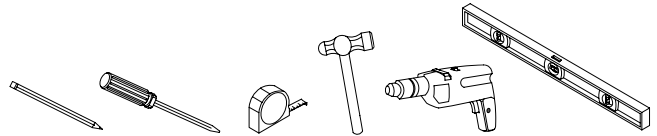


TOOLS REQUIRED

- Rechargeable, variable speed drill
- Slot screwdriver
- Non marring hammer with 1" head
- Level
- Caulk or sealant for both mitered corners and to cover gaps between the frames and window jambs
- Pencil



INSIDE MOUNT WITHOUT FRAME (DIRECT MOUNT)

1. Install top hinge

- Starting with the left panel, place panel into opening.
- With the hinge leafs secured to the panel, position the panel so it has equal clearance at the top and bottom.
- Make a pencil mark at the bottom of the top hinge.
- Place hinge leaf below the pencil mark on the window frame. Install one screw (#6 x 5/8") into the hinge securing it to the window frame.
- Check to see if the position is accurate by placing the panel into the opening and inserting the hinge pin into the hinge.
- If accurate, remove the panel and set the second screw (#6 x 5/8") into the top hinge and move to the installation of the bottom hinge.
- If the position of the panel is not correct, adjust the position of the hinge leaf attached to the window opening and check again for accurate positioning.

Note: Front to back positioning of the hinge leaf varies based on the type of hinge leaf being used for this application. Standard 5/8" Hinge Leaf – the barrel of the hinge should be just in front of the edge of the window frame. 1 1/4" Extended Leaf Hinge – the barrel of the hinge should extend approximately 1/2" past the front edge of the window frame.

2. Install bottom hinge

- Place the panel into position by inserting the hinge pin into the top hinge.
- Make a pencil mark on the window jamb below the bottom hinge and remove panel.
- Install one screw into the bottom leaf of the bottom hinge.
- Check the position is accurate by setting the panel back in the opening and inserting the hinge pins in both the top and bottom hinges.
- If accurate, remove panel and install second screw in bottom hinge.
- If the position of the panel is not correct, adjust the position of the bottom hinge and check again for accurate positioning.

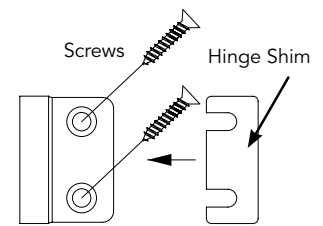


Fig. 1.1

Note: In most cases the window frames are not plumb. Hinge shims will likely be needed to properly align hinges and allow proper panel operation. (See Fig. 1.1)

3. Level Panels

- If there are more panels in the same opening, repeat the first two steps with lining up the panels as the main concern.
- If minor support or leveling is required, turn adjustable jamb cap at the bottom of the vertical jamb (stile) to the required spot. (See Fig. 1.2)

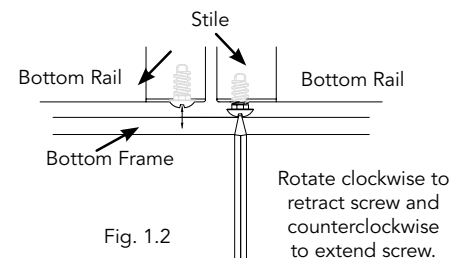


Fig. 1.2

4. Install Remaining Hinges

- Once panels are level, install the remaining hinges while the panels are hanging.
- Simply open the panel(s), and insert hinge pins into all hinges.
- One at a time, slide a hinge leaf up onto the bottom of an intermediate hinge pin.
- Hold the leaf so that it is positioned against the leaf attached to the panel and the window jamb.
- Set both screws and use hinge shims when necessary. Repeat the above steps for all remaining hinges.

5. Install catch system

- If Magnets were requested, see Magnet & Catch Placement section on page 9 for installation details.
- If Panel Lock was requested, see Panel Lock Ramp Installation on page 9.

FRAME ASSEMBLY

1. Labels

- All Frames will be identified with labels. Match the line number of the frame to the line number of the panel. Do not remove labels until product is installed.

2. Frame Assembly

- Lay frame sides flat beside the panels to ensure that the frames will be assembled correctly and that the hinges on the panels and the frames will be in alignment.
- Frames should be pre-drilled with installation holes. If not, pre-drill all frame sides using a 3/8" drill bit. Drill through the first layer of Polyresin 3 only.
- Installation holes are located just below each hinge on the side frames (except bottom hole is located just above the bottom hinge). Top and bottom frames should have evenly spaced holes no more than 16" apart. (See Fig. 2.2)
- Insert the plastic corner keys into both ends of the top and bottom frames.
- Using a rubber mallet hammer, give a firm tap to the frame to ensure the corner keys are fully engaged.

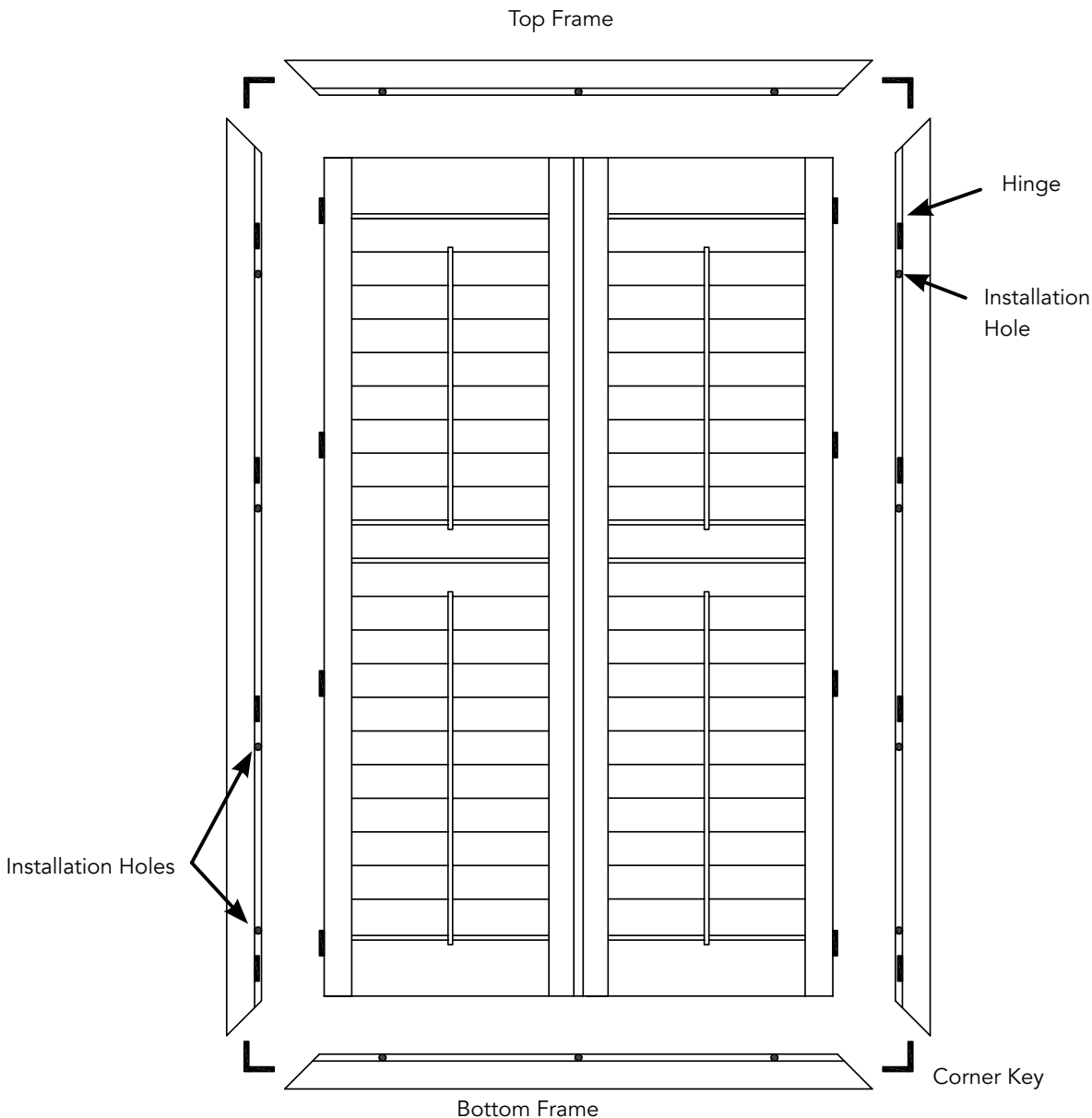


Fig. 2.2

INSIDE MOUNT WITH L FRAME

1. Place frame in opening

- Make sure the frame has been properly assembled and is right side up. Labels will identify each frame piece.

2. Fasten frame

- Center the frame in the opening. Insert screws (#8 x 1 1/2") into the pre-drilled holes of the top of each side frame. Set the screws into the window jambs.

Note: If the frame is significantly smaller than the opening size, then do not overtighten the screws. Overtightening the screws will cause the frame to distort.

3. Hang panels

- Set the panel(s) in the frame and insert the hinge pins of the top and bottom hinges only.

4. Square or level panels to the opening (See Fig. 3.1)

- Move bottom frame left or right until the panels are level. If this does not work then;
- Remove the top left screw and move the left frame side up or down until the panels are level. Once level, set the screw back into the window opening. If this does not work then; try repeating for the right side frame. (An alternate option to this step is to remove the top right installation screw. Loosen or tighten the top left side screw until the panels are level then re-install the top right screw.)
- When the panels are level and square within the frame, hold the bottom frame in position and set a screw in the middle bottom frame hole. (Note: Setting a bottom screw may not be possible due to marble window sills, etc. If this is the case, set screws in the lower side frame holes.)

5. Fasten remaining screws

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

6. Panel Lock & Magnets

- The Panel Lock system does not require any installation when 4-sided frames are used. The Panel Lock caps have already been installed in the ends of the stiles. The plungers lock into the groove of the frame.

7. Cap screw holes

- Once all screws have been installed and panels checked for level, cap all holes with the provided button plugs. (See Fig. 3.2)

8. Close Gaps

- Close gaps around frames with L-Frame Cover Strip (if requested). This is glued to the front face of the frame. (See Fig 3.2)
- Caulk or sealant can be used to seal any gaps around the frames or mitered corners.

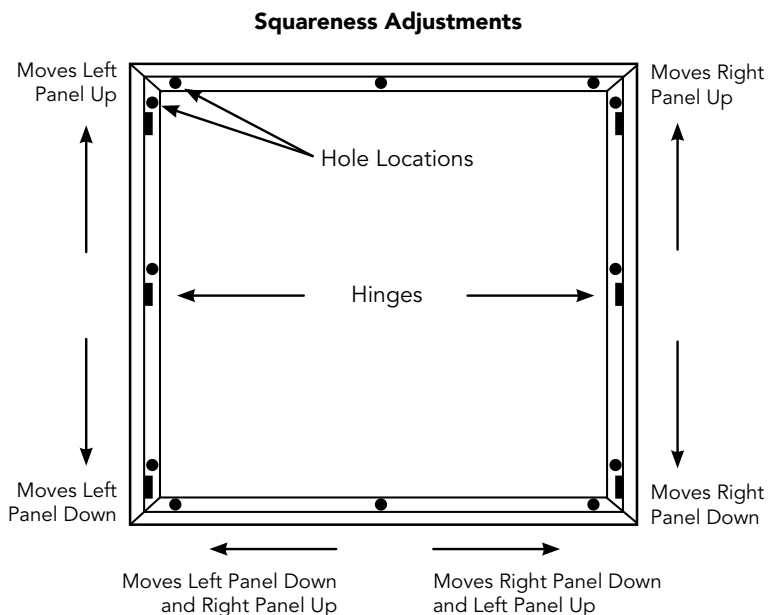


Fig. 3.1

Inside Mount L Frame with Cover Strip

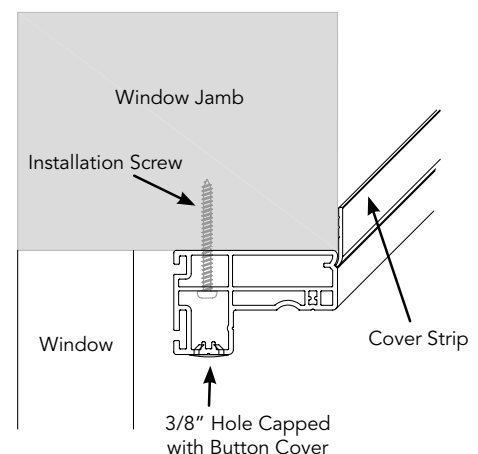


Fig. 3.2

INSIDE MOUNT WITH Z FRAME

1. Place frame in opening

- The top of the frame is indicated by 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, but labels do not indicate top or bottom frames, as they are usually interchangeable.

2. Fasten frame

- Most frames have pre-drilled holes placed for ease of installation.
- Insert a screw (#8 x 1 1/2") in both the left and right top side frame holes. Center the frame in the opening, then set the screws into the window jambs.

Note: If the frame is significantly smaller than the opening size, then do not overtighten the screws. Overtightening the screws will cause the frame to distort.

3. Hang panels

- Set the panel(s) in the frame and insert the hinge pins of the top and bottom hinges only.

4. Square or level panels to the opening (See Fig. 4.1)

- Move bottom frame left or right until the panels are level. If this does not work then;
- Remove the top left screw and move the left frame side up or down until the panels are level. Once level, set the screw back into the window opening. If this does not work then; try repeating for the right side frame. (An alternate option to this step is to remove the top right installation screw. Loosen or tighten the top left side screw until the panels are level then re-install the top right screw.)
- When the panels are level and square within the frame, hold the bottom frame in position and set a screw in the middle bottom frame hole. (Note: Setting a bottom screw may not be possible due to marble window sills, etc.)
- When magnets are supplied, minor support or leveling can be achieved by turning the adjustable jamb cap at the bottom of the vertical jamb (stile) to the required spot. (See Fig. 1.2)

5. Fasten remaining screws

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

6. Close any gaps

- Dap or Caulking can be used to seal any gaps around the frames or mitered corners.

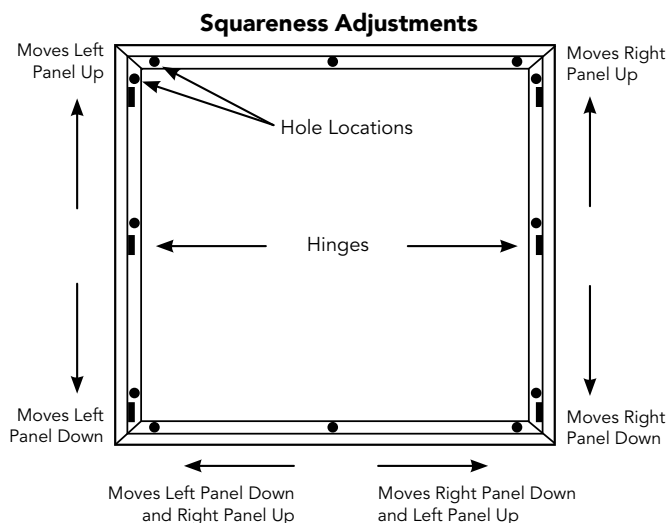


Fig. 4.1

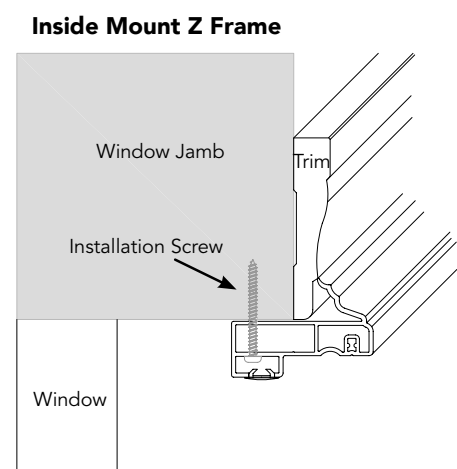


Fig. 4.2

INSIDE MOUNT WITH HANG STRIP

1. Drill installation holes

- 3/8" diameter holes must be drilled at each hinge location. (See Fig. 5.1)

2. Place side frame in opening

- The top part of the frame is indicated by 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.

3. Fasten hinge side hang strip

- Insert a screw (#8 x 1 1/2") inside the top hole first, followed by the bottom, keeping the hang strip plumb.

4. Hang panels

- Set the panel(s) in the opening and insert the hinge pins of the top and bottom hinges only.

5. Square or level panels to the opening

- Adjust the bent leaf hinges, if necessary. (See Fig. 5.1)
- Loosen the hinge screws and move the hing left or right.
- Re-tighten screws once level.
- If the panels cannot be leveled or squared by adjusting the hinges, then use shims behind the hang strip to achieve the desired results.

6. Fasten remaining screws

- Insert screws in the remaining holes.
- Check to ensure panels are level after every screw has been screwed into position.

7. Fasten top and bottom light stop

- Drill 3/8" holes about 5" from each end of each piece of light stop.
- Space intermediate holes evenly about every 12"-16".
- Center and insert screws.

8. Cap screw holes

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

9. Install magnets and plates

- See Magnet & Catch Placement section on page 9 for installation details.

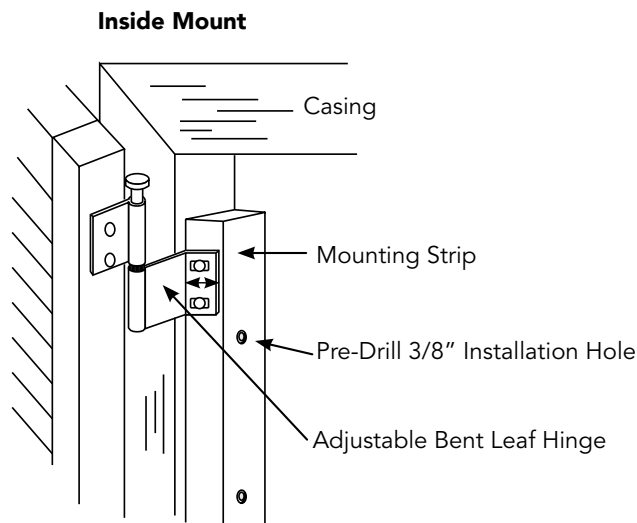


Fig. 5.1

OUTSIDE MOUNT WITH L FRAME AND DESIGNER FRAME

1. Hold frame on opening

- Make sure the frame has been properly assembled and is right side up. The top of the frame is indicated by a greater amount of distance from the top of the top hinge to the edge of the frame.

2. Fasten frame

- Insert a screw (#8 x 1 1/2") 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. Depending on the application and number of extensions, longer #8 x 2" screws may be supplied.

3. Hang panels

- Set panel(s) in the frame and insert the hinge pins of the top and bottom hinges only.

4. Square or level panels to the opening (See Fig. 6.1)

- 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 the bottom frame in position and place a screw in the middle bottom frame hole. Make sure the bottom frame is level before setting screws.
- If minor support or leveling is required, turn adjustable jamb cap at the bottom of the vertical jamb stile to the required spot. (See Fig. 1.2)

5. Fasten remaining screws

- Insert screws in the remaining holes.
- Check to ensure panels are level after every screw has been screwed into position.

6. Close any gaps

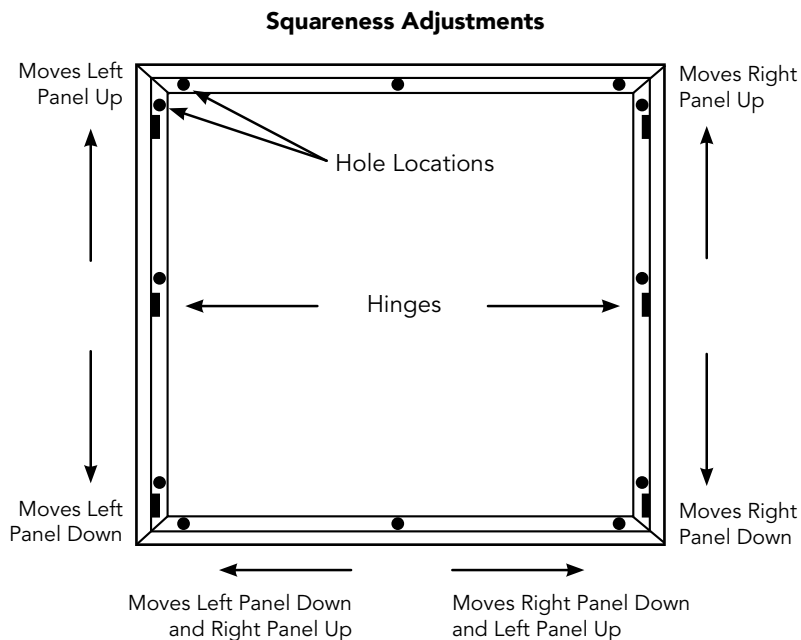


Fig. 6.1

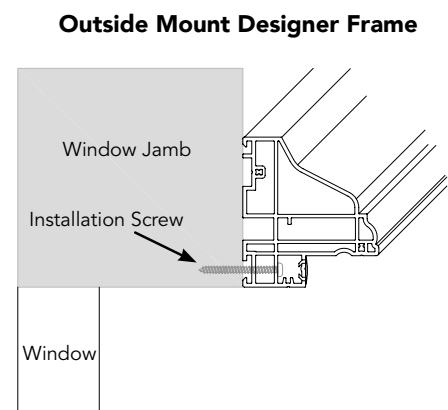


Fig. 6.2