

## Participant information

Hall & Wright Builders  
Bryan McGowin  
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Southport, NC 28461  
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Website: www.hallandwright.com

## Category

Single Family Homes (over 3,000 sq. ft.)

## Project information

C Sharp  
7806 East Beach Drive  
Oak Island, NC 28465  
Date Completed: 12/13/2013  
Total cost of project (exclusive of land): \$650,000  
Dimensions of building (all floors of multi-story building): 33'11"x 58' both floors  
Asking price/purchase price (Affordable Housing only):  
Total sq. ft. of conditioned space: 3,127 sf

## Built By (if different than applicant)

Hall & Wright Builders  
PO Box 10477  
Southport, NC 28461  
Phone: 910-363-4603

## Panels Manufactured By

Company Name (members only): Premier Building Systems

## Designed By (if different than applicant - SIPA will only recognize members)

Dogwood Architecture  
Eric Jabaley  
1106 Audubon Blvd.  
Wilmington, NC 28403  
Phone: 910-264-3742

Describe the end use of the building: This is a family vacation beach house. Due to the increase in insurance costs on the coast, the owners wanted a very strong hurricane resistant home. We were able to achieve 75% savings on flood insurance and 22% on Wind and Hail insurance through the use of SIPs. This home achieved IBHS Fortified for Hurricane Gold certification

How did SIP construction help you get this job? The owner is very savvy in terms of advanced building construction methods (he owns a glass manufacturing company, his brother is an Architect, his son is an architect and another son is a project manager for a large nationwide home builder.) He wanted SIPs and I gave him a tour of my personal house which is built with SIPs and we toured a few houses under construction and he was sold. Since we are the only Builders in our area that has extensive experience with SIPs he decided to go forward with us.

SIP wall thickness and core material: 6.5" EPS wall

SIP roof thickness and core material: 8.25" curved EPS roof

Describe the benefits of using SIPs on this project. Did SIPs help save time, labor, construction costs, or energy? SIPs helped us save time and labor on installation. The real savings is the energy efficiency of the home. This project achieved Energy Star 5+.

Describe any innovative design elements or structural engineering involved: The roof is gull wing curved roof that has a 40' radius. The upstairs is an open great room and kitchen the curved roof is exposed and faced with Cypress T&G through out the upstairs including the Master bedroom and bath. The ceiling height is 16.5' and the only collar tie support comes from 1" steel rods spanning across the width of the house at 11' high 8' o.c. It is on pilings 12' above ground elevation in the 130 MPH wind zone across the street from the Atlantic Ocean. We raised the house 3' above code to the lowest horizontal member due to being in the Coastal High Hazard Area. In order to meet the requirements of the IBHS Fortified Certification all interior walls were sheathed with plywood which made them all sheer walls. We used Impact windows throughout as well.

Please list any certifications the project received, such as ENERGY STAR, LEED, National Green Building Standard, or local green building programs. Only list certifications that are completed: Energy Star, IBHS Fortified for Hurricane Gold Certification

HERS Index (residential projects): 59

Blower door test results (ACH50) (residential projects): 093

Energy use intensity in kBtu/ft<sup>2</sup> (commercial projects):

Additional Information or Explanation: IBHS Fortified gives the homeowners a 22% yearly savings on wind and hail insurance We raised the house 3' above BFE to the lowest horizontal member for a flood insurance savings of 75%

Describe the HVAC system used on the project: Lennox 2 ton system for the first floor 16.2 SEER

Lennox 2.5 Ton for the second floor 15 SEER

R-410A

with Wi Fi programmable touch screen thermostats

Describe any other energy-saving materials used in the building envelope other than SIPs. List U-values of windows used and the R-value of any insulation materials: .25 u factor and .30 shgc

Foam sealed all windows, doors and cracks

Taped all SIPs seams and ice and water shield on the entire roof.

Please list any energy-efficient products or design features, such as lighting, hot water heating, appliances, passive solar: LED lighting throughout, passive solar orientation through use of large overhangs, LED low voltage night lighting throughout greatroom, high efficiency hot water heater with plumbing manifold system for near instantaneous hot water. Energy star appliances, water wise fixtures

Were any solar panels installed on the project? If so, indicate the size of the system: No

Please list any sustainable materials or design features not listed in the previous pages, such as recycled materials, low-VOC finishes, landscaping, etc.: Cali Bamboo floors throughout, reclaimed wood custom vanities, No VOC paint interior and exterior,

No VOC adhesives, KCMA Green Guard cabinets, Native irrigation free landscape, Reclaimed sinker cypress ceilings on second floor with No VOC finish.

Any additional comments on the project:















