



STORM PROTECTION PRODUCTS

# **Pull-Down Shutter**

Assembly and Installation Instructions



#### IMPORTANT NOTICE!

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

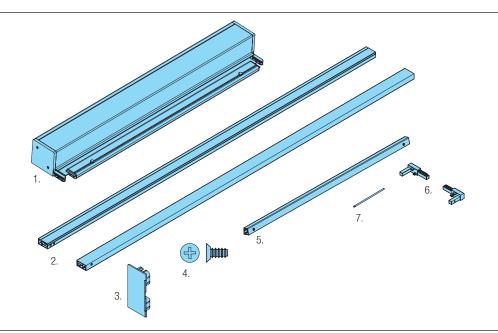
Wayne Dalton, a Division of Overhead Door Corporation P.O. Box 67 Mt. Hope, OH 44660

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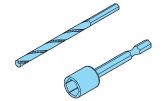
#### Package Contents:

- 1. Canister
- 2. Side Guides3. Side Guide End Cap (Optional)
- 4. #8 x 3/8" (6)
- 5. Sill
- 6. Corner Keys
- 7. Custom Lock Pin (Optional)



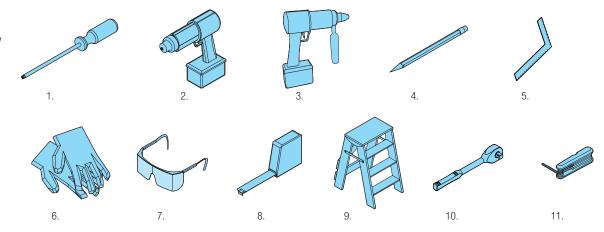
#### **Additional Materials:**

Use the appropriate fasteners, drill bits and drive sockets for the material you are drilling into. See current engineering drawings for appropriate fastener selection. Follow the manufacturer's instructions to secure the fastener properly.



#### Required Tools:

- 1. Phillips Head Screw Driver
- 2. Electric drill
- 3. Electric Hammer Drill for Masonry
- 4. Pencil
- 5. Carpenters Square
- 6. Gloves
- 7. Safety Glasses
- 8. Tape Measure
- 9. Step Ladder
- 10. 1/4" Reversible Ratchet
- 11. Hex Key



#### SAFETY INFORMATION

#### **IMPORTANT NOTICE!**

Hurricanes, tornadoes and other high wind events are capable of producing substantial destructive forces. Hurricane protection products, including Fabric-Shield® Pull-Down Shutters, will not withstand all foreseeable impacts and pressures. The use of hurricane protection products, including Fabric-Shield® Pull-Down Shutters, 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® Pull-Down Shutters.

Fabric-Shield® Pull-Down Shutter is approved for use in all Windborne Debris Regions outside the High Velocity Hurricane Zone (HVHZ) as a non-porous system. HVHZ is defined as Miami-Dade and Broward counties by the Florida Building Code.

Fabric-Shield® Pull-Down Shutter 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® Pull-Down Shutter system.

Proper installation of the Fabric-Shield® Pull-Down Shutter 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 storm protection product. Installations shall conform to the installation documents provided with the product by Wayne-Dalton, at the time of purchase. Replacement documents are available from Wayne-Dalton'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 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 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.

#### PRODUCT COMPLIANCE:

Wayne Dalton Fabric-Shield® Pull-Down Shutters, have met the requirements of the following:

of the following:
International Building Code:
Florida Building Code (All Windborne Debris Regions outside HVHZ)
Texas Dept. of Insurance (All Windborne Debris Regions)
Large Missile Testing:
ASTM E 1886/E 1996 (Missile Type "D")
Static and Cyclic Pressure Testino:

Static and Cyclic Pressure Testing:
ASTM E 1886/E 1996 (9000 Cycles)
FBC TAS 202 ASTM E 330 (Static Pressure)
Design Pressure up to 128 PSF

#### INSTALLATION SAFETY INSTRUCTIONS



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

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

- Before installing this product, READ and FOLLOW all installation instructions fully so you are aware of all of the functions and features..
- 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.
- 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.
- 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.
- Wayne-Dalton disclaims any responsibility for the use of any fasteners other than those shown on the Florida Building Commission product approvals.

1	Assembly Layout	Canister
Tools Needed: None	Layout the canister assembly, side guides, side guide end caps (optional), sill and corner keys on a clean surface (drop cloth, paper or cardboard).  Check that all the parts are correct for the window that it is to be installed on.	Side Guides End Caps (Optional)  Sill  Corner
2	Adjust Lock Pin (Optional)	Keys
Tools Needed: None	Adjust Lock Pin for Custom Access (optional). Each unit will include two 6" lock pins for exterior access as standard equipment. To adjust the lock pins for interior access, unscrew the lock knob from the lock pin. Pull the lock pin out of the curtain bar exterior channel and slide the end with a tapped hole into the interior channel. Rotate the lock pin to line up the tapped hole with the lock knob. Screw in the lock knob. Similar procedures apply to other lock pins or special order lock pins. Special order pins (up to 60") can be used for inside operation of sliding glass doors or horizontal sliding windows.	Lock Knob  Curtain Bar Exterior Channel  Lock Pin
		Curtain Bar Interior Channel Tapped Hole Lock Pin
		Align Lock Pin's Tapped Hole With Lock Knob

Lock Knob

#### Tools Needed: Pencil

Tape Measure

3

9/32" Drill Bit Or 11/32" Drill Bit

Electric drill

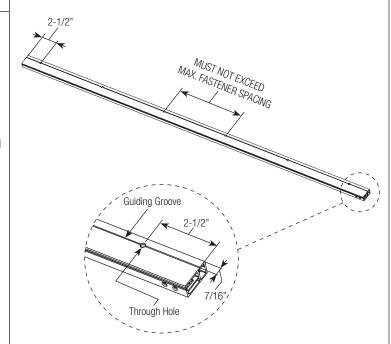
**Drill Holes In Side Guides** 

**IMPORTANT:** Determine your maximum fastener spacing based on our engineering drawing. Consult with your local building officials if necessary.

**NOTE:** The center of all fastener holes must be 7/16" from the edge of the side guide (side without slot). Some side guides may have a guiding groove (for drill bit).

The fastener holes must be 2-1/2" from each end and all fastener holes between, must not exceed your maximum fastener spacing.

Review opening for fastener locations and mark hole locations on side guides accordingly. Drill a hole through the side guide at each marked location. For ¼ inch fastener, use a 9/32 inch drill bit. For a 5/16 inch fastener, use a 11/32 inch drill bit. Take care not to drill an oversize hole or the head of the fastener may slip through.



# 4

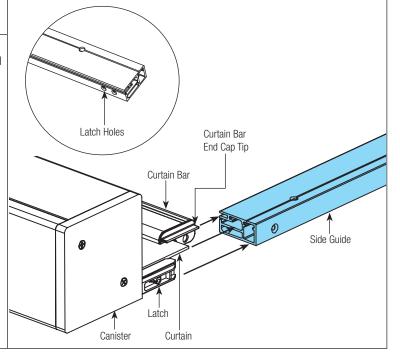
#### **Attach Side Guides**

#### Tools Needed:

None

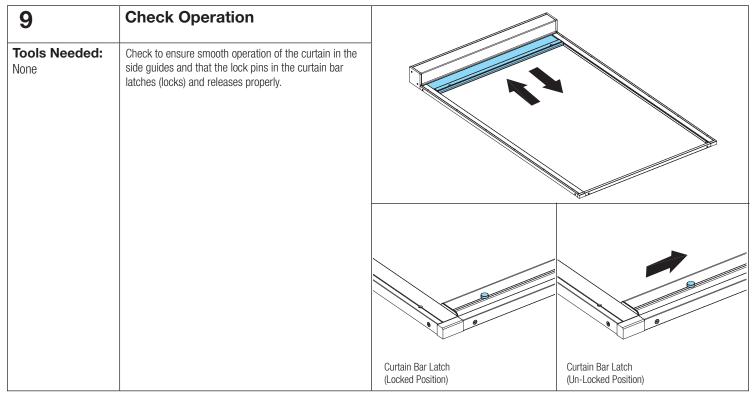
Pull out the curtain from the canister by the curtain bar and slide the tip of each curtain bar end cap and the end of the curtain into each of the side guides.

**NOTE:** Slide the curtain into the ends of the side guides WITHOUT latch holes.



5	Secure Guides	Left Side	Right Side
Tools Needed: Phillips Head Screwdriver	Slide the side guides completely onto the posts of the canister assembly.  Secure with a #8 x 3/8" flathead screw each side. Release the curtain to allow it to roll back into the canister.	Canister Side Guide  #8 x 3/8" Flathead Screw	
6 Tools Needed: None	Insert Side Guide End Caps (Optional)  Insert the side guide end cap into the end of each side guide.  Skip steps 7 and 8.  NOTE: If installation allows, install the sill and corner keys to help keep the side guides square during installation. They can be removed after installation if desired, and the end caps installed for a cleaner appearance.	Side Guide	Side Guide End Cap
<b>7 Tools Needed:</b> Phillips Head Screwdriver	Assemble Corners to Sill  Slide each corner key leg into each end of the sill. Secure with two #8 x 3/8" flathead screws.	Corner Key	Corner Key #8 x 3/8" Flathead Screws

8	Attach Sill	
Tools Needed: Phillips Head Screwdriver	Slide the corner and sill assembly into the side guides. Secure with (2) #8 x 3/8" flathead screws.	Side Guides  Sill Assembly  #8 x 3/8" Flathead Screws



# Adjust Spring Tension (If necessary) Tools Needed: Spring tension should be adjusted so cu

Phillips Head Screwdriver

1/4" Reversible Ratchet

Hex Key

Spring tension should be adjusted so curtain is stationary in the half-way position.

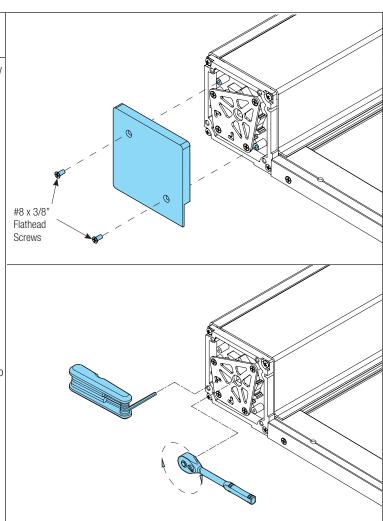
If curtain does not raise or lower properly, adjust spring tension as needed.

Begin by removing the two  $\#8 \times 3/8$ " flathead thread forming screws holding decorative endplate onto the end of the canister. Slide the decorative endplate off the gear plate.

Using a 1/4" reversible ratchet, insert 1/4" reversible ratchet into the winding shaft and begin winding clockwise until there is enough spring tension to allow curtain to roll up and down easily.

If you have too much spring tension, reduce spring tension by using a hex key or small screw driver with an 1/8" shaft and 1/4" reversible ratchet. Insert tool into the pawl and use 1/4" reversible ratchet to unwind spring. Release pressure on pawl and begin unwinding counterclockwise, leave enough spring tension to allow curtain to roll up and down easily.

When spring tension is properly set, slide the decorative endplate onto the gear plate and secure with the two  $\#8 \times 3/8$ " flathead thread forming screws.



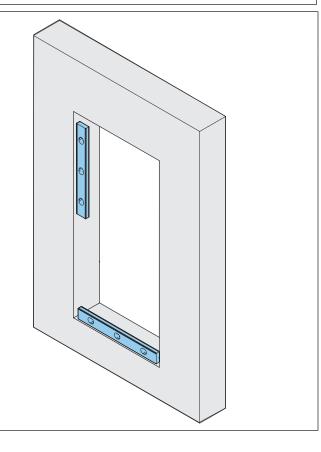
# 11

## **Check Opening**

#### **Tools Needed:** Level

Check to see if the wall surface is level and there aren't any protrusions (i.e., handles, hinges, etc.) that would prevent the proper operation of the shutter. If the wall is not level or there are protrusions, a "build out" may be necessary. Refer to our engineering drawing for build out specification. The purpose of a build out is to achieve a level surface for the shutter assembly. Make sure that the thickness of the build out is sufficient so that the shutter will clear all protrusions.

**NOTE:** Prior to drilling any holes, ensure that all of your drill bits are sharp to prevent the drill from binding and possibly damaging the aluminum components or the wall of the building.



### 12

#### **Locate and Center**

#### **Tools Needed:**

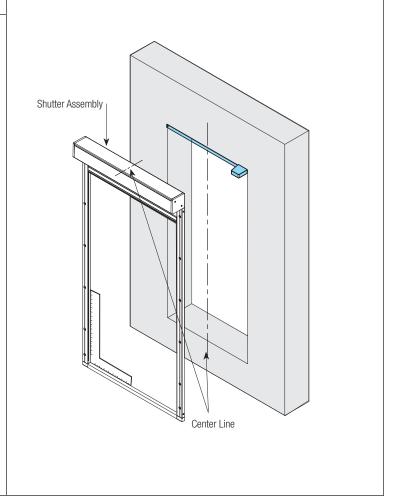
Tape Measure

Pencil

Carpenter Square

**IMPORTANT:** Product performance is dependent on proper installation. Failure to properly install the product could result in product damage, property damage and/or personal injury or death.

Locate the center of the window opening and mark a vertical line. Locate and mark the center of the shutter assembly. Pull down the curtain and lock it to the bottom. Hold the shutter assembly against the window opening. Check that window and shutter center marks are aligned. Check that the side guides on each side are square with shutter assembly. Raise the curtain slightly, and check to see if the distance between the inside edge of the side guide and the corresponding window opening edge is even along the side guide. Ensure the minimum edge distance specified in our engineering drawing. If not square, level the shutter assembly.



# 13

## Mark and Drill Holes

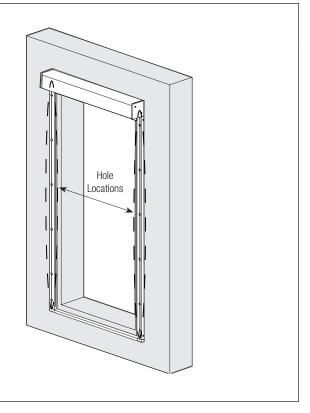
#### Tools Needed:

Pencil

Appropriate drill bit for the material you are drilling into.

Electric Drill

Through the holes in the side guides, mark the pilot hole locations. Set the shutter aside and drill pilot holes into the wall using the appropriate drill bit for the material you are drilling into. Follow the manufacturer's instructions to secure the fastener properly.



14	Secure the Shutter
Fools Needed: lectric Drill lectric socket for the ppropriate fastener elected.	lace the shutter back over the window opening and rive an installation fastener (Provided by Others) ha ay into the upper left pilot hole and one in the upper ght pilot hole.  The heck to make sure the shutter assembly has remaining higher with its center marks and is still square. If the nutter has remained in it's proper location, drive all emaining Installation fastener (Provided by Others) is per pilot holes until fully seated.

15	Check Operation
Tools Needed: None	Close and open the shutter to ensure smooth operation of the curtain and that the latches properly lock and release.

#### Cleaning & Maintenance

If the product needs cleaning, use only soapy water and a clean sponge or rag. Do not use abrasive cleaners.

# LIMITED WARRANTY FABRIC SHIELD® PRODUCTS

Wayne Dalton ("Manufacturer") warrants all storm protection products for a period of <u>FIVE (5) YEARS</u> 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 furnes 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 <u>UNDERSCORED BOLD FACE TYPE</u> 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 fromthe 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.