



Carthage Mills Product Data

Geotextiles | Erosion Control | Geogrids | Geomembranes

ARMORMAX® 75 EC – for Permanent 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.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Tensile Strength ²	ASTM D 6818	58.4 x 43.8 kN/m	4000 x 3000 lbs/ft
Elongation ²		40 x 35%	
Resiliency ²	ASTM D 6524	80%	
Flexibility ⁴	ASTM D 6575	616,154 mg/cm	0.534 in/lb
<input type="checkbox"/> Endurance			
UV Resistance @ 3,000 hrs / @ 6,000 hrs ⁴	ASTM D 4355	90% / 90%	
<input type="checkbox"/> Performance			
Velocity (Vegetated) ^{4,5}	Large Scale	7.6 m/sec	25 ft/sec
Shear Stress (Vegetated) ^{4,5}		766 Pa	16 lbs/ft ²
Manning's N (Unvegetated) ^{4,6}	Calculated	0.028	
USACE / CSU Wave Overtopping	Large Scale	USACE Approved	
Seedling Emergence ⁴	ASTM D 7322	296%	
<input type="checkbox"/> Physical			
Thickness ²	ASTM D 6525	10.2 mm	0.40 in
Light Penetration (% Passing) ³	ASTM D 6567	10%	
Color	Visual	Green or Tan	
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	2.6 m x 36.6 m 95.16 m ²	8.5 ft x 120 ft 113.3 yd ²
		4.6 m x 36.6 m 168.36 m ²	15.0 ft x 120 ft 200 yd ²

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 in ² (22.2 cm ²)	
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	Aluminum Alloy	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 in ² (52.1 cm ²)	
Top Termination	Aluminum	Circumferential Tripple Wedge Grip Assembly to Eliminate Cable Pinch Points Grip to Cable Contact Surface Area: 0.242 in ² (1.6 cm ²) 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)

- The property values listed above are effective 01/01/2020 and are subject to change without notice.
- 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.
- Maximum Average Roll Value, 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.
- Typical Value.
- 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 Carthage Mills for further information.
- 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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Carthage Mills
4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE
info@carthagemills.com

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