



Project Data

Location	Manhattan, NY
Completion	2002
Project Type	Timber Pile Protection
Products / Systems Used	Fiber-Form
Contractor or Applied By	Strongwork Diving

Project Details

Pier 16 in Manhattan, NY is one of the city's most active tourist piers. It is adjacent to the Fulton Fish Market. In service for over 50 years, the timber piles have received marine borer damage, which threatened the structural integrity of the pier. This major rehabilitation called for more than 6,000 LF of timber pile repairs.

The pile repair system chosen was a concrete encapsulation with fiberglass forms. The consultant, Han-Padron and New York City Economic Development Corporation approved Denso's SeaShield Fiber-Forms. The SeaShield Fiber-Forms (fiberglass jackets) are a custom fabricated fiberglass jacket with a tongue-and-groove closure. It provides a strong rigid form to allow concrete to be pumped into the annulus space between the jacket and timber pile.

The timber piles that had received extensive damage from the marine borers received concrete encapsulation. The repair involved building a reinforcement cage around the piles and then installing the SeaShield Fiber-Form. The concrete was then pumped into the annulus space, which increased the overall strength of the pile. To provide ease of application the forms were fabricated in a translucent color to allow the contractor to view the concrete level during the pumping operation.

The contractor, Bob Buecker of Strongwork Diving stated "The SeaShield Fiber-Forms were of high quality, provided on-time delivery and easy to install due to the jackets being translucent". The engineers and owners were pleased with the installation as the application was completed ahead of schedule.

Benefits

- High Impact Resistance
- Long Maintenance-Free Service Life
- UV Resistance
- Can Be Applied Underwater



Concrete is pumped into the annulus space between the jacket and timber pile.



The SeaShield Fiber Forms are positioned around the timber piles.



Completed SeaShield Fiber-Form system.

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