

Home Elevation Keeps Sandy at Bay

Monmouth County, New Jersey -- Frank Gembicki, a homeowner in Neptune, New Jersey, was in the hospital as Hurricane Sandy approached the New Jersey coast. He was not concerned about his home though, as he had elevated it in 2010. Hurricane Sandy, downgraded to a tropical cyclone, stormed ashore and left considerable damage in its wake, but caused only minor damage to Gembicki's home.

"If it hadn't been for the boats from a nearby marina floating by, the house would have received very minimal damage," Gembicki said.

Floating debris damaged the front steps and ripped siding off in several places on the home. The rear deck was damaged by a 26-foot boat that lodged against it. Another boat pulled down electrical power lines as it floated down the street. In addition, personal property stored in the crawlspace and garage was mostly a total loss. When the water receded, two boats were stranded on Gembicki's property.

The home had been severely damaged by a Nor'easter in 1992. In 1993, Gembicki constructed a stone retaining wall parallel with the street and then across the end of his property nearest to the river. This wall is approximately two feet tall. The yard was then back filled from the retaining wall to the house. The wall kept the flooding at bay until a storm on April 2, 2010 caused flood waters to nearly invade the home.

Gembicki told his wife they were either going to sell the house and take a loss on it or elevate it. After some discussion, they decided to elevate the home. He then contacted local officials concerning building codes and permits and called the Federal Emergency Management Agency (FEMA) regarding construction plans and advice on elevating his home. He stated the FEMA representative was very helpful and informative throughout the entire process. Since outside funding was unavailable, he proceeded on his own.

He added a reinforced concrete block foundation on top of the existing foundation, elevating the house an additional five feet. Flood vents were then installed in the exterior walls. A French drain and sump pump were installed inside the foundation to eliminate standing water. In addition, the HVAC and utilities were elevated to the first floor.

After completion of the project, it was discovered that, since the floor of the crawlspace is now two feet below ground level on all sides, the crawlspace by definition is a basement. Gembicki was unhappy with this, but he took it in stride and is still very happy with the results of the project.

"The flood waters came within 18 inches of the top of the floor of the home," Gembicki stated. He pointed out the insulation in the home's floor was still dry. He also mentioned that all his neighbors' homes were not elevated and they were in various stages of repair. Some of them thought he was foolish to spend the money to elevate his home.

"My family was back in the home the day after the storm and a lot of my neighbors have yet to move back in," Gembicki stated. He reiterated how happy he was with the results of the home elevation and the amount of cooperation he received from FEMA.



FEMA has developed many techniques to guide homeowners and contractors on proper building measures and these methods allow for the home to better withstand future storms. Property owners should have their structures evaluated before any repair or improvement work is done in order to ensure the projects will be most effective during a storm.