**How strong is your house against the wind?**

With sustained speeds of over 140 mph, wind is one of the most dramatic elements most people associate with hurricanes. But even at these extreme velocities, we can build new houses, and modify existing homes, to make them stronger against the wind. Here are some tips to help you evaluate your home’s wind resistance.

Remember, these are general guidelines to help you assess your home. If you modify your home in any way, you must meet appropriate codes and regulations. Also, if you are considering hurricane safety upgrades make sure they meet current Florida Building Codes and ask to see the certifications. Always consult a qualified expert if you have any questions or doubts.

**When was your home built?** Despite what we often hear about how strong “those old houses” are; newer is better. Newer homes are typically built to stronger codes and take advantage of new engineering material and construction techniques. If your home is more than about 10 years old, there is probably an opportunity to make it stronger against the wind.

**Where are you located?** Many of us moved to Florida to be closer to the water, but being close to the beach increases all your risks during a hurricane. In any given storm, the winds are typically highest at the coast and diminish as the storm spends time over land. However, because our area is low and flat, no distance from the shore is enough to make us safe from the wind.

**How many stories tall is your house?** The taller walls of multistory homes have more surface area to catch the wind. More area means more overall stress on your walls. In general, one story houses are easier to strengthen against the wind. In addition, to less surface area, there are typically fewer windows as well.

**How strong are your walls?** Most residential construction uses either wood framing or concrete block to build your home. In general concrete block is stronger than wood framing. Some multistory homes use a combination of CBS and wood framing. Predictably, This construction falls somewhere in the middle regarding strength against the wind.



**What kind of roof do you have?** Many factors can affect the strength of your roof. A gable roof has two high, flat walls that can catch wind, while a hip style does not. The gable roof can be strong, but it typically requires additional bracing. The roof deck is also important. Dimensional lumber, more common in older construction, is the least durable, while plywood or OSB is stronger. The strongest, but least common in residential construction, is a concrete roof deck. Finally, your roof covering is important. Tile roofs are strong and heavy enough to resist some lifting, but tiles may break when struck by debris. Metal roofs are also strong and more resistant to impacts from flying debris. Asphalt shingles can be adequate, but are not very durable when compared to tile or metal. Typically they must be replaced more often in the intense Southwest Florida environment.

**How is your roof connected to your walls?** A strong roof and strong walls are only effective if they remain attached to each other and function as a single unit, securely attached to the foundation, to provide an envelope to keep the wind out of your home. There are a variety of specialty connectors designed to do just that in many newer homes. Older homes may be less well connected, perhaps tied together only by nails, in a technique called toe-nailing. This is much less effective than newer construction using specialty clips and wraps.

**How do you protect the openings in your home?** To ensure a strong envelope, you should protect all the openings, windows and doors, from the wind. This may mean covering windows and bracing your garage door. While there are many products to help you protect these openings, not all of them are equally effective. The best choices meet the Florida Building Code – not plywood. Additionally, convenience and ease of use are also critical. No product will work if it is not used, or used improperly. Products are available at many price points. Consult a qualified professional to make the best choice.