Insurance Institute for Business & Home Safety®

FORTIFIED: NEW IBHS COMMERCIAL CONSTRUCTION TOOLS PROTECT THE BOTTOM LINE

Historically, there has always been a conflict between the built environment and Mother Nature. Every year, severe weather and other extreme events cause billions of dollars in direct and indirect losses to commercial enterprises in all parts of the U.S. Although property insurance often covers many of these losses, businesses that are severely damaged may never fully recover due to the loss of management focus, employees, and competitive market share; by some estimates, as many as 1 in 4 businesses that are forced to close after a disaster never reopen.

Commercial building codes establish design, construction and maintenance requirements to protect the people who work in and visit commercial buildings. However, because building codes are considered minimum legal standards that focus on life safety for occupants and first responders, they are not optimal for preserving building use, ensuring reuse or business continuity, or providing the maximum practicable property protection.

This is why the Insurance Institute for Business & Home Safety (IBHS) has developed the FORTIFIED suite of commercial construction standards, which equip business owners with a blueprint for building stronger, more resilient commercial facilities based on building science engineering guidance for natural and man-made hazards.

These voluntary construction standards can be utilized during new construction or remodeling and can be broadly applicable to all hazards, or more narrowly focused on a specific hazard. This article provides an overview of the FORTIFIED program and building resources available to businesses.

This Nationwide Insurance call center, completed in 2012 in San Antonio, Texas, was the first structure built using the FORTIFIED for Safer Business standards.

WHAT IS FORTIFIED?

IBHS' FORTIFIED program identifies a series of extreme weather protection system upgrades that are cost-effective, consistent, definable and verifiable. Since a building's storm resistance is only as strong as its weakest link, FORTIFIED incorporates a systems-based approach to strengthen all of the components that make up a building. This differs from à la carte approaches in programs such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program which allows points to be earned in various categories but does not mandate specific design or construction features. FORTIFIED recognizes that without adequate resilience in all aspects of a building, the risk of loss can be significant even in low-intensity storms.

FORTIFIED also requires a certification process that relies on independent third-party verification by trained and certified FORTIFIED Evaluators. Evaluators review initial design and installation drawings and conduct a physical site inspection to verify final construction complies with the design standards, and therefore offers a consistent level of protection.

In addition to its focus on design and construction, FORTIFIED also leads to more resilient business operations by including varying back-up power requirements in the event of a power outage. Depending on the physical location of the building as well as which FORTIFIED standard is being used, options range from providing electrical connections for back-up power to installing a stand-by generator.

ALL-HAZARDS PROTECTION FOR NEW CONSTRUCTION

Implemented in 2011, FORTIFIED for Safer Business™ is a comprehensive, all-hazard standard intended for small and mid-sized businesses that plan to build new facilities and want to enhance their ability to withstand the wide range of natural hazards and man-made risks that permanently close the doors of numerous enterprises each year. These include floods, freezing weather, hail, high winds, hurricanes, water intrusion, wildfires and earthquakes, as well as interior fire and water damage. FORTIFIED for Safer Business requirements work together to strengthen a building's envelope including the roof, walls, windows/glazed openings, doors and fire resistance.

For more detailed information on FORTIFIED for Safer Business, please visit www.DisasterSafety.org/fortified-main/fortified-safer-business.

INDIVIDUAL HAZARDS PROTECTION FOR NEW CONSTRUCTION AND EXISTING BUILDINGS

In late 2014, IBHS finalized FORTIFIED Commercial™, a new set of building standards that focuses on individual hazards. These specific weather risks, including hurricanes, high winds and hail, threaten businesses in certain regions of the country and can cause large aggregate losses for companies. Additional hazards will be addressed in the future. FORTIFIED Commercial–Hurricane is intended for businesses located in areas along the Gulf of Mexico and Atlantic coasts, which are most vulnerable to hurricanes and tropical storms, while FORTIFIED Commercial–High Wind & Hail is for businesses located in non-coastal areas that are at risk from severe thunderstorms, winds at the peripheral edges of tornadoes, and hail events.

Recognizing the resource constraints facing many business owners, FORTIFIED Commercial employs an incremental approach that incorporates three levels that build on each other—Bronze, Silver and Gold.

- The Bronze level focuses on reinforcement of the roof system, a vital first line of defense for minimizing damage to the building itself and the contents inside.
- The Silver level incorporates the same roof improvements and adds enhanced window and door protections to further strengthen the building envelope.
- The Gold level includes the Bronze and Silver improvements with augmented structural protections in the form of a continuous load path with connections from the roof to the walls, and the walls to the foundation.

There are also varying requirements for electrical back-up power, or the electrical connections needed for quick installation of a portable generator. See the chart on the next page for a summary of the Bronze, Silver, and Gold levels of FORTIFIED Commercial–Hurricane and FORTIFIED Commercial–High Wind & Hail.

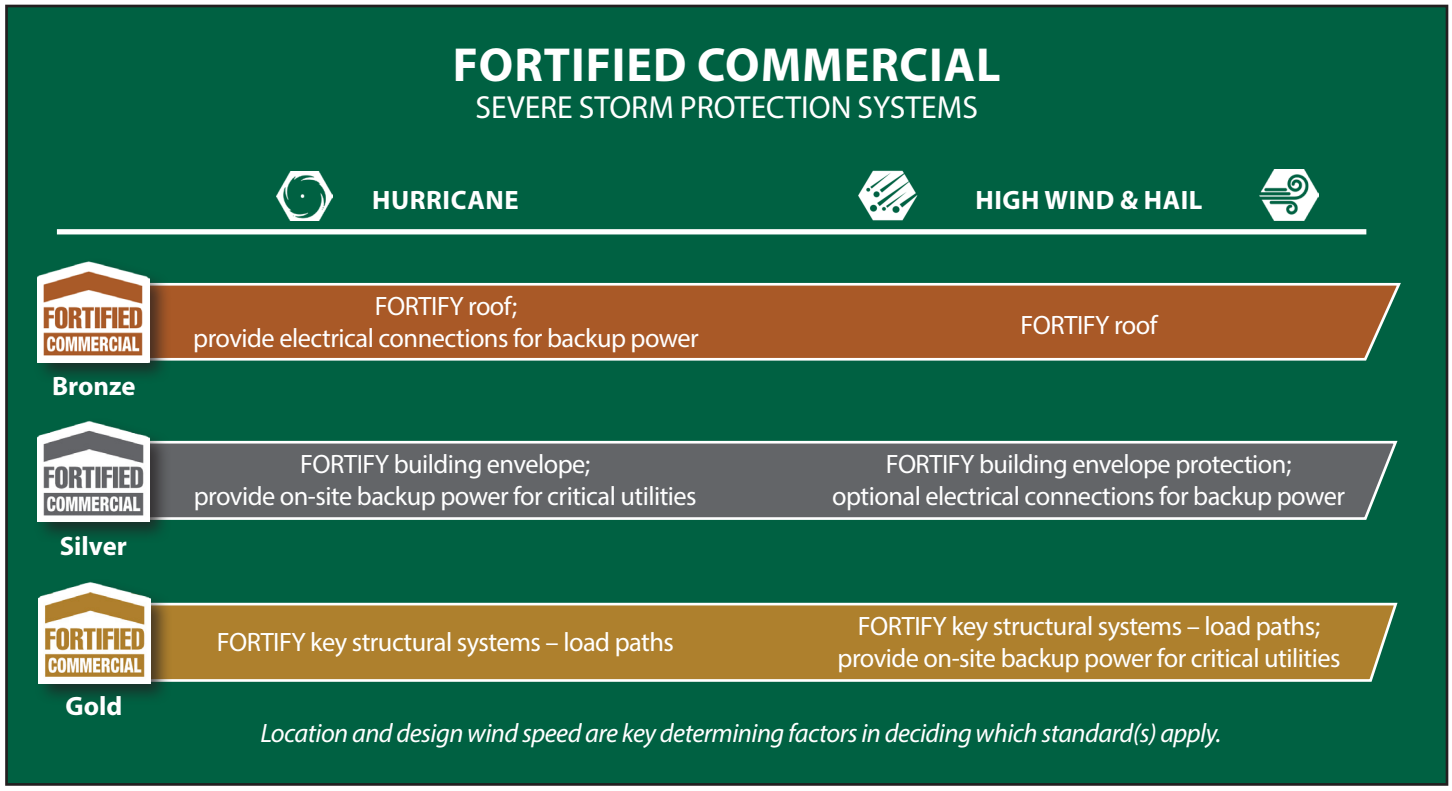
Unlike FORTIFIED for Safer Business where the focus is on new construction, FORTIFIED Commercial can also be used to improve building strength when a business is being renovated or repaired. This may occur, for example, when replacing a roof cover system, rebuilding after a fire or natural hazard loss, or when renovating or expanding. At these times, adding FORTIFIED Commercial protections to the existing structure is a cost-effective way to transform a commercial building into a more resilient and durable asset.

For more detailed information on the FORTIFIED Commercial program, please visit www.DisasterSafety.org/fortified-commercial.

FORTIFIED BENEFITS

While the details of FORTIFIED for Safer Business and FORTIFIED Commercial differ to some extent, here are some of the common benefits to either building or rebuilding using FORTIFIED standards.

- Greatly reduces the potential for structural damage from natural disasters and interior fire.
- Delivers protection that goes beyond the structure to include equipment, inventory and operations.
- Provides consistent building design requirements, along with third-party verification of the construction phase.
- Helps businesses reopen quicker following a disaster, which helps communities recover more quickly by:
    - facilitating operations and immediate reuse post-disaster;
    - preserving market share and competitive advantage by providing continuous service to customers after an event;
    - strengthening community ties by providing critical goods and services in difficult circumstances; and



- reducing environmental impact by limiting destroyed building materials in landfills post-disaster.

Beyond these immediate benefits, the first-hand experiences of both businesses and their customers following a catastrophe will be remembered for years to come. The ability to resume operations, retain employees, and provide the timely delivery of much-needed services will enhance a FORTIFIED business' corporate image and reputation as being a reliable provider when others may fail.

CONCLUSION

IBHS' FORTIFIED suite of commercial standards allows businesses to proactively reduce their vulnerability to extreme weather and other hazards that can damage their facilities, disrupt their operations, and threaten their economic viability. With FORTIFIED Commercial's comprehensive and more focused standards available, businesses can choose the program that is best suited to their budget, risk tolerance, and the life cycle stage of the buildings they are trying to protect.

FORTIFIED & FRANCHISES

FORTIFIED Commercial can be widely used for franchises and other template-type buildings. Franchises typically have a central design that is applied in numerous locations; this is a good opportunity to scale up the building protection and risk-reduction benefits of FORTIFIED Commercial in a resource-effective way. Additionally, many franchises are food-service establishments that play an important role in assisting their local community following a natural disaster when homes may be damaged or the power may be out.

IBHS is a non-profit applied research and communications organization dedicated to reducing property losses due to natural and man-made disasters by building stronger, more resilient communities.

Insurance Institute for Business & Home Safety
4775 East Fowler Ave.
Tampa, FL 33617
(813) 286-3400
DisasterSafety.org