



Installation of our bulk-head went smoothly and the contractor commented on how much easier it is to pile drive this material than other traditional and non-traditional products. I am told that this is most likely due to the superior rigidity and the comparative thinness of the sheet. Please feel free to come by and look at our marina. We are located near Monkey Junction in Wilmington, off of Masonboro Loop Road.

~Tony Hughes  
Masonboro Harbour  
Drive Home Owners  
Association

Complete Product  
Testimonial on Back ➔

## Masonboro Harbour



- Location:** Wilmington, North Carolina
- Span and Width:** Approximately 900 lineal feet of seawall using SuperLoc™ Series 1560 Heavy Duty Fiberglass Composite Sheet Pile, SuperWale™ Fiberglass Waler, Light SuperCap™ Fiberglass Top Cap, Manta Ray earth anchors, Blue Marlin weep hole filters, and Plastic Hex Bolts/Nuts.
- Contractor Location:** Morehead City, NC
- Installation Style:** Vibratory compactor plate hung from excavator stationed on floating barge in canal.
- Design:** Soil conditions were medium dense sand and sandy clay. Exposure of wall approximately 9 ft. Length of sheets both 19 ft. and 22 ft. Complete composite sheet pile, waler and cap system used for long term performance. Other seawall products such as pvc, aluminum, concrete and wood were rejected due to poor long term performance and durability.
- Manufacturer:** Creative Pultrusions, Inc.
- Construction:** Pultruded fiber reinforced polymer composite

# Product Testimonial

**-Tony Hughes, Masonboro Harbour Drive Home Owners Association**

Masonboro Harbour Drive Homeowners Association (HOA) has just completed installation of 900 linear feet of new bulkhead. The condition assessment of our existing wooden walls and new bulkhead designs were done by a consulting firm in Wilmington, North Carolina and the General Contractor and installation crew for the project were from Morehead City, North Carolina.

In selecting a bulkhead material for this project, we considered vinyl and fiberglass sheet piling as being the only cost effective materials with a superior longevity to wood. We ruled out wood because our existing bulkheads in the channel have only lasted 15 years and the breakwater had to be replaced 5 years ago. Of the two synthetic materials, it was apparent that vinyl sheet piling has been on the market much longer, is more widely promoted and used in comparison to composite fiberglass. However, we chose SuperLoc™ composite fiberglass for our project for four reasons:

1) As the project manager for the HOA, and recently retired from the chemical industry, for me there is no question that fiberglass has superior long term properties over an unreinforced vinyl product. How do I reach this opinion? I have a Bsc. in Chemistry, a Masters in Polymer Technology (Graduate from the Plastics Institute from the National College of Rubber and Polymer Technology) and I spent 30 years working for BASF and Ticona, the engineering resins division of Celanese Corporation. In my various jobs, I have marketed several unreinforced and reinforced engineering plastic raw materials into a wide range of industrial applications where we were replacing traditional materials, primarily metals. I marketed similar resin/matrix formulations as SuperLoc™ and these products can be found under trade names Celstran and Fiber-rod. In all my years of selling engineering resins into high temperature, structually demanding applications, I have never competed with vinyl (PVC) based resin.

2) In comparing the base resin data as well as the published engineering data for the competing products, I am confident that the SuperLoc™ product will outperform the vinyl product over the long haul and that its higher heat distortion temperature, higher rigidity and fatigue strength will lead to better retention of physical properties long term.

3) The marine engineer that we selected for this project has designed walls in vinyl and has experienced a failure in a bulkhead construction using vinyl and he also strongly recommended that we select composite fiberglass for our project.

4) Lee Composites can supply a complete system of sheet piling, whaler, cap and tie rod in fiberglass which eliminates the need to mix and match different materials but also provides an aesthetically attractive installation. Although we did not use the fiberglass tie rod, we probably will do so when we repair our breakwater, which is more or less permanently submerged and tie rod corrosion has been severe with our existing system.

Installation of our bulkhead went smoothly and the contractor commented on how much easier it is to pile drive this material than other traditional and non-traditional products. I am told that this is most likely due to the superior ridigity and the comparative thinness of the sheet. Please feel free to come by and look at our marina. We are located near Monkey Junction in Wilmington, off of Masonboro Loop Road.

~Tony Hughes