

# STORM CATCHER®

*A product of*

**STORM  
SMART  
INDUSTRIES**

## *HOW TO MEASURE, ORDER & INSTALL OUR REVOLUTIONARY STORM CATCHER ROLLING HURRICANE SCREEN*

**Print this Tutorial for Complete Instructions**



# Storm Smart Industries Do-It-Yourself Tutorial – Storm Catcher Roll Screens

## Introduction

This tutorial guides you through how to Measure, Order and Install your Storm Catcher Rolling Screen System from Storm Smart Industries. We recommend you print these instructions for easy reference. Follow these steps to get state-of-the-art hurricane protection for your home.

Before you measure you need:

- A clipboard, a pencil, a blank sheet of paper, and a measuring tape.

To make the measuring process easier, it is a good idea to draw a "layout sheet", which is just a basic map of your home. Start at the front entry and move clockwise. Label each opening 1, 2, 3, etc.

## Step 1 – Measure

Before you can order your Storm Catcher Rolling Screens, you must accurately measure each opening you wish to protect. There are two methods to measure the width for the Rolling Screen system, and two methods for measuring the height. Each method considers either the “Daylight Opening” or “Finished Dimension” of the system.

The “Daylight Opening” measurement technique considers the desired “open” space, or the viewing area you will be able to “see out” using this measurement technique. The “Finished Dimension” is the measurement of the complete system. Note you can use one measure technique for the width and the other technique for the height on the same opening.

Note: Measure to the nearest ¼ inch.

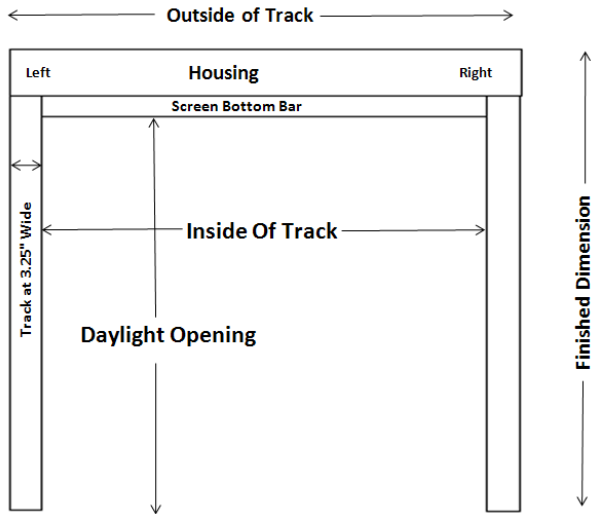
### 1.1 - Measure the Width

There are two methods to measure the width; “Outside of Track” or “Inside of Track”.

The “Outside of Track” method results in the “Finished Dimension” width of the system from the outside of one track to the outside of the opposite track. If you are dealing with a trapped or recessed opening, use the ‘Outside-of-Track to Outside-of-Track’ measurement method.

The “Outside-of-Track” measurement concept is shown on the diagram. Measure the opening width at three different places; near the top, the middle and the bottom. Use the shortest dimension to order.

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## Step 1 – Measure (cont'd)

*Note: To fasten the vertical side tracks to the structure, sometimes the tracks need additional build-out to compensate for a wall that is not “square” or if there is something sticking out that would interfere with the curtain, such as a door handle, etc. If you are measuring this way it is important to know that the track is 3.25”.*

The “Inside of Track” is the distance from the inside of one track to the inside of the opposite track. Each vertical track is 3.25”, the “Inside of Track” distance plus 6.5” (3.25” on each side) calculates to the finished width dimension of the system. You need a minimum of 3.25” of clear structure on each side of the opening to fasten the track to the structure.

If the opening is not trapped, you can use either the ‘Outside-of-Track’ method or the ‘Inside-of-Track’ method.

### 1.2 - Measure the Height

There are two methods to measure the height; the “Finished Dimension” and “Daylight Opening”.

The “Finished Dimension” method gives the finished dimension height of the system from the top of the housing box to the sill or floor. Measure the height at three different places; near the left, the middle and the right side of the opening. Use the shortest measurement to order the system if using this technique.

*Note: The “Total Housing Displacement” is a function of the overall system width and system height. Refer to the “Total Housing Displacement” chart to determine the space the system requires at the top. Use the “Finished Dimension” technique for a trapped opening.*

The “Daylight Opening” method uses the distance from the lowest portion of the bottom bar protruding from the hood, to the sill or floor. See above diagram. Look at the area above the opening to see if there is adequate space for the hood assembly. The total hood assembly size includes the box, header and the bottom bar and is referred to as the “Total Housing Displacement”. Review the chart showing the relationship between the

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opening dimensions and the measuring technique you used to get an estimate of the “Total Housing Displacement”.

### Step 2 –Order

Once you complete the measurement process (width and the height dimensions of each opening) it is time to order your Storm Catcher Rolling Screen. This is done through the shopping cart on the “Order Storm Catcher Rolling Screen” page.

On the “Order” page, you are prompted for the following:

**2.1 – SELECT TRACK & HOUSING COLOR:** Note the track and housing colors do not exactly match the screen colors. Refer back to color choices if needed.

**2.2 – SELECT FABRIC COLOR:** Again, note that the screen colors do not exactly match the track and housing colors.

**2.3 - SELECT WIDTH DIMENSION:** Indicate how you measured the width; “Outside of Track” or “Inside of Track”. (See Step 1 if you are unsure).

**2.4 - SELECT WIDTH MEASUREMENT:** Enter the desired width dimension in inches and ¼” increments.

**2.5 - SELECT HEIGHT DIMENSION:** Indicate how you measured the width; Daylight Opening or Finished Dimension. (See Step 1 if you are unsure).

**2.6 - SELECT HEIGHT MEASUREMENT:** Enter the actual height dimension in inches and ¼” increments.

**2.7 - SELECT TRACK DRILL MEASUREMENT:** Enter the distance you want between drill holes for the fasteners; 4”, 6” or 12”

**2.8 - SELECT DRIVE OPTION:** There are five choices: Manual, Basic Motor, Motor w/Override, Remote Motor and Remote Motor w/Override.

Manual: This is a hand operated crank handle that turns a gear to rotate the reel which rolls the screen up and down.

Basic Motor: This is an electric motor directly wired to a wall switch.

***Note: All electrical work should be performed by a licensed Electrician.***

Motor w/Override: This is a standard electric motor that also includes a manual crank override (see Manual – above) to operate the system in case of power failure or motor malfunction.

Remote Motor: This is an electric motor controlled by a hand-held remote transmitter. The motor must be wired to a power supply but a wall switch is not required.

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### Step 2 –Order (cont'd)

Remote Motor w/Override: This is the same as a Remote Motor (above) but includes a manual hand crank override as described above.

**2.9 - SELECT DRIVE LOCATION**: Looking at the front of the housing/box, choose which side you want the Drive Operator, left or right.

**2.10 - SELECT CRANK POSITION**: Choose either “Inside” or “Outside”. If you select “Outside”, the universal drive will be attached to the outside of the box. If you select “Inside” the universal drive will be attached to the inside.

*Note: If you select “Inside” you will have to drill a hole through your wall.*

**2.11 - SELECT QUANTITY**: Select the quantity of this identical size and configuration you wish to order.

**2.12 – SELECT ADD TO CART**: Follow the prompts to complete your order. This places your order through the website.

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## Step 3 – Install

Read through the following instructions completely *before* beginning installation.

### 3.1 - Tools Required

1. Drills; (standard drill, standard hammer drill or SDS hammer drill – corded or battery operated) with appropriate drill bits.
2. Impact drill and drive bits for driving fasteners
3. 25 foot tape measure
4. 4-6 foot level
5. Ladders (if applicable)
6. Extension cords
7. Rubber mallet or equivalent
8. Stud finder if securing to wood frame
9. Caulking gun and caulk of appropriate color
10. Paper towels or rags
11. Acetone, lacquer thinner or mineral spirits for cleaning metal surfaces
12. Eye protection

### 3.2 - Prepare the Opening

Verify the opening is square and level; make adjustments as needed. The bottom of the opening should provide a uniform surface for the rubber strip attached to the extruded aluminum bottom bar. Check the wall where the tracks and hood assembly will be attached. All surfaces should be clean and even prior to mounting track or hood assembly. Use build-out as required to achieve a level surface for the system assembly if necessary. Install the build-out to allow the system to clear protrusions such as handles, hinges, doorknobs etc.

### 3.3 - Mount the Hood Assembly & Track

There are two basic methods to mount the system; The “Standard Method (Track First)” method and the “Hood Assembly First” method. The Track First method is most common and involves installing the track first, then mounting the hood assembly. It is the simplest and safest installation method. This method should be used for most applications, the exception is trapped openings. For trapped openings, the Hood Assembly First method should be used.

#### 3.3a - Standard Method (Track First)

1. **Remove** the cover from the hood assembly.
2. **Measure** the finished hood assembly (box) to obtain the “outside of box to outside of box” measurement. This dimension is also the “outside of track to outside of track” measurement.
3. **Mark** the walls to indicate the location of the track outside edges.

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*Note: If you are installing build-out, the build-out must be plumb and securely fastened to the wall **before** you fasten the track to the build out. If you built out vertically behind the track, you must also build out horizontally behind the hood assembly. Use two pieces of build-out behind the hood, one at the top and another at the bottom. Build-out should be attached per the engineering. Drill the mounting holes for the build-out offset from than those in the track. The notched (outside) of the track is toward the outside and the taller track portion toward the inside of the opening.*

The top of the track or build-out should be a minimum of 3” above where you want the bottom bar to rest. This allows room for the bottom bar, without it blocking the opening.

4. **Mark** at the top of the opening where the outside of the tracks should be. Both side tracks must be perfectly vertical and level for the system to work properly.
5. **Level and Fasten** one side of the track to the wall surface.

*Note: If attaching to concrete, use a 1/4 SDS or masonry bit. If attaching to wood, use a 3/16 bit to pre-drill the hole. Use 2 1/4 x 5/16 Tapcons to secure the track. At this point it is not necessary to install all of the fasteners. One fastener at the top and one at the bottom are sufficient. This allows you to adjust the track location to assure proper shutter operation. The rest of the fastening can be done once you are sure the tracks are properly positioned.*

6. **Level and Fasten** the other track in the same manner.
7. With the tracks mounted in the correct position, **place** the hood assembly onto the tracks.

*Note: The hood assembly has tabs that extend out of both end caps. Insert these tabs into the tracks.*

8. Prior to drilling holes in the hood assembly, it is important to **fully extend** the screen into the track or **remove** the reel and screen from the housing assembly to prevent screen damage. This prevents inadvertent drilling through the screen.
9. **Drill** holes and **attach** fasteners through the angle piece located in the upper back edge of the hood.

*Note: The holes in the angle may be pre-drilled into the angle at 18 inch intervals. If the hood assembly is over 48” long, use a minimum of two additional fasteners to secure the hood assembly. Wider spans should receive additional fasteners.*

10. If you removed the screen and reel assembly in Step 8, **replace** it at this point
11. **Test** the screen to make sure the system performs properly.

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### Step 3 – Install (cont'd)

*Note: If the assembly does not operate correctly due to the screen being too loose or too tight, adjust the track in or out. As a last resort, you may need to cut off the tab (the piece that fits into the track) from one side of the end cap to allow enough track movement to one side or the other.*

12. Once the screen operates correctly, **install** the hood assembly cover and **test** the screen again.
13. If the screen operates correctly, **drill and drive** fasteners into the remaining pre-drilled holes in the track to securely anchor the system to the wall.
14. **Install** track plugs into track to cover fasteners.

### 3.3b - Alternative (Hood Assembly First) Method

This installation method is used with a trapped opening. Due to the lack of clearance in these cases it may not be possible to position the hood assembly onto the tracks if the tracks are mounted first. With this installation method the hood assembly is mounted first, and then the tracks are installed.

1. **Remove** the cover from the hood assembly prior to installation.
2. **Measure** the finished hood assembly (“box”) to obtain the “outside of box to outside of box” measurement.
3. **Center** the bottom of the hood assembly a minimum of 3” above the opening.
4. **Level** the hood assembly.

*Note: This allows room for the bottom bar, without it blocking the opening.*

5. If you are installing with build-out, **mark** the position of the box, then **install** the build-out as needed.

*Note: The build-out must be plumb and securely fastened to the wall before you fasten the track to the build-out. If you built out vertically behind the track, you must also build out horizontally behind the hood assembly. Use two pieces of build-out behind the hood, one at the top and another at the bottom. Build-out should be attached per the engineering.*

6. **Drill** the mounting holes for the build-out offset from those in the track, so the holes are not in the same place. The notched side of the track faces outside and the taller portion faces the inside.



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### Step 3 – Install (cont'd)

7. Prior to drilling holes in the hood assembly, **fully extend** the screen into the track or remove the reel and screen from the housing assembly to prevent inadvertent drilling through the screen.
8. **Drill** holes and **attach** fasteners through the 2 x2 angle piece located in the upper back edge of the hood.

*Note: The holes in the angle may be pre-drilled into the angle at 18 inch intervals. If the hood assembly is over 48", use a minimum of two additional fasteners to secure the hood assembly to the wall. Wider spans should receive additional fasteners.*

9. With the hood assembly secured to the wall, **insert** the tops of the tracks onto the tabs on the hood assembly ends.

*Note: The hood assembly can be tilted out a little to allow the tabs to fit into the tracks.*

10. **Fasten** the tracks to the structure.

*Note: Make sure the tracks are perfectly vertical and level. At this point it is not necessary to install all of the fasteners. One fastener at the top and one at the bottom are sufficient. This allows you to adjust the track location to assure proper shutter function. The rest of the fastening can be done once you are sure the tracks are properly positioned.*

11. **Test** the screen to make sure the system performs properly.

*Note: If the shutter does not operate correctly due to the screen being too loose or too tight, adjust the track location in or out. As a last resort, you can cut off the tab (the piece that fits into the track) from one side of the end cap to allow enough track movement from one side or the other.*

12. Once the screen operates correctly, **install** the hood assembly cover and **test** the screen again.
13. If the screen operates correctly, **drill and drive** fasteners into the remaining pre-drilled track holes to securely anchor the system to the wall.
14. **Install** track plugs into track to cover fasteners.

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### Step 4 – Install the Operator

During the measuring process you determined the operator drive type, the drive location and the crank position. Verify what you ordered is what you have. If the operator is manual, or motorized with the override option, and is operated from the inside, drilling the holes for the crank drive rod is critical to a quality installation. Once you have drilled through the wall it is challenging to make changes.

#### 4.1 - Gear with Universal Operator (Inside Installation)

With this manual crank design, the system operates from the inside. To accomplish this, a hole for the crank drive rod must be drilled through the wall.

1. Working from the outside, **remove** the front of the housing assembly to determine the correct location to drill the hole for the drive rod.
2. **Ensure** the gear is oriented so the universal arm is square to the wall.
3. Using a 1/4" drill bit, **insert** the bit through the opening in the gear and **drill** a pilot hole through the wall.

*Note: You should have a drop cloth on the inside to catch debris.*

**Caution: Be aware of inside wall conditions such as drapes, valances, cabinets and other interior obstructions. If there is tile on the inside wall, we do not recommend trying to install an inside operator.**

4. After drilling the 1/4" pilot hole in the correct location, go inside and, using the 1/4" pilot hole as a guide, **enlarge** the hole with a 3/4" drill bit.

*Note: To prevent dust and debris from making a mess, use a vacuum held close to the drill.*

5. **Clear** the hole of obstructions and insert the drive rod through the wall and into the gear.

Note: The drive rod may need to be cut to the appropriate length. Make sure the drive rod can operate the system freely without touching the wall. This eliminates friction that can make crank operation difficult and/or noisy. If needed, run the drill through again.

6. **Secure** the universal assembly with the appropriate fasteners.

## Step 4 – Install the Operator (cont'd)

### 4.2 - Motorized Operator

1. **Verify** the power location is consistent with what you ordered.

*Note: Most local building codes require an electrical contractor to install the wiring required for a motorized operator. The wire that connects the motor to the junction box can exit the housing in several ways. The wire can exit through the back or top of the housing or down the opening in the track.*

2. Once you have determined the wire path, **feed** the wire through the hole you have provided and connect the wires to the motor “pig tail”.
3. **Caulk** where applicable to seal the area around the wire.

*Note: If you selected a motorized operator with override and an inside operator, follow the procedures for the wall drill-through in the previous section 4.1.*

4. **Restore** power to the system and **set** the lower and upper motor limits.

*Note: Refer to the appropriate motor operations manual for instructions on how to set the limits.*

*Note: Some motors have limits that are manually adjusted. The limit adjustment is in the housing so you must set the limits **before** you install the header. Installing the header before the limits are set will require removal of the header to access the limit control adjustment. If your motor requires manual adjustment for the limits, a pre-drilled hole is made in the housing at the factory and a plug for the hole is included)*

5. **Replace** the housing cover and **secure** with the small screws.

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### Step 5 – Attach the Header

The header is a structural support attached directly under the box housing and fastened to the side tracks. This support provides additional structural integrity to the housing. The header is the same length as the overall box length and is either a piece of angle or a rectangular tube, depending on the width of the box.

The header is pre-drilled for you to attach to the track. The pre-drilled holes line up with the track's center cavity. Once the motor limits are set and the housing front panel is secured in place you are ready to attach the header.

1. **Place** the header directly under the box and up against the track.
2. **Secure** the header to the track using the supplied self-tapping screws.

### Step 6 - Complete the Installation

1. **Caulk** all edges.

*Note: If there are large gaps between the tracks and build-out, use a backer rod to fill the gap before you apply the caulk.*

2. **Caulk** both sides of the tracks and around the hood assembly perimeter.
3. **Clean up** the job site and take special care to remove any dust, debris or metal filings.

### CONGRATULATIONS!

You have just installed the newest and most exciting hurricane protection product on the market. Simply repeat the installation for your other units