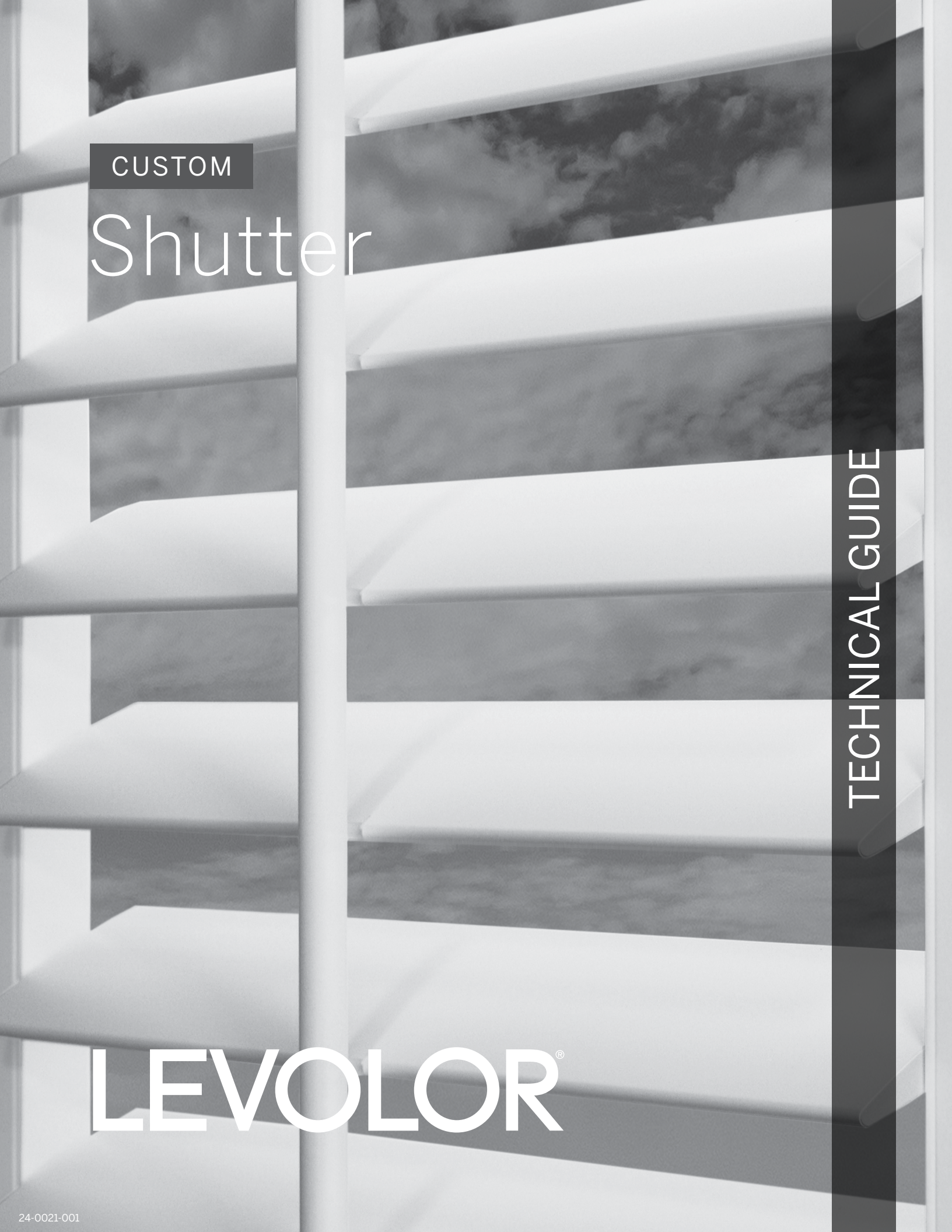


CUSTOM

Shutter

TECHNICAL GUIDE

LEVOLOR®

24-0021-001

Why LEVOLOR® Shutters?

1. The look of real wood with added durability.
2. Will not fade, chip or warp.
3. Our shutters are virtually maintenance free.
4. Waterproof: perfect for kitchens and bathrooms.
5. 25-Year Limited Lifetime Warranty.

Features and Benefits

LEVOLOR® Shutters combine the traditional look of Plantation shutters with advanced design and material manufacturing. The results are a classic look that is functional and durable; a graceful addition to any home.

STYLISH & FUNCTIONAL
Clean lines enhance this choice for windows, patio, and french doors. Three louver styles (2 ½", 3 ½" and 4 ½") give excellent light control. Select from one of three available colors to match the décor of your home.

MADE FROM A POLY COMPOUND
A colorfast compound with U.V. stabilizers designed with strength and durability, yet retaining a special warmth and feel. LEVOLOR Shutters will never warp, shrink, chip, peel, crack or fade and never need painting.

WATERPROOF
Ideally suited for use above kitchen sinks, bathrooms or other high humidity areas. LEVOLOR Shutters have no unsightly staples which may rust, and will not warp or crack due to water exposure.

ENERGY EFFICIENT
Closing the louvers fully in either direction insulates your windows helping to control the temperature of your room; keeping your home cooler in the summer and warmer in the winter.

FIRE RETARDANT
Our poly compund is fire retardant and self-extinguishing. It is safe to use in residential and commercial applications. Meets (NFPA701) National Fire Code Standards.

GREENGUARD®
LEVOLOR Shutters are GREENGUARD® Gold Certified. Visit www.greenguard.org for more information.

CHILD SAFE DESIGN
The Window Covering Manufacturers Association (WCMA) has introduced the industry's first third party certification program designed to help consumers and retailers identify window covering products that are best suited for use in homes with young children. The Best for Kids™ program requires that manufacturers who want to be part of the program meet stringent criteria, and submit those appropriate products to Intertek, a third party testing laboratory recognized by WCMA.

EASY 4-STEP PROCESS

1

CHOOSE YOUR

Color

Louver Color

Select from 3 neutral tones to match any décor.

White | Ivory | Vanilla

Hinge Color

Choose from 3 hinge colors

White (0008)

Ivory / Vanilla (009)

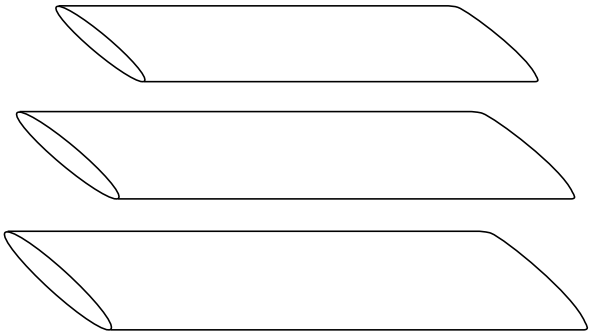
Stainless Steel (010)

2

CHOOSE YOUR

Louver Size

Pick 2 ½", 3 ½" or 4 ½" based on view preference, window size and light control.



2 ½ in. Louver

3 ½ in. Louver

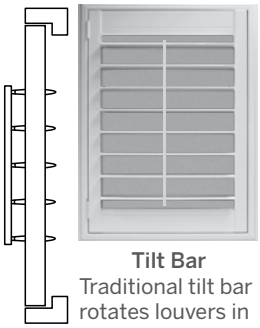
4 ½ in. Louver

3

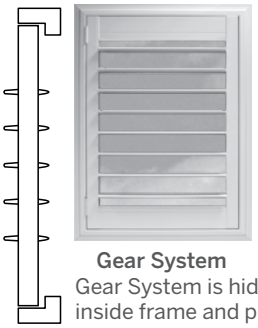
CHOOSE YOUR

Tilt Options

Determine the desired operating system.



Tilt Bar
Traditional tilt bar rotates louvers in either direction.



Gear System
Gear System is hidden inside frame and provides smooth, superior closure in either direction by tilting louvers.

4

CHOOSE YOUR

Frame Style & Configuration

Determine the desired frame style to complete your custom shutter order

L Frame

Inside mount and Outside mount

Z Frame

Inside mount

Bullnose Frame

Inside mount

Trim Frame

Inside mount

Décor Trim Frame

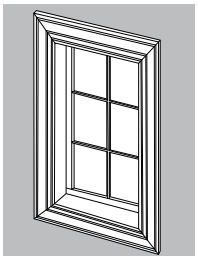
Inside mount

Casing Frame

Outside mount

Choosing Your Frame

Frame recommendations based upon your current window configuration

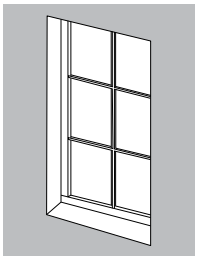


Window Opening
With Molding, Without Sill

BEST CHOICES
Inside Mount: Z or L Frame
Outside Mount: L Frame, or Casing Frame

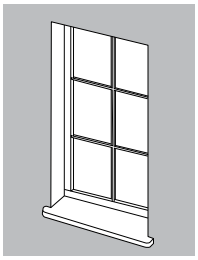
Window Opening
With Molding and Sill

BEST CHOICES
Inside Mount: Z or L Frame
Outside Mount: L Frame, or Casing Frame



Window Opening
Without Molding or Sill

BEST CHOICES
Inside Mount: All IM Frame styles
Outside Mount: L Frame, or Casing Frame



Window Opening
Without Molding, With Sill

BEST CHOICES
Inside Mount: All IM Frame styles
Outside Mount: L Frame, or Casing Frame

NOTE: If molding is flat, then all frame styles are suitable for inside mount.

L Frame

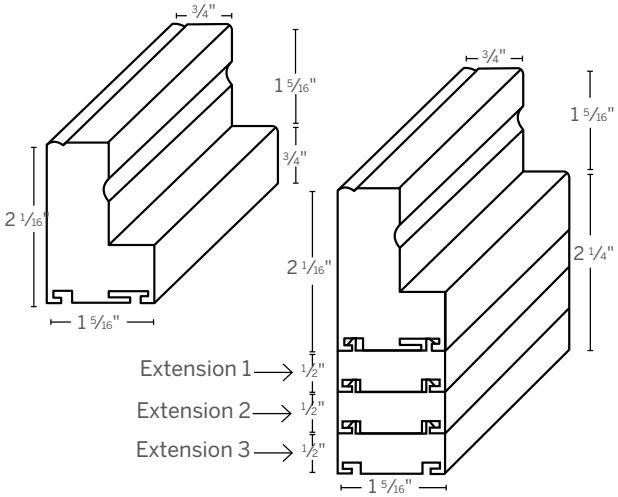
Used for **inside mounts and outside mounts** directly on top of trim or beside trim, and can also be mounted inside a window opening.

L Frame with Extension Added

Used for **outside mount** installations. Usually used when the frame is installed beside the trim or to clear any obstructions. One to 3 extensions may be used to obtain necessary projection to clear existing molding or obstructions.

L Frame

Inside mount and Outside mount

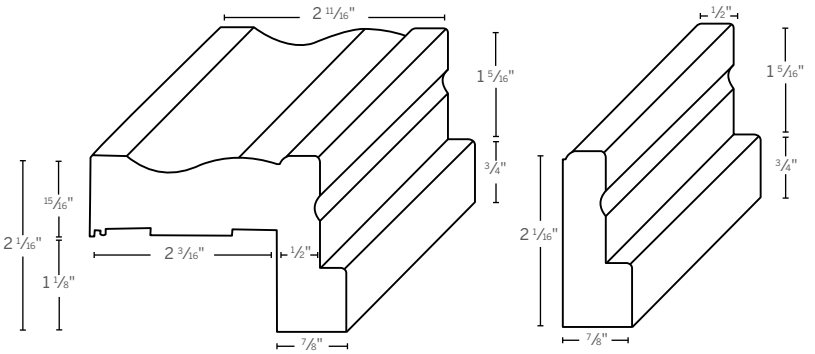


Décor Trim Frame
Décor Trim Frame with Sill

Used for **inside mounts** in openings with drywall returns and without trim. May be ordered with sill frame at bottom for openings with window sill. The bottom frame will sit flat on the window sill. The sill frame will be positioned at the bottom unless otherwise specified.

Décor Trim Frame

Inside mount



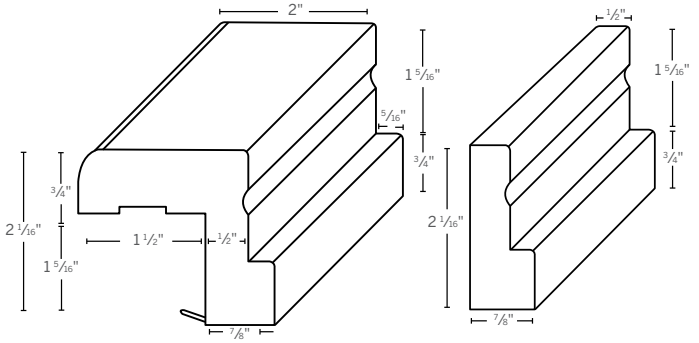
Choosing Your Frame

Bullnose Frame with Flex
Bullnose Frame with Sill

Used for **inside mounts** in openings with drywall returns and without molding. May be ordered with sill frame at bottom for openings with window sill. The bottom frame will sit flat on the window sill. The sill frame will be positioned at the bottom unless otherwise specified.

Bullnose Frame

Inside mount

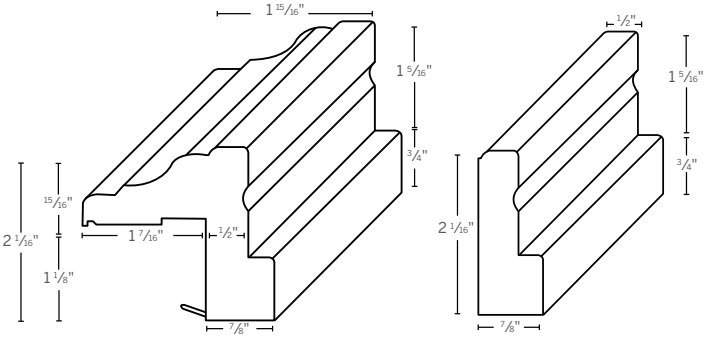


Trim Frame with Flex
Trim Frame with Sill

Used for **inside mounts** in openings with drywall returns and without molding. May be ordered with sill frame at bottom for openings with window sill. The bottom frame will sit flat on the window sill. The sill frame will be positioned at the bottom unless otherwise specified.

Trim Frame

Inside mount

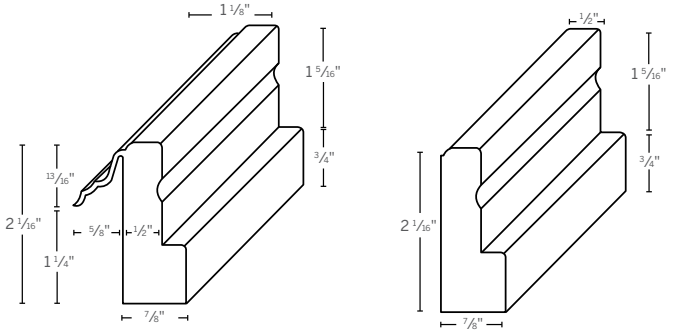


Z Frame
Z Frame with Sill

Used for **inside mounts** applications only. Blends well with all types of molding. Excellent for slightly out of square windows because the extended leg covers any imperfections. Jamb depth required is a minimal 1 1/4 in. May be ordered with sill frame at the bottom for openings with a window sill. The bottom frame will sit flat on a window sill. The sill frame will be positioned at the bottom unless otherwise specified.

Z Frame

Inside mount

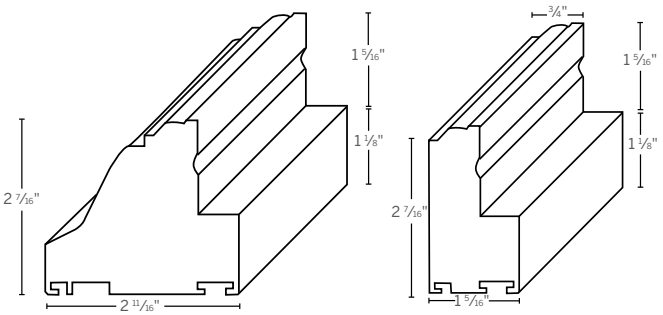


Casing Frame
Casing Frame with Sill

Used for **outside mount** only. Installed on the wall or directly on top of an existing trim. The Casing Frame Extension adds 3/4" projection to the shutter. The Sill Frame will sit flat on a window sill. The Sill Frame will be positioned at the bottom unless otherwise specified.

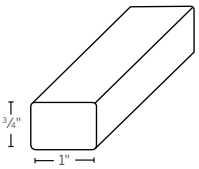
Casing Frame

Outside mount



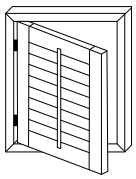
Mounting Strip

Used in conjunction with adjustable bent-leaf hinges for **inside mounts** without frames or as a light block mounted on the inside of panels which are installed without frames. Light blocking mounting strips are available in 4 sizes 1/4". 1/2", 3/4" and 1 inch.



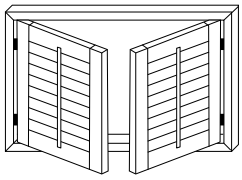
Panel Configurations– No T-Posts (Most common, other options are available.)

1 Panel



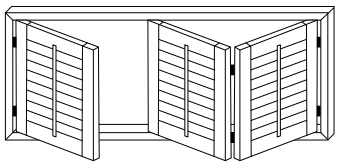
Can be hinged either left or right.
P1-L or P1-R

2 Panels



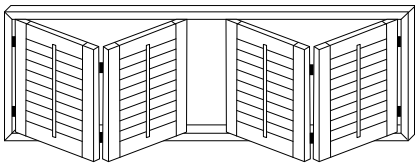
One panel hinged left & one panel hinged right. Can also be hinged (bi-fold) left or right.
P2-LR, P2-LL, or P2-RR

3 Panels



2 bi-fold right and one left or 2 bi-fold left and 1 right.
P3-LLR or P3-LRR

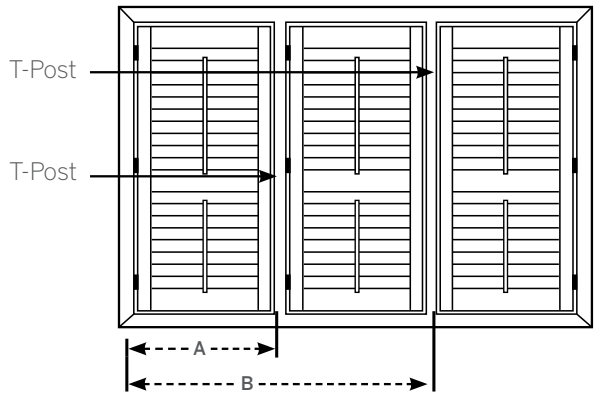
4 Panels



2 bi-fold left and 2 bi-fold right.
P4-LLRR

NOTE: For additional shutter specifications see an associate or visit LEVOLOR.com.

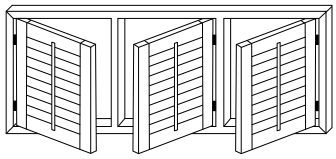
Measuring for T-Post Placement
Always measure from the left side of the window to the center of the T-Post for each T-Post location.



Panel Configurations – With T-Posts
(Most common, other options available.)

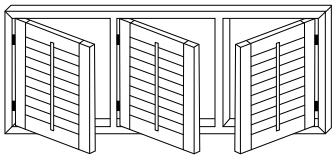
P3-LTRTR
3 Panels-Left panel, T-post, Right panel, T-post, Right Panel

Min. Width	30-in
Max. Width	108-in
Min. Height	16-in
Max. Height	120-in



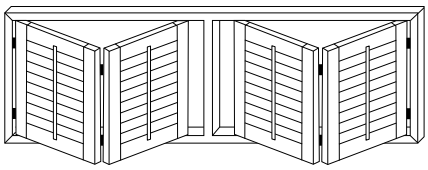
P3-LTLTR
3 Panels-Left panel, T-post, Left panel, T-post, Right Panel

Min. Width	30-in
Max. Width	108-in
Min. Height	16-in
Max. Height	120-in



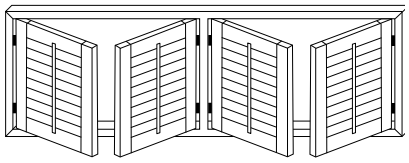
P4-LLTRR
4 Panels- 2Left panels, T-post, 2Right Panels

Min. Width	40-in
Max. Width	96-in
Min. Height	16-in
Max. Height	120-in



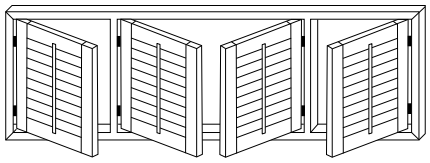
P4-LRTLR
4 Panels-Left & Right panel, T-post, Left & Right Panels

Min. Width	40-in
Max. Width	144-in
Min. Height	16-in
Max. Height	120-in



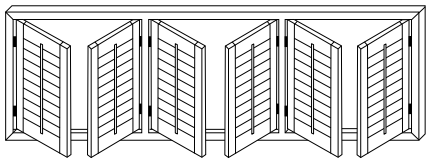
P4-LTLRTR
4 Panels-Left panel, T-post, Left & Right Panels, T-post, Right Panel

Min. Width	40-in
Max. Width	144-in
Min. Height	16-in
Max. Height	120-in



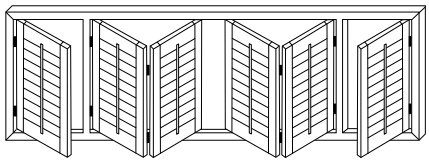
P6-LRTLRTLR
6 Panels-Left & Right Panels, T-post, Left & Right Panels, T-post, Left & Right Panels

Min. Width	60-in
Max. Width	180-in
Min. Height	16-in
Max. Height	120-in



P6-LTLLRRTR
6 Panels-Left panel, T-post, 2Left & 2Right panels, T-post, Right panel

Min. Width	60-in
Max. Width	168-in
Min. Height	16-in
Max. Height	120-in



LOCATING DIVIDER RAILS

Divider rails separate the top louvers from the bottom louvers. This allows the bottom half of shutters to be fully closed for privacy, while allowing the upper half to be open.

A divider rail is required for any shutter panel over 66-inches in height. Two divider rails are required for shutters over 90-inches in height. There is no extra charge for divider rails.

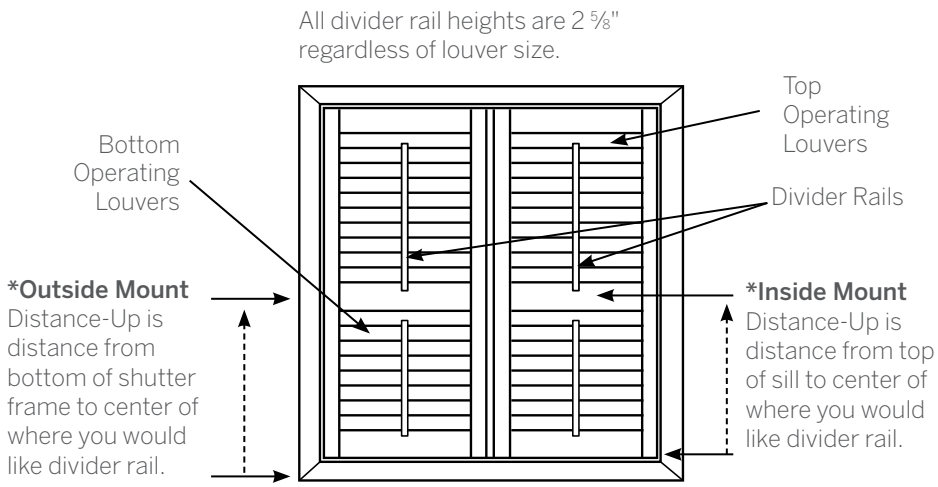
Note: If there are two divider rails along with motorized tilt, the mid-section of louvers will operate simultaneously with either the top section of louvers or the bottom section of louvers. Preferred configuration must be selected at time of order.

You can request the approximate height of the divider rail placement at time of order.

Simply provide the measurements from the bottom of shutter to the center of the divider rail location.

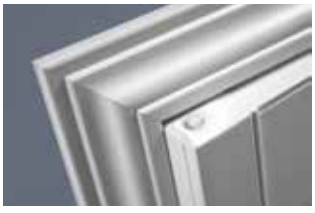
NOTE: The divider rail location may vary up or down by 1 ½ in. from the height requested.

- **Louver overlap may occur; there should be no less than 18" between the divider rail and top/bottom rail.**
- **You can request the approximate height of the divider rail placement.** For example, it may be necessary to match an existing window divider. Simply supply the measurements from the bottom of shutter to the center of the divider rail location. For framed shutters measure from bottom of frame.
- **It is important to note that the exact location may vary from the height you request**. Location of divider rails may vary up or down by 1 ½ inches.



PANEL LOCK

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. Panel locks are standard for 4-sided frames.

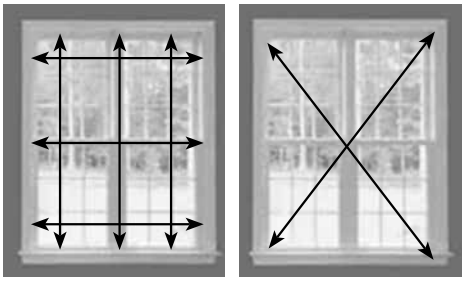


HOW TO MEASURE

Mounting Style Options
There are three mounting options for shutters Inside the window opening (inside mount), Outside the window opening (outside mount), or Outside the window opening ON EXISTING MOLDING (outside mount on existing molding).

Use a durable steel tape measure (do not use a cloth tape).
Measure all windows separately, no matter how similar they look.

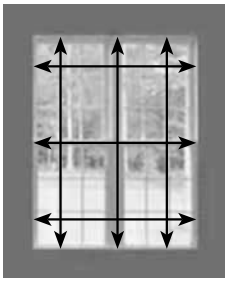
INSIDE MOUNT– SHUTTERS INSIDE WINDOW OPENING (with or without molding)



1. Measure the inside of the window opening, **not the glass.**
2. Measure window width in 3 places. Record the **narrowest** measurement and round down to the nearest ⅛ in.
3. Measure window height in 3 places. Record the **shortest** measurement and round down to the nearest ⅛ in.
4. Do not make any deductions, allowances or additions.
5.. Check for squareness by measuring on diagonals

NOTE: If diagonals are not the same, (less than ½ in. difference) and the window does not have a molding, a trim frame, décor trim frame, or bullnose frame are suggested to allow for easier installation. If diagonal measurement differs by more than ½ in., choose outside mount.

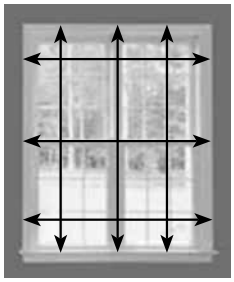
OUTSIDE MOUNT- SHUTTERS OUTSIDE A WINDOW OPENING
(window without molding — For Casing Frame and L Frames Only)



1. Measure the inside of the window opening, **not the glass**
2. Measure the window width in 3 places. Record the **widest** measurement. Round up to the nearest ⅛ in.
3. Measure the window height in 3 places. Record the **longest** measurement. Round up to the nearest ⅛ in.
4. It is necessary to have 1 ⅝ in. additional space on all sides of the opening to mount frames.

We will add necessary adjustments to your window measurements so that shutter will mount directly around window. If you desire your shutter to be a specific width or height, order as exact outside mount finished size.

OUTSIDE MOUNT- SHUTTERS OUTSIDE A WINDOW OPENING
(on existing molding — For Casing Frame and L Frames Only)



1. Measure the width to the outer edges of the molding in three places (your molding is part of the measurement). Record the **widest** measurement rounding up to the nearest ⅛ in.
2. Measure the height to the outer edges of the molding in 3 places (your molding is part of the measurement). If you have a sill, measure from the top of the sill to the top of the molding. Record the **longest** measurement rounding up to the nearest ⅛ in.
3. Do not take any deductions, allowances or additions.

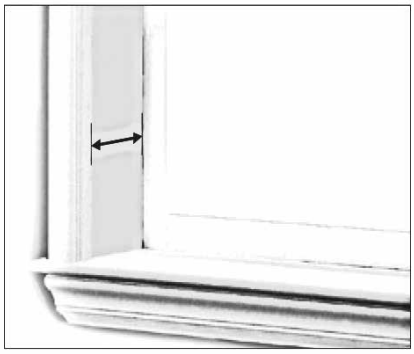
Special "MUST" Requirements:

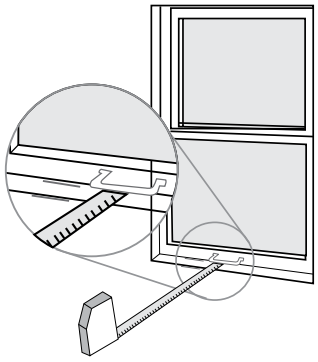
- Molding must be at least 1 ¼ in. wide, and have at least ¾ in. flat surface. The minimum width of trim required for Casing Frame is 2 ⅝ in. L Frame is 1 ⅜ in
- If your molding does not meet the above specifications, you must hang your shutters onto the wall, beyond and around the molding.

SHUTTERS INSTALLED ON WALL AROUND WINDOWS WITH MOLDING (L FRAME AND CASING FRAME ONLY) — Recommend professional measure and installation.

MEASURING FOR DEPTH CLEARANCE

Depth clearance is the minimum window depth required for shutters to operate without interfering with window parts. Measure from the front of any obstruction to the front edge of the window frame to determine depth.

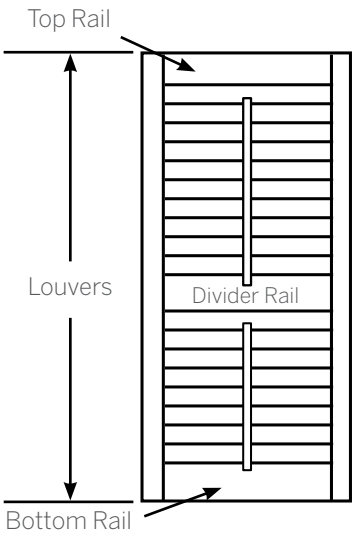




Minimum Depth Clearance by Frame (inches)			
Inside Mount (IM) — with frame or panel with front of window			
Frame Type	**2 ½ in. Louver Tilt Bar, Gear Closure System or Motorization**	**3 ½ in. Louver Tilt Bar, Gear Closure System or Motorization**	**4 ½ in. Louver Tilt Bar, Gear Closure System or Motorization**
Mounting Strip	2 ⅛	2 ⅜	2 ⅞
L Frame	2 ⅛	2 ⅜	3
Z Frame	1 ¼	1 ⅝	2 ⅛
Bullnose Frame	1 ⅜	1 ⅝	2 ⅛
Trim Frame	1 ⅛	1 ½	2
Décor Trim Frame	1 ⅛	1 ½	2
Outside Mount (OM)			
L Frame	0	½	⅞
Casing Frame	0	0	⅝

NOTE: If your window does not meet minimum depth for outside mount, then frame extensions are available. Each frame extension will increase clearance by ½ in.

How to Achieve Panel Consistency



Every specific shutter height is made up of a unique combination:
(1) a top rail
(2) a bottom rail
(3) a number of evenly spaced louvers
(4) possibly one or two divider rails

The distance between each louver is always the same, therefore to change the height of a shutter; we must increase or decrease the size of the shutter.

To achieve a uniform appearance and minimize variations, as well as maintain an equal number of louvers in adjacent shutters, we recommend adjacent shutters be ordered the same height.

If heights are not the same, apply one of the following three options when ordering shutters for adjacent windows

1. For inside mount mounting strip or L frame you may reduce taller shutters up to ⅛ in maximum.
2. For inside mount with Z frame, Bullnose, Trim frame or Décor Trim Frame you may reduce taller shutters up to ½ in maximum.
3. For height adjustments of more than ½ in, we recommend an outside mount.

Shutter Critical Dimensions

Size Limitations: (per panel)
Minimum Width - 6 in
Maximum Width - 36 in
Minimum Height - 16 in
Maximum Height - 120 in

Width Limitations:
1 Panel - 36 in
2 Panel - 72 in (individually hinged)
2 Panel - 48 in (hinged together)
3 Panel - 72 in
4 Panel - 96 in

Divider Rail Specifications
Height 0 to 66 in — No Divider Rail Required
Height 66 in to 90 in — 1 Divider Rail Required
Height 90 1/8 in to 120 in — 2 Divider Rails Required

Minimum and Maximum Shutter Width (inches)						
Type	Z Frame, Trim Frame, Décor Trim Frame, Bullnose Frame		L Frame		Mounting Strip	
	Min Width	Max Width	Min Width	Max Width	Min Width	Max Width
P1-L	7 3/16	37 1/2	8 1/2	38 1/2	6 1/2	36 1/2
P1-R	7 3/16	37 1/2	8 1/2	38 1/2	6 1/2	36 1/2
P2-LR	13 1/2	73 1/2	14 1/2	74	12 1/2	72 1/2
P2-LL	13 1/2	49 1/4	14 1/2	49 3/4	12 1/2	48 1/2
P2-RR	13 1/2	49 1/4	14 1/2	49 3/4	12 1/2	48 1/2
P3-LLR	19 1/2	73 1/2	20	74	18 3/4	73
P3-LRR	19 1/2	73 1/2	20	74	18 3/4	73
P4-LLRR	25	96	26 1/2	96	24 3/4	96

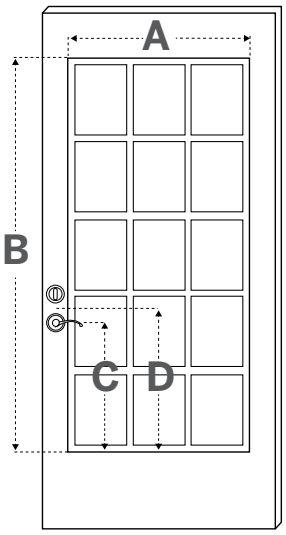
*Chart above includes frames

Individually Hinged Panels
Minimum Panel Width - 6 in
Maximum Panel Width - 36 in
Minimum Panel Height - 16 in
Maximum Panel Height - 120 in

Bi-folding Panels
Minimum Panel Width - 6 in
Maximum Panel Width - 24 in
Minimum Panel Height - 16 in
Maximum Height - 120 in

How to Measure French Door with Cutout

OUTSIDE MOUNT — 4-SIDED FRAME ON TOP OR AROUND THE MOLDING



❶ MEASURE WIDTH

4-sided L frame is used for French Door application.
Depth clearance and obstructions can prevent louvers from operating properly. In order to overcome these obstacles, we will add the necessary number of L frame extensions.
Up to (3) ½ in extensions can be added to the L Frame.

❷ MEASURE OUTSIDE WIDTH (A)

If mounting on top of molding — Measure outside edge of molding to outside edge of molding in three places (top, middle, and bottom). Molding should be a minimum of 1 ⅜ in so that it is wider than the shutter frame.
Record the largest measurements to ⅛ in — **not for use on a curved profile molding.**

If mounting around the molding — Measure the outside width of the molding. Add 2 ¾ in to the width and record the measurements to the nearest ⅛ in.

❸ MEASURE OUTSIDE HEIGHT (B)

If mounting on top of molding — Measure outside of molding to outside of molding in three places (top, middle, and bottom). Molding should be a minimum of 1 ⅜ in so that it is wider than the shutter frame.
Record the largest measurements to ⅛ in.

If mounting around the molding — Measure the outside width of the molding. Add 2 ¾ in to the height and record the measurements to the nearest ⅛ in.

NOTE: *Shutter height may be ordered longer than molding to molding measurements.*

This allows the shutter to be moved up or down in order to center the cutout as needed.

❹ MEASURE DEPTH OF MOLDING

Measure the depth or projection of the molding that protrudes from the door, and note on the order form.

❺ CUT OUT HEIGHT (C or D)

Measure from the bottom of the molding
to the middle of the desired cutout location. Add 1 ⅜ in for the L frame at the bottom of the shutter.

The cutout can be centered on the door handle (“C”) or centered between the door handle and the deadbolt (“D”).

An optional divider rail may be ordered.

The divider rail will be positioned on center of the cutout.

❻ FRAME EXTENSIONS

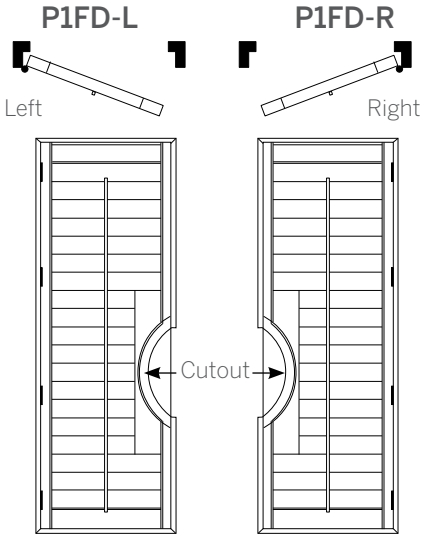
Refer to the clearance charts for the appropriate number of extensions based on the louver size, tilt mechanism, and whether or not there is molding around the glass that protrudes into the room.

Choose Your French Door Configuration

French Door with Cutout (No divider rail)

	2-½" Louver	3-½" Louver	4-½" Louver
Minimum Width	18"	18"	18"
Maximum Width	36"	36"	36"
Minimum Height	36"	38"	40"
Maximum Height	96"	96"	96"
Maximum Square ft.	15 sq ft	15 sq ft	15 sq ft
Minimum Cutout Height	17 ¾"	18 ¾"	19 ¾"

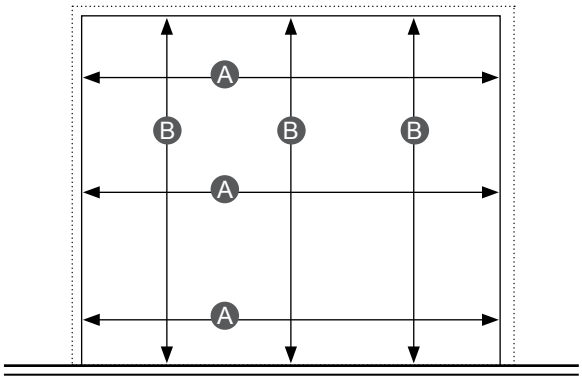
- 4-sided L frame only.
- Cutout size is always 15 inches.
- Minimum cutout height location is measured from bottom of shutter frame.



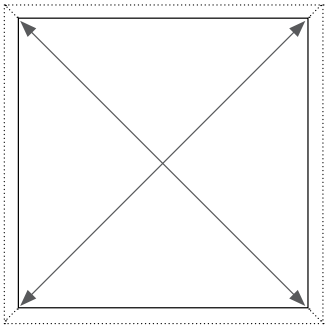
How to Measure By-Pass

- Inside mount must have a minimum jamb depth of 2 in.
- Outside mount standard by-pass will project 6 ⅝ in from the wall.

SHUTTER LOUVERS CANNOT OPEN WHEN PANELS ARE IN FRONT OF ONE ANOTHER.



INSIDE MEASUREMENTS



SQUARENESS CHECK

❶ MOUNTING INSIDE A WINDOW OPENING

Measure inside the window opening in 3 places for **A** & **B**. Record the **smallest** measurement and round down to the nearest ⅛ in.

Do not make any deductions, allowances, or additions.

Check for squareness by measuring diagonals.

❷ SQUARENESS CHECK

Measure diagonals — if not the same then inside mount is not recommended.

❸ MOUNTING OUTSIDE A WINDOW OPENING

Measure outside the window opening in 3 places for **A** & **B** and record the **largest** measurement.

You will need 2 ¼ in above the window and on each side to mount the frame.

To cover an area larger than the window opening simply provide the desired finished width (up to 180 in) and height (up to 120 in).

❹ ONLY IF DIVIDER RAIL IS BEING USED

The measurement recorded is determined from the bottom of the floor or sill to the middle of where the divider rail is to be located.

One divider rail is required for panels over 66 in with a maximum 50 in between the middle of the divider rail and either top or bottom rail.

Two divider rails are required for panels over 90 inches in height with a maximum 50 in between any two rails.

❺ CHOICE OF PANEL CONFIGURATION

Determine from pages 17-19.

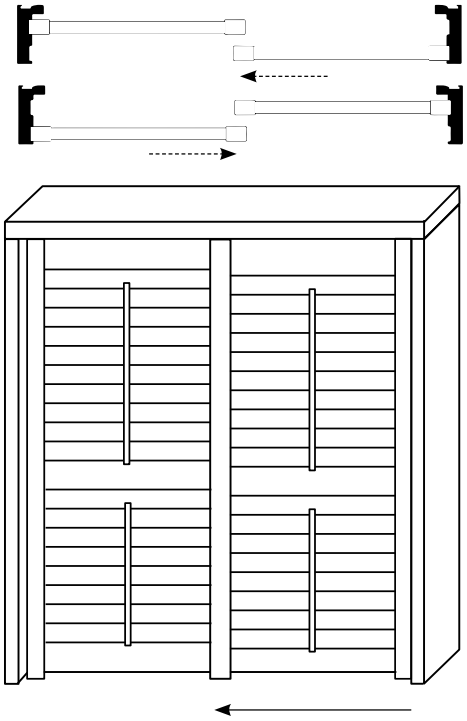
❻ ORDER VALANCE

Choose between the 3 ½ in standard valance or 5 in crown valance and select the appropriate valance returns at time of order.

Choose Your By-Pass Panel Configurations

P2BP-L
P2BP-R

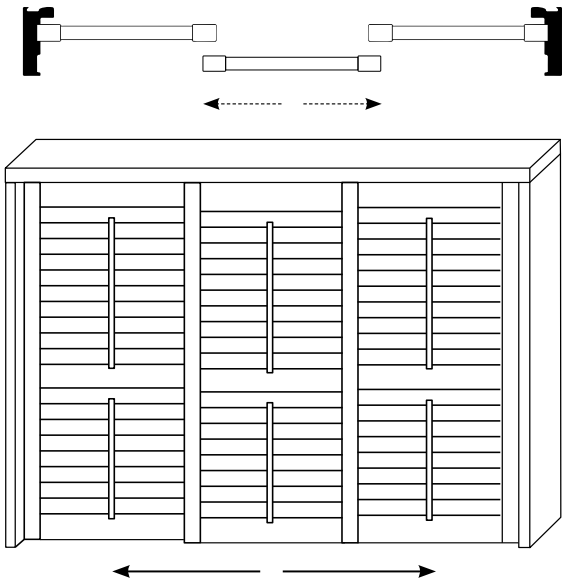
Both panels will operate allowing access to the window or door.



Minimum Width: 24''
Maximum Width: 72'
Minimum Height: 20''
Maximum Height: 120''

P3BP-LCR

Center panel opens over left or right panel.

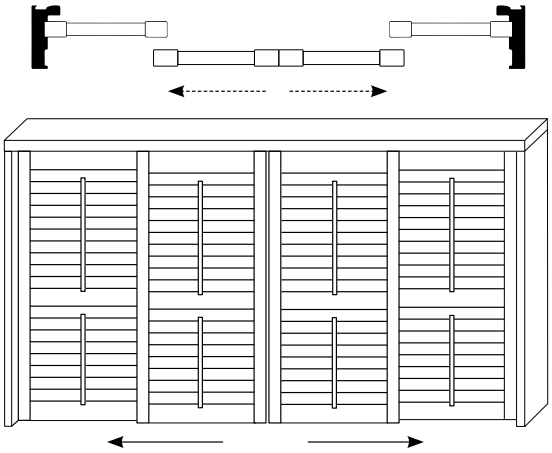


Minimum Width: 36''
Maximum Width: 108''
Minimum Height: 20''
Maximum Height: 120''

Choose Your By-Pass Panel Configurations

P4BP-LCCR

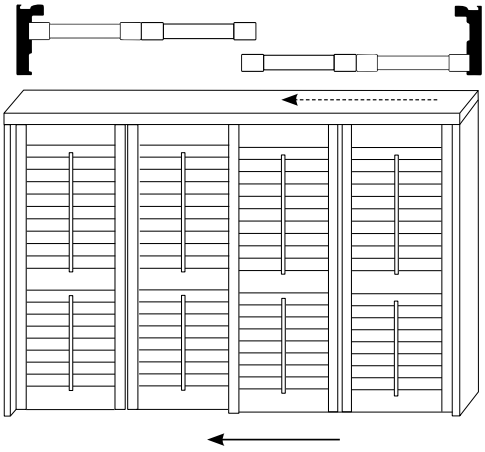
Left center panel opens over left panel,
Right center panel opens over right panel.



Minimum Width: 48''
Maximum Width: 144''
Minimum Height: 20''
Maximum Height: 120''

P4BP-2L2R

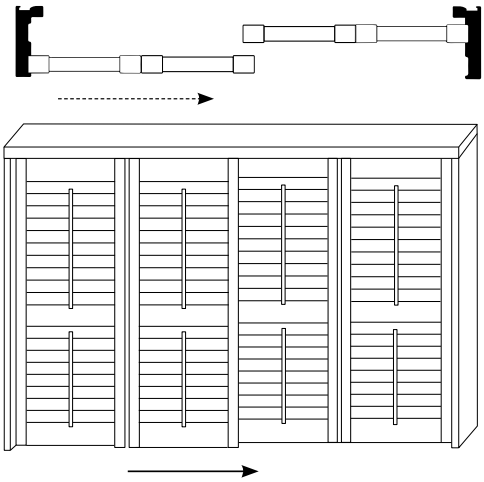
Two right panels open over two left panels.



Minimum Width: 48''
Maximum Width: 144''
Minimum Height: 20''
Maximum Height: 120''

P4BP-2R2L

Two left panels open over two right panels.

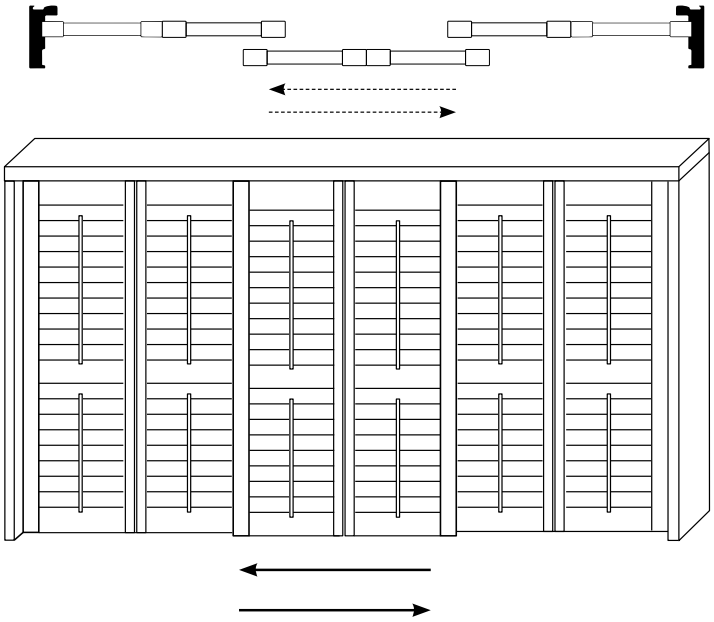


Minimum Width: 48''
Maximum Width: 144''
Minimum Height: 20''
Maximum Height: 120''

Choose Your By-Pass Panel Configurations

P6BP-2L2C2R

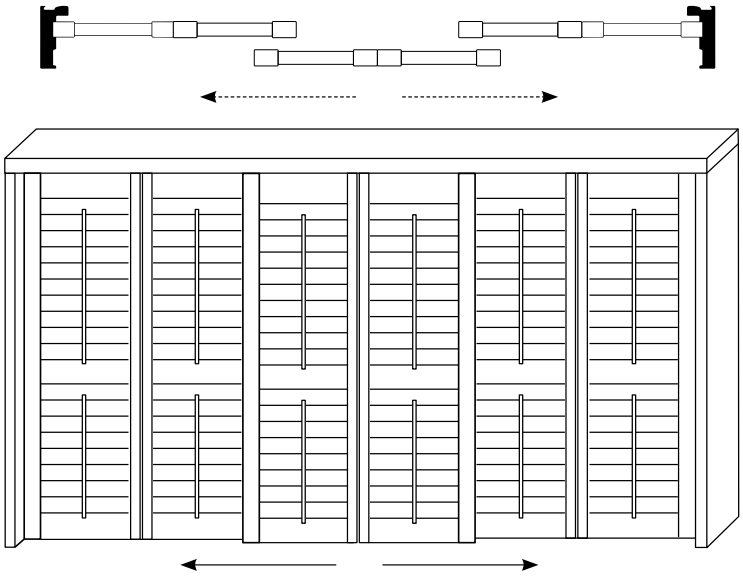
Two center panels, open over either two left or two right panels.



Minimum Width: 72''
Maximum Width: 180''
Minimum Height: 20''
Maximum Height: 120''

P6BP-2LCC2R

Two center panels, not joined, open either two left or two right panels.



Minimum Width: 72''
Maximum Width: 180''
Minimum Height: 20''
Maximum Height: 120''

Cleaning and Care

Cleaning Procedures

LEVOLOR® Shutters are virtually "maintenance free". However, surfaces may become dirty and require periodic upkeep.

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

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

DO NOT USE: 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.

CONTACTING US

To contact LEVOLOR Customer Service regarding any questions or concerns you may have about your new blinds, 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 can be ordered, or shutters can be repaired through our repair center. Please contact LEVOLOR Customer Service through www.LEVOLOR.com for a return authorization number.

Troubleshooting

For more detailed information and easy to follow videos, visit LEVOLOR.com/Shutters

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: 1. If 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 load. Continue with all other installation screws, one at a time, while checking for load. 2. 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: 1. Window cranks are usually located on the bottom sill. If panel is hitting the crack, 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. 2. 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. 3. Patio door handles typically create obstruction with louvers opening, if they stop the panels from closing, the product needs to be built out. 4. 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 proper application. **Reversing the Interlock:** If the center panels do not line-up due to out of plumb walls, pry-off the Stile end cap; slide off the interlock and reverse. Do the same with other panel and re-insert caps.

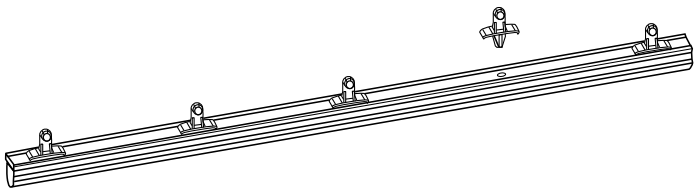
Troubleshooting

For more detailed information and easy to follow videos, visit LEVOLOR.com/Shutters

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 ¼ in 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** P.O: SAMPLE Rm: - 6592 W: 35 1/4 H: 46 5/8 **(01) Panel 1** **Style: STANDARD** WO-LN Pnls 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. 1. 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. 2. 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. 3. 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.**
	Check for residue build-up The material will not discolor and is warranted not to. 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 be used.
Problem	**Product is scratched!**
	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

For more detailed information and easy to follow videos, visit LEVOLOR.com/Shutters

Problem	Louvers are not working properly.
Solution	**Replacing Damaged Tilt Bar Connectors** 1. Remove tilt bar completely. 2. Using a pair of pliers, grab hold of the damaged connector. 3. Bend and/or twist the connector until it is removed from the tilt bar. 4. Set a new connector in the vacant hole. 5. Using the pliers, hold the connector as close to the base as possible. 6. Using a mallet strike the pliers near the connector to fully set it in the tilt bar. **NOTE:** This process can be difficult, so please use caution to prevent damage and/or injury. 

Terms and Conditions

Order Processing

Telephone Orders
The dealer is responsible for the content and accuracy of verbal (oral) orders. Each order will be repeated back by the Customer Service Representative. In certain instances, we may require written orders.

Duplicated Orders
All orders are confirmed after entry into our system. Customer Service is not responsible for duplicate orders caused by a written order following a telephone or duplicate faxes.

Changes and Cancellations
All products are custom made to your specifications under tight deadlines. Once production has begun on your order, changes and cancellations cannot be made.

Claims and Returns

Defective Merchandise
All manufacturing defects must be reported to Customer Service within 30 days of receipt of shutters. We may require the return of the shutter(s) at issue prior to repair or replacement.

Incorrect Merchandise
If any part of your shipment was made incorrectly, Customer Service must be notified within 30 days. A replacement will be made at no charge, if the problem was due to LEVOLOR error. If the problem was due to dealer or customer error, the original order and replacement order will be full charge.

Returns for Repair
Prior to return for repair, contact Customer Service. We will request the order number, date, purchase order number, and type of product. Arrangements for return will be made at that time with directions as to how the shutter(s) should be returned. The package should be marked for easy identification both inside and outside, and should contain a written confirmation of the verbal repair instructions. Repair should be packaged carefully. Product that has been mishandled or received in poor condition will be returned to the customer.

Dealer chargebacks for unauthorized repairs or additional installation cannot be honored. All returns for repair are subject to freight charges, which are the responsibility of the dealer or the customer, as the case may be.

Freight

- Shipment outside the continental U.S. are subject to freight charges.
- Chargeable parts and returns for repair are subject to freight charges.

Pricing and Terms

All prices are subject to change without notice. Until credit is approved, terms are cash with order. Standard terms are Net 30 days from invoice date. Credit terms are subject to change in LEVOLOR's role discretion.

Returns and Credit
Returns can be accepted only if prior authorization has been obtained from customer service. Authorization will include instructions as to how the merchandise should be returned. Unauthorized returns will be refused.

Freight Damage FedEx/FedEx Ground:
- If freight damage is visible, refuse the shipment. FedEx will inspect the damage and return to the shipping location. Contact Customer Service for further information.
- If freight damage is concealed, retain all packaging materials and contact Customer Service immediately (must be notified within 14 days).

Freight Damage Common Carrier:
- If freight damage is visible, refuse the shipment. The carrier will return the merchandise to the shipping location for inspection. Contact Customer Service for further information.
- If freight damage is concealed, retain all packaging materials and contact Customer Service immediately (must be notified within 14 days).

Warranty

Improper cleaning may void warranty.

For complete warranty information visit LEVOLOR.com or call customer service at 1-800-538-6567.

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