



**ARMORMAX**<sup>®</sup>  
BY PROPEX

## PRODUCT DATA • **ARMORMAX**<sup>®</sup> FOR **EROSION CONTROL**

The **ArmorMax**<sup>®</sup> 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<sup>®</sup> 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**<sup>®</sup> has been tested and conforms to the property values listed below<sup>1</sup> 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 B1 Anchor model is used for permanent erosion protection applications and has a working load of up to 800 lbs. The Type B1 Anchor consists a die cast aluminum anchor head, zinc-aluminum coated carbon steel cable, a die cast zinc load-locking mechanism with a ceramic roller, and two aluminum ferrules. The bullet nose design of the anchor head allows the anchor to penetrate Pyramat resulting in minimal installation damage. The Type B1 Anchor is also designed with a recessed cavity so the top of the cable can be cut below the surface being protected.



**PYRAMAT PROPERTIES**

		MARV <sup>2</sup>	
PROPERTY	TEST METHOD	ENGLISH	METRIC
<b>ORIGIN OF MATERIALS</b>			
% U.S. Manufactured Inputs		100%	100%
% U.S. Manufactured		100%	100%
<b>PHYSICAL</b>			
Mass/Unit Area	ASTM D-6566	13.5 oz/yd <sup>2</sup>	457.7 g/m <sup>2</sup>
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	
<b>MECHANICAL</b>			
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)
<b>ENDURANCE</b>			
UV Resistance % Retained 6000 hrs	ASTM D-4355	90%	90%
UV Resistance % Retained 10000 hrs	ASTM D-4355	85%	85%
<b>PERFORMANCE</b>			
Velocity <sup>3</sup> (Fully Vegetated)	Large Scale	25 ft/sec	7.6 m/sec
Shear Stress <sup>3</sup> (Fully Vegetated)	Large Scale	16lb/ft <sup>2</sup>	766 Pa
Manning's "n" <sup>4</sup> (Unvegetated)	Calculated	0.028	0.028
Seedling Emergence <sup>4</sup>	ECTC Draft Method #4	296%	296%
ROLL SIZES		8.5 ft x 90 ft	2.6 m x 27.4 m

**TYPE B1 ANCHOR PROPERTIES**

<b>PHYSICAL</b>		<b>ENDURANCE/ COMPONENT MATERIALS</b>	
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 in <sup>2</sup>	Load Bearing Plate	Die cast zinc
Anchor Head Weight	0.1 lbs	Load-Lock Mechanism	Die cast zinc w/ceramic roller
<b>PERFORMANCE</b>		Crimped Ferrule	Aluminum
Load Range (Cohesive through Non Cohesive Soils)	Up to 500 lbs	<b>MECHANICAL</b>	
		Ultimate Strength	1,100 lbs
Embedment Depth	Up to 5 ft	Working Load	800 lbs

**NOTES:**

- The property values listed are effective 04/2011 and are subject to change without notice.
- 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.
- 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.



**Propex Operating Company, LLC** · 1110 Market Street, Suite 300 · Chattanooga, TN 37402 USA  
PH: 800-621-1273 · F: 423-899-5005 · PropexGlobal.com

Fibermesh®, Fibercast®, Enduro®, Novomesh®, Novocon®, Geotex®, Landlok®, Pyramat®, X3®, SuperGro®, Petromat®, Petrotac®, and Reflectex™ are registered trademarks of Propex Operating Company, LLC.

This publication should not be construed as engineering advice. While information contained in this publication is accurate to the best of our knowledge, Propex does not warrant its accuracy or completeness. The ultimate customer and user of the products should assume sole responsibility for the final determination of the suitability of the information and the products for the contemplated and actual use. The only warranty made by Propex for its products is set forth in our product data sheets for the product, or such other written warranty as may be agreed by Propex and individual customers. Propex specifically disclaims all other warranties, express or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, or arising from provision of samples, a course of dealing or usage of trade.