

# SHOREX JAX™

Wave Attenuation Structures



Promoting Living Shorelines and Coastal Restoration

## SHOREJAX™ COMPOSITION AND CONFIGURATION

SHOREJAX™ interlocking concrete armor units consist of two identical concrete halves which, when interlocked, create a concrete matrix. 48" SHOREJAX™ halves are fastened together with a 3/8" galvanized, threaded rod and nut tightened to specified torque. Each SHOREJAX™ unit has a centralized core with three arms extending equidistantly. When each half-unit is properly interlocked, a completed SHOREJAX™ unit exhibits six equal extensions placed 90 degrees from the four adjacent arms. Upon placement, each unit will be supported by the adjacent concrete arms, allowing nesting of the adjacent SHOREJAX™ units. Multiple nested SHOREJAX™ units are referred to as a cluster.



| SHOREJAX™ PHYSICAL PROPERTIES |                                 |                  |                 |
|-------------------------------|---------------------------------|------------------|-----------------|
| COMPRESSIVE STRENGTH          |                                 | WATER ABSORPTION |                 |
| NET AREA                      | MIN. PSI                        | MAX. PCF         |                 |
| AVG. OF 3 UNITS               | INDIVIDUAL UNIT (MIN. REQUIRED) | AVG. OF 3 UNITS  | INDIVIDUAL UNIT |
| <b>4,000</b>                  | <b>3,500</b>                    | <b>9.1</b>       | <b>11.7</b>     |



3:2 CLUSTER 12,000 LBS

| SHOREJAX™ MODEL | TOTAL LENGTH (IN) | ARM LENGTH (IN) | FILLET LENGTH (IN) | ARM WIDTH (IN) | VOLUME (FT <sup>3</sup> ) | WEIGHT (LBS)   |
|-----------------|-------------------|-----------------|--------------------|----------------|---------------------------|----------------|
| <b>SJ-48</b>    | <b>48</b>         | <b>16.64</b>    | <b>3.68</b>        | <b>7.36</b>    | <b>4.49</b>               | <b>600-650</b> |



## CABLING SHOREJAX™ INTO CLUSTERS

Once the desired cluster configuration has been completed, each resulting cluster shall be cabled in the field. All cabling should be performed by qualified personnel, utilizing minimum 27mm polyester cable. Cabling aides in the mechanical interlock of the SHOREJAX™ units and helps alleviate potential scouring at the toe.

Additionally, cabling further reinforces the SHOREJAX™ cluster at all pivotal termination and transition points. Cable shall be placed around the entire midsection of the cluster per manufacturer's recommendation. All slack cable shall be hand tightened prior to placement of cable sleeves. Only approved cable sleeves provided by the manufacturer shall be utilized. Cable

sleeves will be double-crimped with an approved electric or pneumatic crimping device as recommended by the manufacturer. Orientation of additional cables may be recommended by the engineer, taking into account the size of the SHOREJAX™ cluster. All field cabling configurations shall be approved by the engineer and/or manufacturer.

## DEPLOYMENT OF SHOREJAX™

SHOREJAX™ units may be placed individually or in cluster configuration. SHOREJAX™ clusters are individual units nested as closely as possible into a pre-defined matrix. When nesting SHOREJAX™ units to make a cluster, the center-to-center spacing between units should be 19.2" - 24". Per manufacturer's recommendation, approved cabling should be placed and securely fastened around the mid-section of the cluster. All clusters should be deployed with a minimum spacing of 8" between clusters. Final spacing and placement of all SHOREJAX™ clusters shall be determined by the design engineer.



## PREPARATION, BEDDING AND SUPPORT

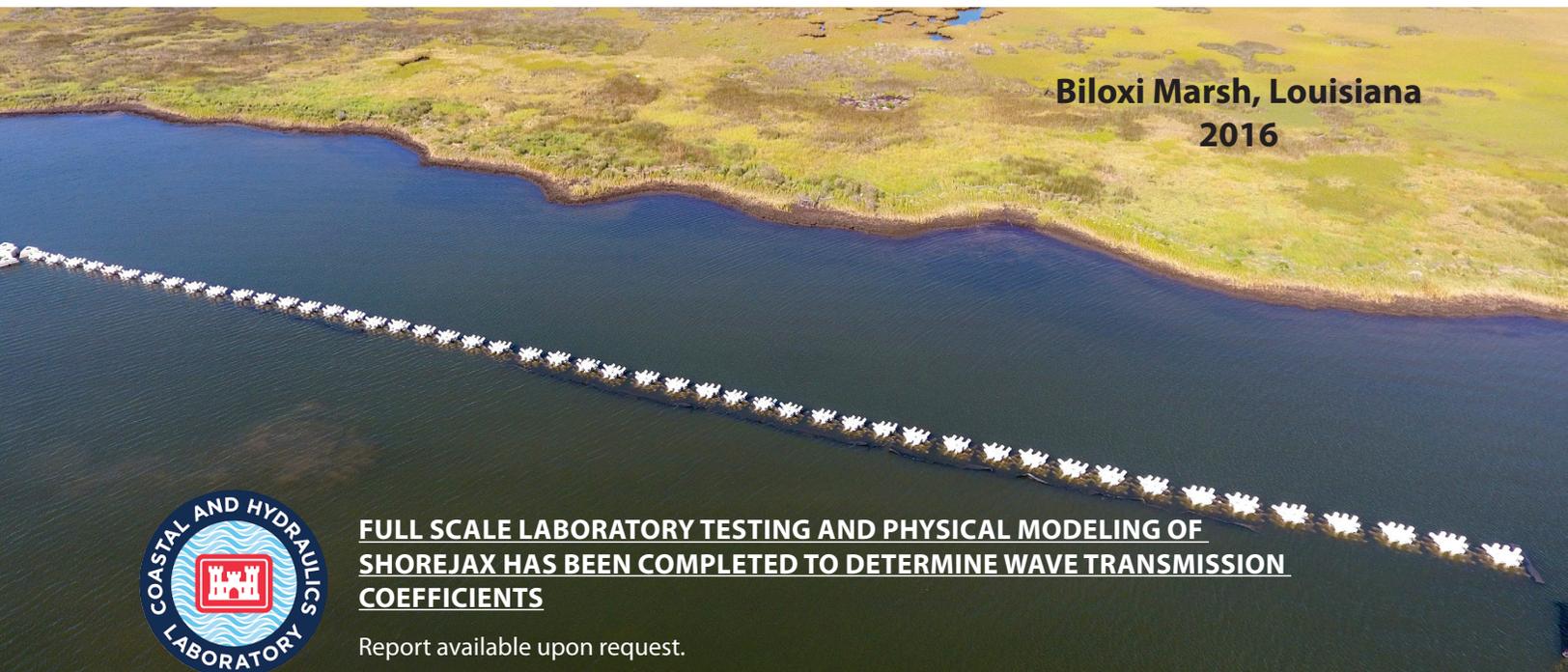
Prior to placement of SHOREJAX™ units or clusters, an aggregate bedding material or infill may be utilized to fill interior voids. Aggregate bedding stone may be reinforced with a BaseLok® FabGrid® Marine Geocomposite.

BaseLok® FabGrid® Marine Geocomposites are high-strength polypropylene biaxial geogrids laminated or sewn to a specified geotextile fabric. Utilizing a BaseLok® FabGrid® Marine Geocomposite can help confine the aggregate and account for elevation changes of the seafloor.

**Engineering Support:** Our engineering staff is ready to support your next project. Contact [engineering@premier-concrete.com](mailto:engineering@premier-concrete.com)



**Biloxi Marsh, Louisiana  
2016**



**FULL SCALE LABORATORY TESTING AND PHYSICAL MODELING OF SHOREJAX HAS BEEN COMPLETED TO DETERMINE WAVE TRANSMISSION COEFFICIENTS**

Report available upon request.



LIVING SHORELINES



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