT PROPERTIES

PROPERTY	TEST METHOD	MARV ²	
		ENGLISH	METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured Inputs		100%	100%
% U.S. Manufactured		100%	100%
PHYSICAL			
Mass/Unit Area	ASTM D-6566	13.5 oz/yd ²	457.7 g/m ²
Thickness	ASTM D-6525	0.4 in	10.2 mm
Light Penetration (% Passing)	ASTM D-6567	15% (Max)	15% (Max)
Color	Visual	Green or Tan	
MECHANICAL			
Tensile Strength (Grab)	ASTM D-6818	4000 x 3000 lb/ft	58.4 x 43.8 kN/m
Elongation	ASTM D-6818	40 x 35%	40 x 35%
Resiliency	ASTM D-6524	80%	80%
Flexibility	ASTM D-6575	0.534 in-lb (avg)	615,000 mg-cm (avg)
ENDURANCE			
UV Resistance % Retained 6000 hrs	ASTM D-4355	90%	90%
UV Resistance % Retained 10000 hrs	ASTM D-4355	85%	85%
PERFORMANCE			
Velocity ³ (Fully Vegetated)	Large Scale	25 ft/sec	7.6 m/sec
Shear Stress ³ (Fully Vegetated)	Large Scale	16lb/ft ²	766 Pa
Manning's "n" ⁴ (Unvegetated)	Calculated	0.028	0.028
Seedling Emergence ⁴	ECTC Draft Method #4	296%	296%
ROLL SIZES		8.5 ft x 90 ft	2.6 m x 27.4 m

TYPE B2 ANCHOR PROPERTIES

PHYSICAL		ENDURANCE/ COMPONENT MATERIALS	
Anchor Head Length	4.75 in	Anchor Head	Hot Dip Galvanized Ductile Iron
Anchor Head Width	1.2 in	Rigid Tendon	Zinc Plated Steel 3/8" All Thread Rod
Anchor Head Bearing Area	5.0 in ²	Load Bearing Plate	Galvanized Sheet Steel
Anchor Head Weight	0.8 lbs	Locking Nut	Zinc Plated Steel
PERFORMANCE		Shackle Casting	Hot Dip Galvanized Investment Cast Steel
Load Range (Cohesive through Non Cohesive Soils)	Up to 1,500 lbs	MECHANICAL	
		Ultimate Strength	5,000 lbs
Embedment Depth	6 to 12 ft	Working Load	3,000 lbs

NOTES:

- ¹ The property values listed are effective 04/2011 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 velocity and shear stress has been obtained through vegetated testing programs featuring specific soil ty pes, 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.
- ⁴ Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.



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