



# Installation

## Windows & Doors

### Tools required

- Hand Drill Counter Sink Drill Bit Set #8
- Philips Screw Driver
- Measuring Tape
- Level
- Nail gun and finish head nails can be used for Wood

### What's Included

- Panels with hinges pre attached
- Frames with hinges and corner joints in place for easy installation
- All mounting hardware

(Larger size panels and frames are packed separately to avoid damage in shipping.)

### Polyclad Hardwood vs. Wood Shutter Installations

Whether installing polyclad or wood, the principals of installing all shutters are the same. There are, however, three installation differences between the polyclad and the wood shutter. These are:

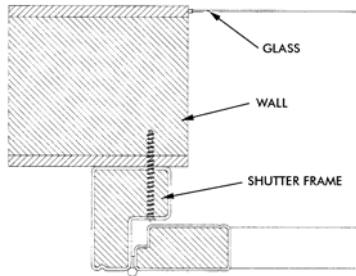
- 1) frame corners are either frame joints or hoffman keys
- 2) installation is done either using screws or nails
- 3) finishing may require silicon vs. touch paint and spackle .

These differences are covered in great depth in the wood installation section at the end of these install instructions.

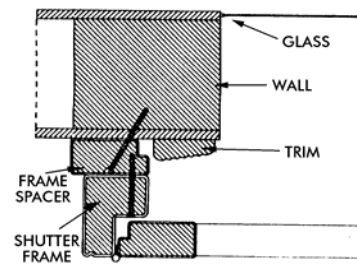
## Outside Mount Installations

### 3 Mounting Options

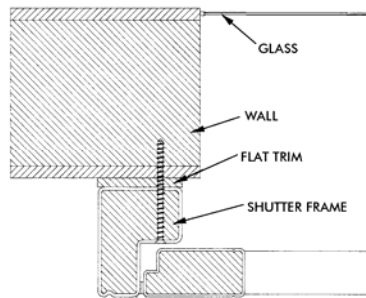
Three types of outside mount installations are possible. These are shown below.



Install on Drywall



Install Beyond Trim



Install On Trim

### Outside Mount Installation Instructions

#### Windows & Doors

1. Frame Assembly - Assemble the frame by securing the horizontal frame rails onto the corner joints which are already fastened to the vertical frame legs. Set the #6 x 3/4" painted head screws through the pre-drilled holes and tighten.

**Note:** If shutter is already pre-assembled, skip this step and just remove the panel(s) from the frame.



2. Frame Hole Pre-Drilling - Pre-drill three holes on the right and left vertical frames using the counter sink drill bit set #8. Locate the top and bottom holes 4" below the inside corner of the frame. For multiple panels pre-drill additional holes at the center of the top and bottom frames.





**Frame Installation** - Locate the top of the frame. The top hinge is 2" below the top inside corner. Place the frame against the wall and center it around the opening.

**Note:** The panel can only fit in with the top frame positioned up.



**Single Panels** - Attach the vertical frame with hinges to the outside wall by screwing in the #8 x 3" painted head screw at the top of the frame leg. Line up the leg that has the hinges evenly along the side of the window opening and screw in the bottom of the frame leg.

**Multiple Panels** - Attach the left vertical frame leg to the outside wall by screwing in the #8 x 3" painted head screw at the top of the frame leg. Using a level, align the top horizontal frame, then attach the right vertical frame leg by screwing in the #8 x 3" painted head screw.

**Note:** There should be ¼" between the opening and the inside edge of the frame all around.

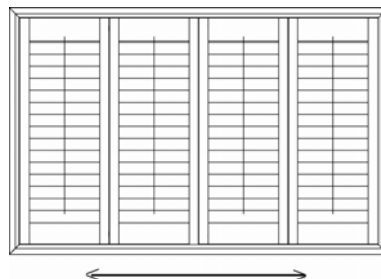
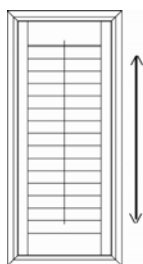
3. **Hanging Panels** - Hang the panel(s) onto the hinges and close the panels.

*Trade Tip: With multiple hinges sometimes it's easier to loosen or remove the middle hinges when inserting the panels. Retighten or reattach hinges after the panel is hung.*

4. **Align Panel(s) and Set The Frame** – Align the panel(s) and set the frame w/ screws.

**Single Panels** - Move the frame leg without the hinges up until the panel opens and closes freely in the frame. Hold the frame in this position and set the #8x3" painted head screw at the top of the frame without hinges. Set the final screw at the bottom of the leg without the hinges. Set the remaining screws in the frame as necessary.

**Multiple Panels** - Move the bottom frame side to side (swaying Left & Right) until the panels align. Mark the frame and the wall with a light pencil on the under side. Make sure that the gap between the panel and the bottom frame is close to but not touching the panels. Open the panels, line up the bottom frame with the pencil marks and set the #8x3" painted head screw. Close the panels and mark the top frame and wall with a light pencil making sure the frame is close to but not touching the panels. Open the panels, line up the top frame with the pencil mark and set the screw.





5. **Secure Remaining Screws** - Before setting the remaining screws in the legs make sure that the gap between the panels is close but not touching at the center. It is best to do this with a light pencil mark on the wall next to the frame legs and lining up the frame with the mark before setting the screws.

*Trade Tip: For small adjustments only, you can "stretch" the hinges by opening the shutter panels and inserting the head of a screw or hinge pin between the hinge flaps then shut the panels carefully until the hinge is stretched slightly. Make this adjustment a little at a time until the panels have the appropriate gap you are looking for. If the hinges are butterfly hinges it will be necessary to insert a putty knife next to the inside of the stile before closing the panel to avoid damaging the stile with the pin or screw head. Only adjust the hinge where you need to close the gap between the panels. This adjustment is only useful in closing the gap between the panels.*

6. **Attach the Magnets** –

Single Panels - Position the magnets at the top and bottom of the frames close to the frame leg without the hinges and fasten with the 3/4" screws supplied. If panels are less than 2' tall, you may use one magnet at the center of the frame leg.

Multiple Panels - Position the magnets on the top and bottom frames as shown in the schematic below and fasten with the 3/4" screws supplied.

Panel Configurations with Magnet Positions in Black



Using a pencil lightly mark on the panel where the center of the magnet is located. Measure the distance between the edge of the inside of the frame and the center of the magnet. Using this measure and the mark on the panel, secure the Magnet Plate to the backside of the panel facing the frame and fasten with the 1/2" screw supplied.



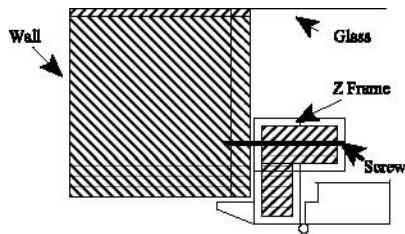
7. **Finishing Touches**- If the walls are white or light in color use white paintable caulk and caulk the outside of both frame legs where the frame meets the wall . If the shutter sits on a sill, caulk between the frame and the sill. Use a damp cloth to clean up excess caulk. Wipe down shutters for marks and dust. Open and close louvers with tilt rod to check smooth operation.



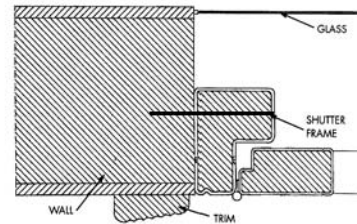
## Inside Mount Installations

### 4 Mounting Options

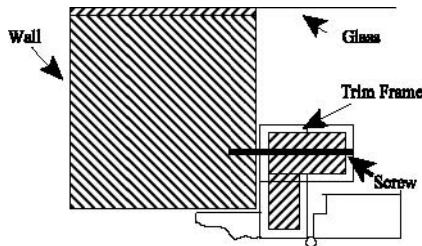
Four possible inside mount options are shown below.



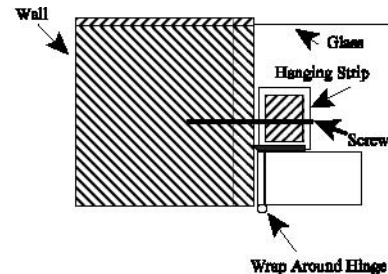
Z Frame Installation



Standard Frame Installation



Trim Frame Installation



Hanging Strip Installation

### Inside Mount Installation Instructions

1. Frame Assembly - Assemble the frame by securing the horizontal frame rails onto the corner joints which are already fastened to the vertical frame legs. Set the #6 x 3/4" painted head screws through the pre-drilled holes and tighten.

**Note:** If shutter is already pre-assembled, skip this step and just remove the panel(s) from the frame.



2. Frame Hole Pre-Drilling - Pre-drill three holes on the right and left vertical frames using the counter sink drill bit set #8. Locate the top and bottom holes 4" below the inside corner of the frame. For multiple panels pre-drill additional holes at the center of the top and bottom frames.



3. Frame Installation - Locate the top of the frame. The top hinge is 2" below the top inside corner. Place the assembled frame into the opening and center it. *If window is excessively out of square, use shims between the frames and jambs.*

**Note:** The panel can only fit in with the top frame positioned up.



Single Panels - Screw a #8x3" painted head screw at the top of the frame leg that has the hinges. Make sure that the gap between the frame and the wall is equal on both sides of the shutter. This can be done by backing out the screws and resetting them as necessary. Now set the bottom screw on the same side.

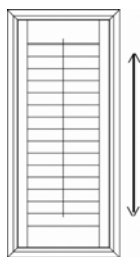
Multiple Panels – Screw a #8x3" painted head screw at either of the top corners of the frame. Level the frame and set another screw at the opposite top of the other frame leg.

4. Hanging Panels - Hang the panel(s) onto the hinges and close the panels.

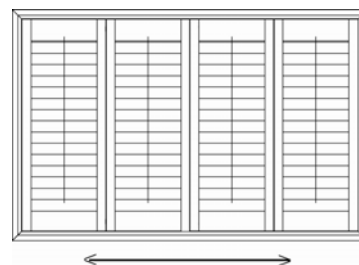
*Trade Tip: With multiple hinges sometimes it's easier to loosen or remove the middle hinges when inserting the panels. Retighten or reattach hinges after the panel is hung.*

5. Align Panel(s) and Set The Frame – Align the panel(s) and set the frame w/ screws.

Single Panels - Move the frame leg without the hinges up until the panel opens and closes freely in the frame. Hold the frame in this position and set the #8x3" painted head screw at the top of the frame without hinges. Set the final screw at the bottom of the leg without the hinges. Set the remaining screws in the frame as necessary.



Multiple Panels - Move the bottom frame side to side (swaying Left & Right) until the panels align. Mark the frame and the wall with a light pencil on the under side. Make sure that the gap between the panel and the bottom frame is close to but not touching the panels. Open the panels, line up the bottom frame with the pencil marks and set the #8x3" painted head screw. Close the panels and mark the top frame and wall with a light pencil making sure the frame is close to but not touching the panels. Open the panels, line up the top frame with the pencil mark and set the screw.





6. **Secure Remaining Screws** - Before setting the remaining screws in the legs make sure that the gap between the panels is close but not touching at the center. It is best to do this with a light pencil mark on the wall next to the frame legs and lining up the frame with the mark before setting the screws.

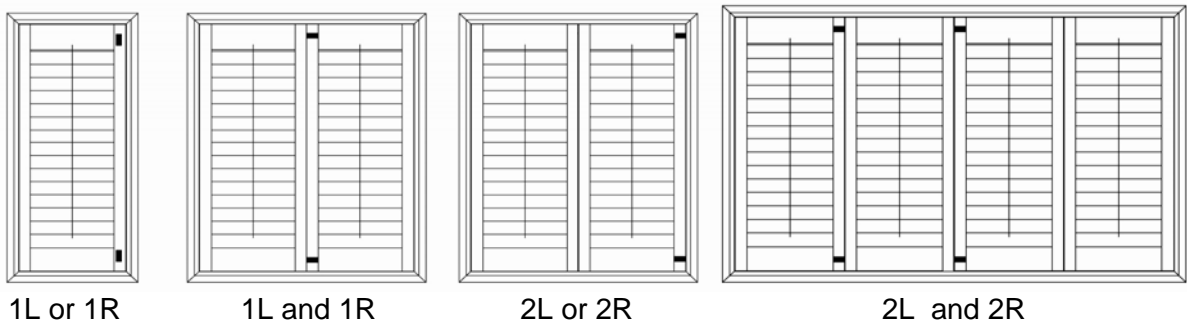
*Trade Tip: For small adjustments only, you can "stretch" the hinges by opening the shutter panels and inserting the head of a screw or hinge pin between the hinge flaps then shut the panels carefully until the hinge is stretched slightly. Make this adjustment a little at a time until the panels have the appropriate gap you are looking for. If the hinges are butterfly hinges it will be necessary to insert a putty knife next to the inside of the stile before closing the panel to avoid damaging the stile with the pin or screw head. Only adjust the hinge where you need to close the gap between the panels. This adjustment is only useful in closing the gap between the panels.*

8. **Attach the Magnets** –

Single Panels - Position the magnets at the top and bottom of the frames close to the frame leg without the hinges and fasten with the  $\frac{3}{4}$ " screws supplied. If panels are less than 2' tall, you may use one magnet at the center of the frame leg.

Multiple Panels - Position the magnets on the top and bottom frames as shown in the schematic below and fasten with the  $\frac{3}{4}$ " screws supplied.

Panel Configurations with Magnet Positions in Black



Using a pencil lightly mark on the panel where the center of the magnet is located. Measure the distance between the edge of the inside of the frame and the center of the magnet. Using this measure and the mark on the panel, secure the Magnet Plate to the backside of the panel facing the frame and fasten with the  $\frac{1}{2}$ " screw supplied.



9. **Finishing Touches**- If the walls are white or light in color use white paintable caulk and caulk the outside of both frame legs where the frame meets the wall . If the shutter sits on a sill, caulk between the frame and the sill. Use a damp cloth to clean up excess caulk. In the case of a 3 sided frame for inside mount, a light stop needs to be mounted. Secure the light stop on the sill between the frames using #8 x 3" painted head screws. Wipe down shutters for marks and dust. Open and close louvers with tilt rod to check smooth operation.





## French Doors And French Door Cut Outs

1. Frame Hole Pre-Drilling – Remove the panel from the frame. Pre-drill three holes on the right and left vertical frames using the counter sink drill bit set #8. Locate the top and bottom holes 4" below the inside corner of the frame.

*Note: Never use a nail gun.*

2. Frame Installation - Locate the top of the frame. The top hinge is 2" below the top corner. Position the frame around the window. Screw a #8x3" painted head screw at the top of the frame leg that has the hinges. Line up the leg that has the hinges evenly along the side of the window opening and screw in the bottom of the frame leg.



**Note:** For French doors with a molding around the glass, you can either mount on the molding or do a build out around the molding using a hanging strip as a spacer.

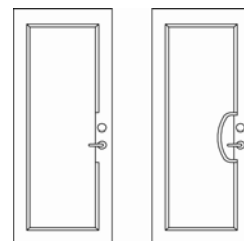
3. Hanging Panels - Hang the panel(s) onto the hinges and close the panels.  
*Trade Tip: With multiple hinges sometimes it's easier to loosen or remove the middle hinges when inserting the panels. Retighten or reattach hinges after the panel is hung.*

4. Align Panel(s) and Set The Frame – Align the non hinged frame leg with the panel and use a pencil to lightly mark the door at the top of the frame leg.



French Doors -Open the panel, ensure the frame is aligned with the pencil mark, and screw in a #8x3" painted head screw at the top of the frame leg. Attach another screw at the bottom and center of the frame leg.

French Door Cut outs - Open the panel, ensure the frame is aligned with the pencil mark, and screw in a #8x3" painted head screw at the top of the frame leg. Position the cutout between the frame and attach. Attach another screw at the bottom and center of the frame leg.





5. Attach the Magnets –

Position the magnets at the top, bottom and center of the frame leg without the hinges and fasten with the  $\frac{3}{4}$ " screws supplied. Using a pencil lightly mark on the panel where the center of the magnet is located. Measure the distance between the edge of the frame and the center of the magnet. Using this measure and the mark on the panel, secure the Magnet Plates to the backside of the panel facing the frame and fasten with the  $\frac{1}{2}$ " screw supplied.

6. Finishing Touches- If the door is white or light in color use white paintable caulk and caulk the outside of both frame legs where the frame meets the wall . Use a damp cloth to clean up excess caulk. Wipe down shutters for marks and dust. Open and close louvers with tilt rod to check smooth operation.





## Bi Pass And Bi Fold Sliders

### Tools required:

Hand Drill Counter Sink Drill BitSet #8  
Philips Screw Driver Measuring Tape  
Level

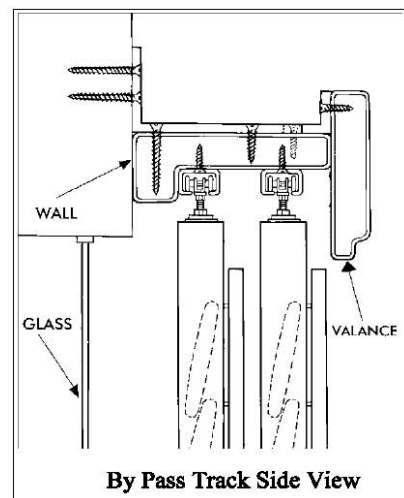
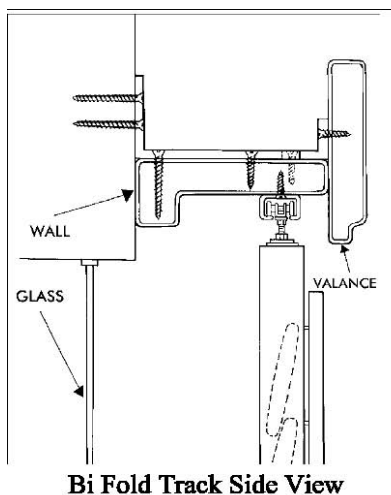
### What's Included:

- Panels with hinges pre attached (By folds only).
- Vertical frames legs and one horizontal frame rail with reinforcements inserted.
- Carrier track(s) with screws, carriers, bushings and brackets
- Valance
- All mounting hardware

To avoid damage in shipping large size panels and frames are packed separately.

### Installation

Sliding shutters can be either Bi-Fold or By-pass as illustrated below. Refer to the applicable drawing for guidance during installation.





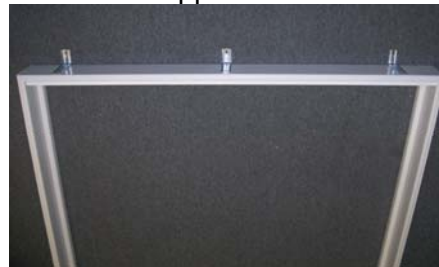
## Installation Instructions Sliders

### Bi-Pass Sliding Shutters

There are basically two methods that can be used to install Bi-pass shutters. The first method described below is the preferred method. The second method can be used when obstacles such as walls or cabinets are protruding on both sides of the door opening preventing side access to the shutter frame.

#### Leg Removal Method

1. Frame Assembly - Lay the pieces of the frame on a smooth surface in front of the opening and assemble the frame by attaching the frame legs to the frame headrail using #8 x 1 ½" screws into the pre-drilled holes at the top of the frame legs.
2. Headrail Installation - Stand the frame up against the wall and position it around the door opening. Level the frame. Use shims to raise the legs as necessary to make the frame level. Attach one of the vertical frame legs to the wall using a #8 x 3" painted head screw. Attach the Frame Headrail to the wall using the 2" x 4" brackets and screws supplied.



3. Attach Bottom Panel Guides (if supplied) - Attach the guides to the bottom of the panels using the ½" screws supplied.



4. Sliding Panels Onto Track - Remove one of the frame legs and slide the panels onto the tracks attached to the Frame Headrail. Reattach the frame leg to the Frame Headrail.

5. Attaching Panels Together - If necessary attach panels that are on the same track together by using magnet plates on the back side of the panels.



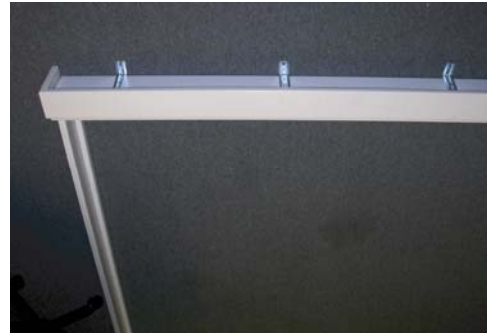
6. Side Frame Installation - Move the panel on the back track toward the frame leg away from where the door opens and closes. Line up the panel with the frame leg and secure the leg to the wall using #8 x 3" screws. (If there is a baseboard



chisel out that portion of the baseboard at the bottom of the frame leg so the frame will be flush against the wall). Move the panel on the front track toward the frame leg where the door opens and closes and follow the same procedure. Remove the shims if used.

7. Valance Assembly - Insert the valance corners into the valance and secure them with the screws supplied. Slide the valance returns over the corner legs and secure them with screws supplied

8. Valance Installation - Mount the valance to the top frame rail using 1" x 1" brackets and #6 x 3/4" screws in the pre-drilled holes.



10. Finishing Touches- If the walls are white or light in color caulk between the frame legs and where the legs meet the wall . Clean up excess caulk using a damp rag. Make sure the panels operate smoothly. Spray silicon spray on the tracks and wheels to insure smooth operation.



### **Carrier on Track Method**

1. Frame Assembly & Carrier Insertion - Lay the pieces to the frame on a smooth surface in front of the opening. Insert the carriers into the tracks on the top horizontal frame rail. Assemble the frame by attaching the frame legs to the frame headrail using #8 x 1 1/2" screws into the pre-drilled holes at the top of the frame legs. Make sure the back of the frame is facing upward.

2. Headrail Installation -Stand the frame up against the wall and position it around the door opening. Level the frame. Use shims to raise the legs as necessary to make the frame level. Attach the frame headrail to the wall using the 2" x 4" brackets and screws supplied

3. Attach Bottom Panel Guides - Attach the guides to the bottom of the panels using the 1/2" screws supplied.

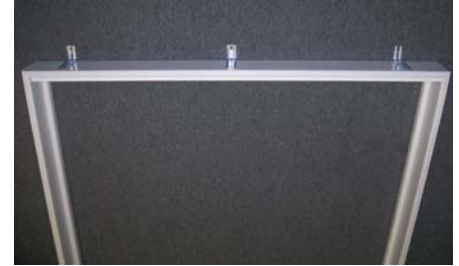
4. Hanging Panels On Carriers - Hang the shutter panels on the carriers by attaching the carrier stems into the anchors in the top of the stiles. Adjust the stems of the carriers until the panels are level, then tighten the lock nuts.

5. Follow steps 6 through 12 above.



## **By-Fold Sliding Shutters**

1. **Frame Assembly** - Insert the carries into the tracks on the top horizontal Frame Rail. Assemble the pre mitered frame using the #8 x 1 ½" screws in the pre drilled holes.
2. **Headrail & Frame Installation** - Stand the frame up against the wall and level it using a Level. Place shims under the vertical legs to level the frame and to bring the bottom of the vertical frame legs flush with the level of the carpet. Attach the top frame rail to the wall using the 2" x 4" brackets and the screws (refer to diagram). Make sure the vertical frame legs are square to the top horizontal frame rail and parallel to each other then secure them to the wall using #8 x 3" painted head screws at the top only.
3. **Jamb Kit Assembly** - Install the jamb kit assembly at the bottom left and right frame leg(s) and to the floor. Follow the instructions in the jamb kit that is included in the slider.
4. **Hanging First Panel Onto Track** - Install the outer panel by placing the bottom pivot into the hole in the jamb bracket assembly. Allow the panel to rest on the pivot. Hold the panel in position so that the top pivot is aligned with the pre-installed track bushing, and adjust the top pivot so that the head enters into the hole of the track bushing to a point where the panel is securely held.
5. **Aligning Panel And Hanging Second Panel** - Close the shutter panel and adjust the top and bottom pivots until the panel is parallel to the vertical frame leg, hang the inner panel(s) to the outer panel(s) using the hinges. Align the inner panel's factory installed stile anchor with the carriers. Attach the carrier into the stile anchor. Adjust the stem of the carrier until the panel is leveled, and tighten the lock nut. Repeat this step for all successive panels.
6. **Ensuring Proper Panel Operation** - Close the shutter panels to make sure they are fully extended and flush in line with the frame. If panels do not extend fully, adjust pivot points in either direction. Install catches as needed with or without spacers.
7. **Valance Assembly** - Insert the valance corners into the valance and secure them with screws. Slide the valance returns over the corner leg and secure them with screws. Mount the valance to the top frame rail using the 1" x 1" brackets and #6 x 3/4" screws at the pre drilled locations.



**Note:** Be sure the bottom of the valance is 1/8" above the top plates.



8. **Finishing Touches**- If the walls are white or light in color caulk between the frame legs and where the legs meet the wall . Clean up excess caulk using a damp rag. Make sure the panels operate smoothly. Spray silicon spray on the tracks and wheels to insure smooth operation.





## Arches and Specialty Shapes

1. Position Arch or Shape- Position the Arch or Shape over the opening.
2. Frame Installation - With a pencil lightly mark both the bottom right and left side of the Arch or Specialty Shape on the wall.

Using Finish Nails – Mount the frame onto the wall using the supplied finish nails through the face of the frame. Position the nails along the base and at the 0, 45, 90, 135 and 180 degree marks. Drive the nails through any of the bevels on the frame so they are not visible.

Using Screws - Screw through the frame into the wall at one of the recessed screw openings, be careful not to over-tighten. Screw the remainder of the screws into the remaining recessed openings.

3. Finishing Touches- Caulk the finish head nails so they are not visible or, if using screws, insert the wooden screw-hole buttons into the recessed openings.



## Wood Installation Instructions

While installing wood shutters is very similar to installing polyclad shutters, there are some differences that should be noted. These are covered below:

### Frame Assembly -

Wood uses Hoffman keys as opposed to the frame joints used in Polyclad.

Assemble the frame by placing the frame pieces face down on a soft surface on the floor. Use the markings written on the frames to make sure the top and bottom are lined up with the correct frame legs. Insert the Hoffman keys in the corners and gently tap them making sure the miter seams are even at the front of the frame.



### Frame Installation -

Wood shutters can be installed by either screws or nails. If you are using a nail gun follow the same procedures as using screws as outlined except substitute nails for screws. (No pre-drilled holes will be necessary).

### Finishing Touches -

If you use nails for installation, fill in the nail holes with spackle. Use the touch-up paint included and touch-up the nail holes and miters as necessary.



## ShutterSMART Repairs And Parts Replacement

### Louver Replacement

1. Remove Tilt Rod Cap - Remove tilt rod end cap by pushing the end cap behind the tilt rod with a screw driver.



2. Remove Tilt Rod - Remove the tilt rod by sliding it off the hooks.



3. Remove Louver - Grab the louver with both hands and gently bend it while pulling it toward you for leverage until the pin is out of the stile hole and remove the louver.



4. Replace Louver - Replace the louver the same way as step 3 only reversed.

5. Replace Tilt Rod - Slide the tilt rod back onto the louvers.

6. Replace EndCap - Replace the end cap.

### Hook Replacement

1. Remove Tilt Rod - Remove tilt rod as described in steps 1, 2 & 3 above.

2. Remove Hook - Grab the hook and twist it until it has the proper angle to come away from the louver

3. Replace Hook - Replace the hook by reversing the order of removal as described in step 2.



## MiraMonte Louver Replacement

1. Remove Staple - Use vise grip needle nose pliers and grab the staple attached to the tilt rod of the louver you wish to remove. While holding the tilt rod with the other hand for stability gently wiggle the pliers back and forth while pulling away from the tilt rod until the staple is removed.



2. Remove Louver - Place a utility knife between one end of the louver and the stile where the louver pin attaches to the stile. Gently tap the back of the utility knife until the pin is severed. Then remove the louver and remove the severed pin from the stile.



3. Replacing with New Louver - Insert the replacement louver by putting a louver pin in one end of the louver and a spring loaded pin in the stile opposite that pin. Put the pin end of the louver in the stile and place a putty knife between the spring loaded pin in the stile and the end of the louver without the pin and line up the louver so when the putty knife is removed the spring loaded pin will enter the hole at the end of the louver.



4. Repair Staple - Use a toothpick and fill the holes in the tilt rod where the staple was. Put a staple in the vise grip needle nose pliers and dip the staple ends in wood glue. Position the staple through the staple in the louver and into the hole left by the previous staple as far as possible.

5. Hook Louver to Tilt Rod - Using small channel lock pliers with tape wrapped around the jaw of the pliers grab the staple and gently force the staple into the tilt rod as far as necessary.



# NOTES