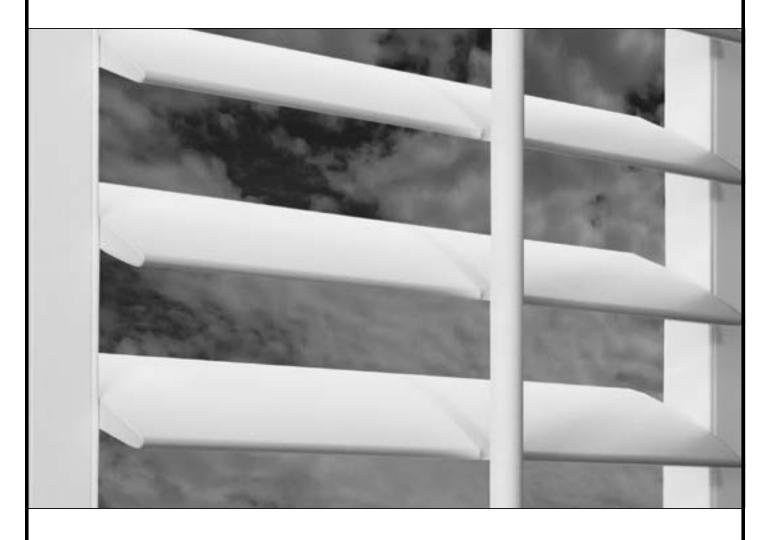
LEVOLOR

Shutters

INSTALLATION • OPERATION • CARE INSTALACIÓN • FUNCIONAMIENTO • CUIDADO



Tilt Bar • Gear Closure System • Motorization Barra de inclinación • Sistema de cierre de engranajes • Motorización

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Thank you for purchasing LEVOLOR® 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 installation.

Please visit LEVOLOR.com/Shutters to view installation videos and Spanish translation.

INSTALLATION OVERVIEW

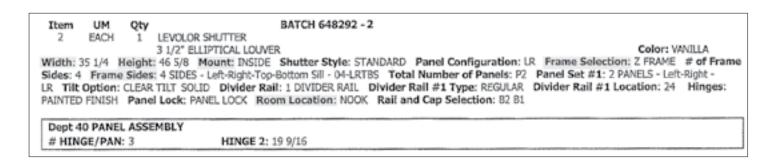
All frame styles and configurations follow the same basic installation process:

- 1. Review the packing slip and product labels to identify your frame style and mounting application
- 2. Organize tools and components
- 3. Assemble the frame
- 4. Fasten the frame in two points
- 5. Hang shutter panel(s)
- 6. Confirm the product is square / level
- 7. Fasten the remaining screws into the frame
- 8. Finishing touches such as panel lock adjustment, screw caps and caulking

STEP 1: REVIEW THE PACKING SLIP AND PRODUCT LABELS

Before you begin, review the packing slip that came with your order to identify your frame and mounting application.

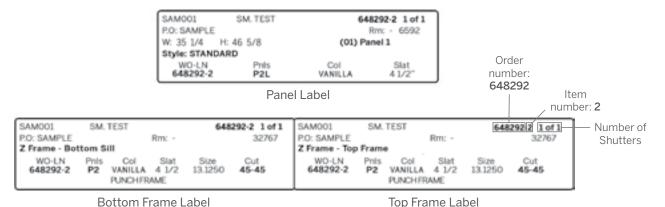
Packing Slip Example:



This example shows the following:

Width: 35-¼-in
Height: 46-5%-in
Mount: Inside
Frame: Z Frame
of Frames: 4 Sides
Room Location: Nook

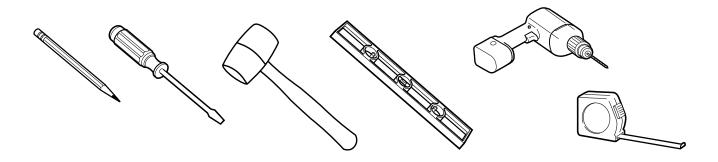
Packing Labels Example:



- Each **frame** will be identified with a removable label.
- Match the line number of the frame to the line number of the panel.
- Do not remove labels until product is installed.

STEP 2: TOOLS YOU MAY NEED (Make sure you have all required tools.)

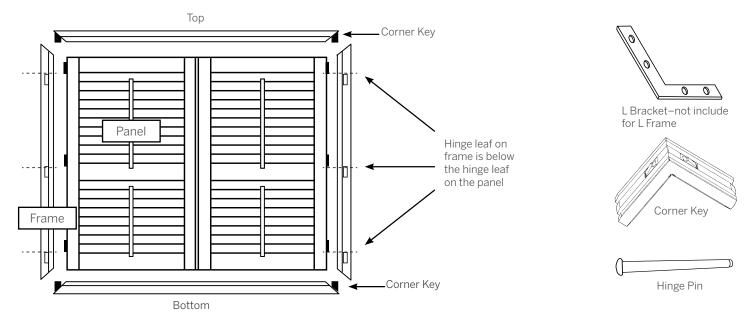
- Pencil
- Tape measure
- Level
- · Rechargeable, variable speed drill
- 3/8" diameter drill bit
- 3" Robertson bits #1 and #2
- Slot screwdriver
- Non marring hammer with 1" head
- Caulk or sealant for both mitered corners and to cover gaps between the frames and window jambs
- Loctite[®] glue 414 or contact cement required for outside mount applications (not supplied)
- Jig saw, hack saw, Dremmel® tool or exacto knife if cut-outs are required



STEP 3: ORGANIZE PARTS AND COMPONENTS

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.

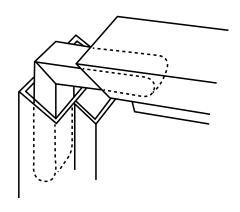
- The top of the frame is indicated by a greater amount of distance from the top of the top hinge to the edge of the frame.
- The frame label will indicate left, right, top or bottom frame.
- Frames are pre-drilled with installation holes for easy installation.
- Installation holes are located just below 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.



STEP 4: ASSEMBLE YOUR FRAME

IMPORTANT: if using t-post read and follow instructions on page 10 for placing t-posts before frame assembly

- Insert the plastic corner keys into both ends of the top and bottom frames.
 - For L frame applications apply Loctite 414. See steps below for gluing corner keys.
- Slide the corner key that is in the top and bottom frames into the end of each side frame.
- Using a rubber mallet hammer, give a firm tap to the frame to ensure the corner keys are fully engaged

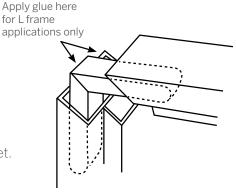


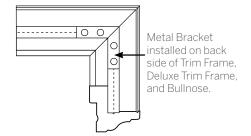
Glue Corner Keys – (L frame applications only)

Loctite 414 is required for an outside mount L frame applications only.

- Apply Loctite® 414 (or Contact Cement) to inside surface of the corner key cavity of both frame corners to be assembled. (not supplied)
- Insert the corner key, making sure the mitered corner is clean, tight and in alignment. Hold firmly until set (10 to 20 seconds).
- · Repeat for remaining corners.

IMPORTANT: It will be impossible to detach the corners after the adhesive has set.





STEP 5: FASTEN THE FRAME IN TWO POINTS

Note: Directions vary depending on frame type and inside or outside installation applications FASTEN FRAME FOR INSIDE MOUNT WITH Z, TRIM, BULLNOSE OR L FRAME STYLES

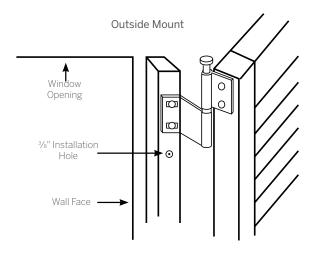
- Center the assembled frame in opening, ensuring the frame is right side up.
 Reminder: The top of the frame is indicated by a greater amount of distance from the top of the top hinge to the edge of the frame.
- Set two screws through the top frame only, as level as possible
- Fasten one screw in the top left frame and the second screw in the top right side of the top frame using the pre-drilled holes.
- Be sure to fasten the screws through the frame and 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.

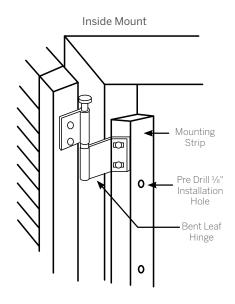
FASTEN FRAME FOR OUTSIDE MOUNT WITH L FRAME OR CASING FRAME

- Center frame on window opening, ensuring the frame is right side up.
 Reminder: 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.
- Set two screws through the top frame only, as level as possible
- Fasten one screw in the top left frame and the second screw in the top right side of the top frame using the predrilled holes.
- NOTE: Do not overtighten the screws. Overtightening the screws will cause the frame to distort.

FASTEN FRAME FOR INSIDE OR OUTSIDE MOUNT WITH MOUNTING STRIP

- Drill installation holes, 3/8" diameter holes must be drilled at each hinge
- Place side frame in opening, ensuring the frame is right side up.
 Reminder: 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.
- Insert a screw inside the top holes first, followed by the bottom ones, keeping the panels plumb





STEP 6: HANG PANELS

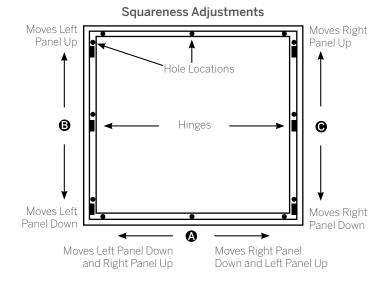
- Set the panel(s) in the frame
- Insert the hinge pins for the top and bottom hinges only.

STEP 7: SQUARE OR LEVEL PANELS TO THE OPENING

Confirm that the panels are level/square if not the following adjustments can be made to correct it.

- Move bottom frame left or right until the panels are level
- If this does not correct the issue remove the top left screw and move the left frame side up or down until the panels are level
- 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.

Note: Panel locks are located at the top and bottom of a shutter panel. They are used to keep panels securely closed and can also be used to level the panel.



For mounting strip applications

• Adjust the bent-leaf hinges, if necessary, by loosening the hinge screws and moving the hinge left or right. Re-tighten hinge screws once level.

STEP 8: FASTEN REMAINING SCREWS

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

For mounting strip applications

- Fasten top and bottom frame by drilling 3/8" holes
- Center frame and insert screws

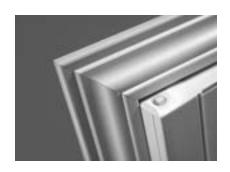
STEP 9. FINISHING TOUCHES/PANEL LOCKS

Panel Locks

Panel locks are standard for 4-sided frames. See page 9 for steps on installing Panel locks on 2 or 3 sided frames

Panel locks are located at the top and bottom of a shutter panel. They are used to keep panels securely closed and can also be used to level the panel.

- To adjust the Panel Lock system using a flat head screwdriver, #2 Robinson Bit, or a Squarehead Bit to adjust the plungers.
- Push in on the plunger and rotate clockwise to thread the plunger into the panel or rotate the plunger counterclockwise to extend the plunger.



Cap screw holes

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

Close any gaps

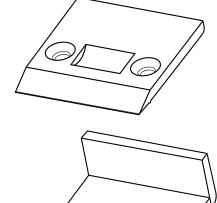
• Caulking or sealant can be used to seal any gaps around the frames or mitered corners.

PANEL LOCK RAMP

Used on 2 and 3 sided frames when panel lock is selected at time of order

NOTE: Ramps will be necessary when less than 4 frame sides are ordered. There are two ramp styles:

Standard Panel Lock Ramp



Panel Lock Ramp with Back

PANEL LOCK INSTALLATION

Once the shutter and panels have been installed

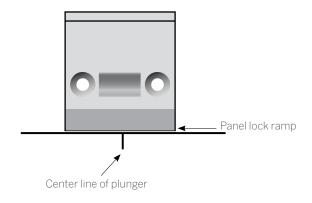
- Use a pencil to mark the windowsill to show where the center of the panel lock plunger is located, as well as the front of the ramp.
- · Open the shutter panels
- Place the panel lock ramp on the sill so that it aligns with the indicator lines.
- Mark the center of each screw hole of each ramp
- Remove the ramps and drill a pilot hole for each screw using a 3/32" drill bit
- Place the ramp back on the sill and set the screws. (Repeat as necessary)
- Operate the panel(s) to ensure proper function and closure.

Panel Lock Spring Loaded Plunger

Mark center of each plunger with pencil

Adjusting the panel lock plunger

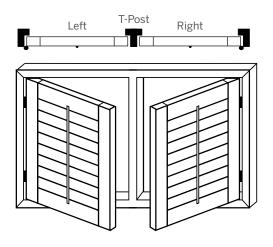
- The panel lock plunger can be adjusted by using a flat head screwdriver.
- Push in on the plunger and rotate clockwise to thread the plunger into the panel or rotate the plunger counterclockwise to extend the plunger.



T-POSTS INSTALLATION

If you are hanging multiple panels in one frame, T posts are required to keep Panels stable.

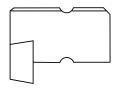
- T-Posts are used as a divider to hinge single or bi-fold panels when openings are too wide to hinge panels from the side.
- T-Posts can be placed directly in front of any existing window divider.

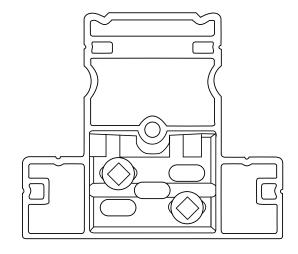


If mounting using alignment blocks

- Stack two T-Post Alignment Blocks.
- Position on the frame so that the holes in the blocks are lined up with the pre-drilled holes in the bottom frame.
- Using $(\#6 \times 1^{3}/4^{"})$ screws, attach the blocks to the frame.
- Repeat for the top frame.
- See steps for Assembling frame (page 5)
- After the frame is installed and the position of the T-Post is determined, set a (#8 x 2") installation screw horizontally through the pre-drilled hole in the side of the T-Post at the bottom.







T-POST INSTALLATION - T-POST ALIGNMENT BLOCK WITH 4-SIDED FRAME

Assemble frame and T-Post

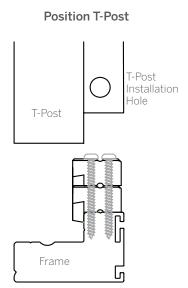
- Insert the corner keys into the top frame.
- · Attach the left side frame to the top frame.
- Attach the right side frame to the top frame.
- Attach T-Post to the top frame by sliding the T-Post over the blocks on the bottom frame.
- If aluminum reinforcement was requested for the T-Post, make sure it is positioned properly within the T-Post.
- Attach the top frame. Make sure the corner keys in each end of the top frame align with the corner key cavities in the side frames. At the same time make sure the T-Post is positioned on the blocks attached to the top frame.

Install the shutter

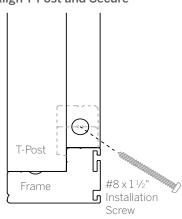
- Follow standard instructions for installing the frame.
- Test the fit and position of the panels to determine the location of the T-Post.
- Mark the position of the T-Post on the frame with a pencil.
- Remove the panels.

Align T-Post and secure

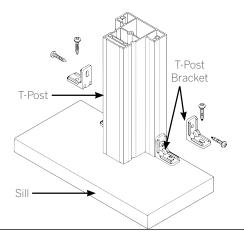
- With the bottom of the T-Post in the desired position, drive a $\#8 \times 1\frac{1}{2}$ " installation screw horizontally through the hole in the end of the T-Post.
- The screw will then pass between the (2) T-Post Blocks, thus locking the T-Post into position.
- Repeat for the top of the T-Post and cap installation holes with button covers







T-Post Attachment to Sill or Casement



Use T-Post bracket to center T-Post

 Using screws provided, anchor T-Post to the top and bottom frame, window opening, or sill.

ADDITIONAL INSTALLATION INSTRUCTIONS

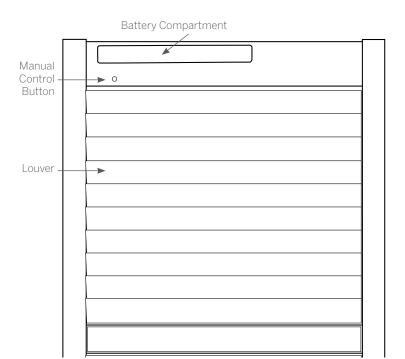
MOTORIZATION

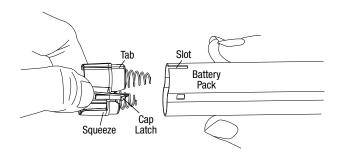
Install Batteries/Connect the Power Source

- Install the Batteries into the Battery Pack
 - Squeeze the cap latch to release the cap.
 - Remove the cap from the battery pack.
 - Install the batteries according to the instructions on the battery pack label.

Note: AA alkaline batteries are recommended; Lithium and rechargeable batteries are NOT recommended.

- Replace the cap: Align the tab with the end of the pack, press the cap on until it latches.
- Install battery pack
 - Slide open door to battery compartment
 - connect the power cable into the socket on the battery pack
- Once there is power to the shutter the manual control, button will operate the louvers and remote can be paired.
- See remote guide for these instructions or download the LEVOLOR App, which will easily walk you through the remote pairing process.





FRENCH DOOR SHUTTERS - FRAME ASSEMBLY FOR 4 SIDED FRAMES

STEP 1. FRAME ASSEMBLY

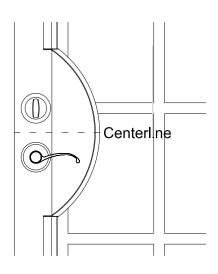
- In order to prevent shipping damage, the panel and frame will ship as a fully assembled unit.
- The frame will be completely assembled and ready to install, including the frame plate located on the cutout side of the shutter.

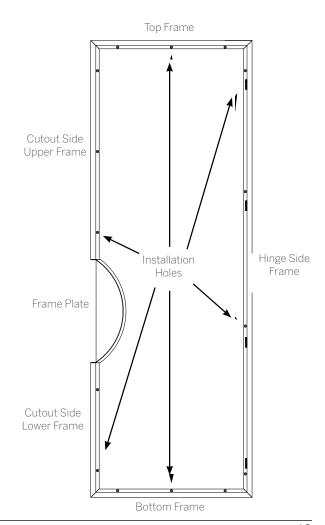
STEP 2. FRAME INSTALLATION

- Partially set an installation screw into the upper cutout side frame and upper hinge side frames.
- Set the frame against the door to check position of the frame and the alignment of the cutout to the handle or between the handle and the deadbolt.
- Level the top frame and set the cutout side screw. Ensure the center line of the frame plate will align with the handle and the outside edge of the frame plate will cover the glass but not interfere with the handle.
- Set the top hinge side screw, making sure the top frame is level.
- Set the panel in the frame and verify location and operation. Move the bottom frame left or right to achieve best possible operation of the panel.
- Install screws on the lower frame side below the cutout and check operation of panel.
- · Continue setting screws and checking operation of panel.
- · Install button plugs once all screws have been set.

NOTES FOR SIDE BY SIDE FRENCH DOOR INSTALLATION

- The installation method remains the same for both shutters in a side by side installation.
- Begin by installing the shutter on the door with an operational handle. If both handles operate choose either door.
- Install the first shutter as described above.
- Once the first shutter is complete, place a long level on the top frame of the installed shutter. Allow the level to hang across the face of the second door.
- Begin installing the second frame and make sure the top frame aligns with the level, and thus the first shutter.
- Finish installing second shutter as described above
- Repeat for the top of the T-Post and cap installation holes with button covers.





BY-PASS INSTALLATION

STEP 1. FRAME ASSEMBLY

- If it is a 2, 3 or 4 sided application, insert the provided 3" screws through the top frame and line up the screw through the screw ports inside the side frames (fasten lightly).
- For an **inside mount**, drill a 3%" hole through the first layer of vinyl, within the mounting area every 10" starting at each end of the frame.
- For an outside mount, drill a 3/8" through the first layer of vinyl at the front edge of the reveal of the frame every 10".

STEP 2. TOP FRAME INSTALLATION

- For an **inside mount**, fasten the top frame to the opening, making sure it is level; shim to level if necessary.
- For an outside mount, set the frame against the wall.
 Level the top and fasten the top frame to the wall with the provided installation screws.

STEP 3. WHEEL CARRIERS

 Insert wheel carriers inside each aluminum track.
 Two carriers are assigned to each panel so check the panel configuration to determine the correct number of carriers in each track.

STEP 4. ALUMINUM TRACKS

 Mount aluminum tracks to the extreme left of the opening of the frame by screwing through the predrilled holes in the track to the extrusion lines on the underside of the top frame.

STEP 5. ATTACH DOUBLE PANELS (if applicable)

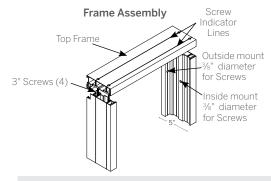
 When two panels are to be attached, lay panels face up and side by side on the floor. Remove the two interior top jamb caps. Insert the panel joiner by sliding it into the two interior jambs.
 Place the jamb caps onto the top jambs.

STEP 6. HANG SHUTTERS

- 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 wheel carrier adjustable nut.
- To level the panels, turn the adjustable nut of the wheel carrier with the provided wrench tool.

STEP 7. SECURE SIDE FRAMES (if applicable)

- Mount each side frame with the mounting screws provided so that the frames are plumb to the hanging panel.
- Cover the 3/8" holes with the button plugs.



Note: With track secured to the frame, remove every other track screw. Replace each with a #8 x 3 screw.

Outside Mount Application Outside Mount Frame Support Bracket Instal Screws Inside Mount Application 3" Install Screws Standard 5" By-Pass Valance Bracket Shutter Pane Wheel-Aluminum Carrier Track Door Optional Bracket 5" Crown Valance 3-1/2 Standard Valance ← Small Floor Guide Floor Guide Install Screw

STEP 8. ATTACH VALANCE (if applicable)

- Attach valance brackets to the front of the frame using the included #8 x 1" screws, the installation holes should be pre-drilled. Once all brackets are secure, position the channel on the back of the valance so that it rests on the bracket.
- The valance will need to be on a 45-degree angle, with the bottom of the valance farther into the room. Rotate the valance down to a vertical orientation until locked into the brackets.

STEP 9. FLOOR GUIDE INSTALLATION (optional)

 Install floor guide(s) in-between each set of moving panels. The guides prevent the doors from swinging forward into the room or back into the opening. Two sizes are available depending on type of by-pass.

TROUBLESHOOTING

Problem	Panels will not stay closed.
Solution	 Check panel load. Load is created when the installation of a panel is not plumb. If installed out of plumb, there is pressure put on the stile, which forces the door to open with a spring back effect. If the load is excessive, there is a possibility the louvers will be difficult to close. Adjusting the load can be resolved by one of the following ways: If load is detected the frame application, 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 load. Continue with all other installation screws, one at a time, while checking for load. If there is a 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. If window cranks are usually located on the bottom sill. If panel is hitting the crank, there are 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 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 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

TROUBLESHOOTING

Problem	Panels are too tight.	
Solution	Ensure the frame is installed properly. To check if the installation screw has been drilled in enough measure the top and bottom opening of the installed frame. Compare measurements to the actual width of the panel(s). The opening should be at least ½" larger than the panel(s) width. 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 similar width, panels can be placed into the wrong opening or with the incorrect panel grouping. Check the labels to ensure they correspond with the opening, as well as the instructions given by the Order Form.	
	SAM001 SM. TEST 648292-2 1 of 1 PO: SAMPLE Rm: - 6592 W: 35 1/4 H: 46 5/8 (01) Panel 1 Style: STANDARD WO-LN Pylis Col Slat 648292-2 P2L VANILLA 4 1/2"	
Problem	Panels are sagging.	
Solution	 Check the plumb of the installation. If the stiles are not plumb, the panels can appear to be sagging. Measure the top width and the bottom width to see if there is any variation. If the variation is wider at the bottom, the distance must be made the same as the top. If the top and bottom widths are the same, check the diagonal. If uneven, an adjustment to the plumb is required to assist in leveling the panel. If minor support or leveling is required, turn adjustable jamb cap at the bottom of the vertical jamb to the required spot. 	
Problem	Louvers are discoloring.	
Solution	Check for residue build-up The shutter material will not discolor and is warranted not to, with normal use and proper cleaning and maintenance. Any situation of discoloration is a direct result of residue from a cleaner or natural build-up (smoke, dust or oil furnace). This product should be cleaned only with soap and water or a recommended vinyl cleaner. A mild abrasive cleaner such as Soft Scrub® can also be used.	
Problem	Product is scratched.	
Solution	Check for surface inconsistencies. To determine if the apparent scratch is a line or a scratch simply run your finger over the area. Touch will in most cases determine any imperfection. Minor scratches can be buffed off by gentle rubbing with #0000 steel wool.	

TROUBLESHOOTING

Problem	Motorized shutter is not responding to the manual control button.	
Solution	Check that the batteries in the battery pack are correctly inserted and are fresh. Check that the battery pack is securely connected to the power cable and the cables are not pinched or caught in the battery panel cover. See the Remote Control Guide for operating or programming troubleshooting solutions.	
Problem	Motorized shutter is not responding to the remote.	
Solution	Check that the batteries in the remote and battery pack are correctly inserted and are fresh. Check that the battery and battery pack are securely connected to the power cable and the cables are not pinched or caught in the battery panel cover See the Remote Control Guide for operating or programming troubleshooting solutions.	

CLEANING PROCEDURES

LEVOLOR® Shutters are made from a material that makes them virtually maintenance free.

NOTE: Improper cleaning may void warranty



VACUUMING

· Attach a soft-bristled brush to the end of the hose. To avoid missing any dust, tilt the louvers so that you can also clean the rear.



SPOT-CLEANING/STAIN REMOVAL AT HOME

- Using a soft cloth, wash with mild soap and water.
- For difficult to remove dirt and stains, water-based household cleaners can be used.

CLEANING PROCEDURES TO AVOID:

Avoid using feather dusters and other related products, these will spread the material rather than capture the particles

Avoid Chlorine-based cleaners or other cleaners containing organic solvents could affect the surface appearance and durability of the product.

WARRANTY

For complete warranty information visit LEVOLOR.com or call Customer Service at 1-800-LEVOLOR or 1-800-538-6567. **NOTE:** Improper cleaning may void warranty

CONTACTING US

To contact LEVOLOR Customer Service regarding any questions or concerns you may have about your new shutters, you may reach us at 1-800-LEVOLOR (8:30 am - 6:30 pm EST) www.LEVOLOR.com

ADDITIONAL PARTS AND SERVICES

Additional or replacement parts may be available. Please contact LEVOLOR Customer Service for more information.