

cathedral-style ceilings should be balloon framed or will require a special design by a registered architect or licensed engineer.

- Platform Framing – Brace the intersection of the gable end and the end wall. This intersection is a particularly weak point and those that are not properly braced can collapse, causing major damage by allowing wind and wind-driven rain into the home. In homes with attics, an attic floor or ceiling diaphragm with the proper bracing techniques can be used to provide the lateral support of the gable end wall if the end wall is NOT framed full height.

Step 5. Foundation-to-Wall-to-Roof Connections

- Your home's ability to resist the extreme force of wind is only as strong as its weakest link, so the only way to create a wind-resistant home is to secure all connections - foundation to wall, and wall to roof. To make sure the roof stays in place when severe winds blow, securely anchor the roof to the wall by installing hurricane straps or clips on each rafter or truss where they meet the exterior walls. Be sure to install all connectors following manufacturer's specifications. Installing foundation-to-wall-to-roof connections may be beyond a roofing contractor's scope and he or she may have to work with a building contractor to perform this step.

Information about all of these procedures is available from the Federal Alliance for Safe Homes – FLASH®, Inc. – www.flash.org.

To learn about savings on your wind insurance premium based on improvements to your roof or other areas of your home, contact your insurance company. You can also get information on insurance savings through www.FloridaDisaster.org. Click on the "Strengthen your Home" link to access information about insurance savings. Look for this icon:



To learn more about hurricane-resistant home features, please visit:

www.FloridaDisaster.org

and look for the "Strengthen Your Home" icon.



Call the Federal Alliance for Safe Homes – FLASH®, Inc. at

877-221-SAFE (7233)

for more information.



**Protection begins
with a roof
over your head...**

**...and that's where the
savings begin, too.**



Are you a homeowner planning on replacing or upgrading your roof?

Maybe you're a roofing contractor about to install a new roof on an existing or new home.

Either way, below are five steps that can be taken during a roofing job to provide an even stronger roof and help homeowners qualify for savings on their homeowners wind insurance premium.

Step 1. Roof Deck Attachment

The techniques described in this step and steps two and three should be used during roof installation on both new and existing homes, and are best performed by a licensed, professional roofing contractor.



- For new construction, install a roof deck of 5/8-inch thick plywood with 8 penny ring shank nails spaced 6 inches along the panel edges and every 6 inches in the field of the panel. Make sure the nails penetrate the decking directly into the roof framing.
- Look in the attic to confirm the roof decking is properly nailed to the roof framing. If you can see nails along the sides of rafters or trusses, where the nail penetrates the decking, your roof deck may not be securely attached (see photo above).

- Another way to more securely attach your roof deck is to apply a bead of construction adhesive along each side of the rafter or truss. An alternative to construction adhesive is the use of sprayed foam adhesive.

Step 2. Secondary Water Barrier

Even though roof coverings are somewhat wind resistant, a secondary water barrier provides protection if the covering is damaged or blown off.

- Create a secondary water barrier by installing self-adhering flashing tape or modified polymer bitumen strips on top of the joints in your roof deck. This will help keep out the rain in the event the roof covering is damaged or destroyed by severe weather.
- Install one layer of 30# underlayment (sometimes called felt paper) over the roof decking and secondary water barrier. The felt helps with drainage in the event water gets under the roof covering.



Step 3. Roof Covering

- Install a roof covering that has been tested to the latest standards for wind and hail resistance. These standards are: ASTM D 3161 (modified to 110 mph), ASTM D 7158 (Class G or H shingles recommended) or UL 2390 for wind resistance and UL 2218 for impact resistance.



- Be sure to specify these standards and look for labels on the products or product packaging confirming these standards because ordinary roofing materials may not look any different from the wind-resistant versions.

Step 4. Gable End Bracing

The type and shape of your home's roof can influence how well the roof will withstand high winds. Wind pressure on a hip shaped roof is lower than the wind pressure on a gable shaped roof in the same storm. Homes with un-braced gable end walls are more likely to suffer damage, such as collapse of the end wall from high winds.



Installation of gable end bracing may be beyond a roofing contractor's scope and he or she may have to work with a building contractor. The following information will be helpful to any building professional undertaking gable end bracing:

- Continuous Wall Construction or Balloon Framing – For new construction, use full-height studs, concrete or solid masonry walls from the floor to the roof. Balloon-framed gable end walls perform better in windstorms because they do not have the hinge that usually exists where the triangular part of the gable sits on top of the wall below. Homes with high,