HunterDouglas

Installation • Operation • Care



Palm Beach™ Polysatin Shutters

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Questions?
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Hunter Douglas Palm Beach™ polysatin shutters are built using the highest quality materials. When properly installed, these shutters will provide a lifetime of beauty and performance.

Installation Overview

Panel shutters come in many configurations — individually hinged, bi-fold panels, with and without T-posts, track systems comprised of from one to many panels, French door shutters and specialty shapes. There are also a variety of frames for inside or outside mounting.

Whatever the configuration, installation procedures are basically the same for most. The frame is assembled and fastened to the window at two points. Then the shutter panels are individually installed and racked, during which time frame attachment is completed. Duracatch™ lock adjustment or magnet mounting, caulking and other finish work complete a typical installation.

Unpacking

Carefully unpack the shutters. The package will include:

- Shutter panels
- Disassembled frames (frames for specialty shapes are typically assembled)
- Miscellaneous hardware (hinge pins, button covers, etc.)

Tools and Fasteners Needed

- Variable speed drill (⅜") with 3⁄32" and ⅜" drill bits
- 3" Robertson #6 and #8 bits, #1 and #2 head
- Flat blade, Phillips, and Robertson #1 and #2 screwdrivers
- Measuring tape
- Level
- Rubber mallet
- Miscellaneous tools for non-typical installations (jig saw, hack saw, Dremmel tool, etc.)

Screws are provided. Other types of fasteners may also be needed depending upon the specific mounting surface (concrete, plaster, etc.) and mounting method.

Additional Materials

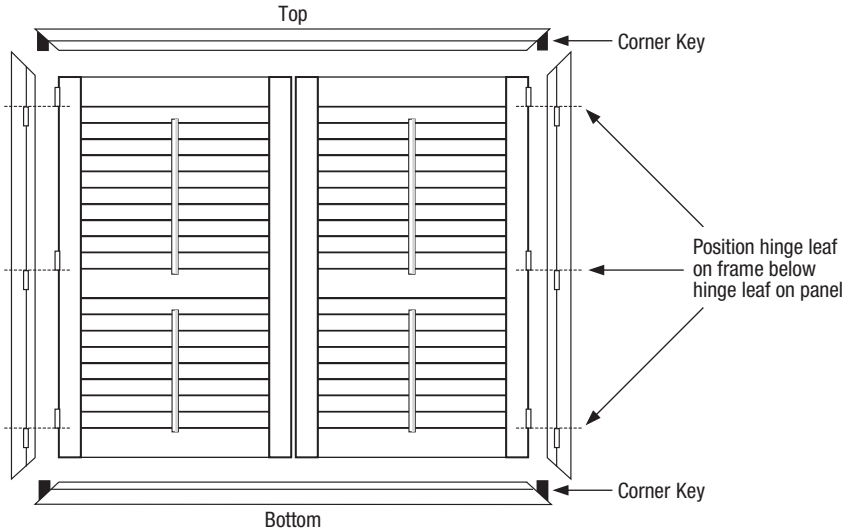
Additional materials required for shutter installation include:

- Canvas drop cloth large enough for unpacking and frame assembly
- Clean fabric cloth and a mild cleaning spray solution
- Finishing supplies (caulk, sealant, etc.)
- Instant adhesive or contact cement (outside mount L-frames only)

Panel Systems Frame Assembly

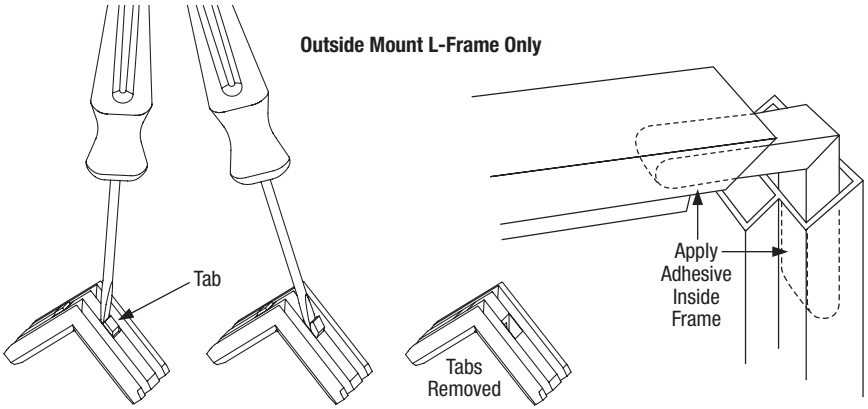
Prepare the work area. Lay the shutter panels on your drop cloth face up as they will appear in the window. Then follow the procedure below.

1. Lay the side frames beside the panels, so that the panel hinges are above the frame hinges. If one or more T-posts are used, lay them in the proper position, as well.

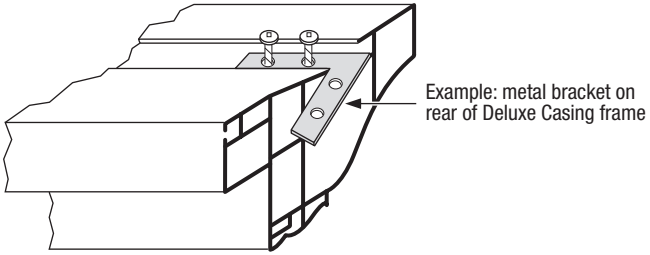


2. Insert the plastic corner keys into the ends of the top and bottom frames.

IMPORTANT: With outside mount L-frames only, glue the corner key into position as illustrated. This prevents the frame from bowing. First remove the tabs off the corner key with a flat blade screwdriver. Then apply a small amount of instant adhesive or contact cement to the inside of the frame. Insert the corner key into the end of the frame and hold firmly until set. (Note. Be sure the frames match before gluing. The corners cannot be detached after the adhesive has set.)

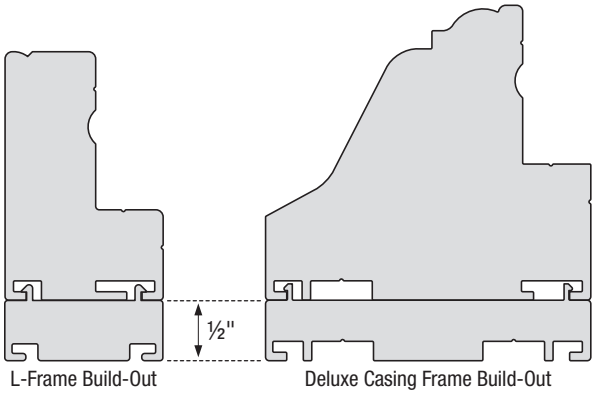


3. With the Deluxe Casing frame, Colonial Z-frame and Standard Z-frame, install 90-degree metal brackets on the back of the corners for a tight, more secure assembly.



4. Deluxe Casing frame and outside mount L-frame only: If build-out is needed for additional clearance, install the build-out onto the back of the frame.

- ➤ The build-out snaps onto the back of the frame.
- ➤ The Deluxe Casing frame build-out is also screwed into the back of the frame.



5. If one or more T-posts are used, attach them as explained on pages 6 and 7.

IMPORTANT: T-post attachment begins before the bottom frame piece is attached.

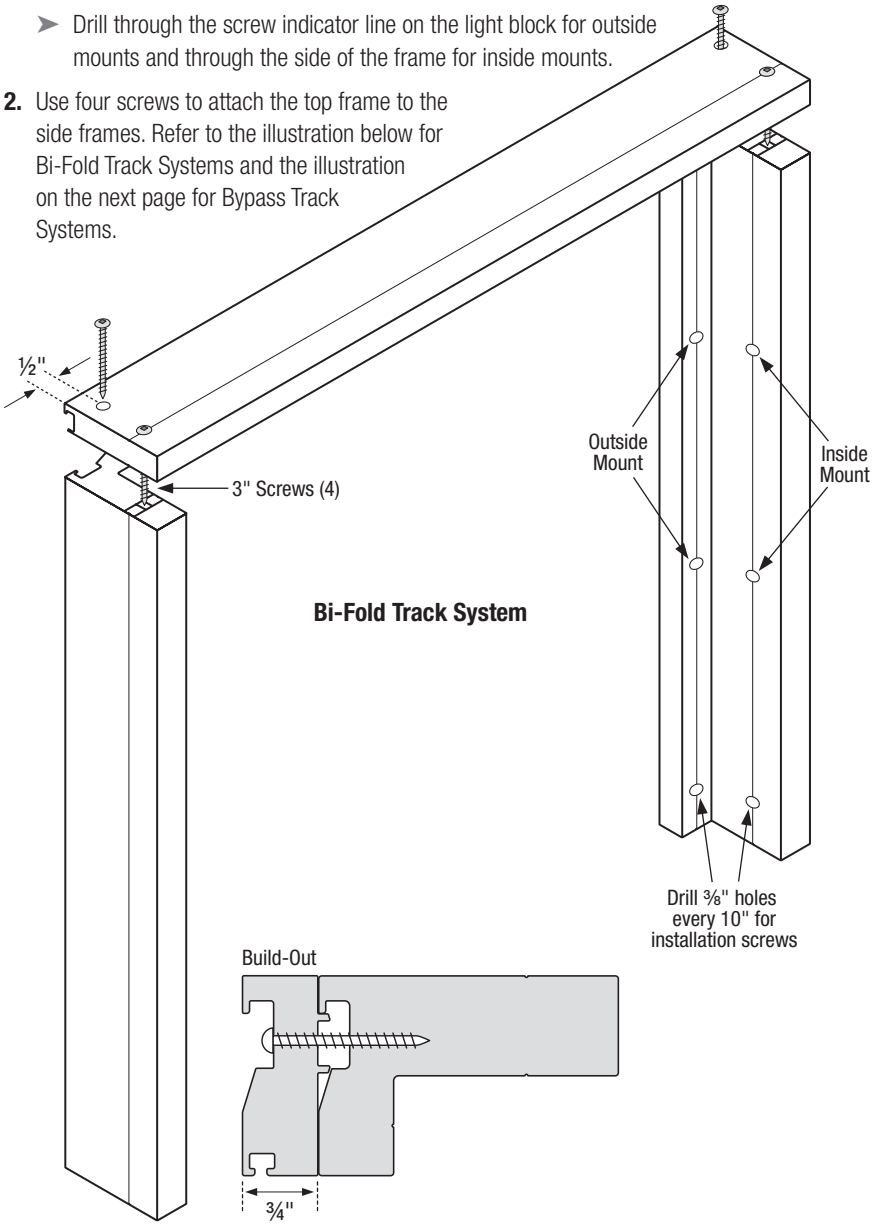
Track Systems Frame Assembly

Prepare the work area. Lay the frame pieces on your drop cloth in their proper orientation. Then follow the procedure below.

1. Drill ⅜" installation holes in the frame pieces **through the first layer of vinyl only**.

- ➤ Start at each end and space holes every 10".
- ➤ Drill through the screw indicator line on the light block for outside mounts and through the side of the frame for inside mounts.

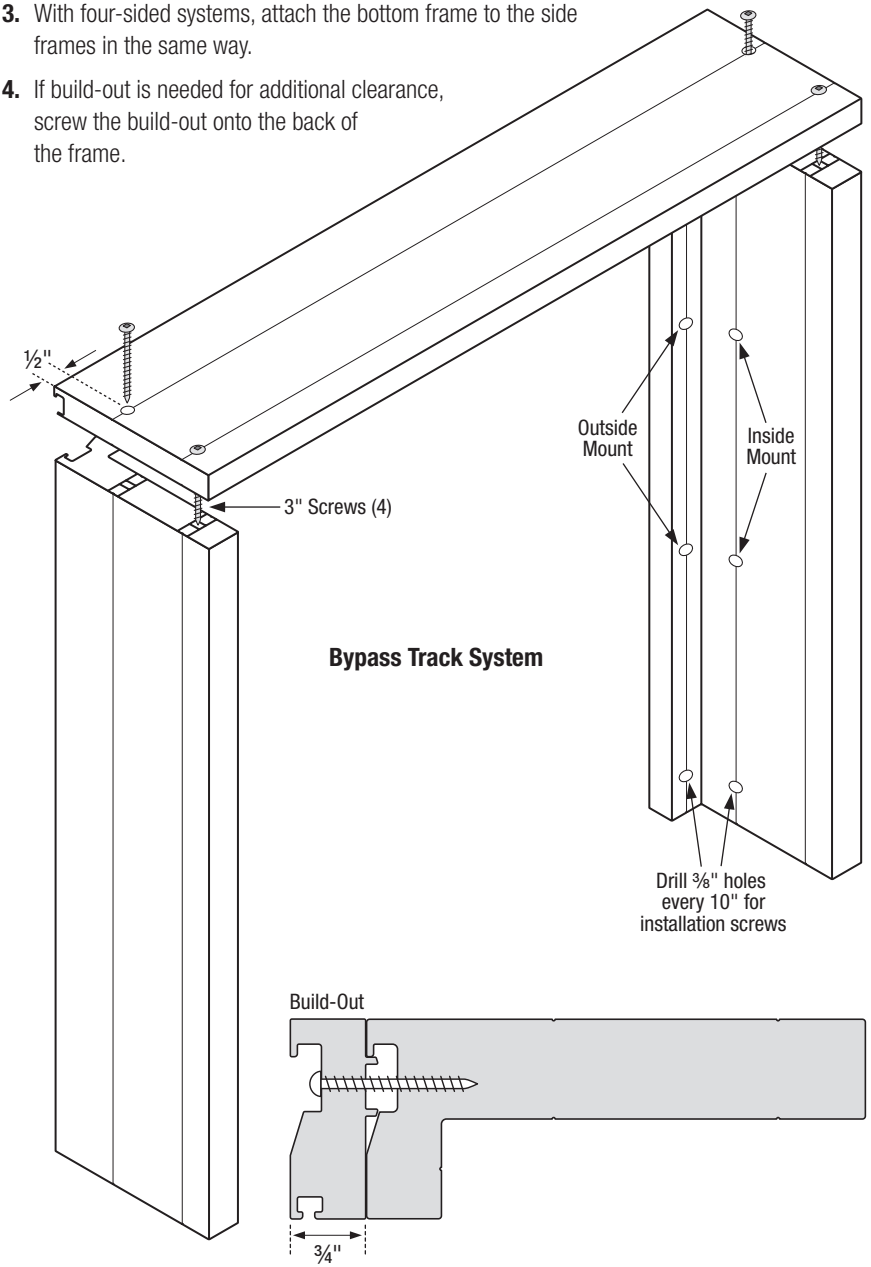
2. Use four screws to attach the top frame to the side frames. Refer to the illustration below for Bi-Fold Track Systems and the illustration on the next page for Bypass Track Systems.



Bi-Fold Track System

3. With four-sided systems, attach the bottom frame to the side frames in the same way.

4. If build-out is needed for additional clearance, screw the build-out onto the back of the frame.



Bypass Track System

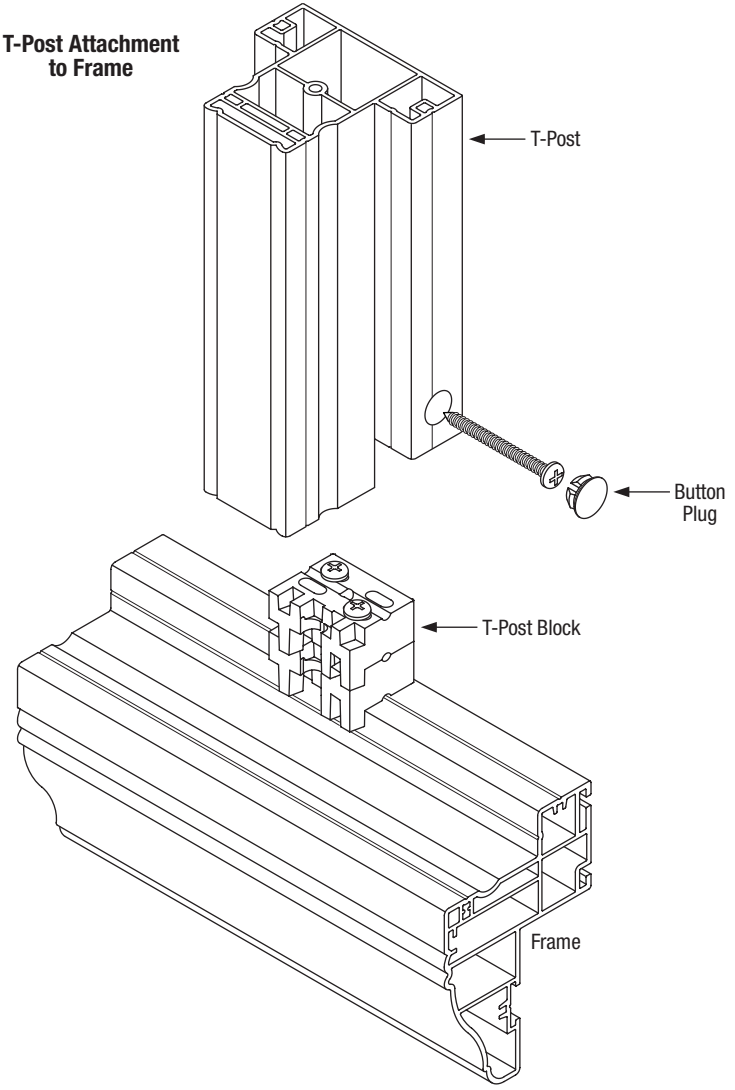
T-Post Attachment

If one or more T-posts are used, attach them before the bottom frame piece is attached.

1. T-post blocks will be pre-attached to the top and bottom frame pieces.

- ➤ Slide the T-post onto the T-post block on the top frame piece and secure the T-post to the block using the screw provided.
- ➤ Slide the T-post block on the bottom frame piece into the T-post and attach the bottom frame. Then secure the T-post to the block using the screw provided.
- ➤ Cap the T-post installation holes with a button plug.

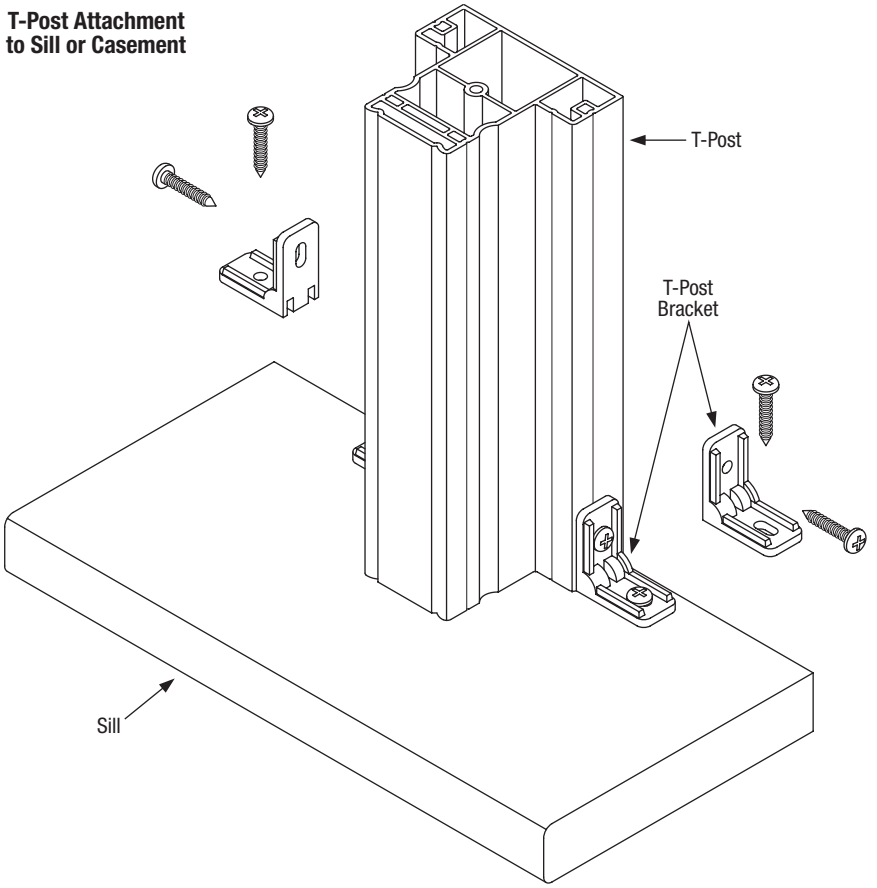
T-Post Attachment to Frame



2. With 3-sided frames or inside mounts with no frame, T-post brackets are used to attach the T-post to the sill or casement after the frame has been installed. Refer to the illustration below.

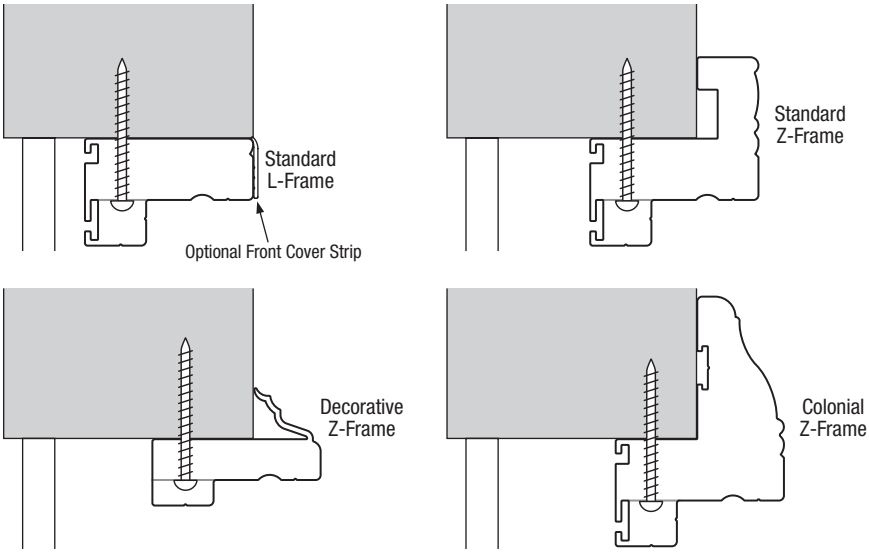
- ➤ Attach the brackets to the sill or casement using the slotted hole on the bracket to allow for side-to-side adjustment.
- ➤ Be sure to square the T-post before tightening the brackets.
- ➤ T-post brackets can also be used to attach T-posts to frames when T-post blocks are not provided.

T-Post Attachment to Sill or Casement



Inside Mount Framed Installation

This section covers inside mount installation of shutters with L-frame, Standard Z-frame, Decorative Z-frame and Colonial Z-frame.



1. Place the assembled frame in the opening.

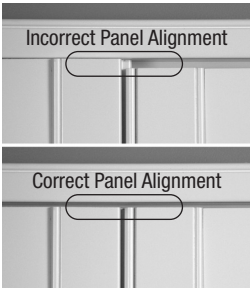
- ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
- ➤ The left and right sides of the frame are labeled.

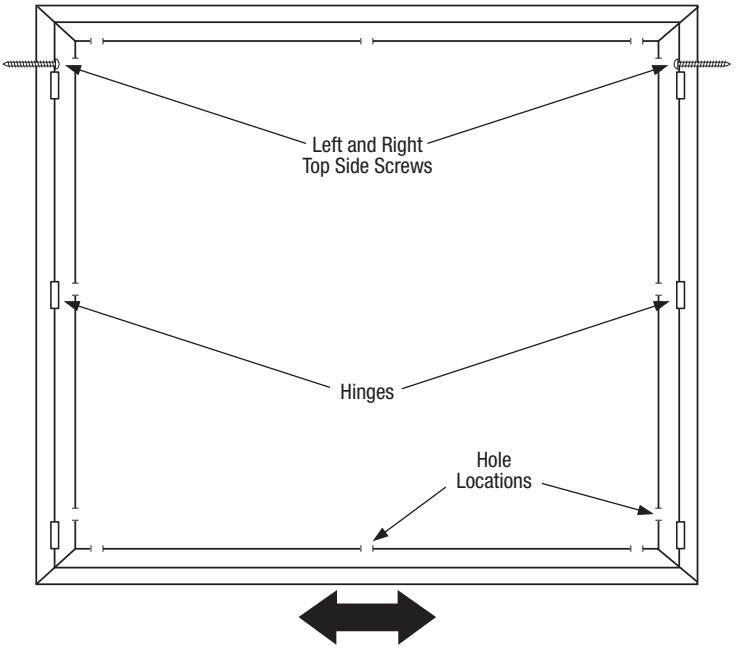
2. Attach the left and right sides of the frame. Insert Robertson screws through the hole above the top hinge on each side.

- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Center the frame in the opening, then set the screws into the jambs.
- ➤ Tighten the screws snugly, but do not overtighten. If the screws are too loose, the framed opening will be smaller than ordered. If the screws are too tight, the framed opening will be larger than ordered.

3. Hang the panels and check for proper panel alignment.

- ➤ If the panels are misaligned, rack the shutters by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the Duracatch™ lock system is designed to help level the panels within the frame.





4. When the panels are aligned and square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.

5. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.

6. Adjust the Duracatch™ panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.

➤ If necessary, install panel lock ramps on the sill or casement (see page 30).

7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.

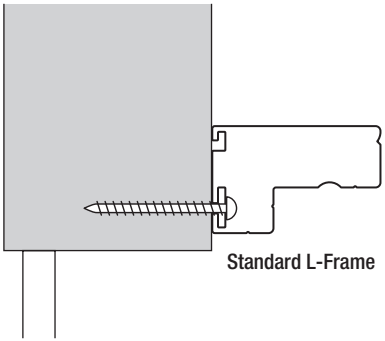
8. If necessary, glue front cover strips to the front of the L-frame (see page 35).

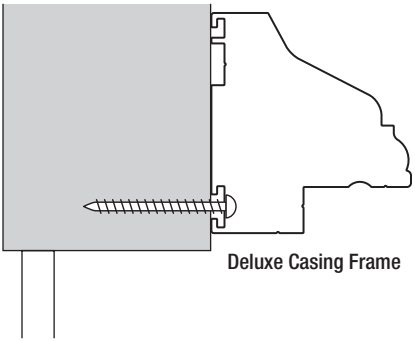
9. If necessary, install magnets and plates (see page 31).

10. Perform any necessary finish work (see page 35).

Outside Mount Framed Installation

This section covers outside mount installation of shutters with L-frame and Deluxe Casing frame.





1. Place the assembled frame over the opening.

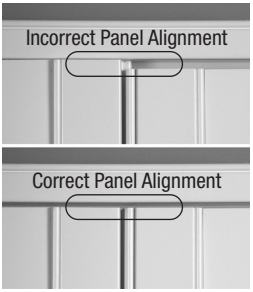
- ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
- ➤ The left and right sides of the frame are labeled.

2. Attach the left and right sides of the frame. Insert Robertson screws through the hole above the top hinge on each side.

- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Center the frame over the opening, then set the screws into the mounting surface.
- ➤ Tighten the screws snugly, but do not overtighten.

3. Hang the panels and check for proper panel alignment.

- ➤ If the panels are misaligned, rack the shutters by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the Duracatch™ lock system is designed to help level the panels within the frame.

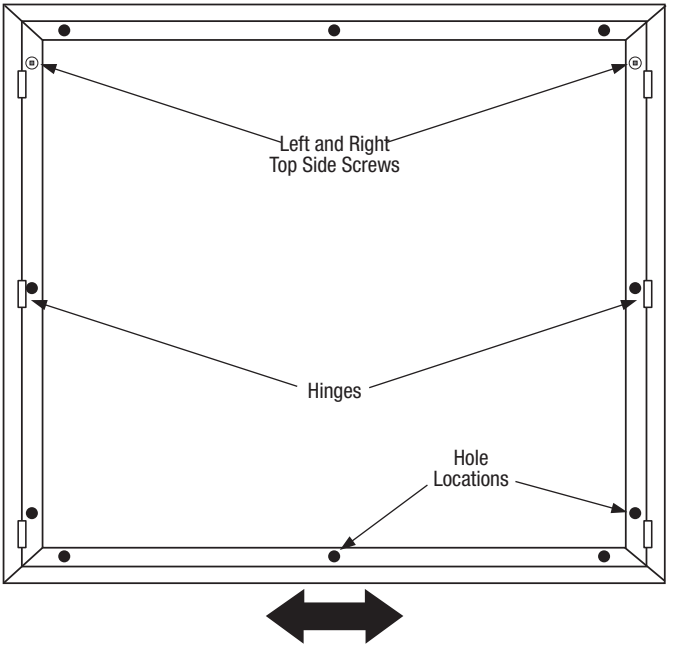


4. When the panels are aligned and square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.

5. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.

6. Adjust the Duracatch panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.

- ➤ If necessary, install panel lock ramps on the sill (see page 30).



7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.

8. If necessary, install magnets and plates (see page 31).

9. Perform any necessary finish work (see page 35).

Inside and Outside Mount Installation with Hang Strip

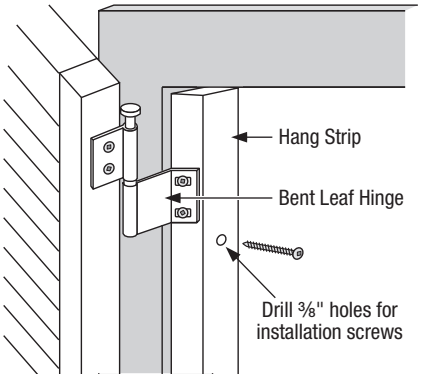
Hang strip installations are two-sided.

1. Drill ⅜" installation holes in the hang strips **through the first layer of vinyl only**.

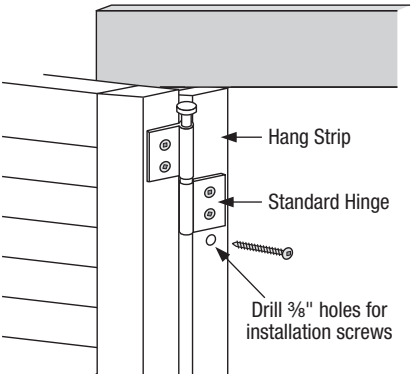
- ➤ With outside mounts, drill through the face of the hang strips. With inside mounts, drill through the side of the hang strips.
- ➤ Drill installation holes below each hinge. (The top of the hang strip is indicated by the greater distance between the top hinge and hang strip end, versus the smaller difference between the bottom hinge and hang strip end.)
- ➤ Space holes similarly on hang strips without hinges.

Inside Mount

Hang Strip Behind Panels

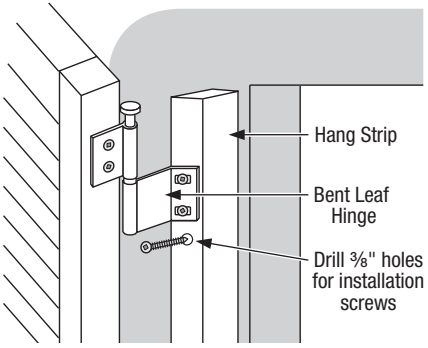


Hang Strip to Side of Panels

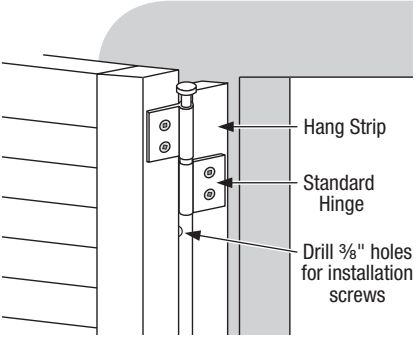


Outside Mount

Hang Strip Behind Panels



Hang Strip to Side of Panels

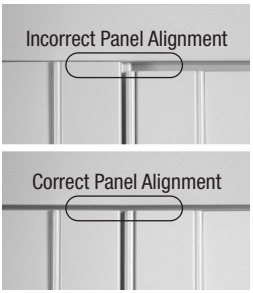


2. Attach the side hang strips inside or outside the opening.

- ➤ With outside mounts, be sure the hang strips are positioned the correct width apart and at the correct height.
- ➤ Insert a Robertson screw into the top and bottom holes only, then set the screws into the mounting surface.
- ➤ Tighten the screws snugly, but do not overtighten.

3. Hang the panels. Square and align the panels to the opening.

- ➤ If necessary, adjust the bent-leaf hinges by loosening the hinge screws and moving the hinge left or right.
- ➤ Re-tighten the hinge screws once the panels are square and aligned.



4. Insert screws into the remaining holes and check that the panels are still level after each screw has been tightened. Re-adjust if necessary.

5. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins.

6. Cap all screw holes with the provided button plugs.

7. With inside mounts, install Duracatch™ panel lock ramps (see page 30).

8. With outside mounts, install magnets and plates (see page 31).

9. Perform any necessary finish work (see page 35).

Inside Mount Installation with No Frame

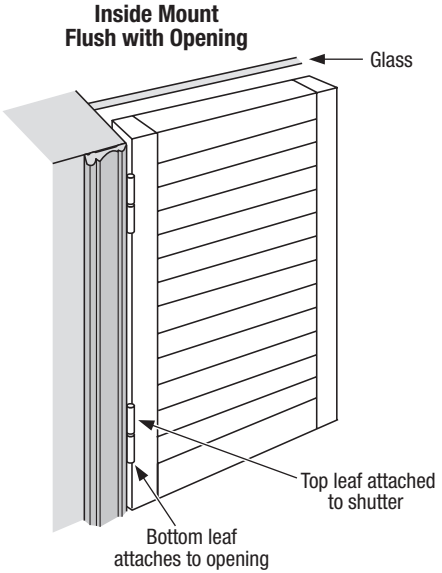
Unframed inside-mounted shutters may be installed flush with the opening or projected out from the opening using extended leaf hinges, which can add up to ⅝" additional clearance.

1. Install the top window jamb hinge.

- ➤ Position the left panel in the opening so that it has equal clearance at the top and bottom. Mark where the bottom of the top hinge is located.
- ➤ Align the top of the window jamb hinge with the mark and attach it using one screw.
- ➤ To check for accurate placement, install the panel by its top hinge, inserting a hinge pin to hold the panel in place. Adjust placement of the window jamb hinge if necessary.
- ➤ If placement is accurate, remove the panel and install the second screw into the window jamb hinge.

2. Install the bottom window jamb hinge.

- ➤ Again, install the panel by its top hinge, inserting a hinge pin to hold it in place.
- ➤ Mark where the bottom of the bottom panel hinge is located.
- ➤ Align the top of the bottom window jamb hinge with the mark and attach it using one screw.
- ➤ To check for accurate placement, install the panel into the two hinges. Adjust placement of the bottom window jamb hinge if necessary.
- ➤ If placement is accurate, install the second screw into the bottom window jamb hinge.



3. Repeat steps 2 and 3 for the right panel, if applicable. Be sure to align the right panel to the left panel.
   - ➤ When the Duracatch™ panel lock system is used, turn the adjustable plunger if minor support or leveling is required.
   - ➤ If necessary, shim using the provided hinge shims.
4. Once the panels are level and square in the opening, install the remaining window jamb hinges while the panels are hanging.
   - ➤ Open the panels.
   - ➤ Install the window jamb hinges onto the panel hinges using the hinge pins.
   - ➤ Screw the window jamb hinges in place.
   - ➤ If necessary, shim using the provided hinge shims.
5. Install Duracatch panel lock ramps (see page 30) or magnets and plates (see page 31).
6. Perform any necessary finish work (see page 35).

Bi-Fold Track System Installation

Typically, Bi-Fold track systems have three-sided frames; however, they may also be two-sided or four-sided. The basic installation procedure is the same whatever the configuration.

1. During frame assembly (see pages 4 and 5), you should have pre-drilled installation holes through the frame pieces. If you have not, refer to those pages for instructions.
2. Install the assembled frame. For both inside and outside mounts, be sure there is sufficient rear clearance for louver movement.
   - ➤ **Inside mount:** Using the provided screws, fasten the top of the frame to the opening and level. Square the side frames and fasten to the sides of the opening. Use shims as necessary to ensure a level and square installation.
   - ➤ **Outside mount:** Center the frame over the opening.
     - — Attach the top frame first, starting within 3" of the highest corner.
     - — Place a four foot level on the top frame and secure the second fastener in the top frame within 3” of the other corner, ensuring the top frame is level.
     - — Finish attaching the top frame by securing one screw at each stud, 16” to 24” apart, depending on the type of construction.
     - — Square the side frames and fasten to the sides of the opening.
3. Assemble components onto the aluminum track (see illustrations on pages 18 and 19).
   - ➤ **Side stack** (all panels stack to one side): Insert the proper number of wheel carriers into the top track. Then insert the top pivot on the side where the panels stack.
   - ➤ **Split stack** (panels stack to both sides): Insert the proper number of wheel carriers into the top track. Then install a top pivot on each end.
4. Mount the track to the top frame.
   - ➤ Position the front of the track flush with the front of the frame. With side stack designs, be sure the top pivot is on the correct end.
   - ➤ Attach the track through the pre-drilled holes using the provided screws.
5. Hang the pivoting panel(s).
   - ➤ A bottom pivot pin is installed at the bottom of the pivoting panel(s). Insert the pin into the bottom pivot bracket.
   - ➤ Push one of the door plates onto the adjustable nut of the top pivot, and push the other onto the adjustable nut of the first wheel carrier.
   - ➤ Lock the panel in place by rotating the plastic slide around the neck of the adjustable nuts on the top pivot and wheel carrier.
   - ➤ With split stack designs, repeat these steps for the other pivoting panel.
   - ➤ To square the panel(s), loosen the set nut on the top pivot bracket. Rotate the adjustable nut until the panel is square, then re-tighten the set nut.

6. Hang the remaining panel(s).

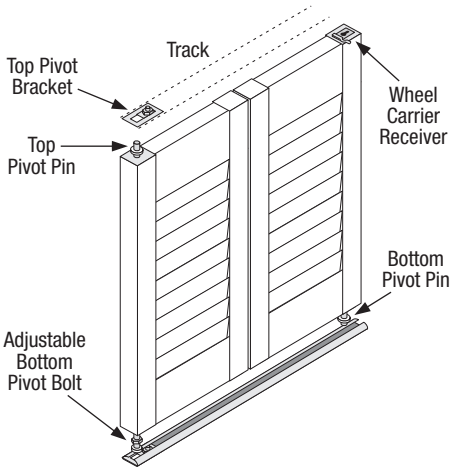
- ➤ Hang the panel(s) from the wheel carriers as described in step five.
- ➤ Connect all hinges using the hinge pins.
- ➤ Adjust the panel(s) to level using the adjustable nut on the wheel carriers.

7. Side stack only: Install the stop bumper and stile channel.

- ➤ Attach the stop bumper on the side opposite where the panels stack. Position it approximately 12" down from the top of the frame, on the screw indicator line.
- ➤ Attach the stile channel on the same side as the stop bumper, approximately 3" from the bottom of the frame, on the screw indicator line.

8. Attach the bottom guide track.

- ➤ Fasten the bottom pivot bracket(s) and the bottom guide track to the floor, centering them to the grooves in the side frames.
- ➤ If there is a bi-fold panel assembly on only one side of the frame, install one bottom pivot bracket on that end of the guide track. If there are bi-fold panel assemblies on both sides of the frame, install a pivot bracket on each end of the guide track.



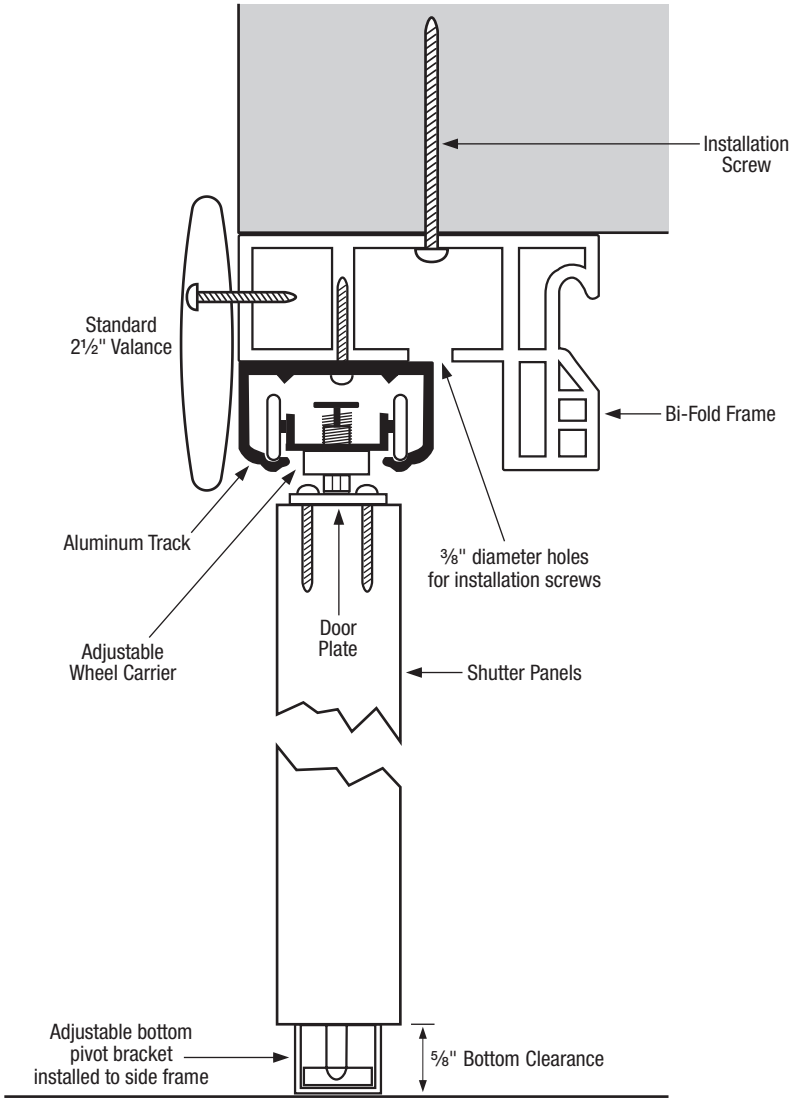
9. Attach the valance, if applicable.

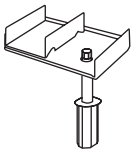
- ➤ Drill ⅜" installation holes **through the first layer of vinyl only**.
- ➤ Space the holes 20" apart.
- ➤ Glue or use double-sided tape to attach the valance returns, if applicable.
- ➤ Attach the valance to the top frame with the screws provided. Alternate valance attachment options include gluing or using double-sided tape.

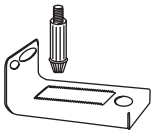
10. Cap all screw holes with the provided button plugs.

11. Perform any necessary finish work (see page 35).

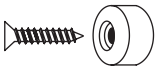
Inside Mount Bi-Fold Track System

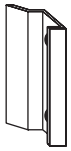



Top Pivot

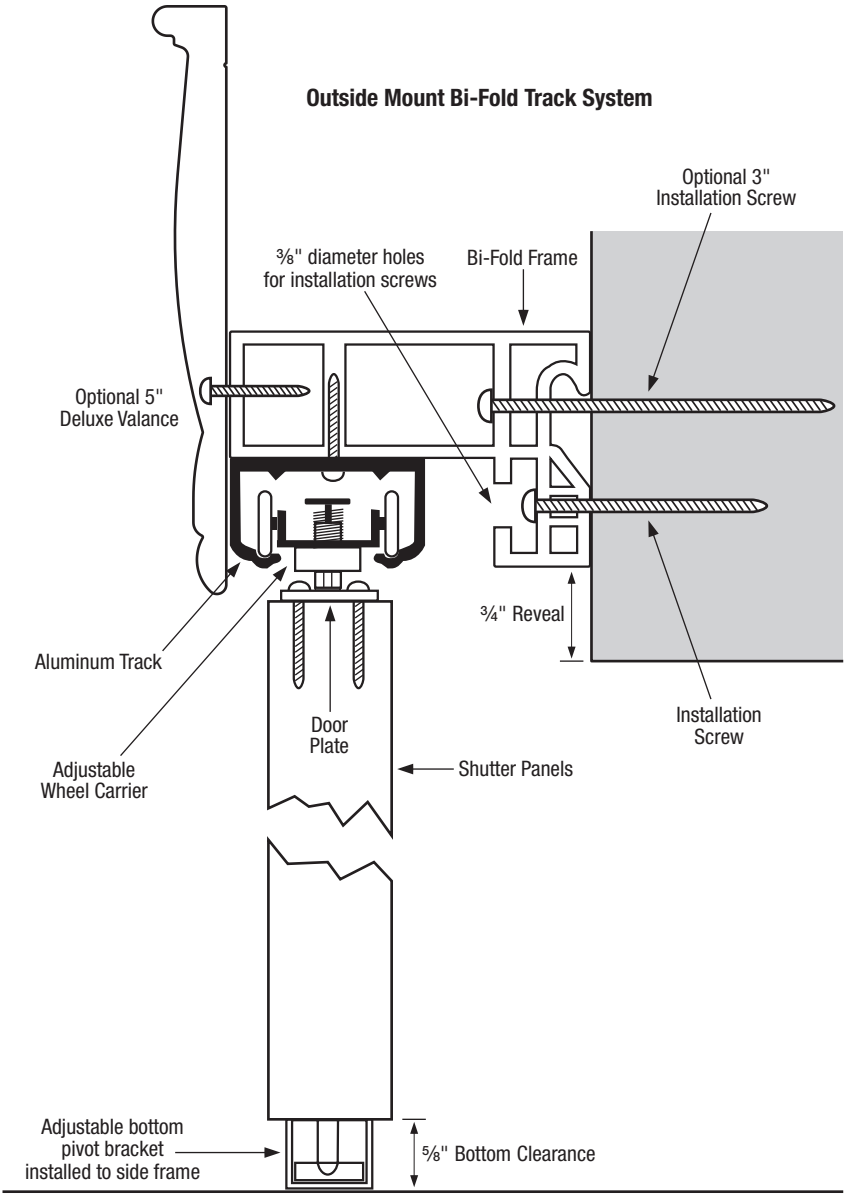

Bottom Pivot

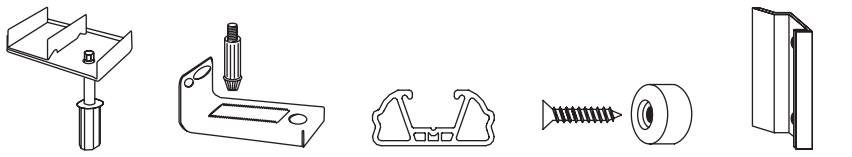

Floor Guide


Stop Bumper


Stile Channel

Outside Mount Bi-Fold Track System

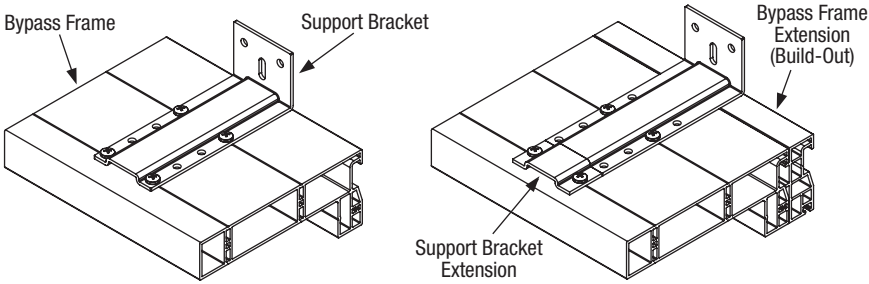




Bypass Track System Installation

Typically, Bypass track systems have three-sided frames; however, they may also be two-sided or four-sided. The basic installation procedure is the same whatever the configuration.

1. During frame assembly (see pages 4 and 5), you should have pre-drilled installation holes through the frame pieces. If you have not, refer to those pages for instructions.
2. **Outside mount only:** Attach support brackets to the top of the frame.
   - ➤ Position the end brackets 1"–2" away from the installation holes on the end of the top frame, with additional brackets spaced between them no more than 32" apart.
   - ➤ Screw the brackets into the frame at the extrusion lines, with the back of the bracket flush with the back of the frame.
   - ➤ Use support bracket extensions if bypass frame extension (build-out) is attached to the frame when greater projection or louver clearance is needed.



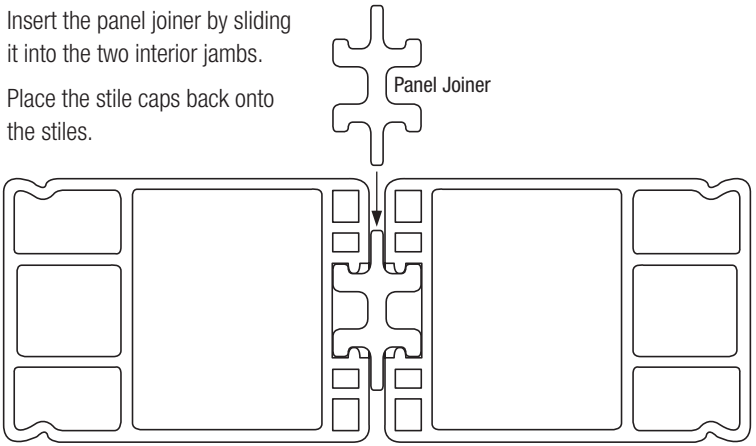
3. Install the assembled frame. For both inside and outside mounts, be sure there is sufficient rear clearance for louver movement.
   - ➤ **Inside mount:** Using the provided screws, fasten the top of the frame to the opening and level. Square the side frames and fasten to the sides of the opening. Use shims as necessary to ensure a level and square installation.
   - ➤ **Outside mount:** Center the frame over the opening.
     - — Attach the top frame first, starting within 3" of the highest corner.
     - — Place a four foot level on the top frame and secure the second fastener in the top frame within 3” of the other corner, ensuring the top frame is level.
     - — Finish attaching the top frame by securing one screw at each stud, 16” to 24” apart, depending on the type of construction.
     - — Square the side frames and fasten to the sides of the opening.
     - — Screw the support brackets to the mounting surface.
4. Insert wheel carriers onto the aluminum tracks (see illustrations on pages 22 or 23).
   - ➤ Insert the proper number of wheel carriers into each track. There are two wheel carriers per panel; check the panel configuration to determine the correct number per track.

5. Mount the tracks to the top frame.

- ➤ Using the provided screws, mount the track through the pre-drilled holes in the track to the extrusion lines on the underside of the frame.

6. Attach double panels if applicable.

- ➤ When two panels are designed to be operated together, lay the panels face up and side-by-side on the floor.
- ➤ Remove the two interior stile caps at the top of the panels.
- ➤ Insert the panel joiner by sliding it into the two interior jambs.
- ➤ Place the stile caps back onto the stiles.



7. Hang the shutter panels.

- ➤ Push the door plates onto the adjustable nut of the wheel carriers.
- ➤ Lock the panels in place by rotating the plastic slide around the neck of the adjustable nut on the carriers.
- ➤ To level the panels, turn the adjustable nut on the wheel carrier using the provided wrench tool.

8. Optional: Install floor guides between each set of moving panels. The guides prevent the panels from swinging forward into the room or back into the opening.

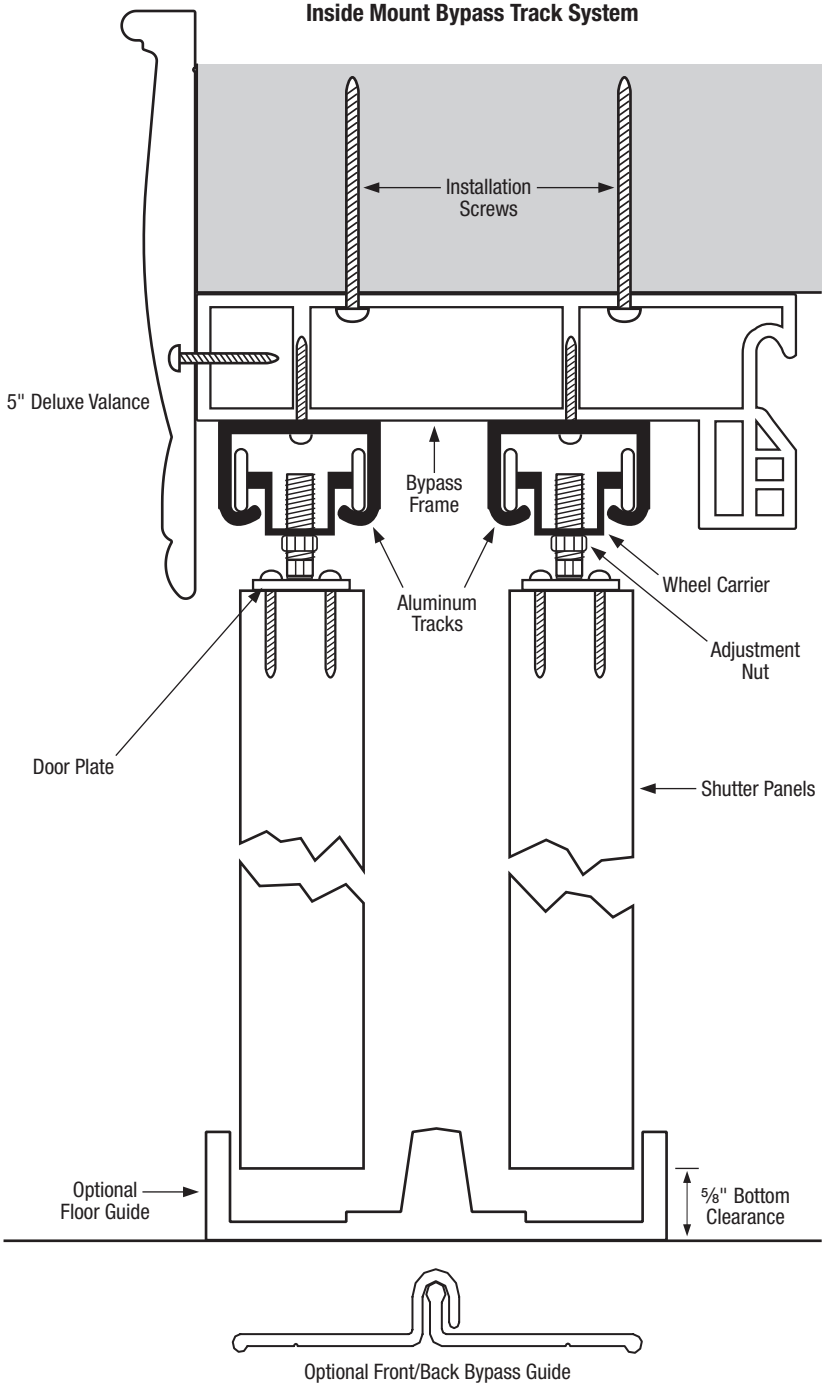
9. Attach the valance, if applicable.

- ➤ Drill ⅜" installation holes **through the first layer of vinyl only**.
- ➤ Space the holes 20" apart.
- ➤ Glue or use double-sided tape to attach the valance returns, if applicable.
- ➤ Attach the valance to the top frame with the screws provided. Alternate valance attachment options include gluing or using double-sided tape.

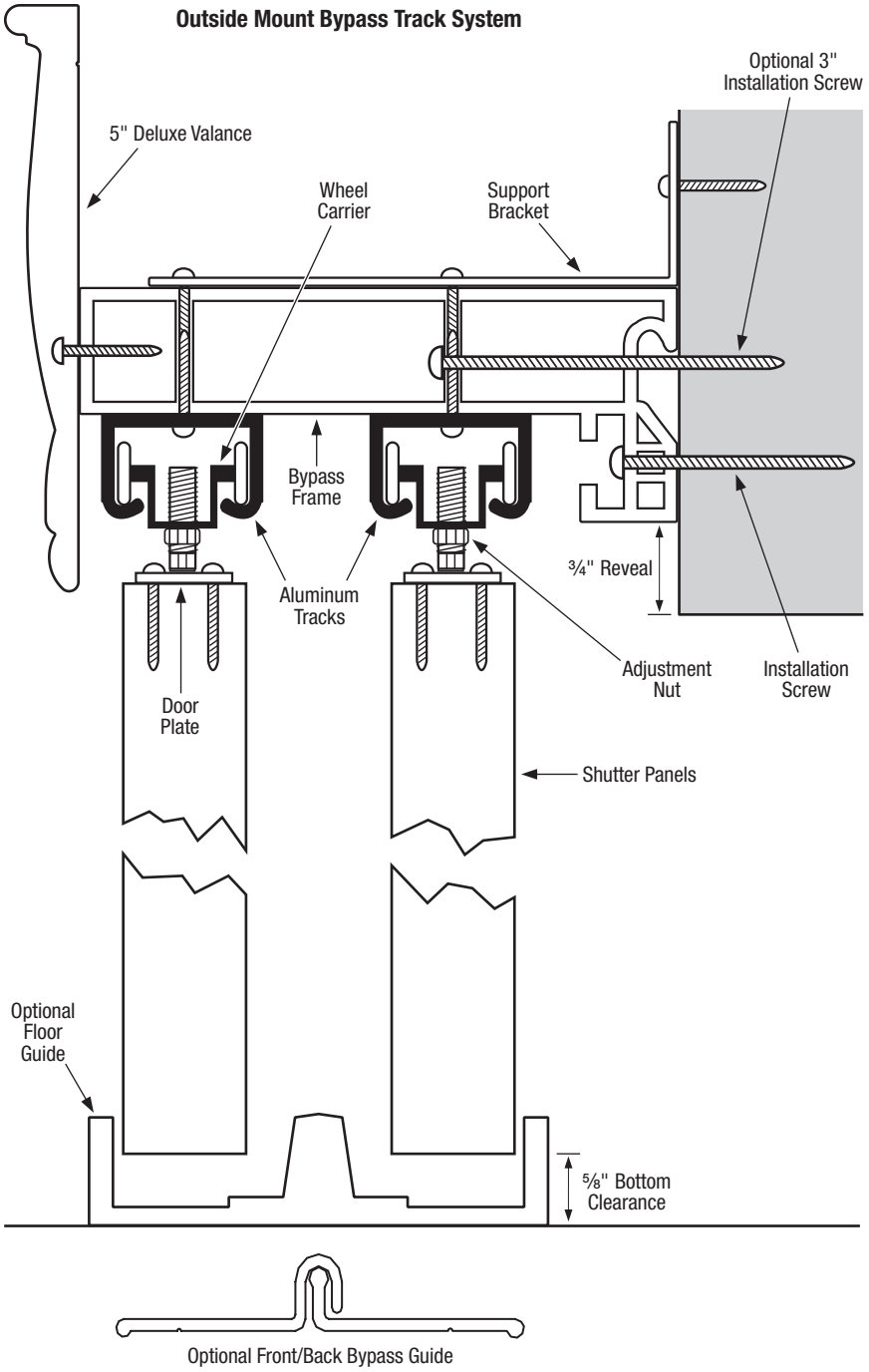
10. Cap all screw holes with the provided button plugs.

11. Perform any necessary finish work (see page 35).

Inside Mount Bypass Track System

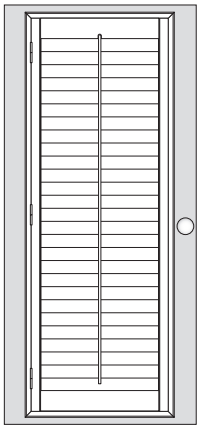


Optional Front/Back Bypass Guide

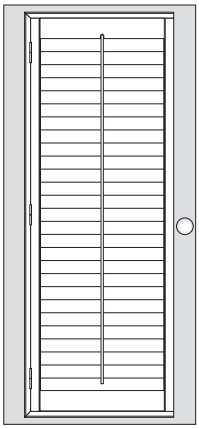

Outside Mount Bypass Track System
Optional 3" Installation Screw
5" Deluxe Valance
Wheel Carrier
Support Bracket
Bypass Frame
¾" Reveal
Aluminum Tracks
Adjustment Nut
Installation Screw
Door Plate
Shutter Panels
Optional Floor Guide
⅝" Bottom Clearance
Optional Front/Back Bypass Guide

French Door Shutter Installation

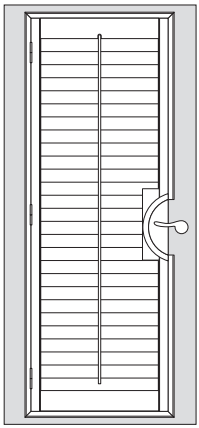
French door shutters are mounted using the L-frame, either 3-sided or 4-sided. Installation procedures for French door cut-outs are the same as those for full panel French door shutters.



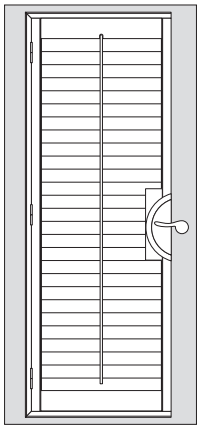
French Door Shutter with 4-Sided Frame



French Door Shutter with 3-Sided Frame



French Door Cut-Out with 4-Sided Frame

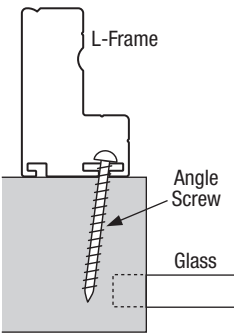


French Door Cut-Out with 3-Sided Frame

1. Place the assembled L-frame over the opening.

- ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
- ➤ The left and right sides of the frame are labeled.

2. Attach the left and right sides of the frame. Insert Robertson screws through the top hole on each side.



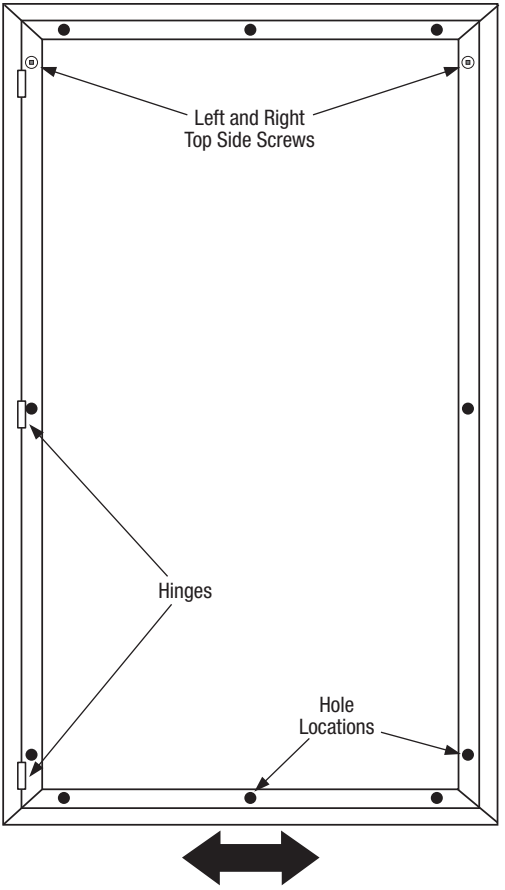
- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Center the frame over the opening, then set the screws into the mounting surface.

  IMPORTANT: Angle the screws to avoid breaking the glass.

  IMPORTANT: With French door cut-outs, make sure the cut-out is centered on the door knob.
- ➤ Tighten the screws snugly, but do not overtighten.

3. Hang the panel and check for squareness.

- ➤ If the panel is not square, rack the shutter by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the Duracatch™ lock system is designed to help level the panel within the frame.



To square the panel, move bottom frame left or right

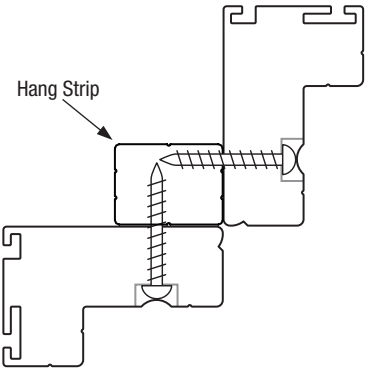
4. When the panel is square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panel is still square and re-adjust if necessary.
5. Insert screws into the remaining holes and check that the panel is still aligned after each screw has been tightened. Re-adjust if necessary.
6. Adjust the Duracatch panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.
7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
8. If necessary, install magnets and plates (see page 31).
9. Perform any necessary finish work (see page 35).

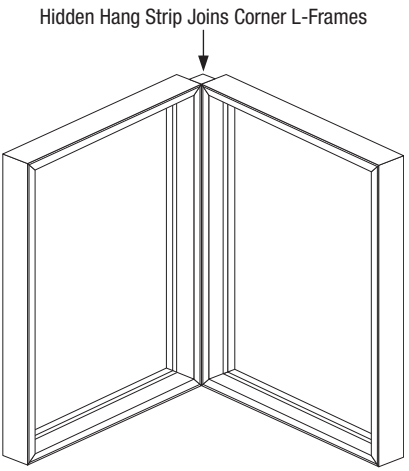
Corner Window Shutter Installation

Corner window shutters are two framed shutters connected together at a 90-degree angle. Before performing a corner window installation, you should be familiar with the framed shutter installation procedures described on pages 8–11.

1. Connect the two assembled frames.

- ➤ Position the provided hang strip flush with the front of the right side of the left frame. Attach it with screws through the frame, on the screw indicator line.
- ➤ Attach the left side of the right frame to the hang strip in a similar fashion.

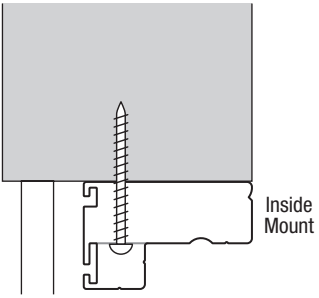


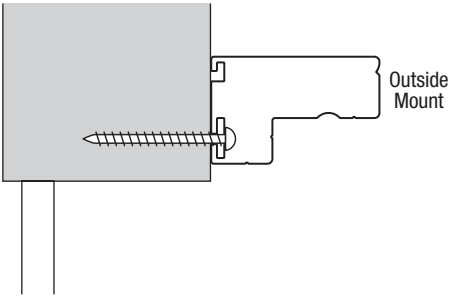


2. Place the connected frames in or over the opening.

3. Attach the inside corners of the left and right frames. Insert Robertson screws through the holes nearest the hang strip on the top and bottom frame pieces.

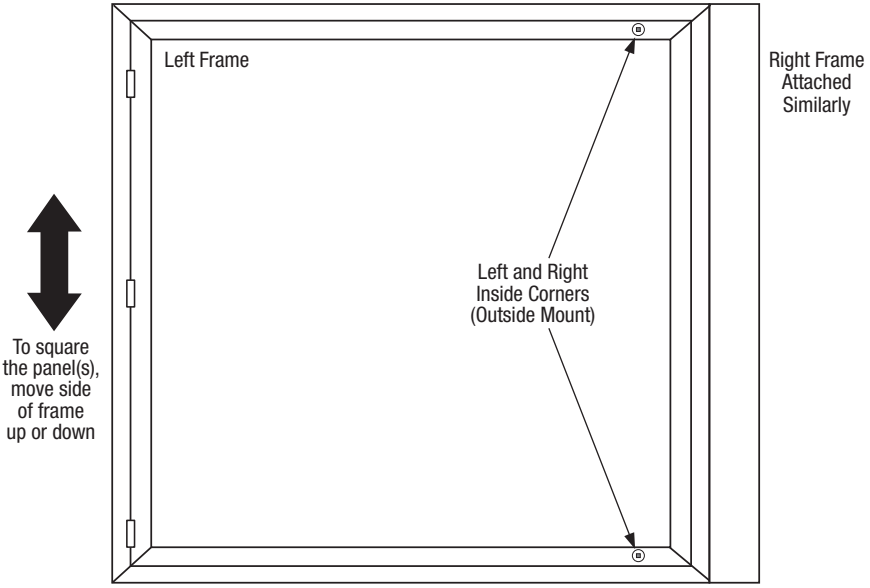
- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Tighten the screws snugly, but do not overtighten.





4. Hang the panel(s) in the left frame and check for proper panel alignment.

- ➤ If the panel(s) are not square or misaligned, rack the shutters by grasping the frame at its outside corners and moving it up and down until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the Duracatch™ lock system is designed to help level the panels within the frame.



5. When the panels are aligned and square within the frame, hold the bottom of the left frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.

6. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.

7. Adjust the Duracatch panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.

8. Once all screws have been installed and the panel(s) checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.

9. Repeat the panel installation and frame attachment procedures for the right frame.

10. If necessary, install magnets and plates (see page 31).

11. Perform any necessary finish work (see page 35).

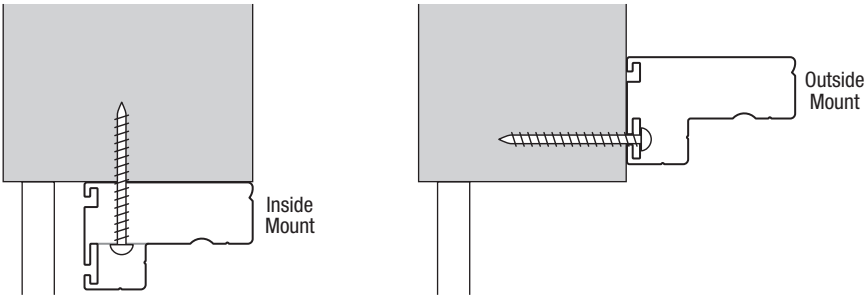
Bay Window Shutter Installation

Bay window shutters are three individually framed shutters (left, middle and right) abutted together in the window. Before performing a bay window installation, you should be familiar with the framed shutter installation procedures described on pages 8 to 11.

1. Place the middle frame in or over the opening.

2. Insert a Robertson screw into the left and right holes in the top of the frame.

➤ Center the frame in or over the opening, then set the screws into the mounting surface. Tighten snugly, but do not overtighten.



3. Hang the panel(s) in the middle frame. Rack the panels and complete frame installation as described on pages 8 to 11.

4. Attach the left frame as you would for a corner installation (see pages 26 and 27) with Robertson screws through the holes nearest the middle frame on the top and bottom frame pieces.

➤ Abut the left frame to the middle frame.

➤ Set the screws into the mounting surface. Tighten snugly, but do not overtighten.

5. Hang the panel(s) in the left frame.

➤ Rack the panels by moving the left side of the left frame up or down.

➤ Complete left frame frame installation, checking squareness and alignment after setting each screw.

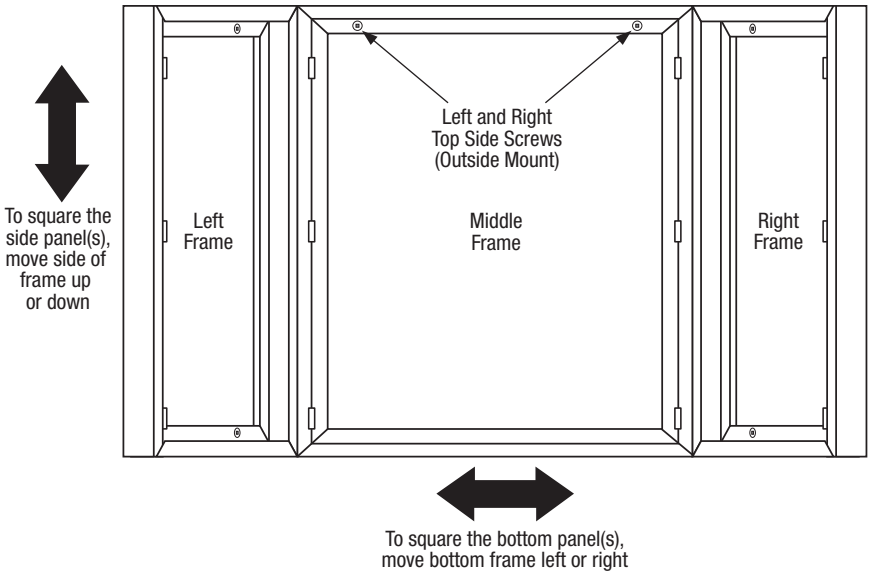
6. Attach the right frame in a similar fashion, with Robertson screws through the holes nearest the middle frame on the top and bottom frame pieces.

➤ Set the screws into the mounting surface. Tighten snugly, but do not overtighten.

7. Hang the panel(s) in the right frame.

➤ Rack the panels by moving the right side of the right frame up or down.

➤ Complete right frame frame installation, checking squareness and alignment after setting each screw.



8. Adjust the Duracatch panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.

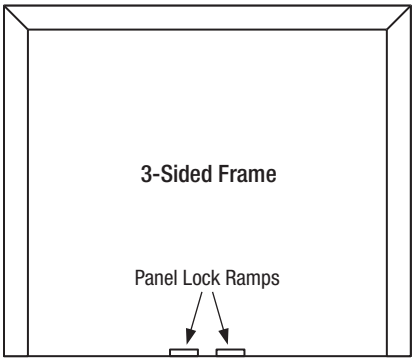
9. Once all screws have been installed and the panel(s) checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.

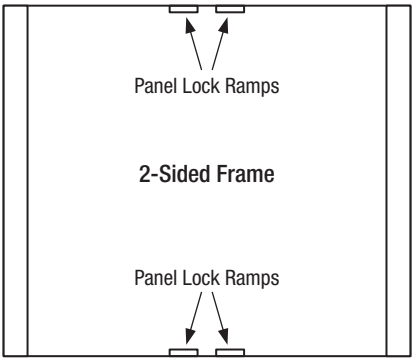
10. If necessary, install magnets and plates (see page 31).

11. Perform any necessary finish work (see page 35).

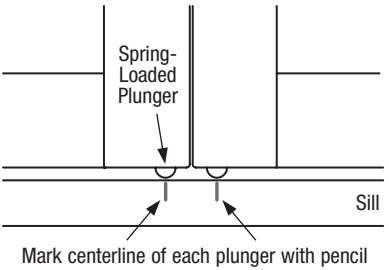
Install Duracatch Panel Lock Ramp(s), If Applicable

The Duracatch™ Panel Lock System with spring-loaded plunger is installed on panels and frames during fabrication. If your panel configuration is a 3-sided frame application, install panel lock ramps on the bottom sill. If a 2-sided frame, install the panel lock ramps on both the top and bottom sills.



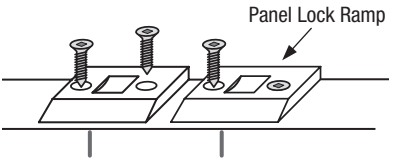


1. With the shutter panel(s) closed, make a pencil mark on the sill to show where the center of each spring-loaded plunger is located.



2. Mark where to drill screw pilot holes.

- ➤ Open the shutter panel(s). Place the panel lock ramp on the sill with the sloped edge facing front.
- ➤ Center the panel lock ramp on the line marking the plunger location.
- ➤ Mark the center of the ramp's screw holes. Repeat for all panel lock ramps.



3. Drill pilot holes for each panel lock ramp using a 3⁄32" drill bit.

4. Attach the panel lock ramps to the sill using the Robertson screws provided.

5. Close the shutter panels to check function and closure.

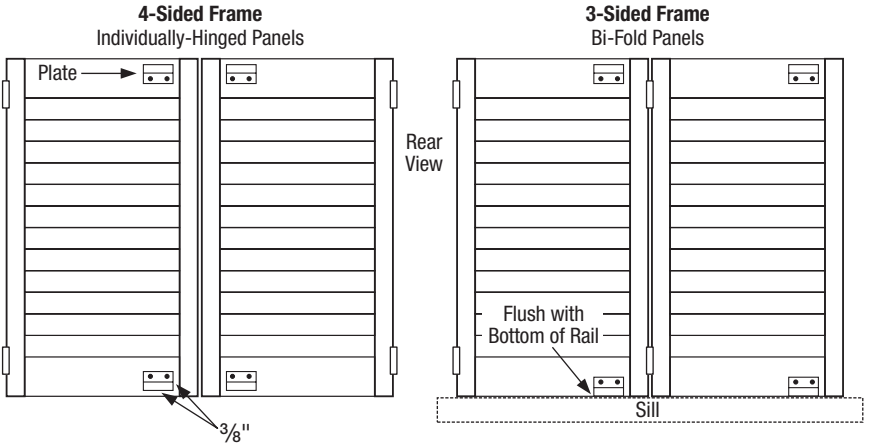
6. The spring-loaded plungers can be adjusted using a flat blade screwdriver.

- ➤ If closure is too tight, push in on the plunger and rotate clockwise to recess the plunger.
- ➤ If closure is too loose, push in and rotate the plunger counterclockwise to extend it.
- ➤ Rotate the plunger in one-half turn increments to maintain alignment with the style cap.

Install Magnets and Plates, If Applicable

If the shutter panels do not have panel locks, you may need to install magnets and plates if they are not already installed.

1. Review the diagrams below. Plates are installed at the top and bottom of all shutter panels. Magnets are installed behind the plates to the frame or sill.



2. Using a pencil, mark the frame (top and bottom) where the stile meets the top and bottom rails, on the side where the shutter closes against the frame.

➤ With three-sided frames, mark the sill at the bottom.

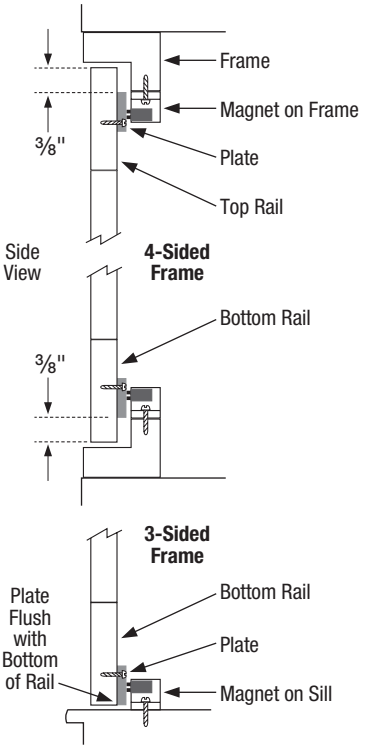
3. Install the magnets to the frame's light block so that the magnets are 3⁄8" in from the mark, toward the center of the shutter panel.

➤ With three-sided frames, install the magnet to the sill 3⁄8" in from the mark. Align the magnet with the frame's light block.

4. Install the plates on the rear of the panels so that they align with the magnets. The corner of the plates should be 3⁄8" in from the stile and the edge of the top or bottom rail.

➤ With three-sided frames, install the bottom plates flush with the edge of the bottom rail.

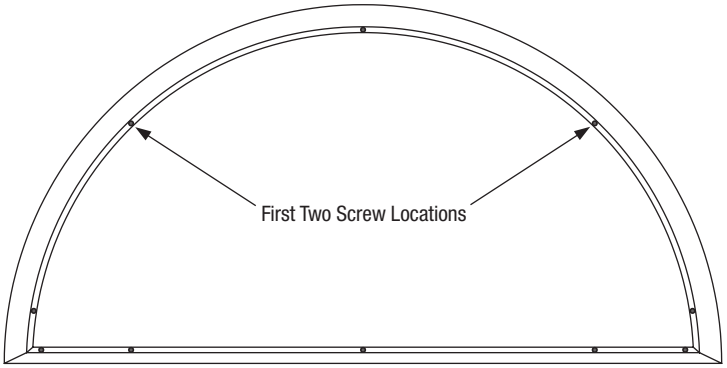
5. Close the shutter panels to check function and closure. Adjust magnet or plate position, if necessary.



Stand-Alone Specialty Shapes Installation

Stand-alone specialty-shaped shutters are installed independently of standard shutters.

1. Place the frame in or over the opening and center. Make sure the bottom frame is level.
2. Attach the frame with two screws through the curved portion of the frame.
   - ➤ Screws should be placed in the top left and top right of the curve as illustrated below.
   - ➤ Do not overtighten the screws — doing so could distort the shape.

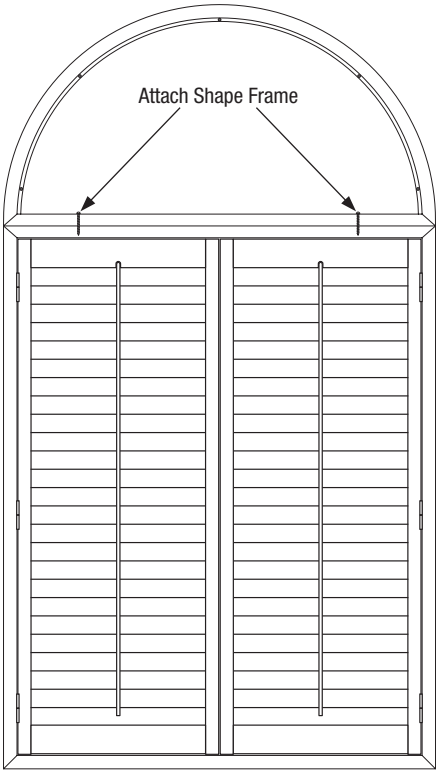


3. Place the specialty-shaped shutter into the frame. Spring-loaded plungers on the bottom of the shape snap into grooves on the frame, and a magnet at the top center holds the shape in place.
4. Move the bottom of the frame left or right to create the proper gaps around the shape.
   - ➤ Mark the bottom frame location where the proper gaps are created.
   - ➤ Remove the shape from the frame.
5. Move the bottom frame to align it with the mark, and screw through the middle of the bottom frame to hold it in the correct position.
6. Place the shape back into the frame and double-check that it fits properly.
7. Remove the shape from the frame and set all remaining screws, being careful not to overtighten.
8. Place the shape into the frame. Adjust plunger depth if necessary to provide a good fit in the frame.
   - ➤ If fit is too tight, push in on the plunger and rotate clockwise to recess the plunger.
   - ➤ If fit is too loose, push in and rotate the plunger counterclockwise to extend it.
9. Cap all screw holes with the provided button plugs and perform any necessary finish work (see page 35).

Specialty Shapes with Shutter Installation

When a specialty shape is over a standard shutter, the bottom of the shape's frame is attached to the top of the standard shutter's frame. The standard shutter is always installed before the specialty shape.

1. Place the frame in or over the opening. Align the bottom frame of the shape with the top frame of the standard shutter.
2. Set two installation screws through the bottom frame of the shape into the top frame of the standard shutter. Do not overtighten the screws.
3. Place the specialty-shaped shutter into the frame. Spring-loaded plungers on the bottom and top of the shape snap into grooves on the frame.
4. Move the top of the shape's frame left or right to create the proper gaps around the shape.
   - ➤ Mark the top frame location where the proper gaps are created.
   - ➤ Remove the shape from the frame.
5. Move the top of the frame to align it with the mark, and screw through the top center to hold the frame in the correct position.
6. Place the shape back into the frame and double-check that it fits properly.
7. Remove the shape from the frame and set all remaining screws; do not overtighten.

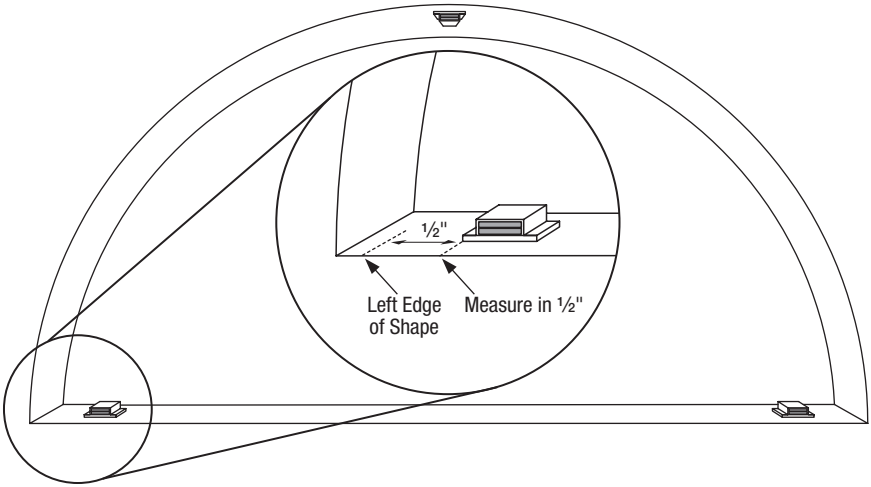


8. Place the shape into the frame. Adjust plunger depth if necessary to provide a good fit in the frame.
   - ➤ If fit is too tight, push in on the plunger and rotate clockwise to recess the plunger.
   - ➤ If fit is too loose, push in and rotate the plunger counterclockwise to extend it.
9. Cap all screw holes with the provided button plugs and perform any necessary finish work (see page 35).

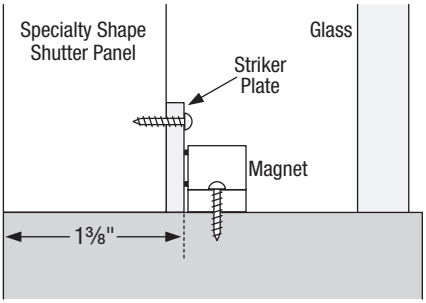
Unframed Specialty Shapes Installation

Unframed shutters are always inside mounted and attached with magnets.

1. Place the shape in the opening and center it.
2. Mark the position of the left and right edges of the shape on the bottom of the opening.
3. Measure in from each mark ½", and make another mark. The second marks indicate where the outside edges of the magnets will be installed.



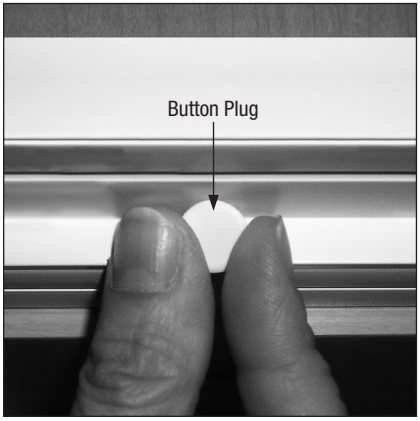
4. At the second set of marks, measure and mark 1⅜" back from the front edge of the opening. The front of the magnet will be located here.

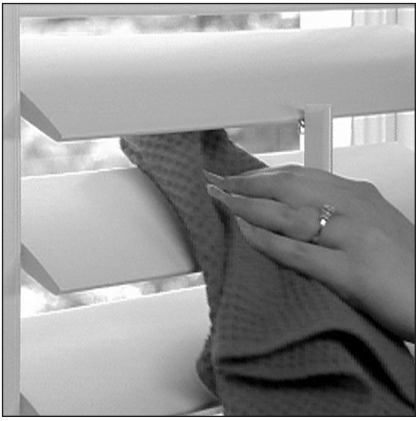


   - ➤ If the magnet will be behind a vertical support on the shape, position it 1¼" from the front edge of the opening.
   - ➤ Measure for magnet position at the top center of the shape in the same way.
   - ➤ If more than three magnets are provided, space them evenly in the opening.
5. Attach all magnets to the opening using the supplied magnet screws.
6. Attach striker plates to the shape so that they will align with the magnets when the shape is installed.
7. Install the unframed specialty shape and center from side to side.
   - ➤ Check that each magnet makes good contact with the striker plates.
   - ➤ Make any necessary adjustments to magnets that do not hold securely.
8. Perform any necessary finish work (see page 35).

Perform Any Necessary Finish Work

- If you have not done so already, cap all screw holes with the provided button plugs.
- If you have not done so already, on inside-mounted L-frame applications glue L-frame cover strips to the front of the L-frame to fill gaps between the frame and window jamb.
- Apply sealant as needed to fill gaps between frames and window jambs or between mitered corners.





- Wash any dirt or grease from the shutter using a clean cloth and mild detergent solution. Never use ammonia-based products.
- Invite the home owner to inspect the installation. Give the home owner the Hunter Douglas warranty card. Demonstrate proper operation of the shutters and show the customer the location of their individual authenticity plate serial number.



Operation

- Tilt the louvers by grasping one louver and moving it. **Do not** use the tilt bar to tilt the louvers.
- Open the shutter panel by grasping the stile through open louvers and pulling out. **Do not** use the tilt bar to open the shutter panel.

Care

- Clean using a dry and soft feather duster, clean cloth, dust cloth or dusting mitt. A vacuum with the soft brush attachment can also be used.
- Palm Beach™ polysatin shutters may be washed using a mild detergent solution. Never use ammonia-based products.
- Ultrasonic cleaning or use of chemical solvents and scrubbing cleansers are not recommended. This will damage the product.
- When cleaning any window, spray glass cleaner on a cloth rather than spraying directly on the window.

Unique Features of Palm Beach Polysatin Shutters

- ➤ Duracatch™ panel lock system eliminates the need for magnets.
- ➤ Duralink™ cufflink connectors securely attach the louvers to the tilt bar.
- ➤ Duratension™ creates the necessary tension in the louvers for effortless operation.
- ➤ The Palmetto™ system offers traditional shutter look and function with a tilt bar.
- ➤ The Lantana™ system offers smooth louver operation with its hidden gear system. No tilt bar is needed, resulting in a very clean look.

Problem: Panels Won't Stay Closed

- **Check the Duracatch™ panel lock.** Check to ensure that the panel lock plunger is seated properly in the panel lock ramp. Possible problems include:
  - ➤ The panel lock plunger is too far inside the panel. Adjust the plunger as described in step 6 on page 30.
  - ➤ The plunger does not sit in the "dip" in the panel lock ramp. Reposition the ramp, if necessary. Refer to steps 1 through 5 on page 30.
  - ➤ Check plunger and stile cap alignment. The plunger is designed to lock into grooves on the stile cap to prevent unwanted rotation. If they are not aligned, the plunger will remain inside the cap. To adjust, use a flat blade screwdriver to rotate the plunger until it is properly aligned and able to extend beyond the stile cap.
- **Check the number of magnets.** If magnets are used for closure, check that there are two per panel, one at the top and one at the bottom. Refer to the magnet installation section on page 31. (Note: Café style shutters use only one magnet.)
- **Check magnet contact.** If magnets are used for closure, check that the magnets and magnet plates have full contact with each other. Possible problems include:
  - ➤ The magnet and plate are not aligned. The magnet or magnet plate may need to be moved to achieve proper alignment. Refer to the magnet installation section on page 31.
  - ➤ The magnet is at a slight angle, with only one side of the magnet touching the plate. Loosen one of the screws on the magnet to allow it to be straightened so that it makes full contact with the plate.
  - ➤ The magnet plate is not flush with the panel, so that only one side touches the magnet. Adjust the screws so that the magnet plate becomes flush with the panel.
- **Check panel load.** Load is created when the installation is not square. This places load on the stile, which can force the panel to open with a spring-back effect. If the load is excessive, the louvers may be difficult to close, as well. Possible solutions include:
  - ➤ If load is detected with framed applications, tighten or loosen the installation screws on the frame. (Do not use shims.) Start by removing all the installation screws except for the top. Re-install the bottom installation screw until there is no load. Continue with all other installation screws, one at a time, checking for load after each one.
  - ➤ If there is load on a bi-fold panel, remove the second bi-fold panel and resolve the problem with the first hinged panel as described above. Then re-attach the second panel and check that the problem has been resolved.
  - ➤ If load is detected with unframed applications, shim the hinges to square the panels. Remove all hinge pins except for the top and bottom. Shim those hinges as needed until the problem is resolved. Continue with the other hinges, one at a time, checking for load after each one.

Problem: Panels Won't Stay Closed (continued)

- **Check for obstructions that prevent panels from closing.** Possible problems include:
  - ➤ Window cranks can prevent panels from closing. Take the crank off the rotator and see if the panel is still obstructed. If the panel closes, replacing the window crank with a T-crank can often solve the problem. Otherwise, build-out may be required to add clearance. For panels without a frame, an extension hinge may be used to bring the panel into the room an extra ⅝".
  - ➤ Window locks are other possible obstructions. Add clearance as described above.
  - ➤ Patio door handles can prevent louvers from opening. If a handle stops a panel from closing, the shutter must be built-out.
  - ➤ Bowed sills or casements can prevent inside-mounted shutter panels from closing if the narrowest height and width measurements were not ordered. Double-check the inside measurements and compare them with the measurements ordered and received.
- **Check for a twisted panel.** Panels can sometimes be twisted by weight leaned against it or by extreme heat. Fortunately, the polysatin material can be "tweaked" back to its original shape with gentle force. To do this, use your hand to support the middle of the panel's outside stile and bend the top or bottom back into position until the panel remains closed.

Problem: Panels Are Too Tight

- **Check that the frame is installed properly.** If the frame is not installed correctly, it may cause the inside opening of the frame to be too narrow at a specific point, causing the panels to be too tight. To check if the installation screws have been tightened the correct amount, measure the top or bottom width and compare it to the width where the panel appears to be too wide. Adjust the installation screws to square the frame.
- **Check that the panel is in the correct opening.** When multiple windows are of similar size, panels can sometimes be placed into the wrong opening or with the incorrect panel grouping. Check the labels and order form instructions to ensure that the panels are in the correct opening and with the correct panel group.
- **Check that the panel width is correct.** To determine a manufacturing or ordering error, check the measurement of the panel versus the measurement on the label. If the label measurements are correct, then measure the inside width of the opening in three locations to verify the correct width was ordered. If a panel is made or ordered too wide, it can possibly be cut down.
- **Check that the frame width is correct.** If the frame is manufactured too small, the panels will be too tight. Measure the back installation part of the frame and check it against the ordered width, taking into account the fabricator deductions.

Problem: Panels Are "Sagging"

- **Check the squareness of the installation.** If the stiles are not square, the panels can appear to be sagging.
  - ➤ Measure the top and bottom frame widths. If there is any variation, make the top and bottom widths the same by adjusting the installation screws or, in extreme cases, shimming the frame.
  - ➤ If the top and bottom frame widths are the same, check the two diagonal measurements. If uneven, the frame is out of square. Adjust it as described above.

Problem: Louvers Are Too Tight

- **Check for overtightening between the stiles and rails.** If there is less play near any rail and the rail and louver widths have been checked, there is a possibility the screws attaching the stiles to the rails have been overtightened. To loosen the screws, carefully remove a stile cap and slide out the light block. This will expose the assembly holes. Use a #8 Robertson drill bit to release the tightness.
- **Check panel load.** Review the procedures at the bottom of page 37.
- **Check louver widths.** There should be some play between louvers and stiles. Move the louvers side to side. If there are some louvers that appear to be tighter, measure and compare the widths of the louvers. If they are not the same, then there may be a fabrication error requiring the louvers to be replaced or cut down.
- **Check rail widths.** Measure all horizontal rails, including divider rails, to ensure that all are exactly the same width.

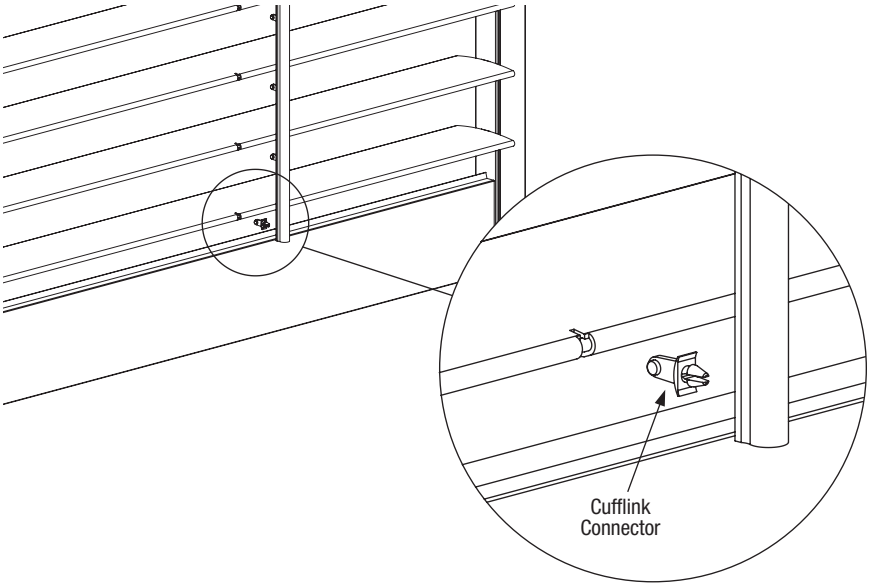
Problem: Louvers Are Warped

- **Check tolerances.** This problem presents itself as variations in light penetration or light leakage when the louvers are closed. There are two possible causes:
  - ➤ Panels with louvers over 20" wide come with aluminum reinforcement to prevent sag. The polysatin material can be tweaked back to its original shape with gentle force.
  - ➤ The louver holes in the stile have a tolerance of 0.01". While this may not seem to be much, it may cause slight variations in light penetration when the louvers are closed — the louvers overlap slightly differently in different locations. This is a normal, inherent characteristic and not a defect.
  - ➤ The natural effects of gravity and heat can cause slight variations in level, especially on wider panels. However, the product should never have a level variation exceeding 1/16".

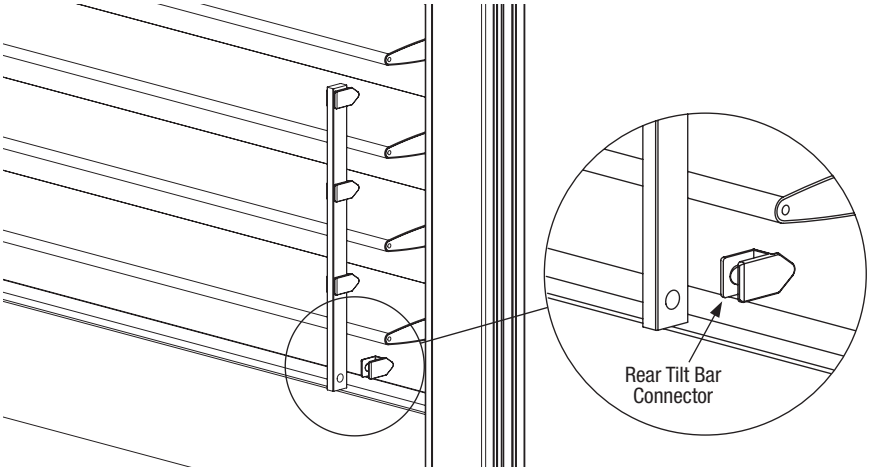
Problem: Louvers Are Not Working Properly

- **Check panel load.** Review the procedures at the bottom of page 37.
- **Check connectors.** With Palmetto™ shutters, connectors attach the louvers to the tilt bar.
  - ➤ Duralink™ cufflink connectors attach the louvers to the tilt bar at the front of the panel. Check that the connectors are securely attached and not bent. Snap them back into place if they are detached. If the connectors easily separate from the louvers, they could be defective and should be replaced (see bottom of this page).

    IMPORTANT: To ensure the long life of shutters, the front tilt bar should not be used to open the panel or tilt the louvers.
  - ➤ With rear tilt bars, rear connectors attach the louvers to the tilt bar at the back of the panel. Check that the connectors are securely attached and not bent. If the connectors easily separate from the tilt bar or louvers, they could be defective and should be replaced by detaching the tilt bar (see top of page 41).
- **Replace Duralink cufflink connectors (front tilt).** Follow this procedure:
  1. Pull the tilt bar from the louvers. Start at the top and "unzip" the tilt bar.
  2. Remove the broken connector(s).
  3. Replace the broken connector(s). Snap the new connector(s) into the notch on the tilt bar.
  4. Replace the tilt bar. Insert the connectors into the louvers by holding the louvers in place and firmly pressing the connector into the notch on the louver.



- **Replace rear tilt bar connectors.** Follow this procedure:
  1. Remove the broken connector(s).
  2. Snap the new connector(s) into the rear tilt bar.
  3. After all the broken connectors have been replaced, connect the tilt bar to the louvers by snapping the connectors back onto the ends of the louvers.



Problem: Shutter Is Discoloring

- **Check for residue build-up.** The polysatin material has UV stabilizers to prevent discoloring. Any situation of discoloration is a direct result of residue from a cleaner or natural build-up (smoke, dust or oil furnace). Clean the shutter with soap and water. Never use ammonia-based products.

Problem: Shutter Is Scratched

- **Check for pull lines.** Pull lines are an inherent by-product of the extrusion process. Polysatin pellets are softened to be able to be pulled through the extrusion machinery. Pull lines are not considered defects.
- **Check for shine lines.** Shine lines are another inherent by-product of the extrusion process. While the softened polysatin pellets are being pulled through the machinery, some of the pellets create a different sheen. These shine lines can run in any direction and are not possible to control. Shine lines are not considered defects.
- **Check for surface inconsistencies.** To determine if the apparent scratch is a pull/shine line or scratch, simply run your finger over the area. In most cases, touch will determine whether the “scratch” is a defect or inherent characteristic.

LIFETIME GUARANTEE

The Hunter Douglas® Lifetime Guarantee is an expression of our desire to provide a thoroughly satisfying experience when selecting, purchasing and living with your window fashion products. If you are not thoroughly satisfied, simply contact Hunter Douglas at (888) 501-8364 or visit hunterdouglas.com. In support of this policy of consumer satisfaction, we offer our Lifetime Limited Warranty as described below.

COVERED

BY A LIFETIME LIMITED WARRANTY

- Hunter Douglas window fashion products are covered for defects in materials, workmanship or failure to operate for as long as the original retail purchaser owns the product (unless shorter periods are provided below).
- All internal mechanisms.
- Components and brackets.
- Fabric delamination.
- Operational cords for a full 7 years from the date of purchase.
- Repairs and/or replacements will be made with like or similar parts or products.
- Hunter Douglas motorization components are covered for 5 years from the date of purchase.

NOT COVERED

BY A LIFETIME LIMITED WARRANTY

- Any conditions caused by normal wear and tear.
- Abuse, accidents, misuse or alterations to the product.
- Exposure to the elements (sun damage, wind, water/moisture) and discoloration or fading over time.
- Failure to follow our instructions with respect to measurement, proper installation, cleaning or maintenance.
- Shipping charges, cost of removal and reinstallation.

Hunter Douglas (or its licensed fabricator/distributor) will repair or replace the window fashion product or components found to be defective.

TO OBTAIN WARRANTY SERVICE

1. Contact your original dealer (place of purchase) for warranty assistance.
2. Visit hunterdouglas.com for additional warranty information, frequently asked questions and access to service locations.
3. Contact Hunter Douglas at (888) 501-8364 for technical support, certain parts free of charge, for assistance in obtaining warranty service or for further explanation of our warranty.

NOTE: In no event shall Hunter Douglas or its licensed fabricators/distributors be liable or responsible for incidental or consequential damages or for any other indirect damage, loss, cost or expense. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Different warranty periods and terms apply for commercial products and applications.

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