

## When Building or Remodeling

### **Windows:**

If you are replacing your existing windows, install impact-resistant window systems, which have a much better chance of surviving a major windstorm. These window systems are commonly available in hurricane-prone areas. If you are unable to find them locally, you can order them from manufacturers or home improvement stores in coastal areas.

**Entry Doors:** Make certain your doors have at least three hinges and a dead bolt security lock with a bolt at least one inch long. Anchor door frames securely to wall framing.

**Patio Doors:** Sliding glass doors are more vulnerable to wind damage than most other doors. If you are replacing your patio doors or building a new home, consider installing impact-resistant door systems made of laminated glass, plastic glazing or a combination of plastic and glass.

**Garage Doors:** Because of their size and construction, garage doors are highly susceptible to wind damage. A qualified inspector can determine if both the door and the track system can resist high winds and, if necessary, replace them with a stronger system. Garage doors more than eight feet wide are most vulnerable. Install permanent wood or metal stiffeners. Or contact the door manufacturer's technical staff for recommendations about temporary center supports you can attach and remove easily when severe weather threatens.

**Roofs:** If you are replacing your roof, take steps to ensure that both the new roof covering and the sheathing it attaches to will resist high winds. Your roofing contractor should:

- Remove old coverings down to the bare wood sheathing.
- Remove sheathing to confirm that rafters and trusses are securely connected to the walls.
- Replace damaged sheathing.
- Refasten existing sheathing according to the proper fastening schedule outlined in the current model building code for high-wind regions.
- Install a roof covering designed to resist high winds.
- Seal all roof sheathing joints with self-stick rubberized asphalt tape to provide a secondary moisture barrier.

If you want to give your roof sheathing added protection, but it's not time to reroof, glue the sheathing to the rafters and the trusses. Use an adhesive that conforms to Performance Specification AFG-01 developed by APA -- The Engineered Wood Association, which you can find at any hardware store or home improvement center.

**Gables:** Brace the end wall of a gable roof properly to resist high winds. Check the current model building code for high-wind regions for appropriate guidance, or consult a qualified engineer or architect.

**Connections:** The points where the roof and the foundation meet the walls of your house are extremely important if your home is to resist high winds and the pressures they place on the entire structure.

- Anchor the roof to the walls with metal clips and straps (most easily added when you replace your roof).
- Make certain the walls are properly anchored to the foundation. A registered design professional can determine if these joints need retrofitting, and a qualified contractor can perform the work the design professional identifies.
- If your house has more than one story, make certain the upper story wall framing is firmly connected to the lower framing. The best time to do this is when you remodel.

**Source:** *Institute for Business and Home Safety. [www.ibhs.org](http://www.ibhs.org)*