



Relief When New Jersey Couple Returns Home

Ocean County, New Jersey – Fred Harvey and his wife, Cecilia, were on vacation when Post-Tropical Cyclone Sandy struck New Jersey causing severe damage along the coast. While viewing a news story of the storm, they realized they were viewing the damage to their neighborhood in Holgate, New Jersey. Although not seeing their own home, they realized that most, if not all, of the residences in their neighborhood were damaged to some extent.

They were allowed to return to their home to retrieve personal items eleven days after the storm. The Harveys were relieved to discover only minor damages to the home. A week later, they were able to begin cleanup and start repairs. Township restrictions were lifted approximately a month after the storm and the Harveys were allowed to move back in.

They lost some valuables stored on the lower level, two van seats, which Harvey had removed before leaving on vacation, and his Jeep, which was parked in an adjacent garage. Fred Harvey said he regretted losing the Jeep, as it was the only vehicle he had purchased new and he was very proud of it.

“I have made a little change since the storm and anything stored will be on shelving at a minimum of five feet off the garage floor,” Harvey said.

The Harveys elevated their home in 1999–2000 shortly after purchasing it. They were moving from Manalapan in central New Jersey and making this their permanent home. They were not aware of any previous storm damage to the residence but Harvey stated, “We had the home elevated just to feel safer.”

After consulting with local officials about building codes and permits, they acquired a contractor and began work. Elevating the structure required lifting and moving the structure off the existing foundation, then pouring reinforced concrete footings and floor. A wall, four feet high, was constructed using reinforced concrete blocks. Spaces were left in the wall for 12 flood vents, a garage door, and two standard doors. On top of the block wall, a standard wood framed wall was constructed. Total elevation resulted in the home being approximately 15 feet above mean high tide. Additional concrete block piers were strategically placed to add additional support for the structure. All the utilities, the heating, ventilation, and air conditioning (HVAC), and the electrical outlets and switches were also elevated.

The current/effective Flood Insurance Rate Map indicates the Base Flood Elevation is nine feet. The Federal Emergency Management Agency’s (FEMA) Advisory Base Flood Elevation is also nine feet. The home is well above these elevations.

The adjacent two-car detached garage was also renovated and the leaky pitched roof was replaced with a flat fiberglass roof. A walkway was constructed from the garage roof to the house and a railing was installed. This formed a large deck with unobstructed views of the bay and spectacular sunsets. They personally funded all these improvements and the total cost was just under \$100,000.

“The peace of mind, and the reduced flood insurance rates, really justifies the cost of elevating our



home,” Harvey stated. “Just look around and see all the damage to our neighbors’ residences and most of them have not completed repairs to the structures. We were able to return to our home as soon as the local officials allowed us to.”

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 work is done in order to ensure the projects will be most effective during a storm.

To learn more on building codes or proper permits, contact your local officials and visit <http://www.fema.gov/building-science/building-code-resources>.

To find information about coastal construction design, visit <http://www.fema.gov/residential-coastal-construction> and <http://www.region2coastal.com/Sandy>.