



FEMA

House Built to Code Survives Katrina

Bay St. Louis, MS – John and Allison Anderson moved back into their home 50 days after Hurricane Katrina struck their community on August 29, 2005, with a 29-foot storm surge and reported winds of 130 miles per hour (mph). Their house was standing and soon inhabitable, unlike many others in the community, because the couple had followed building practices and mitigation techniques advocated by the Federal Emergency Management Agency.

When they decided to build their new home on the Mississippi Gulf Coast, the Andersons wanted to build a house that was safe and storm-resistant. They built to the 2003 International Residential Code. Bay St. Louis and Hancock County have since adopted this code. “My house is a testament to the building code,” asserted Mr. Anderson. The Andersons describe the code as tying all structural elements to the earth in a continuous path. Mr. Anderson credits the survival of his house primarily to the 2-by-6-inch exterior wall framing. He also used 2-by-4-inch horizontal timbers, or purlins, to attach the corrugated metal decking to the roof.

The two-story, 3,125 square-foot contemporary home has fiber cement siding, and was built to withstand minimum wind gusts of 130 mph. A grass roof above the carport added weight to the structure, which was another mitigation technique.

The Andersons evacuated as Hurricane Katrina approached the coast. They waited out the storm at a relative’s house in Hattiesburg, Mississippi, where they sat in disbelief as they learned about the destruction that had taken place in their hometown.

The Andersons returned as soon as it was safe to enter their neighborhood. They discovered that seven feet of water had entered their house, but it was still standing. Although mud covered the first floor, they were glad to find everything intact in the upstairs rooms. Four windows were destroyed on the first floor. Other windows survived the high winds and debris impact because Mr. Anderson had boarded them up with exterior half-inch oriented strand boards before evacuating. Kitchen appliances and walls below the water line were damaged, and there was minor damage to the roof, but there was no other structural damage.

The Andersons immediately began cleaning and repairing their house, but could not live in their home for 50 days because there was no electricity, water, or telephone service. Mr. Anderson’s decision to use polished concrete for flooring on the first level proved to be a wise idea, because clean up and repairs were easier and cheaper than if it had been necessary to remove and reinstall carpet. Mr. Anderson noted that the cost of building the new house was \$115 per square foot, while repairs to the damaged first floor cost only \$55 per square foot.

“It’s really hard on everyone especially the older [people] in the neighborhood who lost their homes,” Mrs. Anderson said. The couple stressed that with proper mitigation techniques, homes in hazard-prone areas can survive.



Hancock County, Mississippi



Quick Facts

- Sector: **Private**
- Cost: **Amount Not Available**
- Primary Activity/Project: **Building Codes**
- Primary Funding: **Homeowner**