

# Smarter Lumber Makes Lasting Impression with Over 25 Years of Structural Reinforcement

The Port of New Orleans is located in Louisiana's Lower Mississippi Rover. It is considered a superior logistics solution because it offers an extensive network of ocean carrier services including waterways, railroads and an interstate highqway.

#### CHALLENGE:

The Port originally installed traditional timber for piles and wale beams. After decades of replacing the timber fendering, the engineering team wanted a long-term solution that could withstand the busy ship and barge traffic. With the large quantity requirements, a new long-term solution needed to be implemented.



### SOLUTION:

In the search for a durable, low-maintenance and low life-cycle cost solution, structural composite plastic lumber was a viable option. The engineering staff ran a life-cycle analysis of the product, and the results showed that structural plastic lumber was the right solution. SeaPile® and SeaTimber® by Bedford Technology were specified by the engineering team, and installation started soon after.

The SeaPile® and SeaTimber® by Bedford Technology products were selected as the piling and wale beams and installed at the Nashville Avenue C Wharf as a test. Kyle Jones, Engineering Manager of the Port of New Orleans, and his team paid close attention to this product to see how it withstood the environment. The product was tested for 6 mothhs to ensure that it met all requirements: impact, absorption and durability. They wanted to know if this product could be used to save money and time by not having to replace as often as traditional timbers. After the test period and meeting all requirements, the SeaPile® piles and SeaTimber® wale beams were installed in other areas in the Port.

#### **RESULTS:**

The Port's original life-cycle analysis predicted a 14-year break-even for the plastic lumber product. It has been over 25 years since the installation of SeaPile® and SeaTimber® by Bedford Technology. This product has proven to be a long-term, low-mainenance and cost effective solution that is also durable. The Port has used the products in many other Wharf locations, and each installation has proven to be the right choice. The Port is now able to run more smoothly and efficiently because each time a pile is replaces, the wharf needs to be shut down.

Each year, routine inspections are performed to see how the product is holding up to ensure the Port's safety and efficiency. In the 25+ years of routine inspections, only 2 piles have needed to be replaced - this was caused by normal wear and tear of the product from heavy impact of barges. With traditional timbers estimating 300 or more piles needing replacement, the plastic lumber piles and wale beams have proven to be a cost-effective, low-maintenance solution for the Port of New Orleans.







#### **Project Date:**

## 1995

#### **Customer Overview:**

The Port of New Orleans is at the center of the world's busiest port system - Louisiana's Lower Mississippi River. It includes over 20 million square feet of cargo handling, covered storage and parking bacilitieparking facilities and has over 11.000 vessels traverse it annually.

### Plastic Lumber Benefits:

- Durable
- Doesn't Break
- Withstands High Impact
- Doesn't Corrode
- Isn't Suseptible to Marine Borers



