



## **PileForm™ ABM** Articulating Block Mat

### **PRODUCT DESCRIPTION**

Five Star® PileForm™ ABM's are superior geo-fabric articulating block mats, which exceed engineering specifications for use in severely hostile marine environments. These erosion control revetments flex (articulate) with changing soil and water conditions. Five Star® PileForm™ ABM material is a spun-bond polyester weave.

### **ADVANTAGES**

- Ease of installation
- UV resistant
- High flexural and tensile strengths
- Very low water absorption
- Excellent solvent and chemical resistance
- High abrasion and impact resistance

### **USES**

River flooding causes the erosion of foundation materials, resulting in the undercutting of bridge piers and abutments. PileForm™ ABMs are useful tools for underpinning and providing scour protection.

Five Star Products' process uses a double-layer fabric form especially woven for optimum strength, stability, adhesion and filtering characteristics. PileForm™ ABM revetments can be cast as easily under water as in-the-dry.

Five Star® PileForm™ ABM revetment is a form for casting in place heavy-duty, rectangular concrete blocks in a staggered joint pattern. Revetments are reinforced by cables inserted between the two layers of fabric prior to slurry injection. Completely embedded in mortar, cables allow the cast-in-place concrete blocks to flex (articulate) with changing soil and water conditions. Revetment fabrics are 100% nylon of which at least 50% by weight consists of textured fibers for optimum filtering characteristics and adhesion to mortar.

Block thickness is controlled by spacer cords in the middle of each block. Lateral flow of mortar is controlled by shop-installed diaphragms (grout stops) located at spaced intervals.

Panels of fabric are shop-assembled in predetermined sizes convenient to handle and are joined together side-by-side at the job site by means of zipper closures attached to the upper and lower layers of fabric. Nylon rope has been used instead of galvanized cables which, as an option, are installed perpendicular to block width only and are referred to as "slope cables." Transverse cables, parallel to block width, may be also inserted if required. Cable sizes are commensurate with block weight. Final selection of cable for each job is at the option of the engineer.

<b>Typical Properties</b>	
Material Type	1/1050/140 T-715 High Tenacity Nylon
Type Selvage	Hot Melt Fused
Weave	2 x 2 Basket
Width (Inches) ASTM D 3774	65.0 Min. – 67.0
Weight (Oz. <sup>2</sup> /Yd) ASTM D 3776	12.15 Nominal
Ends/Inch (Warp) ASTM D 3775	43 +/- 1
Picks/Inch (Fill) ASTM D 3775	41 +/- 1
Gauge Thickness (Inches) ASTM D 1777	0.014 Nominal
Grab Tensile Warp (lbf) ASTM D 5035	1,100 Nominal
Grab Tensile Fill (lbf) ASTM D 5035	1,000 Nominal

*The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result. Test methods are modified where applicable.*

## **PLACEMENT GUIDELINES**

Typically, a small grout pump is all that is required for production pumping of 15 to 20 cubic yards in a day. Five Star® PileForm™ ABM tend to lay flat for easy diver placement, without the floating and twisting associated with other products.

## **TECHNICAL SERVICES**

Complete technical and specification services are available from the manufacturer and their authorized representatives and distributors.

## **FILLING SYSTEM**

Additional literature and the Safety Data Sheet can be obtained from Five Star Products, Inc. upon request.

**NOTE: PRIOR TO APPLICATION, READ ALL PRODUCT PACKAGING THOROUGHLY.** For more detailed placement procedures, refer to Five Star® Design-A-Spec™ installation guidelines or call Five Star Products' Engineering and Technical Service Center at 1-800-243-2206.

For worldwide availability, additional product information and technical support, contact your local Five Star® distributor, local sales representative, or call Five Star Products' Engineering and Technical Service Center at 1-800-243-2206.

SKU / PRODUCT CODE	DESCRIPTION	# UNITS / PALLET	UNIT SIZE
32475	Five Star® Pileform™ ABM (Articulated Block Mat– 6")	Call	Call

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