

ISSUE BRIEF: WIND SAFETY

Manufactured homes perform as well or better than site-built homes during a storm.

TALKING POINTS

- The construction standards for manufactured housing across the country are subject to robust compliance and quality assurance regulations, sometimes more stringent than those for traditional site-built homes.
- The building materials in today's manufactured homes are the same as those used in site-built homes. The homes are engineered for wind safety and energy efficiency based on the geographic region in which they are sold.
- Federal regulations for manufactured homes require a design professional and quality assurance professional during construction to verify that the home is built correctly. Conventional residential construction is not subject to such a rigorous design and inspection system. Each manufactured home also bears a label certifying that it has been designed, constructed, tested and inspected to comply with the federal standard.

TALKING POINTS-HURRICANES

- In hurricane zones, the building standards for manufactured homes are comparable to those for site-built homes.
- In areas prone to hurricane-force winds (Wind Zones II and III of the HUD Basic Wind Zone Map), the standards for manufactured homes are comparable to the current regional and national building codes for site-built homes. Manufactured homes are designed and constructed to withstand wind speeds of 150 miles per hour in Wind Zone 2 and 163 miles per hour in Wind Zone 3.
- As with site-built homes, damage to property or physical harm to occupants is primarily caused by flooding and flying debris, rather than high winds.

TALKING POINTS-TORNADOES

- Unlike hurricanes, a direct hit from a tornado will bring about severe damage or destruction of any home in its path. A tornado's deadly force does not selectively discriminate between the site-built and manufactured home or "mobile homes" (those built prior to the HUD Code's implementation in 1976).
- Today's weather forecasting technologies many times provide advance notice of conditions capable of producing severe wind and tornadoes. If a manufactured home has a below-ground basement, the home's residents should seek shelter there. If a home, site-built or manufactured, does not have a below-ground basement, the residents should seek immediate below-ground or other appropriate shelter from the storm's possible effects.
- What every family needs to know is that the only safe place to be during a tornado is in a proper shelter.

BACKGROUND

In 1994, HUD revised and increased its wind safety standards after Hurricane Andrew in 1992. The result was that during the hurricanes that struck Florida in 2004, not one manufactured home built and installed after 1994 was destroyed by hurricane force winds.

In May 2001, Texas Tech University's Wind Science & Engineering Center in Lubbock, Texas, conducted studies on the effects of strong winds on manufactured housing. A single-section manufactured home, built to Wind Zone I standards (for regions not likely to experience hurricane-force winds), was exposed to the prop wash of a C-130 transport aircraft which created winds in excess of 90 miles per hour. After prolonged exposure to such winds, the manufactured home experienced only limited damage, primarily loss of roofing shingles and some minor structural damage.

In 2007, the federal government established standards requiring all new manufactured homes to meet minimum requirements for installation and anchoring in accordance with its structural design and windstorm standards. In addition, states have the authority to establish additional installation standards above the minimum federal standards. State governments may establish installation and anchoring requirements for homes depending on soil conditions and other factors in their state.

A 2014 Insurance Institute for Business & Home Safety (IBHS) test found that manufactured homes performed better at high winds than traditional-built homes when any attached structures are properly installed. It also suggested that improperly installed attached structures like carports and patio roofs, are what cause about 80 percent of the damage in manufactured homes.

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