

CASE STUDY

BREVARD COUNTY MID-REACH SHORE PROTECTION MERRITT ISLAND, FL SHORELINE RESTORATION



PROJECT SUMMARY

Brevard County needed a permanent solution to its eroding beaches and dunes caused by hurricanes. Engineers came up with an innovative idea to create artificial reefs to help reduce the impact hurricanes have on the shoreline. The 8-by-12 feet rectangular segments are comprised of concrete mats, embedded with coquina rock with Propex's GEOTEX® 1201 nonwoven geotextile working as a separator and filter between the ocean floor and the concrete mats. GEOTEX 1201 is tied to the mats with wire, but will be held down by the weight of the mats themselves once installed. The mats are assembled on a barge before a crane places them in about 40' of water a half a mile offshore. Divers then install the mats on the ocean floor. It is a two year project that plans to rebuild the depleted shoreline.



PROBLEM Erosion of the beaches and dunes by hurricanes



SOLUTION Artificial reefs comprised of concrete mats embedded with coquina rock with a layer of GEOTEX® 1201 on the bottom



INSTALLATION Cranes pick up the 8-by-12 foot rectangular segment and lower it into the water where divers place it on the ocean floor



PERFORMANCE Artificial reefs that reduce erosion caused by hurricanes on the shore line

FEATURES & BENEFITS

- Provides a separator and filter to reduce erosion beneath hard armoring system
- Improved durability reduces potential for tearing during installation
- Can be combined with hard armoring systems to address the needs of nontraditional markets
- GEOTEX 1201 is made in the USA
- Improved hydraulic capabilities creates less resistance during installation
- Polypropylene won't breakdown in aquatic environments preserving the integrity of the installation
- Polypropylene is chemically inert preventing leaching that could potentially be harmful to aquatic life
- Propex Engineering Services team provides design and technical support throughout your project



VISIT OUR WEBSITE FOR MORE INFORMATION, PRODUCT SAMPLES OR OTHER INQUIRIES OR CALL CUSTOMER SERVICE AT 1.800.621.1273



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