shademate®

Polysatin Shutter

Installation & Operating Instructions

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shade-o-matic®

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Thank-you for purchasing Shade-O-Matic Polysatin shutters. With proper installation, operation and care, your new shutters will provide years of beauty and performance. Please thoroughly review this instruction booklet before beginning the installation.

Getting Started

Installation Overview

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

Whichever configuration was chosen, installation procedures are basically the same for most shutters. 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. Sigma 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, corner keys, screws, etc.

Tools Needed

- Variable speed drill (3/8") with 3/32" and 3/8" drill bits
- 3" Robertson #6 and #8 bits, #1 and #2 head
- Flat blade, Phillips, and Robertson #1 and #2 screwdrivers
- Scissors, exacto knife, caulking gun
- 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 Linear frame only)
- Measuring tape
- Level
- Rubber mallet

Frame Assembly

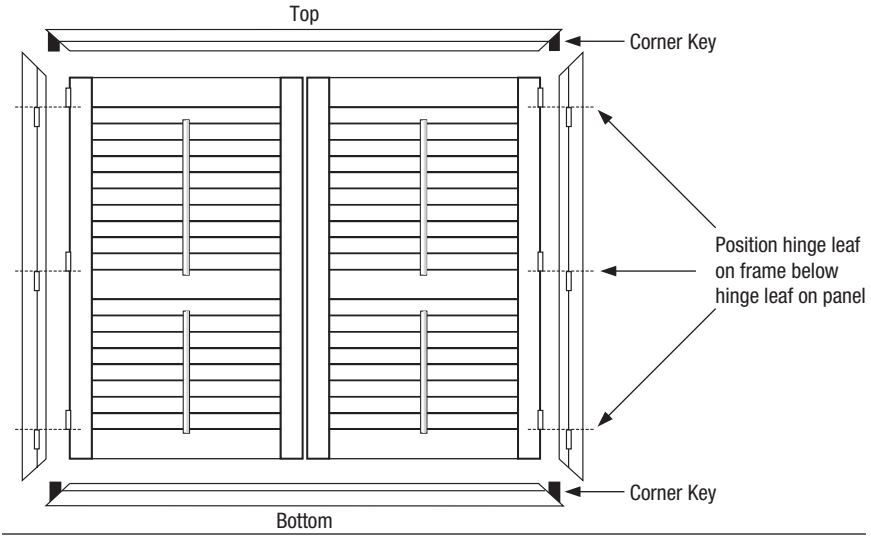
Panel Systems Frame Assembly

Place the canvas drop cloth on the floor and then put the shutter panels face up as they will appear in the window.

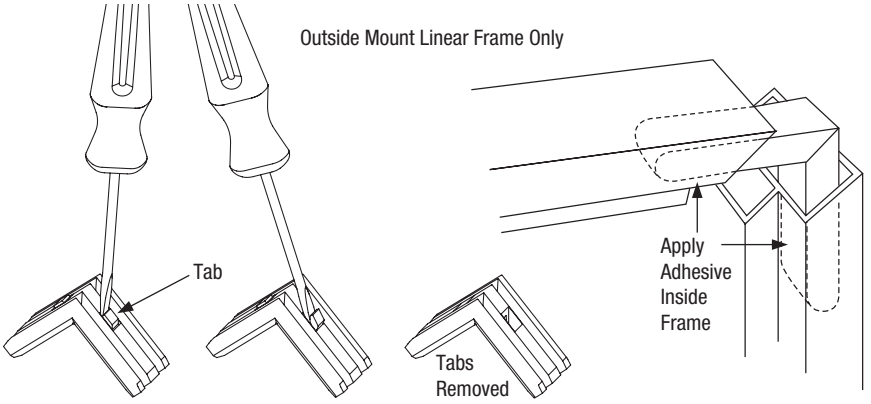
Lay the side frames beside the panels, so that the panel hinges are above the frame hinges.

1. If one or more t-posts are used, lay them in the proper position, as well.

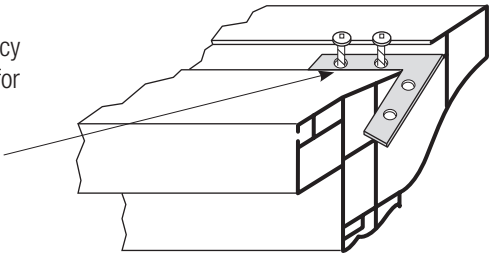
2. Insert the plastic corner keys into the ends of the top and bottom frames.



IMPORTANT: With outside mount linear 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 screwdriver (See below). 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.)

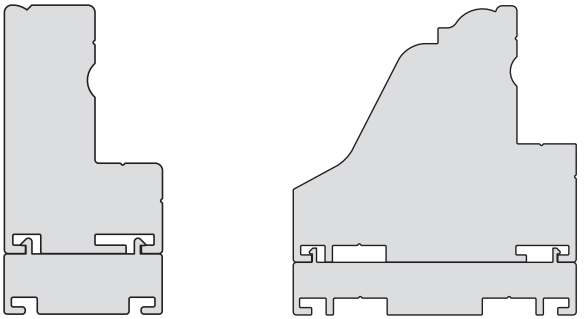


Styling Frame, Crown Frame and Regency Frame there are metal corner brackets for a more secure corner assembly. Do not glue the metal bracket, use the screws provided.



Linear and Styling Frame with Extension and T-Post

Extensions pieces for the styling frame and the linear frame snap into the back of the frame. For additional support, please screw the buildout into the back of the styling frame.

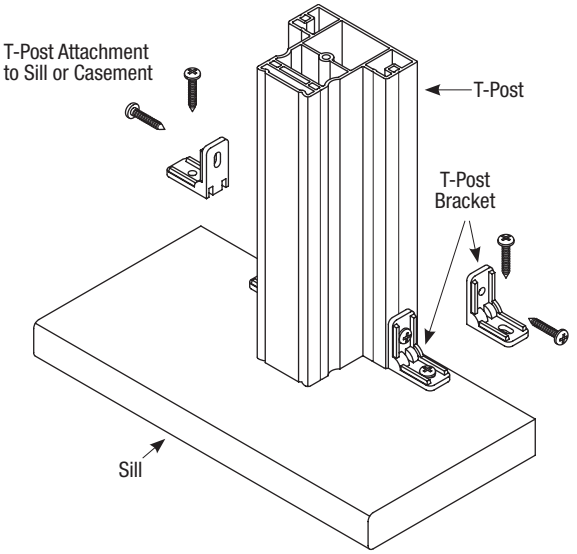


Please note: T-post attachment begins PRIOR to the bottom frame being installed.

T-Post with L-Brackets

With 3 sided frames or 2 sided frames or no frame applications, a T-Post with L-bracket is used to attach the t-post to the sill or casement after the frame is installed. Attach the brackets to the sill using the slotted hole on the bracket to allow for side-to-side adjustment.

Please Note: It is important to make sure that the T-Post is square prior to installing.

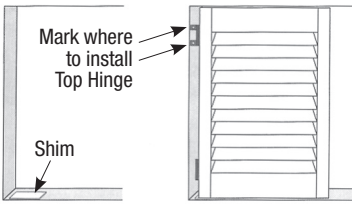


Inside Mount No Frame

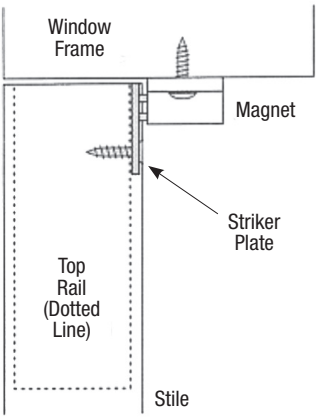
Unframed shutters are always inside mounted.

To install unframed shutters, the hinges attached to the shutter panel(s) are screwed to the inside of the window frame. The shutter panel(s) should be flush with the front of the frame, with the barrel of the hinges just outside the frame.

Install the Shutter Panels



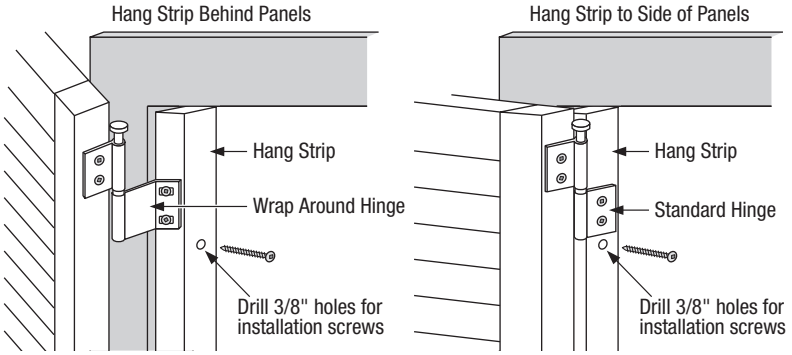
- Place a 1/8" shim in the bottom of the window frame on the side where the shutter hinges will be located.
- With the top hinge open, position the shutter panel in the window on top of the shim. Mark where to attach the top hinge (see illustration).
- Attach the top hinge to the inside of the frame. The barrel of the hinge must be outside the frame to allow the shutter panel to open and close properly.
- Open the bottom hinge and attach it to the frame. If the panel has more than two hinges, do not attach them until after aligning the panel(s).
- If the window has more than one panel, repeat the procedure to attach its top and bottom hinges to the other side of the window frame.
- Close the panels and check their alignment. To adjust the panels, shim the top of bottom hinge to pivot the panel slightly.
- After aligning the panels, attach any remaining hinges to the window frame.
- Install shutter magnets according to the procedures outlined in the *"Magnet Attachment"* section. Attach striker plates flush with the edges of the top and bottom rails, and then attach the magnets to the window frame so that they contact the striker plates when the shutter panel is closed.



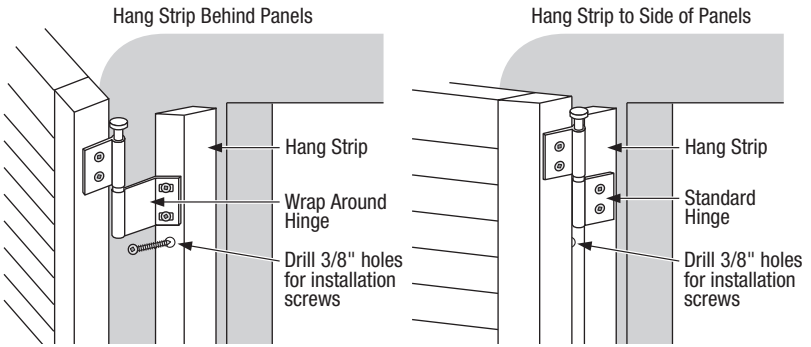
Inside and Outside Mount with Hang Strip

- Hang strip installations are two-sided.
- Drill 3/8” 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. 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 flat screw into the top and bottom holes only, then set the screws into the mounting surface.
- Tighten the screws snugly, but do not overtighten.
- Hang the panels and make sure the panels are square and aligned. If necessary, adjust the wrap around hinges by loosening the hinge screws and moving the hinge left or right.

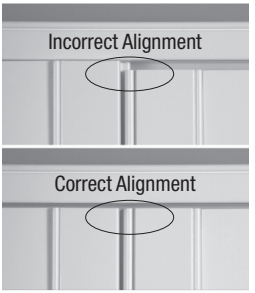
Inside Mount



Outside Mount



- Re-tighten the hinge screws once the panels are square and aligned.
- Insert screws into the remaining holes and check that the panels are still level after each screw has been tightened.
- Re-adjust if necessary.
- Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins.
- Cap all screw holes with the provided button plugs.



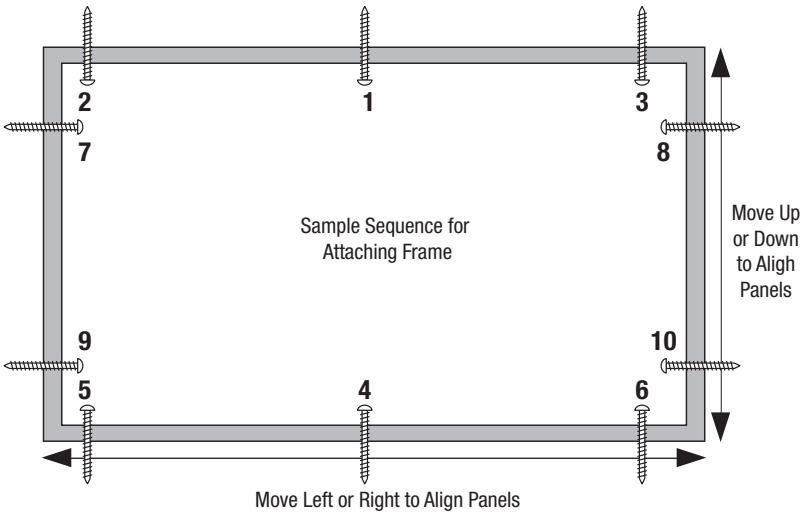
Inside Mount Designer Z Frame, Regency Frame, Crown Frame, and Linear Frame

1. The top part of the frame is indicated by a greater amount of distance from the top of the hinge to the edge of the frame. The label on the frame will indicate left and right side.

2. Centre the frame in the opening and insert a screw in both the left and right side top frame. Then drill the screws into the window jambs.

Please Note: Tighten the screws snugly, however 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. With the hinges applied to the panels and the frames, place the panels in the frame and insert the hinge pins at the top and bottom hinges only.



4. Rack the panels by moving the bottom frame left or right until the panels are level. If this does not work then move the left and/or right frame up or down until the panels are level.

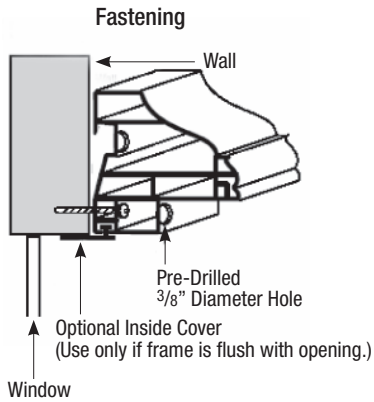
5. When the panels are level within the frame, hold bottom frame in position and place a screw in the middle bottom frame.

6. Insert screws in remaining holes and check to ensure panels are level after every screw has been drilled into position.

Outside Mount with Styling Frame

See *Frame Assembly Section* for details.

- An optional inside cover is available with the Styling Frame. Slide this in the groove on the inside of the frame prior to frame assembly.
- Make sure the frame has been properly assembled and is right side up. Labels that identify each frame piece are located on the back side.
- Insert a screw in both the left and right top side frame holes. Secure the left screw first.
- Make sure the frame is level and then secure the screw on the right.
- Set panel(s) in the frame and insert the hinge pins of the top and bottom hinges only.
- Move bottom frame left or right until the panels are level. If this does not work then.
- Move left frame up or down until the panels are level. If this does not work then.
- Move right frame up or down until the panels are level.
- When the panels are level within the frame, hold bottom frame in position and place a screw in the middle bottom frame hole.
- If minor support or leveling is required, turn adjustable stile cap at the bottom of the stile to the required spot.
- Insert screws in the remaining holes and check to insure panels are level after every screw has been screwed into position.
- Once all screws have been installed and panels checked for levelness, cap all the holes with the provided button plugs.
- For gaps that may occur at frame corners or around frame, apply some Dap.

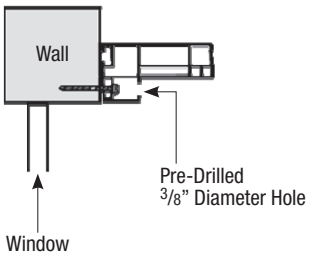


Outside Mount with Linear Frame

See *Frame Assembly Section* for details.

- Make sure the frame has been properly assembled and is right side up. Labels that identify each frame piece are located on the back side.
- Insert a screw in both the left and right top side frame holes as level as possible.
- Set panel(s) in the frame and insert the hinge pins of the top and bottom hinges only.
- Move bottom frame left or right until the panels are level. If this does not work then.
- Move left frame up or down until the panels are level. If this does not work then.
- Move right frame up or down until the panels are level.
- When panels are level within the frame, hold bottom frame in position and place a screw in the middle bottom frame hole.
- If minor support or leveling is required, turn adjustable stile cap at the bottom of the stile to the required spot.
- Insert screws in the remaining holes and check to ensure panels are level after every screw has been screwed into position.
- See *Magnet & Catch Placement* section for details.
- Once all screws have been installed and panels checked for levelness, cap all holes with the provided button plugs.
- For gaps that may occur at frame corners or around the frame, apply some Dap.

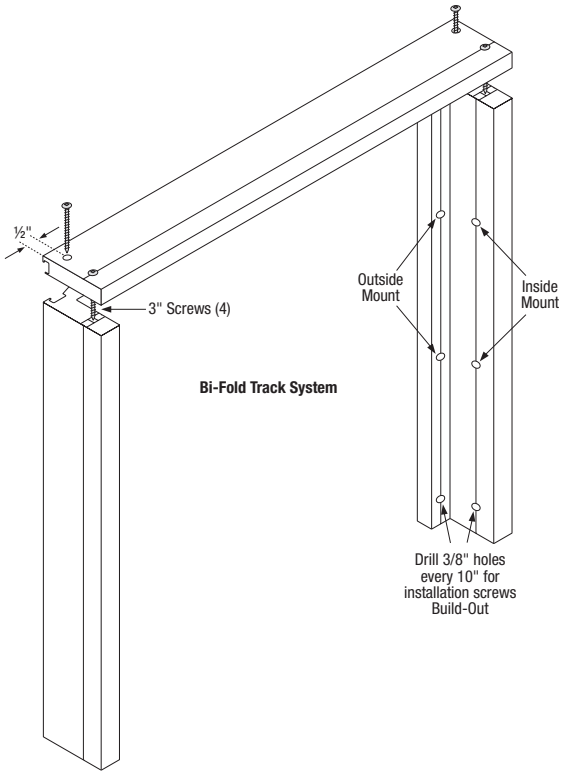
Outside Mount (with L frame) Fastening



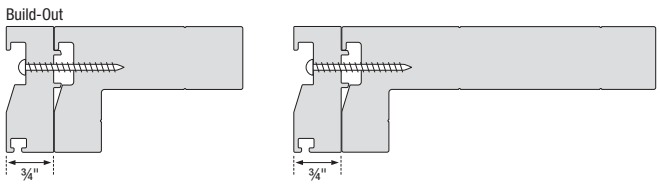
Bi-Fold and Bi-Pass Tracking System
Frame Assembly

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

- Drill 3/8” 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 stop for outside mounts and through the side of the frame for inside mounts.
- Use four screws to attach the top frame to the side frames.
- With four-sided systems, attach the bottom frame to the side frames in the same way. If build-out is needed for additional clearance, screw the build-out onto the back of the frame.



Bi-Fold Track System



Bi-Fold Track System

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: Centre 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.

Assemble components onto the aluminum track (see illustrations on pages 18 and 19).

3. 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.

Mount the track to the top frame.

4. 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.

Hang the pivoting panel(s).

5. A bottom pivot pin is installed at the bottom of the pivoting panel(s). Insert the pin into the bottom pivot bracket.

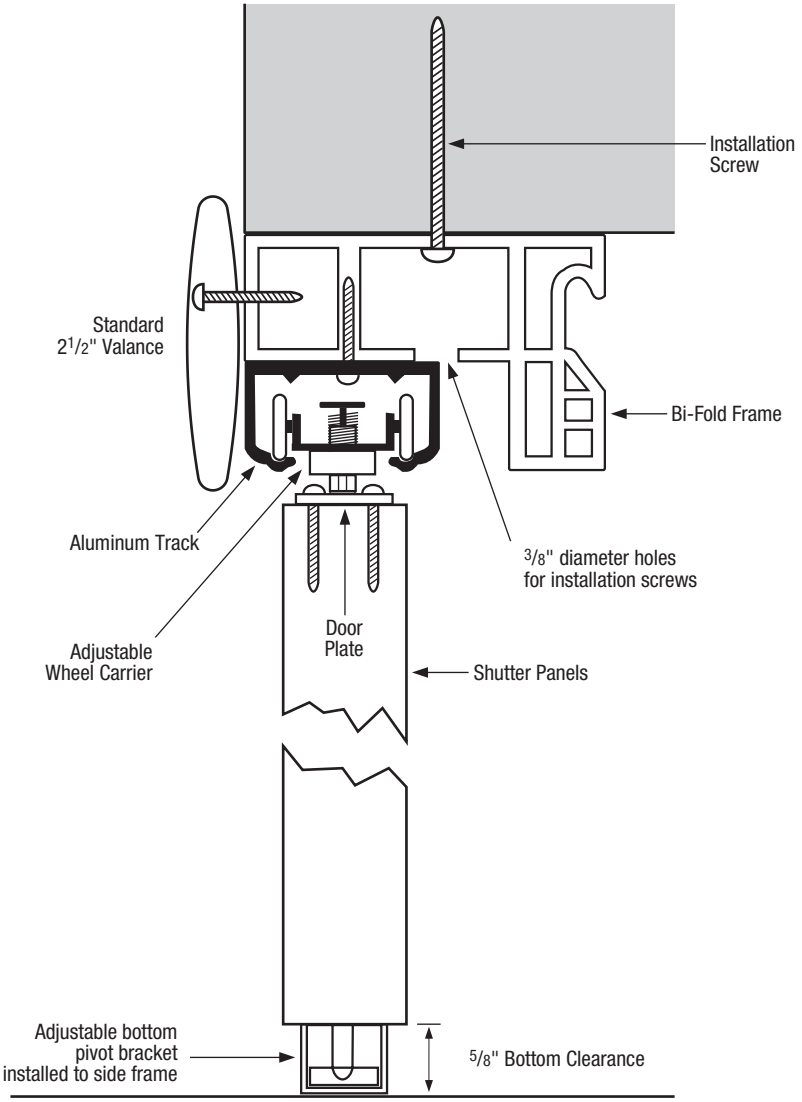
Push one of the door plates onto the adjustable nut of the top pivot, and push the other onto the adjustable nut of the first wheel carrier.

Lock the panel in place by rotating the plastic slide around the neck of the adjustable nuts on the top pivot and wheel carrier.

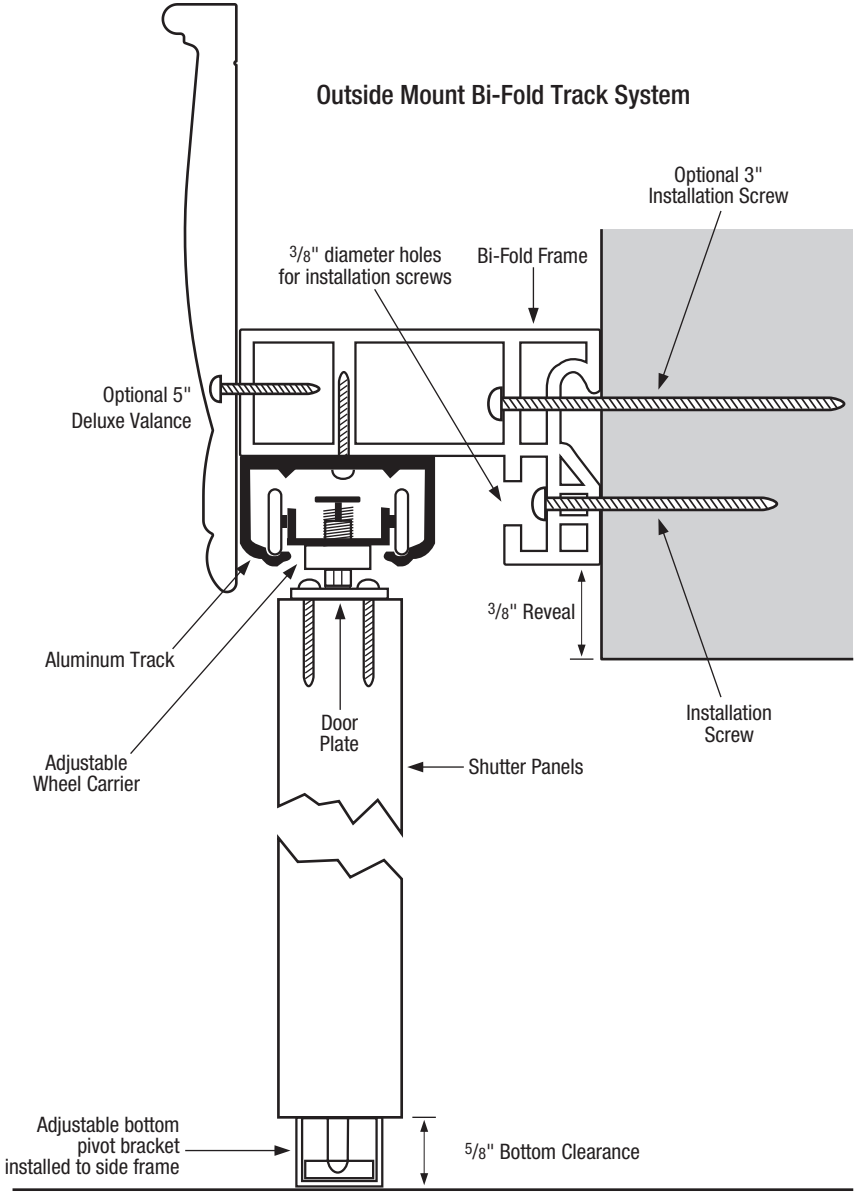
With split stack designs, repeat these steps for the other pivoting panel.

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.

Inside Mount Bi-Fold Track System



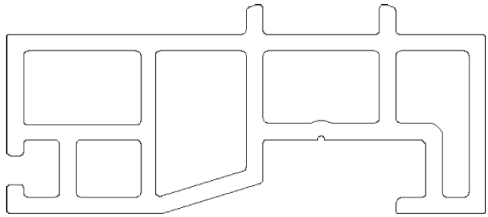
Outside Mount Bi-Fold Track System

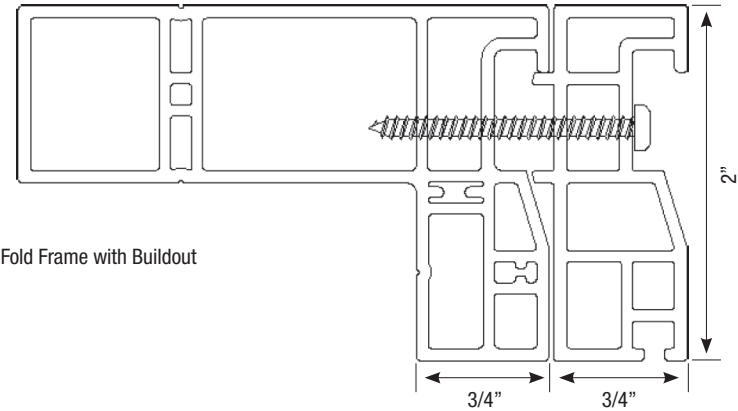


Bi-Fold Tracking System Extension

The Bi-Fold is available at the time of ordering. To install the Bi-Fold, use the screws provided and attach to the back of the Fi-Fold tracking system frame. (See illustration below.)

Bi-Fold Tracking Frame Buildout increases the projection of the frame by 3/4”



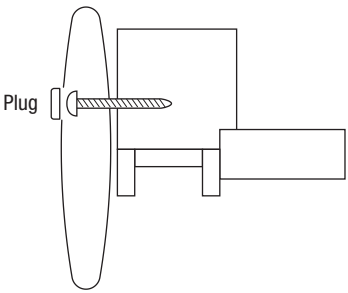


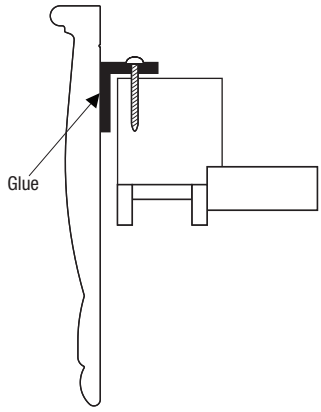
Bi-Fold Frame with Buildout

Valance Attachment

For inside mount place valance on frame and drill. Screw through the face. Use a button plug to cap the louver.

For outside mount use the L bracket supplied and attach to the valance and then attach to the top of the frame.





Bi-Pass Tracking System

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: Centre 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.

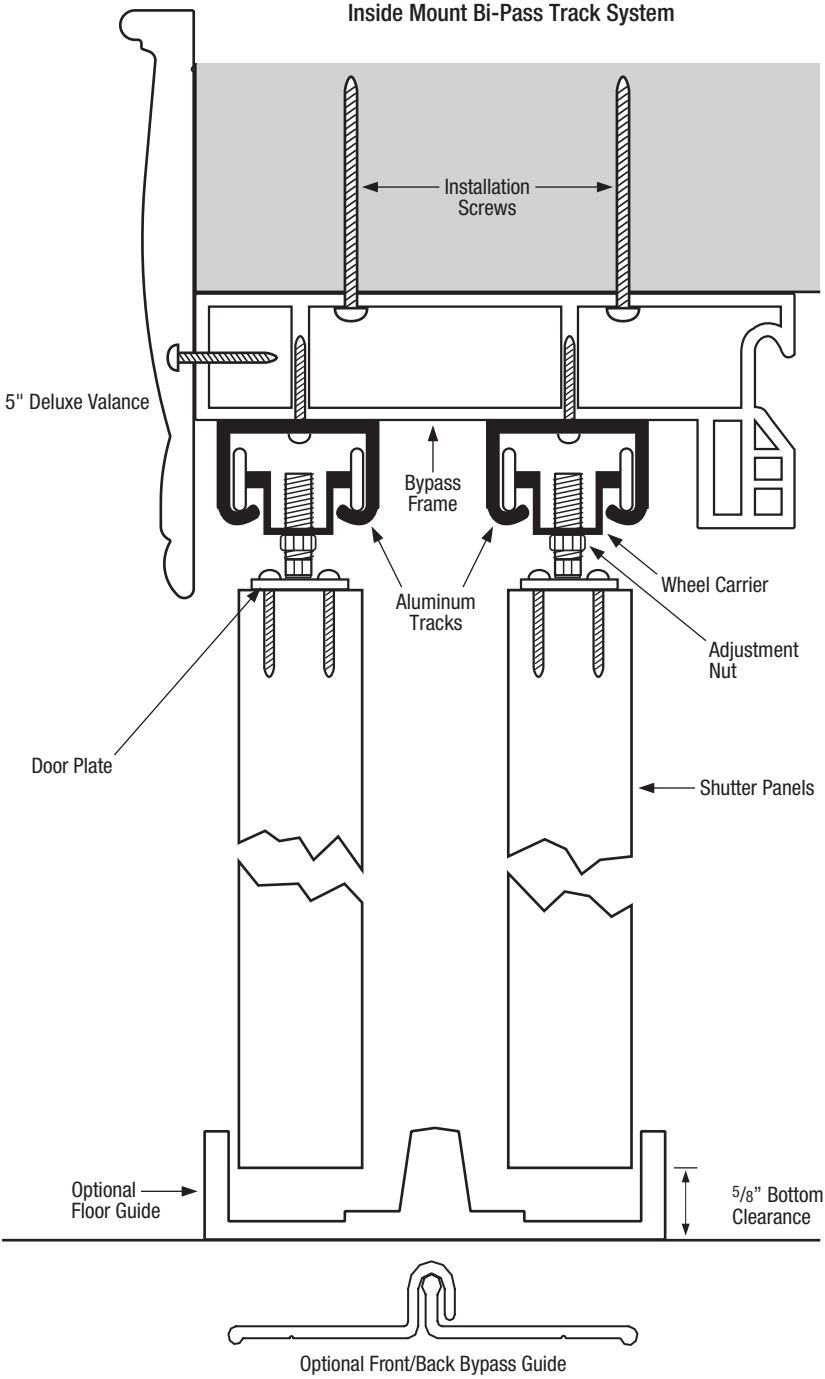
Square the side frames and fasten to the sides of the opening.

Screw the support brackets to the mounting surface.

Insert wheel carriers onto the aluminum tracks.

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.

Inside Mount Bi-Pass Track System



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

Attach the valance, if applicable.

Drill 3/8" 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.

Cap all screw holes with the provided button plugs.

Perform any necessary finish work.

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.

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 stiles.

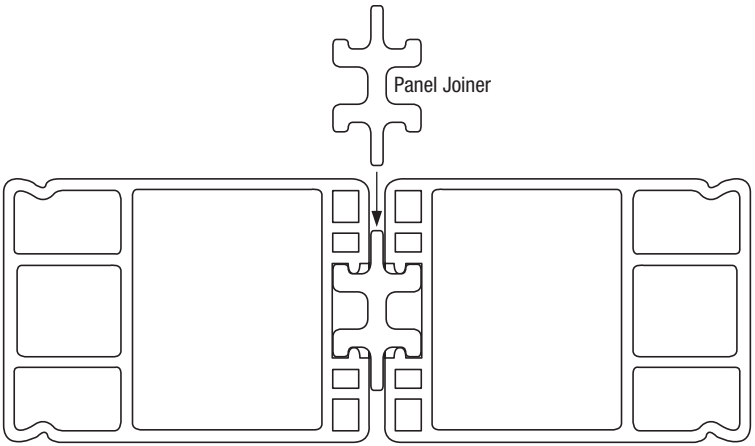
Place the stile caps back onto the stiles.

Hang the shutter panels.

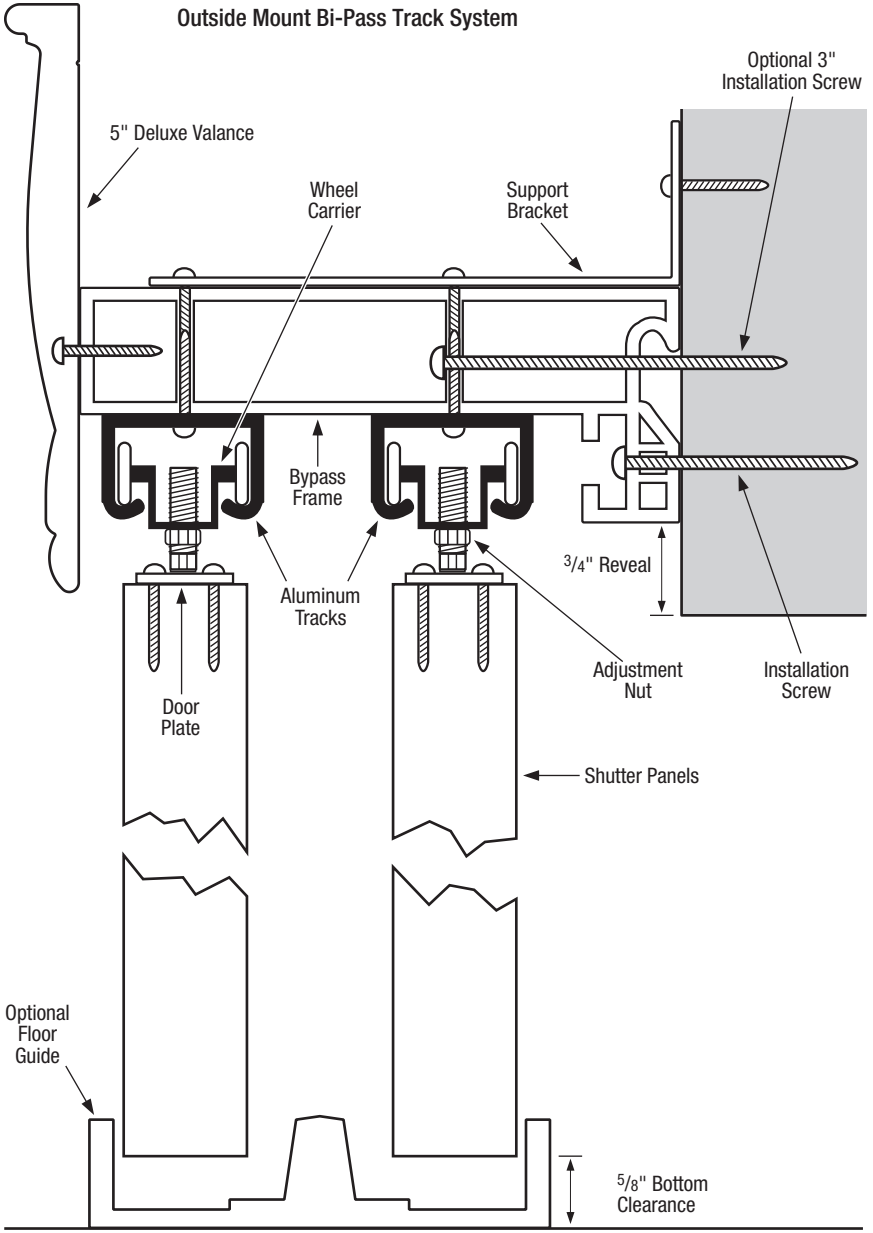
Push the door plates onto the adjustable nut of the wheel carriers.

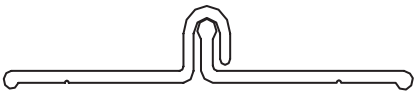
Lock the panels in place by rotating the plastic slide around the neck of the adjustable nut on the carriers.

To level the panels, turn the adjustable nut on the wheel carrier using the provided wrench tool.



Outside Mount Bi-Pass Track System



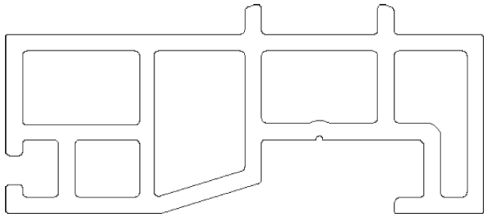


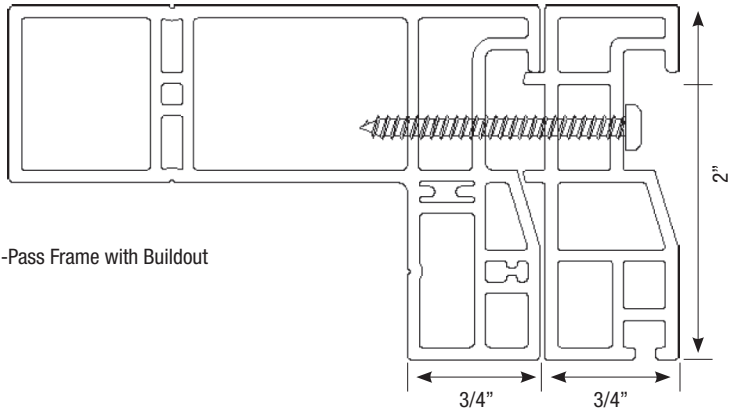
Optional Front/Back Bypass Guide

Bi-Pass Tracking System Buildout

The Bi-Pass buildout is available at the time of ordering. To install the bi-fold buildout, use the screws provided and attach to the back of the bi-fold tracking system frame. (see illustration below)

Bi-Pass Frame Buildout increases the projection of the frame by 3/4”



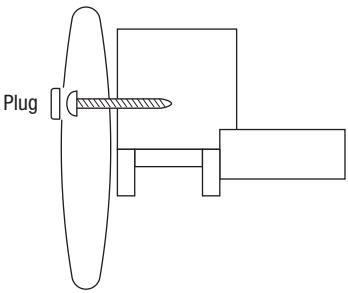


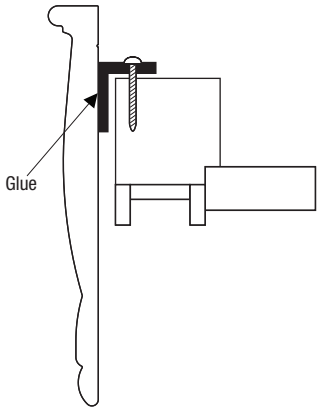
Bi-Pass Frame with Buildout

Valance Attachment

For inside mount place valance on frame and drill. Screw through the face. Use a button plug to cap the louver.

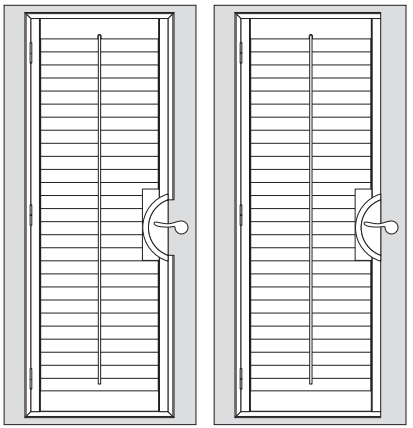
For outside mount use the L bracket supplied and attach to the valance and then attach to the top of the frame.





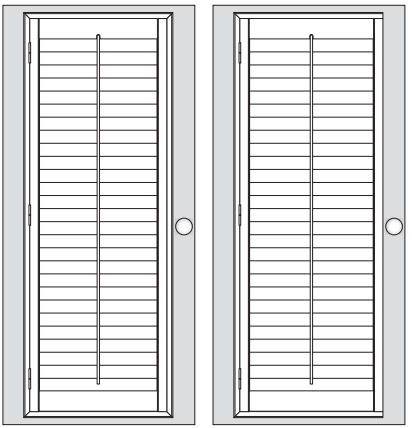
Shutter installation instructions

French Doors with Cut-Outs



4-Sided Frame 3-Sided Frame

French Doors without Cut-Outs



4-Sided Frame 3-Sided Frame

Place the assembled Linear 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.

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.

Centre 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.

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 Sigma is designed to help level the panel within the frame.

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.

Insert screws into the remaining holes and check that the panel is still aligned after each screw has been tightened. Readjust if necessary.

Adjust the Sigma assemblies with a flat screwdriver so all doors stay firmly shut.

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.

Perform any necessary finish work.

One Piece Bay or Bow Window

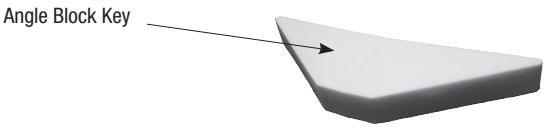
3/8" diameter holes must be drilled at each hinge for the side frames.

Two 3/8" diameter holes must be drilled for each panel at both top and bottom frames.

Each hole should be approximately 4" from each side of panel location.

For an inside mount, the holes are drilled at the side of the frame at the hinge.

For an outside mount, the holes are drilled at the front face of the frame just below the hinge.



Insert bay window angle block key inside the frame at each interior angle. For a designer Z-Frame, Crown frame and Linear frame screw a hinge screw into the frame through the angle block key for strength. For a Styling Frame, Linear Frame screw the metal strapping to the back of the frame.

The top part of the frame is indicated by having a greater amount of distance from the top of the top hinge to the edge of the frame. The label will indicate left and right side.

Insert a screw in both the left and right top side frame holes in the center opening as level as possible.

Hang the panels and insert the hinge pin.

Move bottom frame left or right until the panels are level. If this does not work, then:

Move left frame up or down until the panels are level. If this does not work, then: Move right frame up or down until the panels are level.

When the panels are level within the frame, hold bottom frame in position and place a screw in the middle bottom frame hole.

Hang the outer panels with the top hinge pin only.

Move the left frame up or down until the panels are level (do left side first then right side)

When the panels are level within the frame, hold the bottom frame in position and place a screw in the middle bottom frame hole.

If minor support or leveling is required, turn the adjustable plunger (of the sigma lock) at the bottom of the stile to the required spot.

Install magnets if applicable

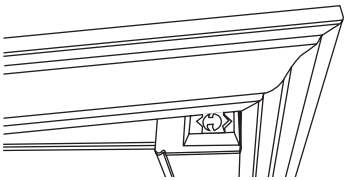
Once all the screws have been installed and panels checked for level, cap all the holes with the provided button plugs.

For gaps that may occur at frame corners or around the frame, apply Dap as needed.

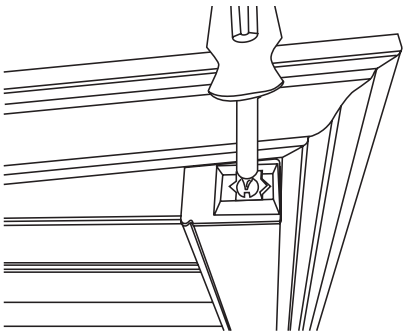
Sigma Adjustment

The sigma will be installed at the top of the stile during manufacturing.

The sigma will snap into the frame at the bottom.



The sigma can be adjusted by using a flat head screwdriver. If the closure is too tight, push in on the plunger and rotate clockwise to recess the plunger. If the 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 stile cap. Do not over torque.



Magnets and Plates

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 3 sided frames, mark the sill at the bottom.

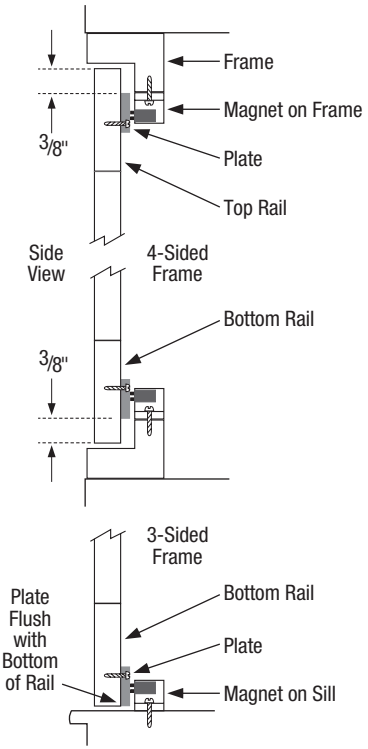
Install the magnets to the frame's light stop so that the magnets are 3/8" in from the mark, toward the centre of the shutter panel. With 3 sided frame, install the magnet to the sill 3/8" in from the mark. Align the magnet with the frame's light stop.

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 3 sided frames, install the bottom plates flush with the edge of the bottom rail.

Please Note: It is very important to close the shutter panels to check function and closure.

Adjust the magnet or plate positions if required.



Note: All magnetic catches must be installed. Mount magnets on frames. When there is no frame, mount magnets on window sill or jamb. Receiver plate mounts on bottom and top cross rails.

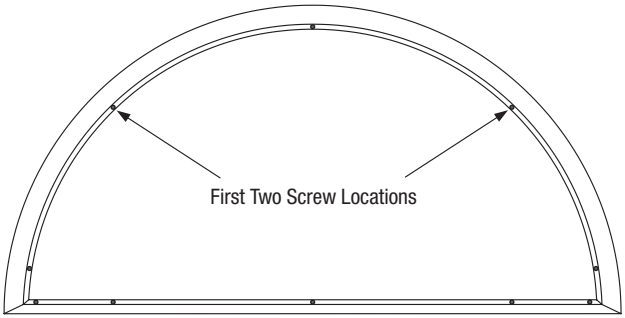
Specialty Shape Alone

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

Place the frame in or over the opening and centre. Make sure the bottom frame is level.

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.



Place the specialty-shaped shutter into the frame. Spring-loaded plungers on the bottom of the shape snap into grooves / ramp on the frame, and a magnet at the top centre holds the shape in place.

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.

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.

Place the shape back into the frame and double-check that it fits properly.

Remove the shape from the frame and set all remaining screws, being careful not to overtighten.

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.

Cap all screw holes with the provided button plugs and perform any necessary finish work.

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.

Place the frame in or over the opening. Align the bottom frame of the shape with the top frame of the standard shutter.

Set two installation screws through the bottom frame of the shape into the top frame of the standard shutter. Do not overtighten the screws.

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.

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.

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.

Place the shape back into the frame and double-check that it fits properly.

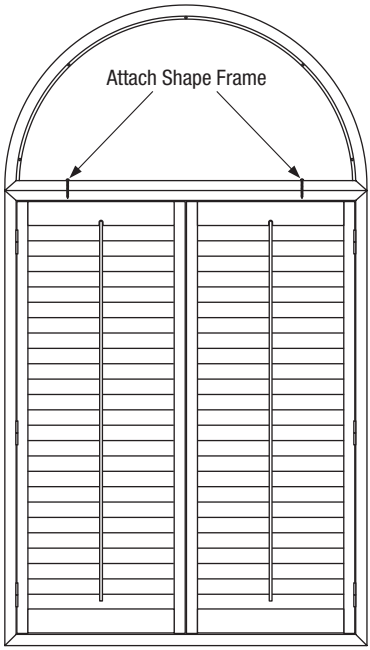
Remove the shape from the frame and set all remaining screws; do not overtighten.

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.

Cap all screw holes with the provided button plugs and perform any necessary finish work.



Unframed shutters are always inside mounted and attached with magnets.

Place the shape in the opening and centre it.

Mark the position of the left and right edges of the shape on the bottom of the opening.

Measure in from each mark 1/2", and make another mark. The second marks indicate where the outside edges of the magnets will be installed.

At the second set of marks, measure and mark 1 3/8" 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 1 1/4" 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.

Attach all magnets to the opening using the supplied magnet screws.

Attach striker plates to the shape so that they will align with the magnets when the shape is installed.

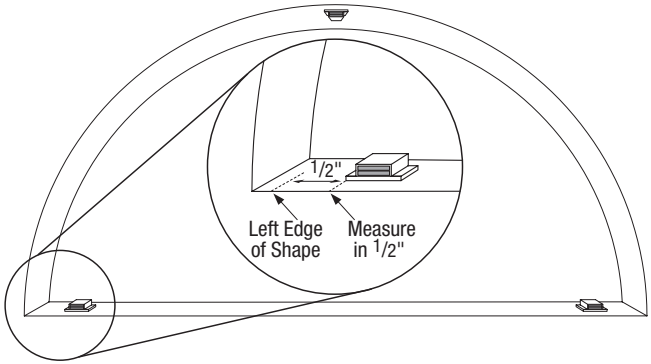
Install the unframed specialty shape and center from side to side.

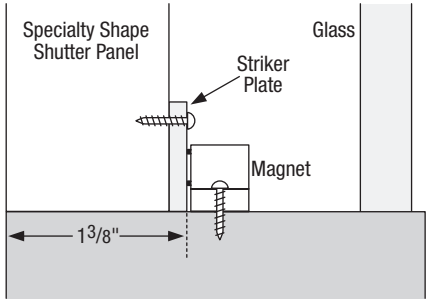
Check that each magnet makes good contact with the striker plates.

Make any necessary adjustments to magnets that do not hold securely.

Perform any necessary finish work.

Please Note: Light gaps around the specialty are normal and within tolerance.





Final Installation Touch Ups and Operation and Care

Final Installation Touch-Ups

If you have not done so already, cap all screw holes with the provided button plugs.

Apply caulking or dap 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.

Demonstrate proper operation of the shutters.

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.

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.

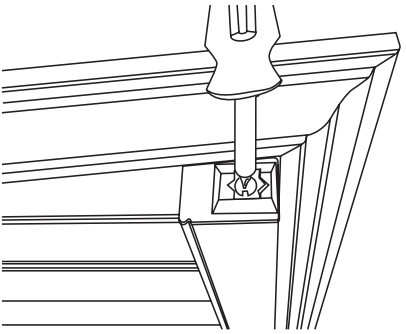
When cleaning any window, spray glass cleaner on a cloth rather than spraying directly on the window.

PROBLEM: Panels won't stay closed

Check to make sure that the sigma catch is connecting to the frame.

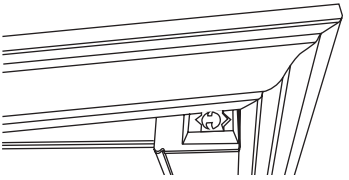
Typical situations that could prevent this from seating properly are:

The sigma is too far inside the panel. Open the panel to access the sigma located at either end of the panel. Using a flathead screwdriver, push in on the sigma, then rotate 1/2 turn. Release the sigma, close panel and check closure. Repeat until panel closes properly. Do not over torque.



Check to make sure that the sigma and stile cap are aligned.

The sigma is designed to lock into grooves on the stile cap to prevent unwanted rotation. If they are not aligned, the sigma will sit inside the cap. To adjust, open the panel to access the sigma. Using a flathead screwdriver, rotate the sigma until the plunger and cap are in proper alignment. The plunger should now extend beyond the panel and make contact with the ramp.



Check the number of magnets

To maximize the closure of the panels, two magnets should be placed on each panel. A bi-fold shutter also uses two magnets per panel. Always ensure that the magnet plates are positioned on the top or bottomrail opposite the hinge side.

Check to ensure the magnet and magnet plate have full contact with each other. Typical situations that could prevent the full contact from occurring are:

1. Magnet and magnet plate are installed with only partial contact with each other. The magnet or magnet plate may have to be moved left or right to ensure better contact or the magnet plate may have to be raised on the panel if only half of the magnet is in contact with the magnet plate.

2. Magnet has been installed on a slight angle with only one side of the magnet touching the magnet plate. Each magnet has a slot to allow each magnet side to be moved slightly forward or backwards. Loosen one of the screws on the magnet to allow the magnet to be straightened to allow for proper contact with magnet plate.

3. Magnet plate has been installed too high on the panel causing the magnet to contact the magnet plate installation screw. Take out magnet plate screws and install the plate lower on the panel. It is important to remove the excess polysatin around the screw holes with an exacto knife. If excess polysatin is not removed, it will not allow the plate to be installed flat on the panel.

4. Magnet plate is not flush with panel which is preventing full contact. See above for situations where the magnet plate has already been moved. For installations without frame, if the magnet plate with the rubber shim has been over tightened, the plate may sit on an angle. Loosen the magnet plate screw slightly to allow the magnet plate to eliminate the angle.

Check panel weight load

Weight load is created when the installation of a panel is not out-of-square. If installed out-ofsquare, there is pressure put on the stile, which forces the door to open with a spring back effect.

If the weight load is excessive, there is a possibility the louvers will be difficult to close. Adjusting the weight load can be resolved by one of the following ways:

If weight load is detected with no frame, then shims will be required to out-of-square the panel installation. Start by focusing on the top and bottom hinge only. Remove all other hinge pins. Shim the top or the bottom hinge on the window jamb until the panel closes without springing back and the louvers operate without resistance. Then concentrate on shimming one hinge at a time testing for spring back and louver operation.

If weight load is detected with frame applications, then adjustments are done by tightening or loosening 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 weight load. Continue with all other installation screws, one at a time, while checking for weight load.

If there is weight load on a bi-fold panel, deal with the first hinge panel only, then attach the bi-fold panel after the panel is installed properly.

Check for obstructions.

If something is stopping the panel from closing, it is called an obstruction. Please check for the following possible obstructions:

Window cranks are usually located on the bottom sill. If panel is hitting the crank, there are a number of possible solutions. Take the crank off the rotator and see if the panel is still obstructed. A small hole in the bottom rail may be cut out so that the small head of the crank will fit inside the panel rail. For panels without frame, an extension hinge may be used to bring the panel into the room an extra 5/8". For panels with frame, a build out may be required behind the frame.

Window locks are usually located on the vertical sides of the window to lock the window. If the lock is in the way of the panel, extend the panel into the room as discussed in the above situation.

Patio door handles typically create obstruction with louvers opening. If they stop the panels from closing, the product needs to be built out.

Bowed window jambs or sills may stop a panel from closing, if the narrowest measurement was not taken in the first place. Double check inside measurements versus the measurements ordered and received to ensure the proper application.

Check for a twisted panel.

There are times when the panel is received twisted. This can occur when something was leaned against or put on top of the panel prior to installation. It can also occur if panels have been stored in an extremely hot location. An advantage of polysatin is that it allows a simple tweaking procedure to put the panel back to its original state. To tweak a panel, place a support hand in the middle of the outside stile of the panel. Take your other hand and place it on either the top or bottom of the panel. Apply pressure to either the top or bottom (like bending it back into position) until the panel stays closed.

Ensure the panel width is correct.

If a panel is made or ordered too wide then it can be cut down to fit. 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 minimum opening width was ordered.

Ensure the frame width is correct.

If the frame is manufactured too small, the panels will be too tight. To find out if the frames are narrow, measure the back installation part of the frame. To determine if the deduction was correct, check with the fabrication site for specific deductions.

Ensure the frame is installed properly.

When a frame is installed as an inside mount, the installation screws initially draw the frame inside the opening. As the screw is driven towards the frame, it draws the frame

towards the window frame. To check if the installation screw has been drilled in enough, simply measure the top or bottom width and compare it to the a width where the panel looks to be too wide. If the frames are not assembled correctly, they may cause the inside opening of the frame to seem too narrow hence making the panels too tight.

Is panel installed in the correct opening?

When a number of windows are of similar width, panels can be placed into the wrong opening or with the incorrect panel grouping.

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.

Panel stiles are reinforced with either a 6" or 26" support. Panels over 20" wide require 6" supports and panel over 60" in length will require 26" supports. Check hinge side only. Lack of support requires repair.

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 astragal. This will expose the assembly holes. Use a #8 Robertson drill bit to release the tightness.

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:

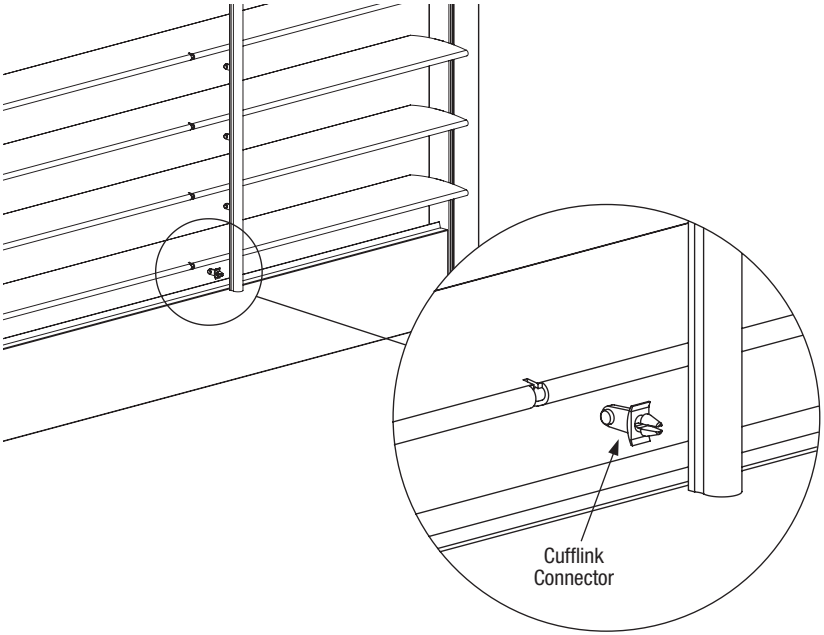
Panels with louvers over 20" wide come with aluminum reinforcement to prevent sag. The polysatin material can be tweaked back to its original shape with gentle force.

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

Seaview cufflinks must be attached the louvers to the tilt bar. 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.



Please Note: To ensure the long life of shutters, the front tilt bar should not be used to open the panel or tilt the louvers.

Replace cufflink connectors (front center tilt)

Pull the tilt bar from the louvers. Start at the top and “unzip” the tilt bar.

Remove the broken cufflink Replace the broken cufflink. Snap the new cufflink into the notch on the tilt bar.

Replace the tilt bar. Insert the cufflink into the louvers by holding the louvers in place and firmly pressing the cufflink into the notch on the louver.

Problem: Shutter Is Discolouring

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 25 Year Warranty

Shade-O-Matic Shutters have a Lifetime 25 Year Limited Warranty for as long as the original purchaser owns the shutter(s), provided that such products were properly installed in accordance to the installation instructions provided by the manufacturer.

This Lifetime 25 Year Warranty must be validated by having the Registration Certificate completed by the installer and the original purchaser and received by Shade-O-Matic no later than thirty (30) days after the completed installation. This will provide the Original Owner total assurance for the entitlement to this Lifetime 25 Year Warranty. This Warranty will take effect from the date the installation of the shutters has been completed at the premises identified in the warranty certificate.

Warranty on Shutter Frames and Panels

Shade-O-Matic warrants its Shutter Collections for the duration of the life of the shutters (25 Years) against such defects in materials including peeling, flaking, total discoloration, workmanship and operations.

Warranty Limitations

Shade-O-Matic's obligations under this warranty is solely and exclusively limited to repair or replacement , as its option, of all or any part of the shutters, which Shade-O-Matic determines to be defective under normal wear and tear on the product.

This warranty is exclusive and in lieu of all other obligations, liabilities or warranties and under no circumstances Shade-O-Matic shall be liable or responsible for incidental or consequential charges, or for any other direct or indirect damages, loss, cost, expense or fee.

Exclusions from Warranty Coverage

This warranty does not cover any condition of damage to the shutter or window from unauthorized repairs, accidents, alterations, misuse, abuse, act of God, normal wear and tear, exposure to elements, excessive humidity, fading, discoloration over time or failure to follow the Shade-O-Matic approved instructions with respect to measurement, installation, cleaning or maintenance.

Improper, inappropriate, or unauthorized replacement parts, repairs or maintenance voids this warranty. This warranty excludes all liability for removal of the shutter and reinstallation in the same or another window, or damage to the window frame, glass or any other portion of the window.

Procedures for Resolution of Lifetime 25 Year Warranty

In the event that the Shade-O-Matic obligation under this warranty is required, the owner must notify the Retailer/Dealer in writing within thirty (30) days after the defect has first appeared, which must contain the following:

1. Name and address of the Owner
2. Date of Installation
3. A brief description of the defect

Upon receipt the Retailer/Dealer will determine if the defect is covered under this Limited Warranty. The Owner may, at his or her own expense , arrange for the delivery of goods to the Retailer/Dealer and in turn to the manufacturer for repairs. Shade-O-Matic reserves the rights to further determine if the repair will be covered under this Limited 25 Year Warranty and will advise Retailer/Dealer on the resolution. Retailer/Dealer authorization is required before Shade-O-Matic will repair, modify, or replace a product not covered by the terms of this Lifetime 25 Year Warranty.

Thank-you

Thank-you very much for purchasing Shade-O-Matic polysatin shutters, the most beautiful shutters in the world.

Shade-O-Matics polysatin® shutters are an excellent way to improve the thermal efficiency on the windows. Polysatin® shutters are energy efficient and are environmentally friendly.

Polysatin® shutters are part of the GreenProtect™ program - for healthier living and are:

GREENGUARD Indoor Air Quality® Certified

GREENGUARD Children & SchoolsSM Product Certified

Environmentally friendly GREENGUARD Listed for Microbial Resistance

The shutters are safe for the home. Polysatin® shutters are designed without cords, so children and pets stay safe. Shade-O-Matics polysatin® shutters are lead-free and meet fire retardant specifications.