THE

FLEXIBLE

HARD

ARMOR

THAT

GROWS

GREEN

SHOREBLOCK®

CONCRETE REVETMENT BLOCK





SHOREBLOCK® SD blocks of different heights and weights can be assembled to provide a castellated cover layer for a higher coefficient of hydraulic friction or improved wave energy absorption and retention.

SHOREBLOCK® SD is a flexible, interlocking matrix of concrete blocks of uniform size, shape and weight connected by a series of cables which pass longitudinally through preformed ducts in each block. SHOREBLOCK® SD revetment systems combine the favorable aspects of lightweight blankets and meshes, such as porosity, flexibility, vegetation encouragement and habitat enhancement with non-erodible, self-weight and high tractive force resistance of a rigid lining.

SHOREBLOCK® SD has proven to be an aesthetic and functional alternative to riprap, poured in place concrete and other heavy-duty, erosion protection systems. SHOREBLOCK® SD is easy to install, therefore, can dramatically reduce overall project costs. More specifically, when compared to other systems, life-cycle costs have been reduced because SHOREBLOCK® SD is a permanent system and saves on subsequent maintenance expenses.

Research and Design

SHOREBLOCK® SD is the most durable, effective and environmentally-friendly erosion control revetment method of fighting severe erosion problems. SHOREBLOCK® SD mats are available

in eight foot widths in lengths up to 40 feet. Mats can be joined to achieve greater lengths. Different sizes of SHOREBLOCK® SD are available depending on the severity of the application. In most markets, Articulated Concrete Blocks (ACBs) are competitive in cost to 12" diameter (or greater) rock (or rip-rap) placed in an 18" or greater blanket thickness, are competitive with gabion mattresses and ACBs are typically more economical than poured in place concrete.

ACBs were successfully tested by the U.S. Bureau of Reclamation and U.S. Federal Highway Administration (FHWA-RD-89-199). The Corps of Engineers has used ACBs on numerous designs for both channel and shoreline stability. Comprehensive wave tank testing was evaluated in 1983 at Oregon State University. ACB installations have been performing successfully since 1980.

SHOREBLOCK® SD DESIGN ADVANTAGES

- Each block has an open area of up to 20% to allow for superior hydrostatic pressure relief and ecologically pleasing vegetative cover.
- Interlocking cabling allow greater flexibility through the axes of articulation — conforms better to ground contours and settlement.
- Prefabricated mats offer quick installation, even underwater.
- Tests have shown that the force needed to remove a block from a revegetated cover layer may be equal to 20 times the weight of the block.





SHOREBLOCK® SD has been successfully tested by Colorado State University, in accordance with the hydraulic performance testing protocol established by the U.S. Federal Highway Administration.

(FHWA-RD-89-199).



MIN. DENSITY (IN AIR) (Lbs./Ft.³)			ESSIVE STRENGTH (PSI)	MAX. WATER ABSORPTION (Lbs./Ft. ³)	
AVG. OF 3 UNITS	INDIVIDUAL Unit	AVG. OF 3 UNITS	INDIVIDUAL Unit	AVG. OF 3 UNITS	INDIVIDUAL UNIT
130	125	4,000	3,500	9.1	11.7

^{*} Unit weight and density values may vary due to availability of local materials.

Specifications

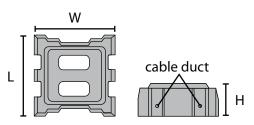


Fabrication of a SHOREBLOCK® SD mat is accomplished by threading corrosive resistant steel or special synthetic cable in one direction through a series of blocks. Cables are then secured to the mattress with corrosive resistant hardware. Cables are sized to provide a 5 to 1 cable strength to mat weight ratio to ensure safe handling while providing extraordinary strength in the system. Longitudinal cables are looped together at the ends of each row of blocks in the mat assembly for easy handling and anchoring. The open cells of SHOREBLOCK® SD comprise about 20% of the mat area.

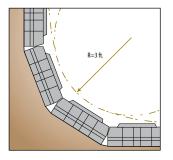
OPEN CELL							
BLOCK CLASS	DIMENSIONS IN.		BLOCK				
	Н	W	L	Unit Weight Lbs.	Weight Lbs./Sq. Ft.	UNIT COVERAGE Sq. Ft.	OPEN AREA
SD-400 OC	4.00	15.50	17.40	50-57	28-32	1.78	20%
SD-475 OC	4.75	15.50	17.40	62-71	35-40	1.78	20%
SD-600 OC	6.00	15.50	17.40	81-94	46-53	1.78	20%
SD-800 OC	8.00	15.50	17.40	108-118	61-67	1.78	20%
SD-900 OC	9.00			120-138	68-78	1.78	20%

CLOSED CELL							
BLOCK CLASS	DIMENSIONS IN.		BLOCK				
	Н	W	L	Unit Weight Lbs.	Weight Lbs./Sq. Ft.	UNIT COVERAGE Sq. Ft.	OPEN AREA
SD-400 CC	4.00	15.50	17.40	66-73	37-41	1.78	10%
SD-475 CC	4.75	15.50	17.40	78-89	43-50	1.78	10%
SD-600 CC	6.00	15.50	17.40	94-108	53-61	1.78	10%
SD-800 CC	8.00	15.50	17.40	125-135	71-76	1.78	10%
SD-900 CC	9.00	15.50	17.40	145-167	82-98	1.78	10%

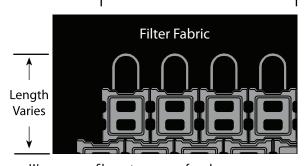
^{*}The SD Series denotes Single Directional Cable System. Note: Additional block styles may be available in some areas. Check with your local SHORETEC® representative for product availability.



SHOREBLOCK® SD units are manufactured in accordance with ASTM C90, C140 and D6684-04.



Each block is interconnected by flexible cables, providing articulation between adjacent blocks.



Woven monofilaments are preferred over nonwoven geotextiles. The soil's particle size (among other factors) will ultimately determine the fabric selection.

Features & Benefits



DURABILITY

SHOREBLOCK® SD will not suffer loss of function due to chemical degradation, UV degradation, biological degradation, vandalism or aging throughout its design life.

STABILITY

SHOREBLOCK® SD has the necessary strength characteristics to resist displacement due to imposed tractive forces and wave loads and the necessary strength to resist both lateral displacement and vertical uplift.

ACCEPTABILITY

SHOREBLOCK® SD becomes part of the landscape and the local ecosystem. Its construction is free of hazardous projections thus offering opportunities for recreation as native grasses are quick to germinate in the soil-filled cells.

AFFORDABILITY

The SHOREBLOCK® SD System is engineered to ensure comprehensive project design, and high quality components at 20-50% lower than alternative erosion control methods.





SHORETEC, LLC 38200 Hwy 16 Denham Springs, LA 70706

225 667 4545 office 800 575 7293 toll free 225 667 7424 fax

www.shoretec.com

©2008, SHORETEC® LLC

SHORETEC®, a Premier Concrete Products, Inc. company, may change product specifications without notice. The SHORETEC® system is suitable for use in the applications described in our literature and on our website, provided proper installation and engineering principles are followed. Professional engineering should be consulted before installation of SHORETEC® units to assure proper design. ALL EXPRESSED OR IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. Printed in the U.S.A. SHORETEC® is a registered trademark of Premier Concrete Products, Inc.