

# *Storm Protection for Historic Resources*



*City of Delray Beach*  
*Planning & Zoning Department*





Storm protection for buildings is essential, particularly when securing openings and vulnerable building components from possible damage due to wind, debris, and water infiltration. This is especially true of historic resources which often consist of unique and irreplaceable building materials. The following is a guide to

aid property owners in choosing appropriate storm protection for their historic buildings and to guide them through the review process by the Historic Preservation Board.

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**➤ *What type of approvals do I need to install my choice of storm protection?***

If you are located in one of the City's five locally designated historic districts or one of the individually listed historic



properties, you must submit a Certificate of Appropriateness (COA) application for the installation of impact resistant windows or other form of storm protection for review and approval by the Historic Preservation Board (HPB). COA applications are available in the Planning & Zoning Department

or on-line at [www.mydelraybeach.com](http://www.mydelraybeach.com). *Please note that review and approval by the Historic Preservation Board does not preclude approval by the Building Department. The Building Permit process is separate from the Historic Preservation Board review process.*

**6 Why must I go before the Board to install storm protection for my home or business?**

The Historic Preservation Board reviews any exterior improvements to contributing and non-contributing buildings within the locally designated historic districts or on individually listed historic properties to ensure that the character of the designated building or district is retained. In order to ensure that the City's historic building stock remains true to its original design, including historic building materials and craftsmanship techniques, the Historic Preservation Board reviews the impact of the installation of any type of storm protection which affects the exterior of the historic building.

**6 What am I permitted to use for storm protection for doors and windows?**

*Board approval for the installation of any storm protection system is on a case by case basis.* While new products are introduced to the market each year, the following is a synopsis of the some of the alternatives for storm protection which will be considered by the Board:

**NOTE:** The following types of storm protection listed below must meet the 2001 Florida Building Code. It is therefore imperative that product approval, available from the manufacturer, be obtained prior to submitting a COA and Building Permit application.



**Impact Resistant Glass** is available for both windows and doors in a variety of sizes and light configurations. Most major manufacturers carry a style that will mimic the historic single or double hung sash, casement, fixed, or awning windows found in many historic buildings. Impact resistant windows and doors are typically made of aluminum to resist rot and pest infestation

but are also available for some styles in wood. Initial installation of the windows and doors is the only step necessary for this type of home or business storm protection. While this is a highly desirable alternative to shutters and as a replacement for highly deteriorated or missing historic windows and doors, impact resistant glass is not currently available in wood frame, single or double hung sash windows which meet the 2001 Florida Building Code. The Historic Preservation Board will consider the installation of aluminum frame, impact resistant glass *only* on elevations which cannot be viewed from the right-of-way on a case by case basis.



**Accordion shutters** are typically constructed of metal which folds and unfolds gliding along a set of permanent tracks. These shutters can be manipulated from left to right, right to left, or can be joined at the center to lock in place. When not in use, accordion shutters fold to the sides and remain permanently

attached to the building to provide an easy resource for protection. Preparation takes virtually minutes consisting of pulling the shutters across the opening and locking them into position. While these shutters are convenient, they are very intrusive for historic resources as the shutters are not stored out of the line of sight when not in use and are difficult to conceal amongst the fabric of the building. Further, installation of the tracks can damage the building fabric. Therefore, this type of protection is not encouraged for contributing historic buildings, however, it may be considered a viable alternative for modern and non-contributing buildings within a district.

**Roll-up shutters** provide full vertical protection for any opening including porches and patios. The shutters consist of PVC or aluminum slats that can be operated manually (crank)



or automatically. Tracks are installed which guide the shutters and secure the slats and housing mechanism. While these are an easy method of protection once initial installation is complete, the housing mechanism (shutter box), when installed on the building's exterior, can be disruptive to the design of the building's façade. Careful

consideration must be given to the design and location of such shutter housing as installation could damage the historic building fabric and is difficult to retrofit onto a historic resource. This type of protection is best on a modern or non-contributing building. A feasible alternative is an interior installation, which can be equally effective but will not negatively impact the historic character of the building.



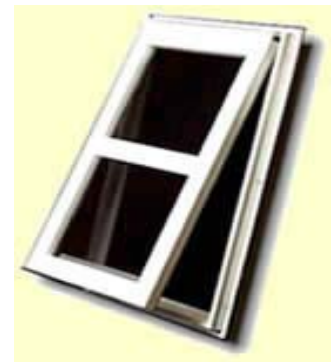
**Storm Panels** can be constructed of aluminum, steel, or clear (Lexan) panels that are designed for installation upon the approach of a storm. Upon initial installation of a storm panel unit, channels or tracks are bolted into the building's exterior. These pre-mounted channels remain in place permanently to facilitate inserting the overlapping storm panels upon the approach of a

storm. Direct wall mounting is also available. Such panels must be stored when not in use. Considered a compatible treatment for the protection of historic resources, storm panels require significantly more time for preparation on the approach of a storm. In order to be compliant with historic preservation design guidelines established by the City, property owners must paint the channels to match the exterior of a building in

order to conceal the location of the channels. Storm panels are one of the most popular and cost effective solutions for protection, however, they may not be the best for use on *all* historic resources. This type of storm protection is considered by the Board on a case by case basis.

Clear (Lexan) panels have also become a viable alternative to aluminum as the transparent nature of the panels allows the infiltration of light without the reduction of the level of protection.

**Perforated Metal Screens** are a fairly new alternative to shutters and panels. The porous screens, which are secured with metal pins, protect openings while allowing minimal interference with the visual qualities of the fenestration, however, some filtering of light to the interior of the building does occur.



Though the screens can be installed upon the threat of a storm, the screens are heavy and cumbersome to install and require significant manpower if installed and removed with each imposing threat. Use of such screens are typically promoted for inaccessible openings such as small or obscure windows or those windows found on multi-story buildings. Note: The construction of weep holes at the bottom of the frame is strongly suggested as the metal screens may trap moisture between the frame and the opening.



**Aluminum Awnings**, often called clamshell awnings, are a popular alternative to decorative shutters. Permanently attached to the building, the awning folds down over the opening from the top and is anchored with screws which go directly into the building's façade. Upon the approach of a storm, the shutters are lowered into a closed position by disconnecting

the telescopic arms. When open the awnings provide additional shade for the building's interior. Popular for masonry buildings,

particularly Ranch style buildings, aluminum awnings are not always appropriate for many of Delray's earlier historic building styles. Careful consideration should be given to the building's style and character when choosing the installation of aluminum awnings.



**Bahama Shutters** are a convenient alternative to removable shutters as they are easily installed and provide not only protection from storms but also provide an interior cooling system by providing protection from the sun. Constructed of aluminum or wood, Bahama shutters are fixed, louvered shutters with a top hinge. They are inserted into inter-locking box beam frames attached to

the building. Upon the approach of a storm, the shutters are lowered into a closed position by disconnecting the telescopic arms. While these shutters are cost effective and a pragmatic alternative to mechanical shutters, Bahama shutters are not appropriate for many of Delray's historic building stock as they are permanent and will remain in place indefinitely. Consideration should be given to the original style and design of a contributing building prior to submittal for approval. Bahama shutters are most appropriate on modern and non-contributing buildings.



**Colonial/Board and Batten Shutters** are constructed of metal, however wood is also used. The shutters are hinge mounted at the sides of window openings. Prior to the storm, the shutters are closed and locked at the center, completely covering the opening. Colonial and board and batten style shutters are more traditional and

were the prevalent styles most often used on Delray's early homes and businesses. Decorative shutter dogs must be installed to hold the shutters in place when not in use. Shutters are a highly desirable alternative for storm protection and are appropriate with many of today's historic and contemporary architectural styles. Installation of Colonial or board and batten shutters on contributing buildings are therefore encouraged by the Historic Preservation Board.

**Sill Track Horizontal Rolling Shutters** are constructed of metal and slide on top and bottom tracks which are permanently fixed to the building.

The shutter slides along the tracks over the opening and fasten to the tracks with clips for minimal preparation time and no storage. In order to be compliant with historic preservation design guidelines established by the City, property



owners must paint the tracks to match the exterior of a building in order to conceal their location. While these shutters are cost effective and are another pragmatic alternative to mechanical shutters, rolling shutters are not appropriate for many of Delray's historic building stock as they are permanent and are attached indefinitely to the building. Consideration should be given to the original style and design of a contributing building prior to installation. Horizontal rolling shutters are most appropriate on modern and non-contributing buildings.

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***Can I install my storm panels once I receive approval from the Historic Preservation Board?***

Once approval has been given by the Board, a permit application must be submitted to Community Improvement for review and approval. Storm panels must meet current Florida Building Codes, as revised, and approval by the Historic



Preservation Board does not mean that approval has been given by the Building Department. Please be certain to contact the Building Department for specifications on current codes and product approvals.

 ***What other steps should I take to prepare for a storm after the installation of storm protection?***

In addition to physically protecting your building, documentation of your home or business, prior to the threat of a storm, is imperative. Visual documentation (video and photographs) and a written inventory is critical to account for the condition of the building prior to the storm and to record the detailed craftsmanship, appurtenances, and types of historic building materials. As many building materials are rare or no longer available, it is essential to evaluate the value of your building for insurance and rehabilitation purposes. *Photos should also be used to document damage and necessary repairs after a storm.*

 ***What am I permitted to do to my building after a storm? Am I required to go before the Historic Preservation Board for repairs to my building?***

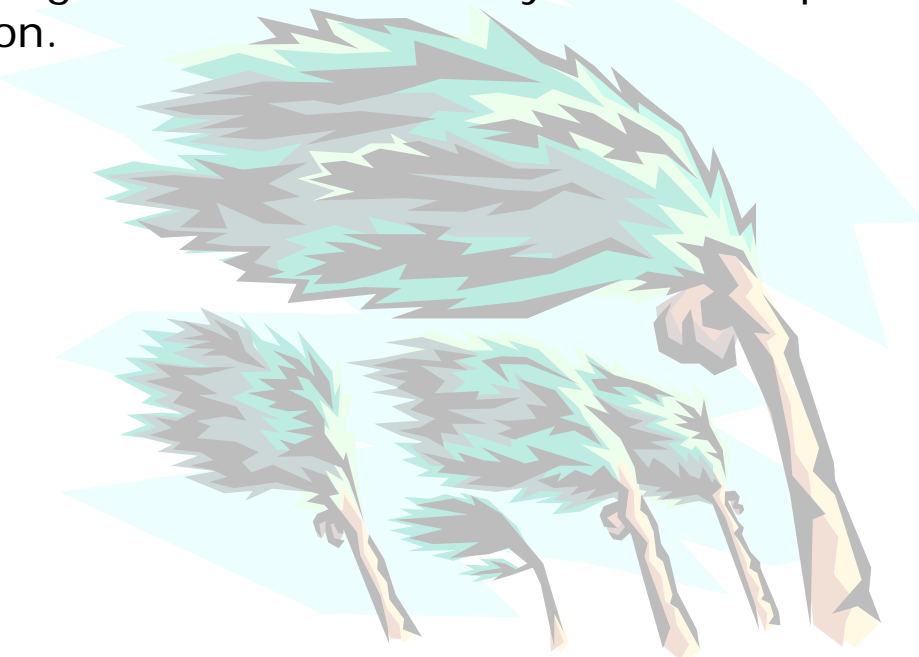
Basic repairs and routine maintenance are always permitted for a historic property owner without review and approval of a COA by the Board, however, a building permit may be required. Any major repairs must be done in-kind, meaning that replacement of any major components of your building must be replaced with the same materials that existed prior to the storm. In-kind repairs may also be completed without Staff or Board approval. Any type of demolition to any part of a designated building requires Board approval prior to any action, unless it is deemed structurally unsound and a public health hazard by Code Enforcement or the Chief Building Official. In an instance where a building has been so severely damaged that rehabilitation is necessary, the owner is permitted to stabilize his/her property without Staff or Board

approval, however, approval must be obtained by Planning & Zoning Staff (administratively) or the Historic Preservation Board prior to exterior modifications which differ from that which previously existed.

Any reference to work that does or does not require HPB approval does not reflect the requirements for the Building Permit Application Process. Contact the Building Department at (561) 243-7200 before the threat of a storm for information regarding work that does and does not require a building permit and regarding openings that require a storm protection system.

***Does the City offer any financial incentives for the installation of storm protection?***

Yes. The City offers an ad valorem tax exemption for improvements to locally designated historic resources which includes the installation of storm protection. The abatement must be reviewed and approved by both the Historic Preservation Board and the City Commission prior to installation. It is therefore critical to plan ahead in order to take advantage of this program. The exemption applies to the value of the improvement(s) for the owner's property taxes for a period of ten years which can be substantial when considering the cost of many of the options for storm protection.



## Before the Threat of a Storm

- ⑥ **Document your property** (if not previously completed) through photographs, video, and a written inventory. This step is best completed prior to any threat. Also, be certain to update this information on a regular basis.
- ⑥ **Contact your insurance company** and make certain that your policy covers historic resources.
- ⑥ **Install proper storm protection** and ensure that all major openings and entryways are secured.
- ⑥ **Review your plan** to secure your property and make certain that others are aware of your storm protection in case of an emergency or when out of town.
- ⑥ **Make any necessary repairs** of historic building fabric that may be loose, rotted, or unstable. Such detailing could become detached or become dangerous debris that might damage other parts of your building or your neighbor's property once the storm approaches and wind speeds increase.

## As the Storm Approaches

- ⑥ **Secure your property.** Mount your storm protection. Clear debris and secure all loose objects that cannot be removed or stored. Protection of any building opening is key to good storm protection. Openings (including garage and accessory structure windows and doors) vulnerable to infiltration by wind, debris, and water, could irreparably damage the building's envelope and diminish its structural integrity. While protection of glass on windows and doors is important, a property owner must be certain to secure all openings first and foremost.

## After the Storm

- ⑥ **Evaluate the damage.** Once your area has been given clearance to return outdoors (removal of power lines, large debris, etc.), evaluate the damage done to your historic resource.
- ⑥ **Ensure that the property is structurally stable** for you and your family or associates to return.
- ⑥ **Document** damaged building material and missing features. Again, video and photo documentation is critical as well as a written inventory.
- ⑥ **Make necessary repairs** to stabilize your property. Refer to the section above for what is appropriate with and without Staff or Board approval.
- ⑥ **Contact the City's Historic Preservation Planner** for aid in determining appropriate methods of repair, rehabilitation, and treatments for the exterior of your historic building or property.

*For further information regarding preparation of your historic resources before or after a storm, contact:*

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