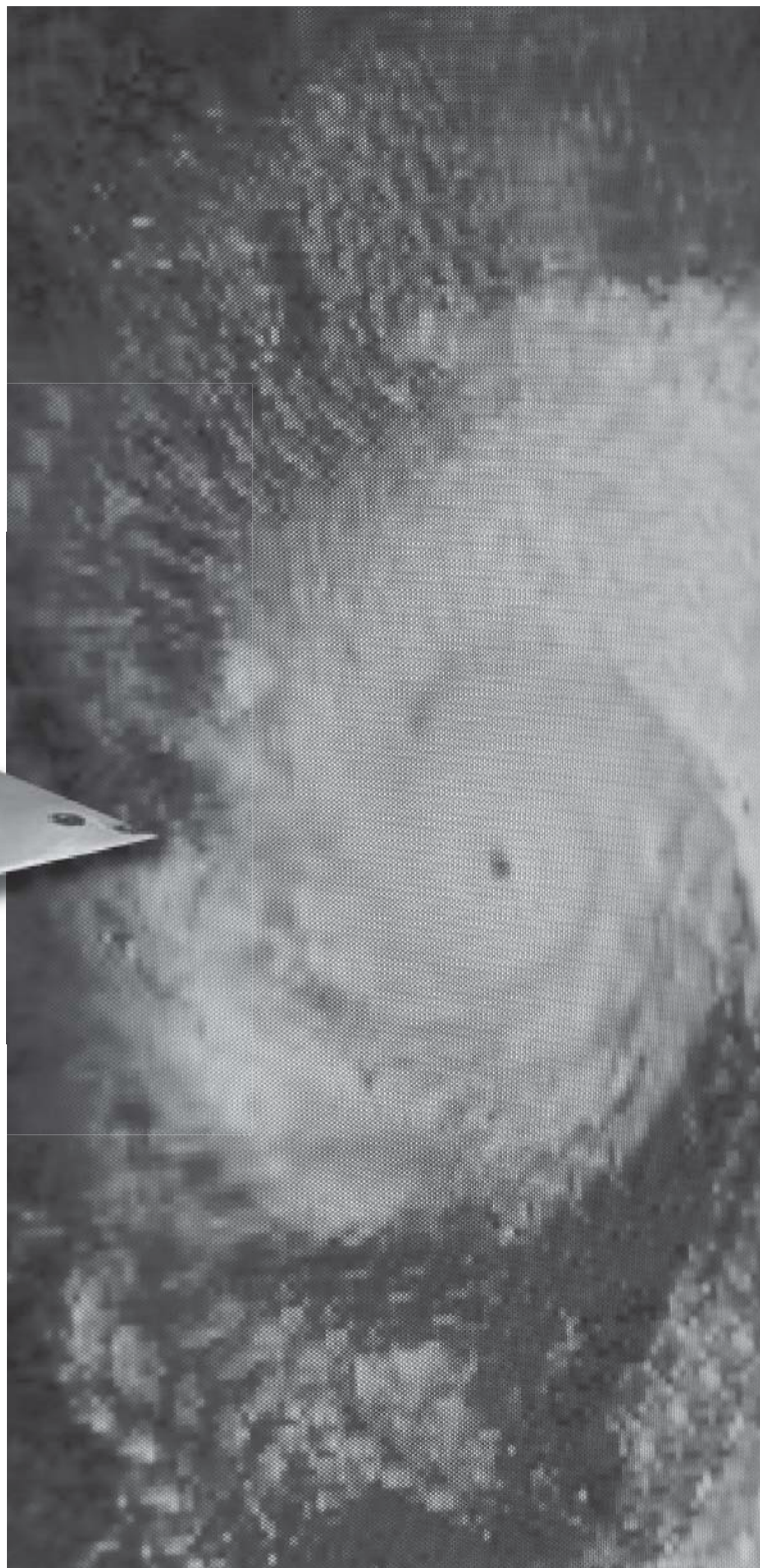




STORM PROTECTION PRODUCTS
CUSTOM STORM PANEL
Assembly and Installation Instructions



IMPORTANT NOTICE!

Read the enclosed instructions carefully before installing the Fabric-Shield® Custom Storm Panel. Pay close attention to all warnings and notes. This manual should be retained for future reference.

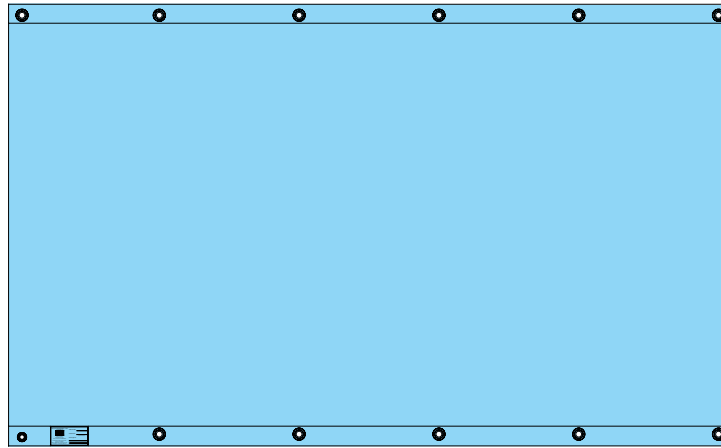
Wayne Dalton
P.O. Box 67
Mt. Hope, OH 44660

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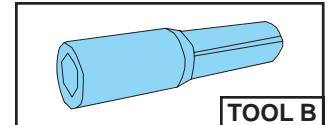
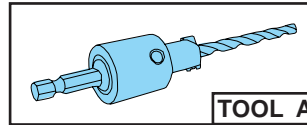
Package Contents:

1. Storm Panel



Hardware:

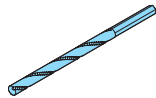
1. Fasteners (not supplied)
2. Angles and Tracks (not supplied)
3. PanelMate combination drill bit (See TOOL A) (0.234" dia. / 0.584" counterbore) (not supplied)
4. 1/8" Hex Key (to adjust PanelMate combination drill bit) (not supplied)
5. 3/8" Socket (used with PanelMate socket driver) (not supplied)
6. PanelMate socket driver (See TOOL B) (not supplied)



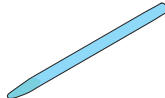
NOTE: PanelMate Fasteners, Drill Bits and Socket Drivers are available at many Building Supply Centers.

Required Tools:

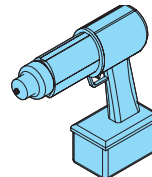
1. Appropriate Drill Bits
2. Permanent Marker
3. Electric drill
4. Pencil
5. Carpenters Square
6. Gloves
7. Safety Glasses
8. Tape Measure
9. Step Ladder
10. Level



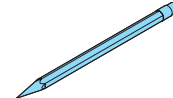
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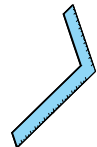
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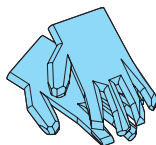
3.



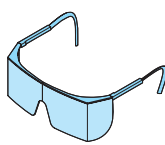
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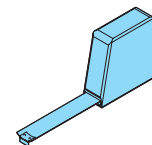
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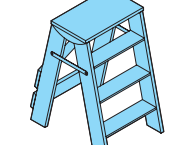
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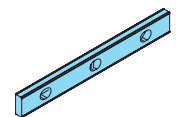
7.



8.



9.



10.

SAFETY INFORMATION

IMPORTANT NOTICE!


Hurricanes, tornadoes and other high wind events are capable of producing substantial destructive forces. Hurricane protection products, including Fabric-Shield® Custom Storm Panels will not withstand all foreseeable impacts and pressures. The use of hurricane protection products, including Fabric-Shield® Custom Storm Panels, do not eliminate the risk of property damage, bodily injury or death during hurricanes, tornadoes and other high wind events. You should obey and follow all evacuation and safety related orders and recommendations issued by governmental authorities. If you are unable to evacuate, take shelter away from openings and outer walls in an interior hallway or room to reduce the likelihood of occupants being struck by flying debris entering the walls, roof or openings. Building permits are required in most localities for installation of hurricane protection products. Contact the local Building Department Authorities in your location to determine if you must obtain a permit before installing any hurricane protection product, including Fabric-Shield® Custom Storm Panels.

Fabric-Shield® Custom Storm Panels are approved for use outside the High Velocity Hurricane Zone, defined as Miami-Dade and Broward counties by the Florida Building Code. Fabric-Shield® Custom Storm Panels do qualify for use in Wind Zone IV (> 140 mph) as a Non-porous system.

Fabric-Shield® Custom Storm Panel products are designed to reduce rapid internal pressurization that can contribute to structural collapse resulting from the loss of a window, door or other opening in the structure. Contact of the hurricane protection product with the element being protected (windows/doors), or pressure failures of existing openings resulting from hurricane force winds are common occurrences. Breaking of glazing or failure of other components being covered (windows/doors) due to hurricane force winds, does not constitute a failure of the Fabric-Shield® Custom Storm Panel system.

Proper installation of the Fabric-Shield® Custom Storm Panel product is necessary to assure product performance. Every assembly and installation is different (windload, structural support, etc.). The purchaser and installer must determine that this product and its installation comply with all state and local building codes and requirements for hurricane protection devices for their particular location. The purchaser and installer should consult with the supplier of the hurricane protection product or an experienced contractor, architect or structural engineer prior to the assembly and installation of any Wayne-Dalton Corp. storm protection product. Installations shall conform to the installation documents provided with the product by Wayne-Dalton Corp., at the time of purchase. Replacement documents are available from Wayne-Dalton Corp's Customer Service Department. Current approved installation documents can be obtained on the websites of the Texas Department of Insurance (www.tdi.state.tx.us) and the Florida Building Code (www.floridabuilding.org). The purchaser and installer are responsible for evaluating the structure's ability to support the superimposed loads and suitability of substructure receiving the fasteners for the storm protection product. Wayne-Dalton Corp. disclaims any responsibility for determining compliance with state and local building codes and requirements for the purchaser's location and the post-manufacture assembly/ installation of Wayne-Dalton Corp. storm protection products.

Definition of key words used in this manual:

 **WARNING:** INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SEVERE OR FATAL INJURY.

CAUTION: PROPERTY DAMAGE OR INJURY CAN RESULT FROM FAILURE TO FOLLOW INSTRUCTIONS.

IMPORTANT: REQUIRED STEP FOR SAFE AND PROPER DOOR OPERATION.

NOTE: Information assuring proper installation of the door.

Wayne Dalton Fabric-Shield® Custom Storm Panels have been evaluated and approved by the following:

Fabric-Shield® Custom Storm Panels have been tested, evaluated and approved:

International Building Code (Windborne Debris Regions > 140 mph):
Florida Building Code (Windborne Debris Regions > 140 mph)
Texas Dept. of Insurance (All Windborne Debris Regions)

Large Missile Testing:


Florida Building Code TAS 201(Large Missile)
ASTM E 1886/E 1996 (Missile Type "D")

Static and Cyclic Pressure Testing:

Florida Building Code TAS 202 (Static Pressure), TAS 203 (1342 Cycles)
ASTM E 1886/E 1996 (9000) Cycles
ASTM E 330 (Static Pressure)

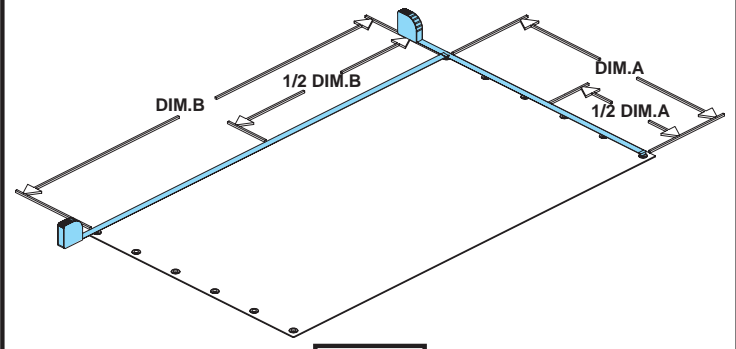

Design Pressure +62/-66 PSF

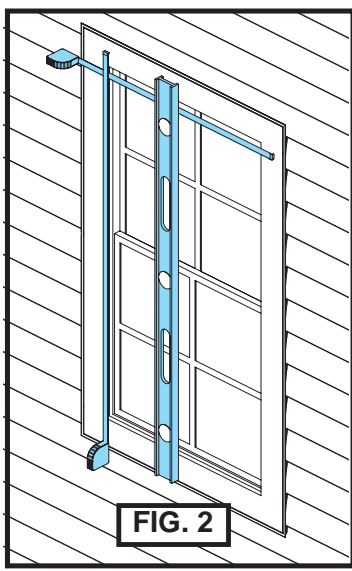
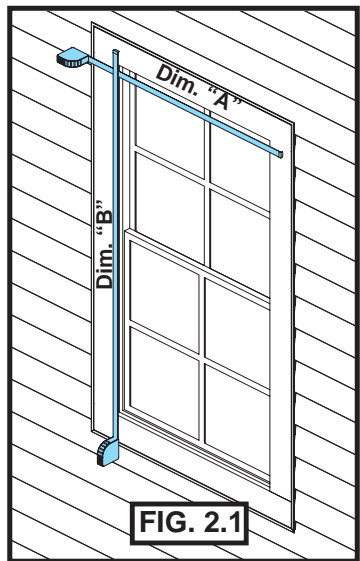
INSTALLATION SAFETY INSTRUCTIONS

 **WARNING:** INCORRECT INSTALLATION CAN LEAD TO SEVERE OR FATAL INJURY. FOLLOW THESE INSTRUCTIONS CAREFULLY.

IMPORTANT NOTICE! Wayne-Dalton Corp. can not accept responsibility for determining compliance of this product and/or its installation with any codes and/or regulations enforced in your area.

1. Before installing this product, **READ and FOLLOW all installation instructions** fully so you are aware of all of the functions and features..
2. Using ladders and/or scaffolding and working at elevated levels may be hazardous. Follow equipment manufacturer's instructions for safe operation. Use extreme caution when working around window and door openings. Falling from a ladder or an opening may result in severe or fatal injury.
3. Wear eye protection when using tools to install, repair, or adjust the product to prevent eye injuries. Improper use of hand/power tools could result in personal injury and/or product damage. Follow manufacturer's instructions for safe operation of equipment.
4. Product should be installed prior to a storm. Always be aware of local forecasts.
5. Wind-borne debris may break glass. Stay away from glass during a storm.
6. Steel fasteners will corrode rapidly when used with ACQ Pressure Treated Lumber. Obtain and use the appropriate size stainless steel screws to fasten unit to any rough opening made from ACQ Pressure Treated Lumber. Failure to use stainless steel fasteners may result in fastener corrosion causing product failure.
7. Wear protective gloves to install, repair, or adjust product to avoid hand injuries.
8. Pay close attention to all warnings, notices, and notes in these instructions.
9. Openings covered with this product cannot be used for an escape exit.
10. Wayne-Dalton disclaims any responsibility for the use of any fasteners other than those shown on the Florida Building Commission product approvals.

<p>1</p>	<p>Tools Needed:</p> <p>Pencil</p> <p>Permanent Marker</p> <p>Appropriate Drill Bits</p> <p>Electric Drill</p> <p>Tape Measure</p>	 <p>FIG. 1</p>
	<p>Using a permanent marker, describe the window opening on the label provided with the panel, i.e., Bedroom Window or Window #2 etc. (See Fig. 1.1)</p>	<div style="background-color: #e0f0ff; padding: 10px;"> <p>2001 Florida Building Code Compliant</p>  <p>2005 Patent Pending FLB Drawing Nos. 04-133-001a & 09-WDF-0004 Florida State-wide Approval Nos. FL2187 & FL3227 Meets ASTM E330, E1886 & E1996 Texas Dept. of Insurance SHU-102</p> <p>Sales Order _____</p> <p>Panel Size _____ (Span x Non Span)</p> <p>Description _____</p> </div> <p>FIG. 1.1</p>

<p>2</p> <p>Tools Needed:</p> <p>Pencil</p> <p>Level</p> <p>Tape Measure</p>	<p>Locate the center of the top and bottom of the opening and mark a vertical line with a level. Also locate the center of the left and right sides of the opening and mark a horizontal line with a level. (See Fig. 2)</p> <p>Measure from the vertical center line, of the opening, half of (Dim A) to the left and right. Mark both the top and the bottom of the opening. Measure from the horizontal center line, of the opening, half of (Dim B) to the top and bottom. Mark both the left and right sides, of the opening. Extend the vertical and the horizontal lines so they intersect at all four corners. (See Fig. 2.1)</p>	 <p>FIG. 2</p>  <p>FIG. 2.1</p>
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3

Tools Needed:

- Pencil
- Appropriate Drill Bits
- Electric Drill

Verify that unit fits opening properly. A 1" or greater overlap of the unit over the edge of the opening for the unfastened edges is recommended, but not required.

Verify that you meet the minimum requirements, for edge distance, for your construction type. (See Fig. 3) (3/4" for Wood and 2-1/2" for Concrete/Hollow Block).

Drill pilot holes on the top two marks using the appropriate drill bit for the correct substrate (1/8" Dia. for Wood and 0.234" Dia. for Concrete).

(see Guide Chart)

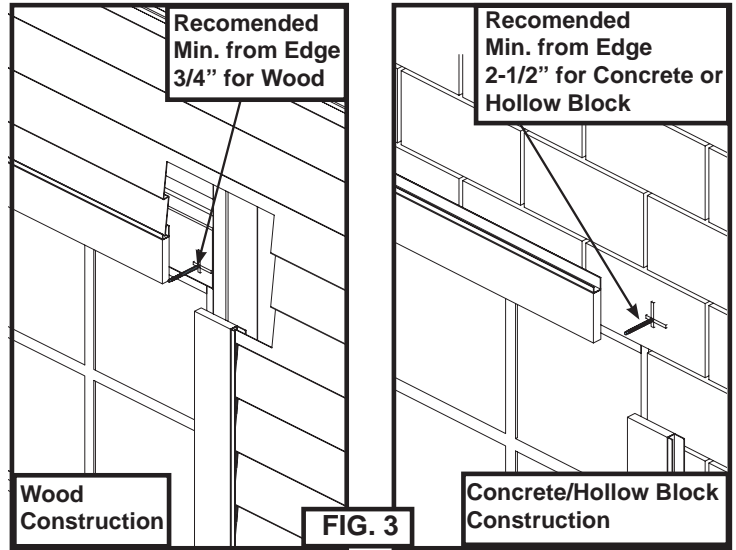
Install fasteners in the pilot holes (See Fig. 3.1), assuring minimum embedment into structural member. (See Chart) Minimum embedment and edge distance excludes Stucco, foam, brick, siding and other wall finishes and veneers.

See Fig. 3.2 for female PanelMate - counterbore 0.584" dia. x 3/4" deep.

See Fig. 3.3 for male PanelMate with washer wingnut.

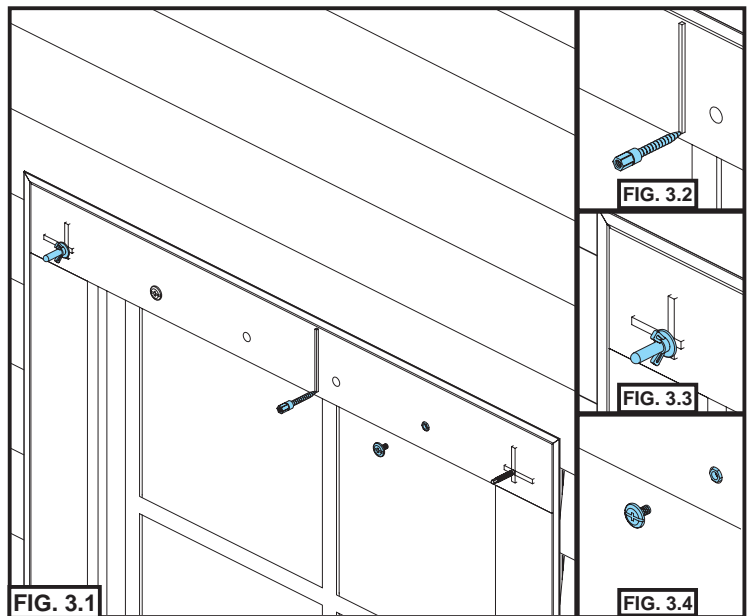
See Fig. 3.4 for female PanelMate with sidewalk bolt.

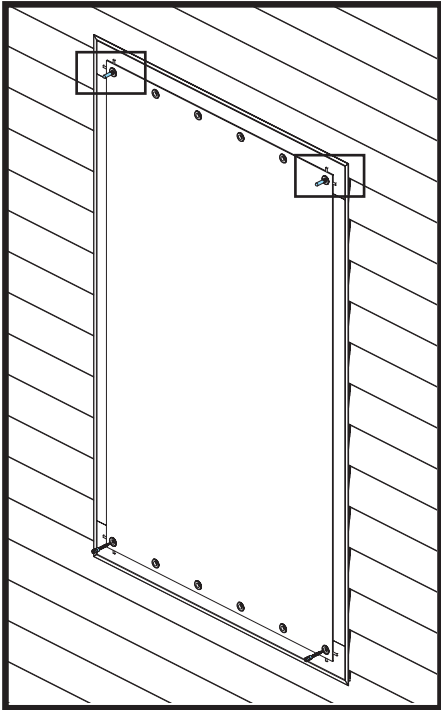
NOTE: When using PanelMate fasteners, a male PanelMate is recommended for top corners to ease installation.

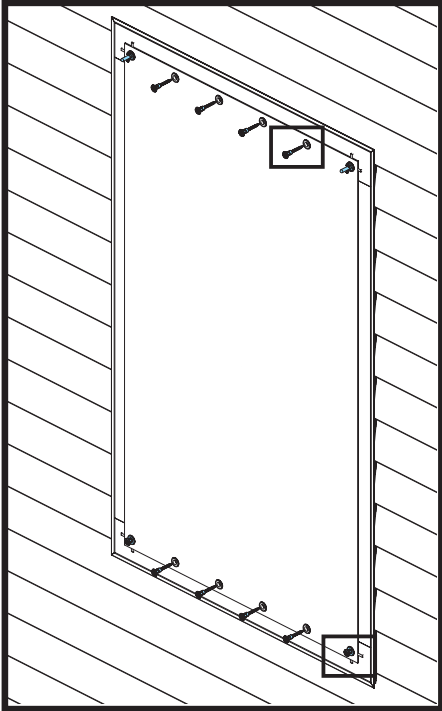


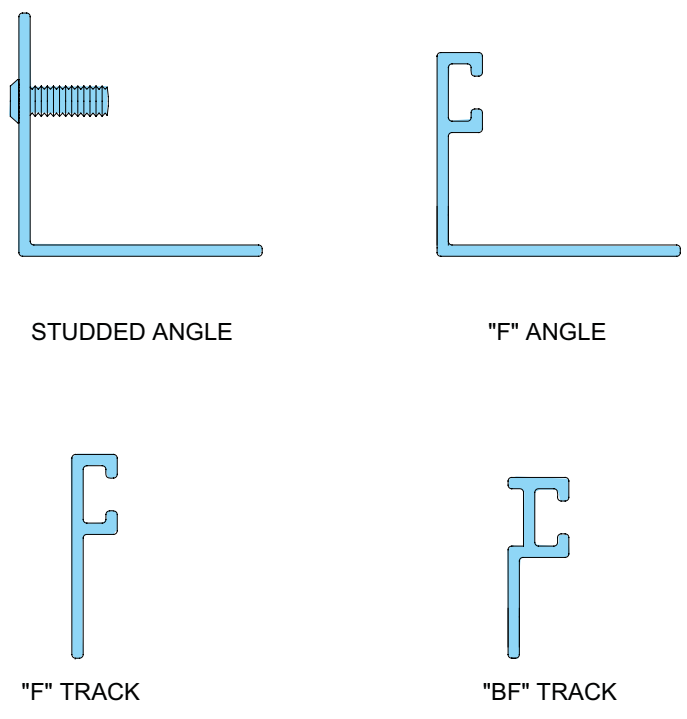
Minimum Embedment		
	Male PanelMate	Female PanelMate
Concrete	2"	1 3/4"
Hollow Block	1 1/4"	1 1/4"
Wood	2"	1 7/8"

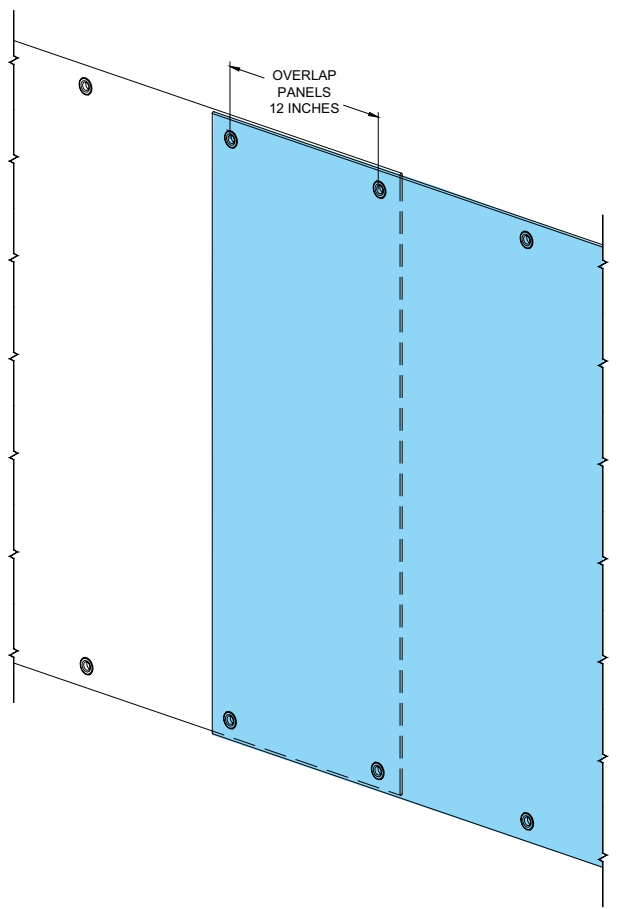
GUIDE FOR DIFFERENT TYPES OF CONSTRUCTION				
Wood Construction				
Drill Size	Recommended Min. From Edge	Fastener Type	Pilot Hole Depth	Counter Bore
1/8"	3/4" Min.	Male PanelMate	2 1/2"	
1/8"	3/4" Min.	Female PanelMate	2 1/2"	1/2" x 3/4 Deep
Concrete Construction				
Drill Size	Recommended Min. From Edge	Fastener Type	Pilot Hole Depth	
0.234" *	2-1/2" Min.	Male PanelMate	2 1/2"	
0.234" *	2-1/2" Min.	Female PanelMate	2 1/2"	0.584" x 3/4" Deep
* Use PanelMate Combination Drill Bit				



<p>4</p>	<p>Tools Needed:</p> <ul style="list-style-type: none"> Pencil Appropriate Drill Bits Electric Drill <p>Hang the Storm Panel on the top two fasteners. Verify that the two bottom corner marks are correctly aligned with the lower grommets. Slight adjustment may be required. Assure that the storm panel fasteners are installed such that the openings between the panel and the structure do not exceed 10% of the coverage area. Drill pilot holes on the lower two corner marks using the appropriate drill bit. Install fasteners in the pilot holes. Mark the center of the rest of the holes thru the grommets of the Storm Panel.</p> <p>Using the Storm Panel as a template, mark the center of the rest of the holes through the grommets. (See Fig. 4)</p>	 <p style="text-align: center;">FIG. 4</p>
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<p>5</p> <p>Tools Needed:</p> <ul style="list-style-type: none"> Appropriate Drill Bits Electric Drill <p>Drill the pilot holes at the center of each marked location. Remove the Storm Panel. Counter bore the pilot hole with 0.584 in. bit 3/4 in. deep if female PanelMates are used. Install the fasteners so the female PanelMate is flush with wall surface. Re-Install the Storm Panel with the appropriate fasteners according to the guide chart. (See Fig. 5)</p>	 <p style="text-align: center;">FIG. 5</p>
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<p>6</p>	<p>Alternate Mounting Methods</p>	 <p>The diagrams show four types of mounting hardware: 1. Studed Angle: An L-shaped metal angle with a threaded hole on the vertical leg. 2. 'F' Angle: An L-shaped metal angle with a hook on the vertical leg. 3. 'F' Track: A vertical metal track with a hook at the top. 4. 'BF' Track: A vertical metal track with a hook at the top and a flange on the side.</p>
<p>Tools Needed:</p> <ul style="list-style-type: none"> Pencil Appropriate Drill Bits Electric Drill Tape Measure 	<p>Wayne-Dalton Storm Protection Products offer alternate methods of attaching Fabric-Shield® Storm Panels to the windows. Shown below are approved angles and tracks. For more information please consult the Engineering Drawing 04-WDF-0004 by visiting the Florida Building Commission State-wide product approvals at www.floridabuilding.org.</p>	<p>STUDED ANGLE "F" ANGLE</p> <p>"F" TRACK "BF" TRACK</p>

<p>7</p>	<p>Panel Overlap</p> <p>In order to cover an area that exceeds a 12 foot non-span area, panels can be overlapped 12" on center as shown.</p>	 <p>The diagram illustrates two blue panels overlapping on a sloped surface. A dashed vertical line indicates the center of the overlap. A dimension line with arrows shows the overlap distance, labeled 'OVERLAP PANELS 12 INCHES'. Screws are shown securing the panels to the surface.</p>
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Cleaning, Maintenance and Storage

- Make certain the product is clean and dry before storage.
- If product needs cleaning, use only soapy water and a clean sponge or rag. Do not use abrasive cleaners
- Lubricate Sidewalk Bolts, Wing Nuts and Studs with White Lithium Grease at least once a year. Additional applications of lubricate may be needed if the product is in a highly corrosive environment.
- Vertical storage off the ground, in a dry, protected and easily accessible area is recommended but not required.
- Wingnuts can be stored on the stud or in any convenient location.

LIMITED WARRANTY

FABRIC SHIELD® and WISP® PRODUCTS

Wayne Dalton Corp. ("Manufacturer") warrants all storm protection products for a period of **FIVE (5) YEARS** from the date of installation, against defects in material and workmanship, subject to all the terms and conditions below.

This Limited Warranty is extended to the person(s) who purchased the product and owns the premises. This Limited Warranty is transferable to another person to whom the premises is sold and can only be used on the premise for which it was originally purchased and installed. As a result this Limited Warranty does NOT apply to any person who purchases the product originally from someone other than an authorized Wayne-Dalton dealer or distributor.

The Manufacturer will not be responsible for any damage attributable to improper storage, improper installation, or any alteration of the product or its components, abuse, damage from corrosive fumes or substances, fire, Acts of God, failure to properly maintain the product, or attempt to use the product, its components or related products for other than its intended purpose and its customary usage. This Limited Warranty does not cover ordinary wear. This Limited Warranty will be voided if any holes are drilled into the product, other than those specified by the Manufacturer.

THIS LIMITED WARRANTY COVERS A CONSUMER PRODUCT AS DEFINED BY THE MAGNUSON-MOSS ACT. NO WARRANTIES, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) WILL EXTEND BEYOND THE TIME PERIOD SET FORTH IN **UNDERScoreD BOLD FACE TYPE** IN THIS LIMITED WARRANTY, ABOVE. Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Any claim under this Limited Warranty must be made in writing, within the applicable warranty period, to the dealer from which the product was purchased. Unless the dealer is no longer in business, a written claim to the Manufacturer will be the same as if no claim had been made at all.

At the Manufacturer's option, pursuant to the dealer having notified the manufacturer of a warranty claim, a service representative may inspect the product on site, or Buyer may be required to return the product to the Manufacturer at Buyer's expense. Buyer agrees to cooperate with any representative of the Manufacturer and to give such representative full access to the product with the claimed defect and full access to the location of its installation.

If the Manufacturer determines that the claim is valid under the terms of this Limited Warranty, the Manufacturer will cause the defective product to be repaired or replaced. The decision about the manner in which the defect will be remedied will be at the discretion of the Manufacturer, subject to applicable law. **THE REMEDY WILL COVER ONLY MATERIAL. THIS LIMITED WARRANTY DOES NOT COVER OTHER CHARGES, SUCH AS FIELD SERVICE LABOR FOR REMOVAL, INSTALLATION, PAINTING, SHIPPING, ETC.**

Any repairs or replacements arranged by Manufacturer will be covered by (and subject to) the terms, conditions, limitations and exceptions of this Limited Warranty; *provided, however*, that the installation date for the repaired or replaced product will be deemed to be the date the original product was installed, and this Limited Warranty will expire at the same time as if there had been no defect. If a claim under this Limited Warranty is resolved in a manner other than described in the immediately preceding paragraph, then neither this Limited Warranty nor any other warranty from the Manufacturer will cover the repaired or replaced portion of the product.

THE REMEDIES FOR THE BUYER DESCRIBED IN THIS LIMITED WARRANTY ARE EXCLUSIVE and take the place of any other remedy. The liability of the Manufacturer, whether in contract or tort, under warranty, product liability, or otherwise, will not go beyond the Manufacturer's obligation to repair or replace, at its option, as described above. **THE MANUFACTURER WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES**, including (but not limited to) damage or loss of other property or equipment, personal injury, loss of profits or revenues, business or service interruptions, cost of capital, cost of purchase or replacement of other goods, or claims of third parties for any of the foregoing. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

No employee, distributor, dealer, representative, or other person has the authority to modify any term or condition contained in this Limited Warranty or to grant any other warranty on behalf of or binding on the Manufacturer, and anyone's attempt to do so will be null and void.

Buyer should be prepared to verify the **date and location of installation** to the satisfaction of the Manufacturer. The rights and obligations of the Manufacturer and Buyer under this Limited Warranty will be governed by the laws of the State of Ohio, USA, to the extent permitted by law.

This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from State to State.

Thank you for your purchase
www.wayne-dalton.com