



Above Ground Safe Room Stands up to Tornado

Full Mitigation Best Practice Story

Cleveland County, Oklahoma



Moore, OK- Don Staley and his family are no strangers to storms and tornados. Their first home was hit by a tornado in October 1998 and suffered minor damage but was destroyed by another tornado on May 3, 1999. They rode out both storms inside the house. "It was such a frightening sound," he said. "We decided we weren't going to ride out another one inside the house."

In December 2000, the Staley's new home was ready. Shortly after moving in, they had an above ground safe room constructed on the back patio. The concrete room has 8 inch thick walls, an 18 inch thick ceiling, a 10 inch foundation and a sliding entry door made of 12 gauge steel with three-quarter inch plywood on each side. The safe room is equipped with battery-powered lights and a battery-powered television.

When the warning sirens sounded on May 8, 2003, Don took shelter in the safe room along with his dog and two cats to ride out the storm feeling very protected and safe. "I was watching it on TV in there," he recalled. "I could see it was coming my way and I could hear it coming. I could hear the roar. That's a sound you never forget."

When he emerged from the shelter, he found his house in shambles with the roof ripped off. Other houses on the street were also heavily damaged or destroyed. The Staleys used their safe room following the tornado to store and protect belongings they had salvaged.

The Staley's home was among the more than 300 homes destroyed in the city that day. Whereas a severe tornado hit the city in May of 1999 claiming 44 lives, there were no deaths in the 2003 tornado. The absence of fatalities is being attributed to community preparedness, improved early warning systems and the many safe rooms and shelters that have been built.

Staley sums it all up, "The safe room saved my life, it came through with flying colors. It's worth a million bucks to me."

Activity/Project Location

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

FEMA Region: **Region VI**

State: **Oklahoma**

County: **Cleveland County**

City/Community: **Moore**

Key Activity/Project Information

Sector: **Private**
Hazard Type: **Tornado**
Activity/Project Type: **Safe Rooms/Community Shelters**
Activity/Project Start Date: **06/1999**
Activity/Project End Date: **12/2000**
Funding Source: **Homeowner**

Activity/Project Economic Analysis

Cost: **Amount Not Available**
Non FEMA Cost:

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Unknown**
Value Tested By Disaster? **Yes**
Tested By Federal Disaster #: **No Federal Disaster specified**
Year First Tested: **2003**
Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://www.ok.gov/OEM/>
Reference URL 2: <http://www.fema.gov/plan/prevent/saferoom/>

Main Points

- Above ground safe room constructed on the back patio
- No lives were lost when a tornado tested the addition of saferooms. Previously, 44 lives were lost in a similar tornado.
- Says Homeowner Don Staley: "The safe room saved my life, it came through with flying colors. It's worth a million bucks to me."



Above-ground Safe Room



Debris from tornado surrounds Safe Room.