



MEMA



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FEMA

Disaster News

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RIGHT TIME TO REBUILD SAFER, STRONGER

CLINTON, Miss. – Rebuilding in the aftermath of the April storms and tornadoes is not only about recovering from disaster, it’s also about reducing future risks caused by high winds or tornadoes.

“It’s the right time for residents and business owners to use techniques to rebuild safer and stronger to reduce the risks of future disasters,” said Mississippi Emergency Management Agency Director Mike Womack.

The first step in rebuilding stronger is learning where buildings are most vulnerable to storm damage.

Experts say the roof is most susceptible to wind damage and should be a hip roof as opposed to a gable roof. With a gable roof, the wind hits harder on the corners. Studies have shown the wind slides over a hip roof. It’s like a dome; there is nothing for wind to get its teeth into. Also, the less overhang for the roof, the better.

Whether with new construction or retrofitting an existing roof, build to ensure the connections between the roof and walls are strong enough to resist the “uplift” effect of high winds.

In such winds, the windows and doors often blow out first. Once the windows and doors are gone, the wind puts pressure on the roof from below and the wind also pulls on the top, so there is double pressure on the roof. When the roof lifts off it may collapse back down on the house.

What about the advice to “equalize the pressure” by opening windows and doors when there is a tornado? “That’s wrong,” said Terry L. Quarles, federal coordinating officer for the Mississippi disaster. “Don’t open the doors and windows. It only gives the wind additional entry into the house.”

Shutters or plywood covers can protect windows from breaking when there is advance notice of a wind storm event. “Electric shutters are now available that operate by just pushing a button,” Quarles explained.

Wooden doors are simply not designed to withstand much of a wind load. Heavier metal doors with several bolts are much more wind resistant.

Garage doors are another vulnerable area. With a weak garage door, a severe wind blows in the door. Wind pressure then lifts the garage roof which is hinged to the house. The garage roof pulls off part of the house, lets the wind into the attic, and puts pressure on the house roof, which then may lift off. Retrofitting older garage doors helps increase a home’s storm resistance but new garage doors are stronger and reinforced.

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Building with 2-by-6 wall studs rather than the more common 2-by-4 timber is another way to make a structure more wind resistant.

Getting down to the foundation, many homes are built on concrete pads to which they are only slightly connected. Severe winds pull the walls right out of the foundation. To resist high winds, structures must be firmly connected to foundations. Bolts set deep into concrete foundations and topped with a washer and nut should be used to screw the structure to the foundation.

For personal safety, a safe room provides protection.

“It’s very economical to construct a safe room while building or rebuilding,” Quarles said.

“Always contact a local building official before undertaking rebuilding, renovating or retrofitting to be sure your plans meet local and state government requirements,” Womack added. “Building codes typically do not require construction practices such as those described here, but a ‘code plus’ approach is well worth the effort.”

More information is available at www.fema.gov/plan/prevent/howto/index.shtm#5

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FEMA’s mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Disaster recovery assistance is available without regard to race, color, religion, nationality, sex, age, disability, English proficiency or economic status. If you or someone you know has been discriminated against, call FEMA toll-free at 800-621-FEMA (3362). For TTY call 800-462-7585.

FEMA’s temporary housing assistance and grants for public transportation expenses, medical and dental expenses, and funeral and burial expenses do not require individuals to apply for an SBA loan. However, applicants who receive SBA loan applications must submit them to SBA loan officers to be eligible for assistance that covers personal property, vehicle repair or replacement, and moving and storage expenses.

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