



Shelter From Future Storms: The Family is Now Prepared

Full Mitigation Best Practice Story

Newton County, Missouri

Seneca, MO – On May 10, 2008, Randy and Dana Lowe, and nine other members of their family, survived an EF4 tornado unharmed, even though it tore the couple's Seneca home apart. The family barely had time to crowd together after realizing the huge tornado was coming. They sat on the floor of the hallway of the 1,100-square foot, wood-frame house as the tornado raged through the area.



"It was a miracle," Mrs. Lowe said. "No one was hurt."

The tornadoes that struck killed 16 people in Missouri as they ripped through homes and businesses along a more than 70-mile path from west to east. The EF4 tornado that hit the Lowe's area of Newton County left behind a trail of hundreds of damaged and destroyed homes and businesses in three southwest Missouri counties.

The home of the couple, who live south of Joplin, ended up a jumble of rubble and broken lumber. Now, the couple lives in a rented 28-foot-long trailer next to the site of their home. "For 19 years, we lived on this corner," Randy Lowe said.

Less than 25 feet away from the trailer is a new storm shelter, installed within days after the tornado hit the Lowes. "Safety is our main consideration," Lowe explained. He and his wife bought the storm shelter from a distributor in Miami, Oklahoma. The storm shelter was constructed by a precast concrete manufacturer in Drumright, Oklahoma.

It is FEMA-compliant, meaning it meets design and construction guidelines established by the Federal Emergency Management Agency. Tests of the 8-foot by 8-foot by 7-foot shelter "were consistent with FEMA...guidelines requiring the shelter to resist a 15-pound, 2-inch by 4-inch missile propelled by a 250-mile per hour ground speed tornado," FEMA officials said.

"We were thinking about getting a storm shelter three years ago," Randy Lowe said. Reflecting on their thoughts of three years ago, and the trauma of the recent event, they acted without hesitation.

Their new storm shelter – two large pieces of rebarred cast concrete with nearly 6-inch thick walls, with the two pieces bolted and glued together with a steel door frame and steel door – took 2 ½ hours to install, Lowe said. It cost \$2,500. And it has space enough for 11 people to hunker down when the next storm strikes.

The Lowes chose to have a shelter installed that is partially underground rather than have it installed as an "in-residence" shelter.

The storm shelter will be in the northeast corner of the couple's new garage. The garage and Dana Lowe's business will be attached to their new one-story house where they can get to the shelter quickly.

The couple's house was covered by \$100,000 of insurance, Randy Lowe said. He will buy building materials, and members of an Amish community will construct it.

It will be sometime in August before construction can start on their new house, Lowe noted, and another 90 days for crews to complete building. Builders will be working from Randy Lowe's sketches. The couple anticipates being able to celebrate Christmas in their new home.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region VII**

State: **Missouri**

County: **Newton County**

City/Community: **Seneca**

Key Activity/Project Information

Sector: **Private**

Hazard Type: **Tornado**

Activity/Project Type: **Safe Rooms/Community Shelters**

Activity/Project Start Date: **05/2008**

Activity/Project End Date: **05/2008**

Funding Source: **Homeowner**

Activity/Project Economic Analysis

Cost: **\$2,500.00 (Actual)**

Non FEMA Cost:

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **1749 , 03/19/2008**

Federal Disaster Year: **2008**

Value Tested By Disaster? **Unknown**

Repetitive Loss Property? **Unknown**

Reference URLs

No URLs were submitted

Main Points

No Main Points were entered.

Main Points



The family's storm shelter