



FEMA

Only House Left Standing: Building Code Saves House

Pascagoula, MS - Robert and Sandra Harris safely waited out Hurricane Katrina at their son's home. They were stunned at what they found after the storm when they traveled 20 miles back to their neighborhood in Pascagoula. The couple was met by a local law enforcement officer who said, "Robert, your house is the only one left standing." Except for their intact house, Wiggins Street was lined with slabs where houses once stood.

Robert examined his house as soon as it was safe to enter. He found everything considerably intact, except for windows that were blown out, some missing roof shingles, torn away steps, and other minor damage. "I'm just happy I had a house left to repair, although I am saddened for others," he said.

After experiencing flooding from Hurricanes Frederick, Elena and George, as well as flooding from rain storms, the Harrises decided to demolish and build a new home in 1999. Flood-conscious and determined to protect against the next hurricane or flood, they decided to build an elevated house. The Harrises did not simply comply with the stronger post-Camille coastal building code, they far exceeded it. Their house was built to withstand winds of 160 mph, and elevated on piles and piers 17.2 feet above sea level, which exceeded the current 13.1-foot requirement. Hurricane Katrina slammed into the Gulf Coast on August 29, 2005. This was the first test for the Harris' new elevated, hurricane-resistant home – and it passed.

"The Harris family is a shining example of how citizens can build or rebuild smarter," said Robert Latham, Director of the Mississippi Emergency Management Agency. "We have a tremendous opportunity now for our communities to rebuild stronger than before and reduce future damage costs."

The Harrises took advantage of Increased Cost of Compliance (ICC) funds from a previous flood loss to pay for mitigation measures to build their new house above code. The cost to mitigate was approximately \$20,000. "This is the best money we ever spent. During Hurricane Katrina the house did what it was supposed to do. It withstood the storm," said Robert.

There is connectivity in the Harris' house from the foundation to the roof. The posts that support the house were connected to other structural components using the proper size galvanized bolts and hurricane straps. Hurricane straps can be used to connect the top of the wall to the roof as well as connect the bottom of the wall and flooring to the post. Harris credits the large posts and the connectivity method of construction for saving his house from serious hurricane damage.

Robert said that he is going to take additional measures to strengthen the house. "I have already installed open risers for the steps and I will consider hurricane-resistant windows and shutters." As an extra precaution, the Harrises will add more hurricane straps to the back porch. "The back porch is my favorite place to relax, view the city, and overlook the Gulf of Mexico," he added.

Photo Caption: The Harris' house was the only one in their neighborhood standing after Hurricane Katrina. They used ICC funds to elevate their house, exceeding the 13.1-foot requirement.



Jackson County,
Mississippi



Quick Facts

- Year:
1998
- Sector:
Public/Private Partnership
- Cost:
\$20,000.00 (Estimated)
- Primary Activity/Project:
Building Codes
- Primary Funding:
National Flood Insurance Program (NFIP)