



Marine mattresses protect historic beach for 23 years to create thriving dune system

Cape May Point State Park

Cape May, New Jersey

CLIENT CHALLENGE

Cape May Point State Park is one of the most notoriously erosive sections of the U.S. Atlantic coastline. Stabilization of the dune and shoreline were required to save historical buildings and critical marsh habitat.

TENSAR SOLUTION

Triton Marine Mattresses were installed over a layer of old construction debris in the tidal zone with no need for an extended apron or embedded toe. Over time, the mattress toe became covered with sand and much of the sand subgrade layer washed into the voids of the concrete debris used as the core, resulting in an irregular and steeper surface supporting the mattress units. The flexibility of the mattress units allowed them to stay in contact with the subgrade preventing any further scour of the dune system.

In late 1997, a severe storm event exposed the installation to direct wave attacks of 8 ft. or more, with the mattresses protecting the dune as intended. In 2004 and in 2006 the USACE renourished the beach area covering the dunes and mattresses with sand and then new plantings were installed. The site was re-visited in August of 2019, 23 years after the installation and the Triton Marine Mattresses were continuing to perform creating a thriving beach dune system and protection from future events like Superstorm Sandy..

Geosyn International
Engineer

City of Cape May, State of NJ DNR
Owner and/or Developer

Shoreline Revetment
Application

Triton UX200 Marine Mattresses
Product

April 1996
Installation Date

Tensor
www.TensorCorp.com
800-TENSAR-1



1997



2019