

Hurricane Straps Save a Roof

Mayflower, AR – The weekend of April 26-27, 2014, gave Beverly Thomas and her husband, Bob Herring mixed blessings. Bob had just gotten out of the hospital on that Saturday and they were celebrating his birthday at a friend’s house on Sunday evening when a tornado hit central Arkansas.

They were not at their house when the tornado ravaged the cities of Vilonia and Mayflower, but they raced home when they heard about the storm. Their dachshund, Jackie Sue, had ridden the storm out alone as the wind barreled around and through the house, and remained unharmed.

Inside the house, the winds had pulled kitchen cabinets from the wall, blown out all but two windows and torn bedroom doors off their hinges. Outside, the storm leveled their shed, wrecked two trucks, and did about \$5,000 in damage to the enclosed porch where they often entertained. The storm’s fierce winds had ripped the siding off the two-year-old, \$90,000 house and had torn away 90 percent of the roof’s shingles.

Nevertheless, the damage could have been far worse. The roof itself remained intact, thanks to the hurricane straps bolted onto each thick rafter and reinforced steel rods supporting the walls.

When they decided to build their home, they had turned to a North Carolina builder familiar with the use of straps and clips. The builder’s experience in constructing homes strong enough to withstand hurricane force winds is exactly what Beverly and Bob wanted for their new home. The cost to add this extra protection at the time they built their home more than paid for itself as their losses were vastly minimized.

Investing in mitigation measures pays big dividends over time. A 2011 cost study conducted by Simpson Strong-Tie Co. with homebuilders revealed that an average increase of baseline construction costs of only \$.50 per square foot or \$1,000 in metal connectors installed in an average 2,000 square foot home made significant improvements. In that study, the connectors were placed from the roof to foundation and the projected increase in the home’s wind uplift resistance went from EF-0 to EF-2 level winds.

So while the storm damaged their home, leaving them to sort and sift through the rubble inside, Beverly and Bob remain grateful to have a roof – with new shingles that neighbors helped apply – over their heads.

They are also looking into a safe room just in case they *are* home for a future tornado.

For more information on hurricane straps and other mitigation measures, please visit www.fema.gov/ar-disaster-mitigation or refer to FEMA P-804 Wind Retrofit Guide for Residential Buildings (<http://www.fema.gov/media-library/assets/documents/21082>)



Photo of the remainder of the bedroom door



Photo showing the remainder of the porch



Photo of the interior ceiling



Photo showing the roof