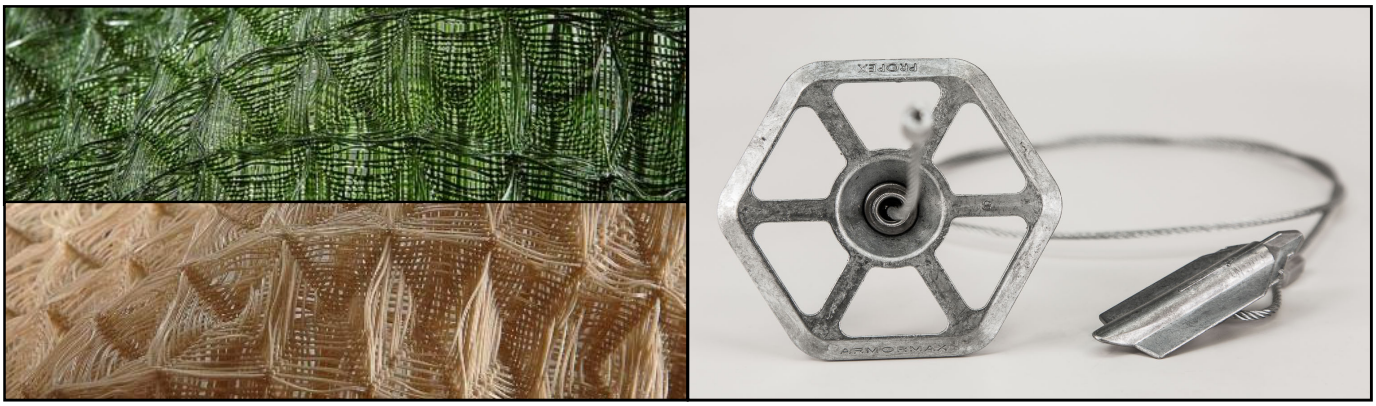
ARMORMAX®
Engineered Earth Armoring System

Product Data

ARMORMAX® 75

For Erosion Control

The ARMORMAX® 75 for Erosion Control is an Engineered Earth Armoring Solution™ used for permanent erosion protection in vegetated and unvegetated applications. It is composed of two components: PYRAMAT® 75 High Performance Turf Reinforcement Mat (HPTRM) and Type B1 Engineered Earth Anchors. ARMORMAX® 75 is available in green or tan to provide for an aesthetically pleasing solution with proven performance. The anchor component is specifically designed and tested for compatibility and performance with PYRAMAT® 75 HPTRM to provide a system solution. Propex offers several anchor options to provide the ARMORMAX® 75 system designed for specific challenges and needs. The expected design life of ARMORMAX® 75 is up to 75 years because of its superior UV resistance, resistance to corrosion, strength, and durability in the most demanding environments.



The PYRAMAT® 75 HPTRM component of ARMORMAX® 75 values listed below[1] while manufactured at a Propex facility having achieved ISO 9001:2015 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 500 lbs. The Type B1 Anchor consists of an aluminum anchor head, galvanized steel cable, aluminum ferrules, zinc-aluminum load-locking mechanism, and a zinc-aluminum top plate. The bullet nose design of the anchor head allows the anchor to penetrate PYRAMAT® 75 HPTRM 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.

Propex GEOSOLUTIONS

ENGINEERED EARTH ARMORING SOLUTIONS™

www.propexglobal.com

Propex Operating Company, LLC · 4019 Industry Drive · Chattanooga, TN 37416 · ph 800 621 1273 · ph 423 855 1466

ARMORMAX®
Engineered Earth Armoring System

Product Data

ARMORMAX® 75

For Erosion Control

PYRAMAT® 75 HPTRM 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-6567	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
ENDURANCE			
UV Resistance % Retained at 3,000 hrs [4]	ASTM D-4355	90%	90%
UV Resistance % Retained at 6,000 hrs [4]	ASTM D-4355	90%	90%
PERFORMANCE			
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		8.5 ft x 120 ft 15.0 ft x 120 ft	2.6 m x 36.6 m 4.6 m x 36.6 m

TYPE B1 ANCHOR PROPERTIES

Component Materials	Material Composition	Physical Properties	
Anchor Head	Aluminum	3.57 in x 1.26 in x 0.91 in (90.7 mm x 32 mm x 23.1 mm) Bearing Area: 3.44 in² (22.2 cm²)	
Cable Tendon	Galvanized Steel	Diameter: 0.109 in (2.8 mm)	
Lower Termination	Aluminum	Length: 0.63 in (16 mm), Wall Thickness: 0.09 in (2.3 mm)	
Load Bearing Plate	Zinc-Aluminum	3.97 in x 4.4 in x 0.25 in (100.8 mm x 111.8 mm x 6.4 mm) Bearing Area: 8.07 in² (52.1 cm²)	
Top Termination	Zinc-Aluminum	Circumferential Tripple Wedge Grip Assembly to Eliminate Cable Pinch Points Grip to Cable Contact Surface Area: 0.242 in² (1.6 cm²) Grip to Cable Contact Ratio: 83% of Cable Diameter	
Performance Properties			
Ultimate Assembly Strength	1300 lb (5.78 kN)	Typical Working Load	500 lb (2.22 kN)
Ultimate Cable Strength	1600 lb (7.12 kN)	Embedment Depth	3-5 ft (0.91-1.52 m)

NOTES:

1. The property values listed above are effective 04/22/2021 and are subject to change without notice. Values represent testing at time of manufacture.
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 Propex 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.

Propex GEOSOLUTIONS

ENGINEERED EARTH ARMORING SOLUTIONS™

www.propexglobal.com

Propex Operating Company, LLC · 4019 Industry Drive · Chattanooga, TN 37416 · ph 800 621 1273 · ph 423 855 1466