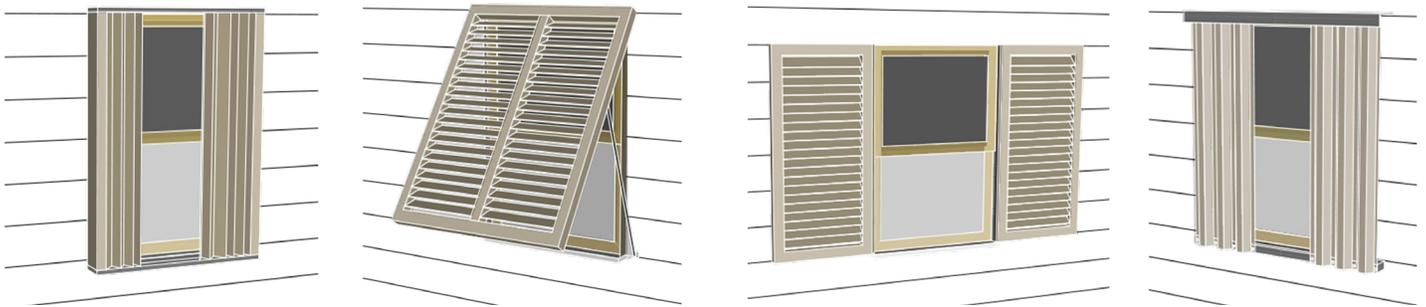


Strengthening Your Home's Defenses: Protecting Doors, Windows and Gable Ends from High-Speed Winds

During high-wind events like strong thunderstorms, hurricanes or tornadoes, openings such as doors, garage doors, windows and gable ends must protect the home from water intrusion and wind pressure. If any of these points break or fail, wind will enter the home, leading to increased pressure that can cause substantial damage to the structure of the home. This is called internal pressurization and can lead to catastrophic consequences.

These critical points are strengthened in the FORTIFIED Silver level to prevent pressurization. There are two FORTIFIED Silver programs: High Wind and Hurricane.



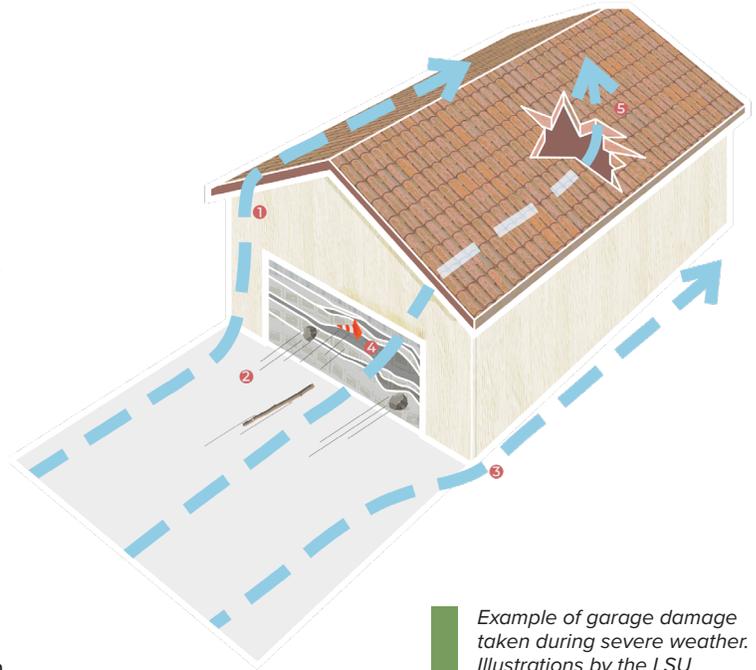
Examples of shutters designed to protect windows. Illustrations by the LSU AgCenter.

THE FOLLOWING METHODS STRENGTHEN WINDOWS, GARAGE DOORS AND GABLE ENDS TO PREVENT DAMAGE:

1. In the FORTIFIED Silver Hurricane designation, windows are protected from impacts by either installing a qualified impact-rated opening protection system or impact-rated windows. These changes make the windows more durable and less likely to break if hit with debris.
 - Impact-rated opening protection options include tested and approved hurricane shutters. Plywood may be used only in very specific instances. A FORTIFIED Evaluator will be able to help guide you on which protection system is permitted.
 - Hurricane shutters are more affordable than impact-rated windows and come in many styles and colors, such as Bahama shutters, colonial shutters, fabric shutters and clear polycarbonate panels. However, shutters should be closed and intact before a storm to offer protection from debris and pressure.
 - Shutters are designed to prevent internal pressurization of the building. Even if the windows break behind the shutters, as long as the shutters stay closed, the home's internal pressure should not reach catastrophic levels.

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- Impact-rated windows can be more costly than shutters but do not require additional preparation before a storm.
 - Some states provide a state tax deduction for installing impact-rated windows
 - There are federal tax credits such as the Energy Efficient Home Improvement Credit and the Residential Clean Energy Credit for installing these windows because they not only make your home stronger but also more energy efficient. We recommend working with a tax professional to ensure eligibility.
- 2. The garage door is the largest opening in the exterior of most homes. If it fails, walls or the roof can be blown out. Pressure-rated garage doors are more durable and will resist bending and breaking during high winds. FORTIFIED Silver requires design pressure-rated garage doors. FORTIFIED Hurricane and High Wind have different requirements, such as impact resistance in hurricane-prone areas.
- 3. The gable ends of a house are often not supported enough to withstand high winds. This can lead to the gable end caving in, causing the house to pressurize. FORTIFIED Silver requires gable ends to have wall sheathing and bracing that provides impact and wind pressure resistance.



Example of garage damage taken during severe weather. Illustrations by the LSU AgCenter.



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