The Purpose of Mitigating Homes

After the hurricanes of 2004, legislation was established to help homeowners reduce their insurance premiums based on their home's ability to withstand a hurricane. The goal was to offer incentives to homeowners who invested in mitigation techniques, upgrades or retrofits to make their home stronger.

Without mitigation techniques applied, your home may not withstand a windstorm as well as you think it will.

North Lauderdale Permitting Information

A permit can be pulled by a licensed contractor or a homeowner that resides at the property as their primary residence. (Note: a landlord who does not reside on the property cannot pull a permit.)

If you are pulling a Homeowner Building Permit it is considered an exemption to the State Law F.S. 489.103(7) and requires the homeowner to complete an Owner/Builder Affidavit to acknowledge their understanding of the legal obligations and to be in accordance with Section 104.6.1.2 of the Florida Building Code.

A permit must be submitted with an initial deposit that is required at the time of submittal. The following items may be needed when applying for a permit: Two (2) sets of plans with applicable details, sealed plans may be necessary; and two sets of Product Approval documents are required for any doors, windows, shutters, roof shingles or tiles, etc.

If you have a Homeowner's Association you will also be required to get written approval notarized or sealed by an authorized HOA officer. Only after plans are approved and the permit is issued, can work commence. The Building Permit Card with plans must be made visible on the property during the construction/repair and readily accessible at the time of inspection.

Inspections are to be called in by the individual who the permit was issued to prior to 3:00 p.m. for the next business day inspection to occur.

Funding provided by a grant from:

State of Florida – Division of Emergency Management

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In partnership with:

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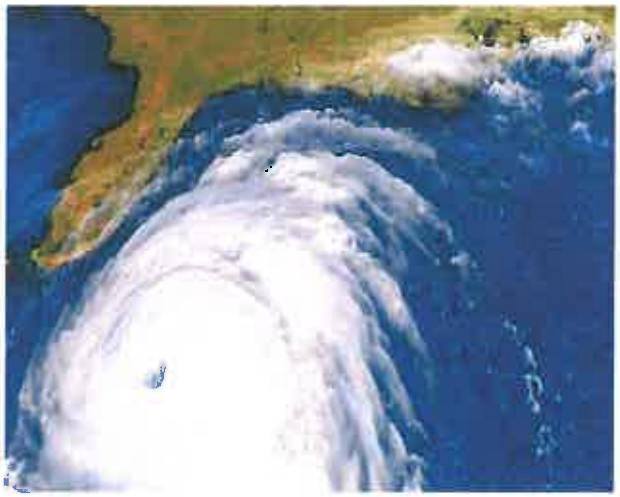


Hurricane Mitigation

The Importance and Benefits of Mitigating Your Home.

Understanding the Benefits of Mitigating Your Home

The City of North Lauderdale Community Development Department, in partnership with the State of Florida Division of Emergency Management, offers this information to homeowners regarding the benefits of home windstorm mitigation. Sometimes grants are available for these types of projects and homeowners should check with their local municipalities and the State of Florida http://www.mysafefloridahome.com

General Information

Did you know that your insurance premiums are based on your home's ability to withstand weather conditions (especially hurricanes) here in South Florida? Homeowners are encouraged to invest in mitigation techniques, upgrades or retrofits in order to be eligible for insurance rate reductions and to make their homes stronger.

Residential buildings can be effectively classified according to their degree of wind vulnerability. That classification recognizes the fact that buildings with wind resistant features are expected to experience significant reductions in hurricane damage and loss.

The reduced risk and associated loss results from both basic house characteristics (roof, shape, frame vs. masonry, etc.) as well as structural features of the building envelope (roof deck attachment, hurricane straps, etc.)

While the existing house characteristics are in place and cannot be easily modified, the key building envelope features can often be upgraded and strengthened to provide notable reductions in vulnerability.

By rating structures based on wind vulnerability and risk, significant financial incentives, (in the form of reduced insurance premiums, credits and discounts) exist for homeowners who invest in hurricane mitigation retrofits. The first step in obtaining a possible reduction of your insurance premium is to have your home assessed by a qualified inspector. It is recommended that you contact your insurance company to inquire if they refer their insured to a specific company for wind mitigation testing. The estimated cost for this service should range from $150 - $200.

Your investment in mitigation testing will no doubt result in a cost savings and help identify structural vulnerabilities that need to be addressed to further strengthen your home.

Key Factors of a Mitigation Inspection

(must be in compliance with the current Florida Building Codes):

- Year Home Built
- Building Height/Number of Stories
- Roof Covering and Installation
- Roof Deck Attachment
- Roof to Wall Connection
- Roof Shape
- Gable Bracing
- Secondary Water Resistance
- Opening Protection

The year your home was constructed is important from an insurance perspective and can be obtained from the property appraiser's website.

The height of the building/number of stories is another factor that increases the wind load exposure. The taller a structure, the higher the wind speeds will affect the structure. As you can see from the illustration provided below, the risks are higher based on the height of any structure and will be considered for underwriting insurance policies.

The roof covering and installation date is key, especially as it relates to the Florida Building Codes (FBC) that are updated periodically. If not properly secured, the roof covering could become flying debris during a hurricane.

Along with the roof covering, how the roof deck attachment is affixed to the trusses/rafters plays an important role in its ability to withstand windstorms. The entire roof deck shall be covered with an approved asphalt impregnated 30# felt underlayment installed with nails and tin-tabs as required for the HVHZ. (No additional underlayment shall be required over the top of this sheet). The inspector will look for the thickness of roof sheathing, the type of attachment (staple, nail or screw), the size of nails, and the spacing of those nails. A combination of these items along with very specific measurements will determine the strength of the roof deck.

The inspector should provide photos of the attachment type to reflect the measurements of the sheathing thickness, size of nails, and truss attachment spacing.

(See inside)

You may qualify for a **Secondary Water Resistance** (SWR) credit if you have a self adhering modified bitumen roofing underlayment applied directly to the roof sheathing or foam (SWR) sprayed from inside the attic (not spray foam insulation). Photographs of this application or documentation from the roofer or homeowner are required to validate when the (SWR) is not visible.

These photos reflect types of foam insulation.

The home's roof to wall connection and type is important. Inspectors should take photos because it helps establish the continuous load path from the roof through the walls and into the ground. The weaker the connection, the higher the risk the roof may lift off during high winds.

Photo above shows roof to wall connections.

Hurricane straps are important to prevent roof lifting.

The roof shape is often reported incorrectly on the Uniform Mitigation Verification Inspection Form. A "hip" shaped roof has **no** other roof shape greater than 50% of any major wall length.

Illustrated below are some roof shapes.

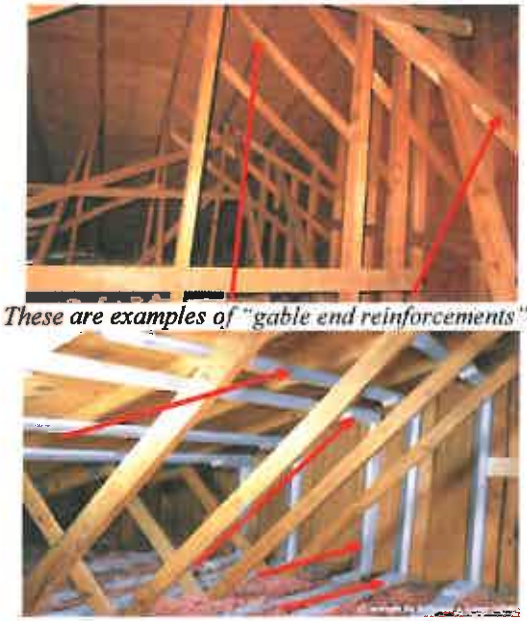
Entire roofs are classified as "other":

- If there is a "gable" over a garage and the garage sits on its own wall;
- If there is one "gable" greater than 50% of an elevation or wall length;
- If the roof is all "hip" except for a flat portion over a porch that is structurally connected to the roof system.
- If the roof is any other shape or combination of shapes other than "hip".

This home is classified as "gable roof".

This photo shows a form of bracing.

All accessible gables must be inspected to properly report gable end bracing and must be braced to meet the Florida Building Code (FBC), otherwise the roof is **not** considered braced. Retrofitted gable braces should be clearly outlined so no confusion exists when your report is submitted to your insurance carrier.



These are examples of "gable end reinforcements".

The wall construction type is an important factor as certain wall structures are stronger and have less risk than others. An inspector will use a metal detector on masonry walls to determine proper reinforcement. At least 3-5 locations should be checked. For reinforced masonry, the inspector should take a photo of the metal detector showing the locations of reinforcement as validation. Other types of wall construction such as unreinforced masonry are found in older homes. Poured concrete is very rare in single-family home residential construction.

Inspectors use metal detectors to validate the reinforcement in the walls.

Opening Protection

In order to receive the "Hurricane" rating, each and every opening on the home, **must** be protected with impact-resistant products that have been tested and comply with the required codes. In order to qualify for an insurance discount, window film **does not** count as an approved form of protection and any hurricane panels, accordion or roll-down shutters must be installed with certain attachments that meet the Florida Building Code.

Every opening, including sky lights and gable vents, must be protected in order to receive the "Hurricane" rating.

This home was disqualified for a discount because every opening except this window was protected with an impact resistant product.

If you have "Hurricane" protection on **every** opening, the inspector will verify the product and photograph the approval stickers or documentation in order to qualify your discount.

In Summary:

This brochure is only a brief outline of information on wind mitigation upgrades. When homeowners truly understand what needs to be done, they will benefit from insurance premium discounts and increase the structural integrity of their home to prevent or reduce losses. The upgrades usually cost less than the discounted savings when calculated over the five year validity period of the Wind Mitigation Inspection.

Make sure that the mitigation inspector takes photos of every phase of the mitigation inspection. If no photos are submitted showing the details, your report may be questioned as to its legitimacy.

For further information, please contact your insurance carrier.