

Materials and Tools

The following materials needed for a standard installation are included with each order:

- Shutter panels and frame, if a framed system
- Magnets with striker plates and necessary screws
- Hinge attachment screws
- Frame dowels and glue

Materials needed for installation:

- Frame Installation Screws - 3" long finish screws may work well in many situations
- Caulk

Tools needed for installation include:

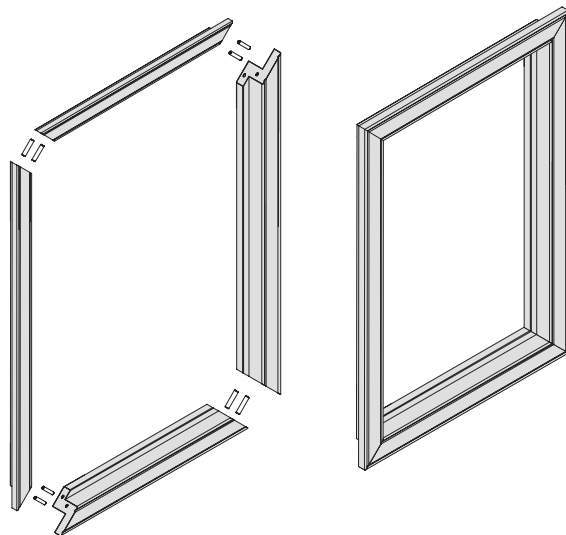
- Steel measuring tape
- Variable speed power drill with driver bits
- 3/32" drill bit
- Pencil

Caution: All screws holes should be pre-drilled to prevent cracking of the material finish. Damage to the materials made during shutter installations can also happen when screws are over tightened. We recommend that you do not make the final turn of a screw with a power driver. Instead, use a power driver to tighten a screw most of the way and then snug the screw by hand. Once a screw is over-tightened, damage cannot be repaired.

Frame Assembly

Shutter frames are shipped knocked-down (disassembled). Using the supplied dowels and glue, reassembly of the frame is quick and easy. All dowel holes have been pre-drilled.

Insert E-Z Bond Super Glue (Thick) glue into the frame corner holes and align all prefabricated pieces inserting the dowel pins into their proper holes in the corners. Squeeze the panel together until all pieces completely seat.



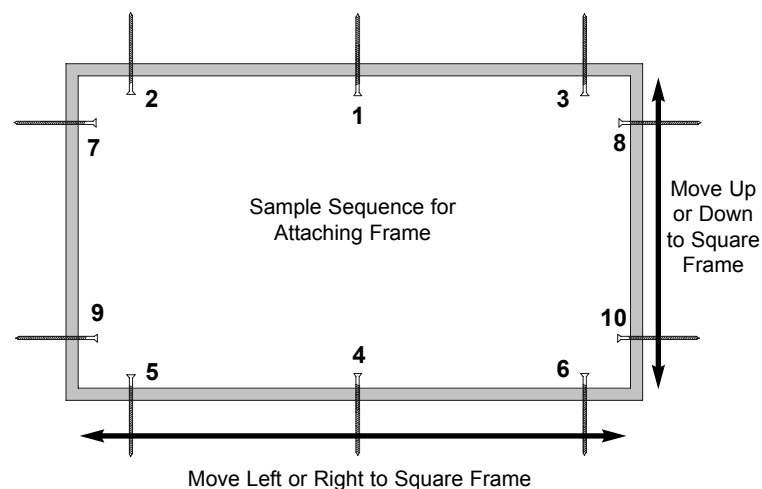
T-Post Attachment

If one or more T-posts are used, mount them to the frame using the pre-drilled holes in the T-post and frame.

Basic Frame Installation

There are three types of frames: L-frame, Z-frame, and deluxe Z-frame. The procedure and sequence of mounting screw attachment is similar for all three types.

1. Center the frame inside or outside the window opening.
2. Screws should ideally be inserted through the light stop on the frame. Remember to pre-drill all screw holes.
3. Attach the top of the frame first. Mount the first screws in the middle of the frame, and then attach the two corners.
4. On larger units, space additional screws evenly, no more than 30" apart and near the top of each T-post.
5. Move the bottom of the frame left or right to square the frame.
6. Once the frame is square, attach the bottom of the frame. Mount the first screw in the middle of the frame, and then attach the two corners. Space any additional screws as you did at the top of the frame.
7. If necessary to align the panels, raise or lower the side frames or T-posts.
8. Only after the panels are all aligned, fasten the sides of the frame using screws at every hinge location.



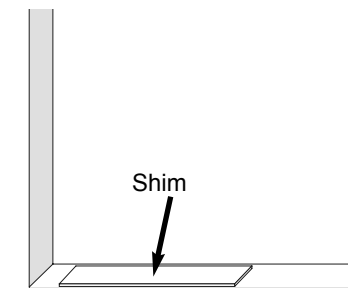
Caulking

Caulking may be required to fill in minor gaps between the frame and wall, between mitered corners of the frame, or over the screw heads for the frame installation screws.

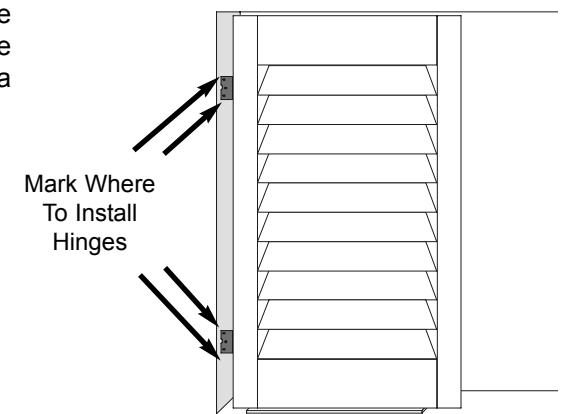
Install shutter panels

1. All hinge locations on the frame have been pre-drilled for the center screw of each hinge. You may desire a different panel location than dictated by the pre-drilled holes. If so, then follow the steps A & B, below.

A. Panels are fabricated 1/4" shorter than the length of the frame opening. Place a shim of the desired bottom gap in the bottom of the frame on the side where the shutter hinges will be located. The pre-drilled hinge locations are determined with a 1/8" shim.



B. With the top and bottom hinges open, position the shutter panel in the window on top of the shim. Mark where to attach the top and bottom hinges (see illustration).



2. Hinge pins are removable. Remove the top and bottom hinge pins and attach the hinges to the inside of the frame. The barrel of the hinges must be outside the frame to allow the shutter panel to open and close properly.

3. If the panel has more than two hinges, do not attach them until after aligning the panel(s).

4. 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.

5. Close the panels and check their alignment. For adjustments to the panels, the frame should be adjusted to square accordingly.

6. After aligning the panels, attach any remaining hinges to the frame.

7. Install shutter magnets according to the procedures outlined in the "Magnet Attachment" section.

Install Pulls

- Mark location for decorative knobs or handles with a pencil
- Pre-drill holes and install.

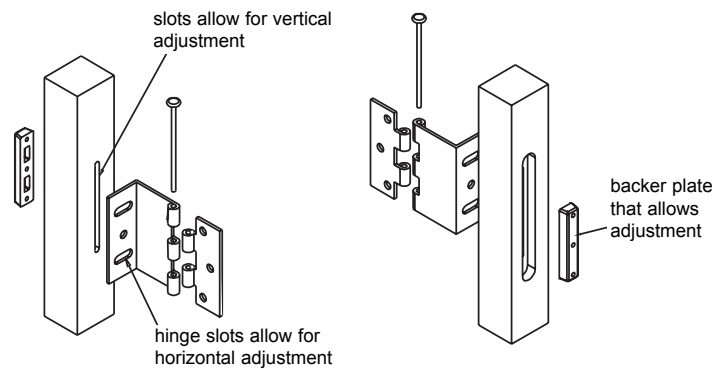
Direct Mount Installation

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.

To install with hanging strip in either inside or outside mount applications:

1. Drill and countersink at least three holes through the hanging strip for use with your mounting screws. (CAUTION: Do not drill or screw through the rout holes on the back of adjustable hanging strips.)
2. Use a pencil to mark the wall or trim surface where you want to mount the hanging strips.
3. Hold the hanging strips on the marks, and fasten the hanging strip to the mounting surface through the middle hole first.
4. Hold a level vertically against the hanging strip. Make sure the strip is straight vertically.
5. Fasten the hanging strip in this position with the remaining two screws and holes.
6. Adjustable Hanging Strips will have a 4" x 1/2" slot in the back, with a smaller 2 1/2" x 1/8" slot going completely through. The narrow slot allows the screws to be inserted into the backer plate. Attach the "L" part of the wrap hinge to the Hanging Strip.

7. Install shutter panel(s) according to the procedures outlined in the "Install Shutter Panels" section. Hanging Strips generally use a back mounted Wrap hinge.



Adjustments

To adjust the overlap in the middle:

- Do not loosen the screws
- Tap the foot/base of the hinges on both panels evenly with a hammer to slide the panels away from each other, checking frequently, until you achieve the gap desired.
- Snug screws again if they have come loose.

To raise or lower the panel with adjustable hanging strips:

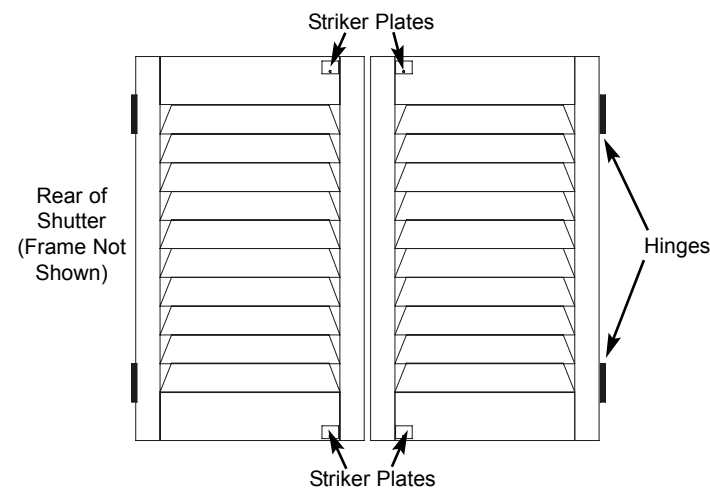
- Slightly loosen the screws that fasten the hinge to the strip
- Move the hinge and panel up or down as needed.
- Snug the screws

Magnet Attachment

Magnets ensure closure of all shutter panels. They are attached to the top or bottom of the frame. The magnets are positioned so that they contact striker plates screwed to the rear of the shutter panels near the top or bottom.

Determine the proper location of the magnet by holding either the top or the bottom of the stile against the light stop. If the opposite end of the stile does not rest against the light stop, a magnet is needed at that end of the panel. If it is resting against the light stop, switch ends and repeat the procedure.

Fasten the magnets to the light stop only where the panels do not touch the light stops when closed. (Striker plate should be fastened to the rail, not the stile.)

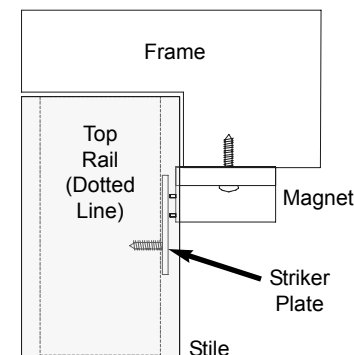


Attach striker plates where the top or bottom rails meet the stiles, as illustrated.

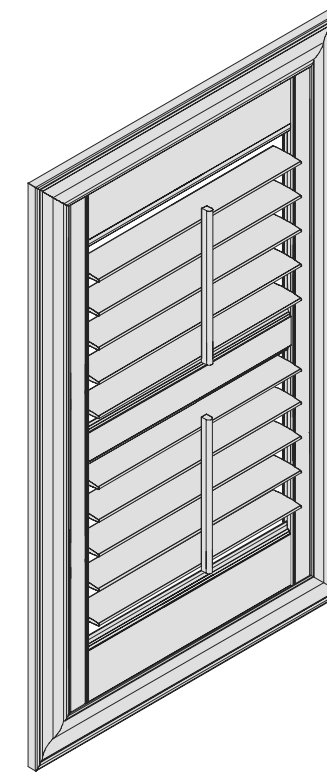
- With frames or light stops, the edge of the plate should be 3/8" from the edge of the rail.
- With no light stops, the edge of the plate should be within 1/8" from the edge of the rail.
- The hole for the striker plate screw should be away from the top or bottom edge of the rail so that the flat part of the plate contacts the magnet.
- Note that the striker plates are attached to the side of the panel furthest from the hinge attachment to the frame or T-post.

- With the panel(s) closed, mark the frame for magnet placement so that the magnets will contact the striker plates and secure the panels in the proper position.

- Attach the magnets to the frame, or to the sill or upper jamb when no light stop is used. Test their placement by opening and closing the shutter panel(s). Adjust if necessary.



WOODWIND PLANTATION SHUTTERS



CUSTOM WOOD ALLOY SHUTTERS

INSTALLATION QUICK REFERENCE