ECLIPSE™ SHUTTERS

RETAIL PRICE LIST & PRODUCT INFO GUIDE
Effective September 15, 2013

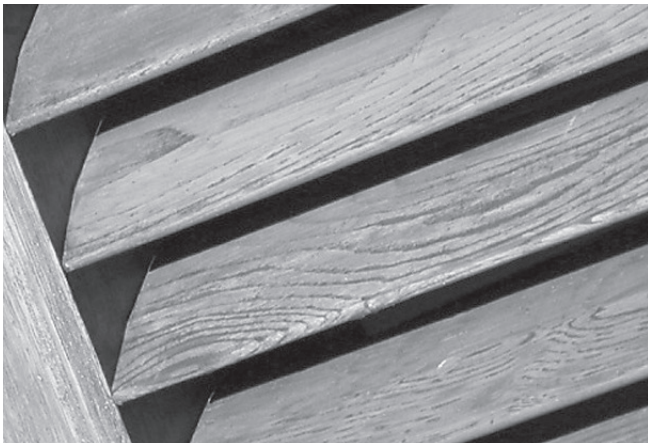
CUSTOM BRANDS GROUP

Shutters have had a long history of protecting windows on the outside, but they were originally designed for the inside of a home.

On Tudor (1485–1547) and Elizabethan (1558–1603) homes, shutters were made of solid boards and covered only the lower half of the window openings, where no glass was installed (glass was expensive in those days.) When open, fresh air came into the room and the shutters folded back to look like decorative wall panels. When closed, usually with a bar across, light still came through the glazed upper half of the window. By the late seventeenth century, double-hung windows were popular. Shutters were still attached inside and decorative, but they covered the whole window.

During the Victorian period (1837–1901) when more houses were constructed from wood, shutters moved outdoors. The former stone and brick homes had such deeply recessed windows that exterior shutters would have been difficult to reach from inside, but wooden walls could be built much thinner and exterior shutters could now be accessed easily from the inside.

By the late nineteenth century, shutters were used as much for decoration as for their practical functions of shelter and protection for the glass. When mechanization entered Victorian millworks, shutters became more sophisticated. They were often louvered or made of narrow horizontal slats angled to deflect the rain, allow some daylight through and provide adequate ventilation.



The History of Shutters

In the 1980s, window technology and window-covering choices eliminated the functional use of outside shutters. However, the revival of Victorian-style housing and the interest in rehabilitating century-old homes are bringing shutters back into the limelight as an interior window treatment. They are often made from wood, with all its inherent problems of chipping, warping, shrinking and peeling.

Eclipse™ Shutters are an extremely durable shutter. They offer the traditional look of California or Plantation style shutters without the inherent problems of wood. Warping, shrinking, chipping, peeling, and color fading are things of the past with
Eclipse™ Shutters.

Eclipse™ Shutters offer complete custom window and door fitting. They are shipped complete with all frames and hardware ready for mounting. They are available in four colors: Cotton, Pearl, Vanilla, and Sandstone.

Do not be fooled by the competition. There is only one Eclipse™ Shutter!

Table of Contents

Features & Benefits

Traditional Look
The look and quality your customers demand but at the cost and durability of Polyresin 3®.

Low Maintenance
The Polyresin 3® Eclipse™ Shutter is easy to clean with just soap and water.

Environmentally Friendly
Eclipse™ Shutters do not destroy our forests. All scrap is recycled.

Made from Polyresin 3®
A colorfast compound with UV stabilizers designed with strength and durability, yet retaining a special warmth and feel. Shutters will not warp, shrink, chip, peel, or fade and never need painting.

Fire Retardant
Polyresin 3® is fire retardant and self-extinguishing. It is safe to use in residential and commercial applications. Meets (NFPA701) National Fire Code Standards.

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

Additional Insulator
An R-value of 3.40 helps to reduce heating and air conditioning costs and outside noise. Closing the louvers upward can help keep heat in the home and provide more privacy.

Modern Manufacturing
Custom crafted in state-of-the-art computerized production facilities that meet today's demanding quality standards.

Fast Production Time
7 to 10 business day production.

Elliptical Louver Sizes
2 1/2", 3 1/2", and 4 1/2"

Patented Tilt Bar Connecting Method
Provides the time honored look associated with shutters. Louvers can be opened or closed in both directions, unlike other shutters which are one-directional only. This method has eliminated unsightly gears or staples which tend to rust or break.

Patented Clearview
Hidden louver joiners provide an unobstructed view, giving our classic shutters a clean and contemporary look.

Patented Seamless Louver Caps
Innovative seamless capping technology eliminates the seam between the louver body and the end cap, for a sleek and modern look.

Panel Lock
This unique system eliminates the use of magnets. When panels are closed, a spring-loaded plunger acts as a
ball catch to hold the panels in the closed position.

Frame Grooves
The spring loaded plunger of the panel lock locates in the integrated groove in all frames. Eliminates the need for magnets and catch plates.

Exclusive Deluxe Divider Rail
The unique design of this rail integrates a handle which provides a clean and easy method of opening shutters. Offered as an option to the existing regular divider rail, the deluxe divider rail is the ultimate in functionality, design, and elegance.

Snap and Hold Corner Key and Notched Frames
Our snap and hold corner key and notched frames were developed to provide a clean, quick and easy installation. All frames, excluding L-Frame outside mount, with a 45-degree miter are notched to accept this corner key.

Aluminum Jamb Inserts
Provides a hidden reinforcement for patio door shutters and larger shutter panels.

French Door Cutouts
Our French Door Cutout is ideal for adding shutters to French doors. The Cutout is designed to work with standard round door handles and lever handles. Available with 2 1/2" and 3 1/2" louvers.

Pre-drilled Frames
Pre-drilled installation holes are strategically placed on all frames for accurate, quick, and clean installation.

Factory Installed Two Part Hinge System
Quick and easy to install. Allows panels to be removed easily for cleaning. Panels open fully for total access to the windows.

Light Block and Interlock
Exclusive to Eclipse™ Shutters, they provide an insulating seal and cover unwanted light gaps between panels.

Adjustable Jamb Cap
If adjustments are required, the screw located on the bottom of each panel can be threaded in or out of the cap accordingly. Thread into the panel until the screw is virtually invisible when adjustments are not needed.

Permanent Finish
Our Polyresin 3® compound features a permanent finish resistant to dents and scratches. Should a scratch occur, it can be removed, without harming the finish.

Warranty
Eclipse™ Shutters are backed with a 25 Year Warranty. *Note: Eclipse™ fabricators reserve the right to refuse manufacture of out-of-spec or void warranty product.*

About the GREENGUARD Environmental Institute
The GREENGUARD Environmental Institute (GEI) is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. As an ANSI Authorized Standards Developer, GEI establishes acceptable indoor air standards for indoor products, environments, and buildings. GEI's mission is to improve public health and quality of life through programs that improve indoor air. A GEI Advisory Board consisting of independent volunteers, who are renowned experts in the areas of indoor air quality, public and environmental health, building design and construction, and public policy, provides guidance and leadership to GEI.

About GREENGUARD Indoor Air Quality Certified®
Product certification program for low emitting interior building materials, furnishings, and finish systems. All GREENGUARD Certified Products have been tested for their chemical emissions performance and can be found in
the GREENGUARD Online Product Guide.

About GREENGUARD for Children & Schools
A product certification program for low-emitting interior building materials, furnishings, and finish systems used in educational, office and other sensitive environments. All GREENGUARD Children & Schools℠ products have been tested for their chemical emissions performance according to CA 01350 and can be found in the GREENGUARD Online Product Guide.

GREENGUARD Children & Schools Certification program's minimum requirements comply with the State of California's Department of Health Services Standard Practice (CA Section 01350) for testing chemical emissions from building products used in schools, offices and other sensitive environments. As such, GREENGUARD Children & Schools Certified products can be used as a strategy to earn valuable credits in the CHPS Best Practices Manual for K-12 schools, U.S. Green Building Council's LEED® Green Building Rating System, Green Guide for Healthcare™, NAHB Green Building Guidelines, Green Globes, Regreen and numerous other local green building codes.

Children are more heavily exposed to environmental toxins than adults; as a result their exposure levels are the basis for sensitive environments. They consume more food, water, and have higher inhalation rates per pound of body weight than adults. To account for inhalation exposure to young children with greater sensitivities, a body burden correction factor of 0.43 has been applied to current allowable emission levels from indoor materials and furnishings.

Emission controls are established to define low-emitting materials for environments where people spend extended periods of time and have children and sensitive adults in residence. These may include schools, daycares, healthcare facilities and residential and commercial spaces.

See the following page for the Greenguard for Children & Schools Certificate for Eclipse Shutters. For more information about Greenguard, please visit their website at www.greenguard.org.

Eclipse Shutters and GREENGUARD
Eclipse Shutters has been tested and verified for both GREENGUARD Indoor Air Quality and GREENGUARD Children and Schools. See page A5 for the GREENGUARD for Children and Schools Certificate issued to Eclipse Shutters. In addition, GREENGUARD has listed Eclipse Shutters on their website as being resistant to the growth of mold. For more information about GREENGUARD, please visit their website at www.greenguard.org.

Children & Schools GREENGUARD® Indoor Air Quality Certified

Eclipse Shutters

Eclipse™ Shutters

This product has been GREENGUARD Indoor Air Quality Certified® by the GREENGUARD Environmental Institute under the GREENGUARD for Children & Schools[SM] product certification program.

Certification Details:

Certification No:	W10Ss9002711-1
Certification Status:	Certified
Certification Period(s):	11/2007- 11/2008
Certification Restrictions:	
NONE	

GREENGUARD Product Emission Standard for Children & Schools

GREENGUARD Indoor Air Quality Certified Products meet the following minimum emission requirements:

Product Category: Window Treatments	**Product Sub Category: Shutters**
Individual VOCs[1]	< 1/100 TLV and < ½ CA chronic REL
Formaldehyde[2]	< 0.0135 ppm/13.5 ppb
Total VOCs[3]	< 0.22 mg/m³
Total Aldehydes[4]	< 0.043 ppm/43 ppb
Total Phthalates[5]	< 0.01 mg/m³
Total Particles (< 10µm)[6]	< 0.02 mg/m³

[1]Any VOC not listed must produce an air concentration level no greater than 1/100 the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, Cincinnati, Ohio 45211-4438) and no greater than 1/2 the CA Chronic Reference Exposure Level (CREL) http://www.oehha.ca.gov/air/chronic_rels/AllChrels.html - (CRELs) Adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA), February 2005).

[2]Formaldehyde criteria established so that emission levels reach 0.014ppm (13.5 ppb) within 14 days of installation (meeting CA 1350 requirements).

[3]Defined to be the total response of measured VOCs falling within the $C_6 - C_{16}$ range, with responses calibrated to a toluene surrogate.

[4]Defined to be the total response of a specific target list of aldehydes (2-butenal; acetaldehyde; benzaldehyde; 2, 5-dimethylbenzaldehyde, 2-methylbenzaldehyde; 3-and/or 4-methylbenzaldehyde; butanal; 3-methylbutanal; formaldehyde; hexanal; pentanal; propanal), with each individually calibrated to a compound specific standard.

[5]Total phthalates include dibutyl (DBP), diethylhexyl (DEHD), diethyl (DEP), butylbenzyl (BBP), di-octyl (DOP), and dimethyl (DMP) phthalates.

[6]Particles applicable to fibrous, particle releasing products with exposed surface area.

Complies with California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers" 2004 (CA section 01350)

GREENGUARD Certification affirms that a product's emissions fall within the limits selected by GREENGUARD from reputable third-party risk based criteria, as identified above. GREENGUARD program testing is conducted consistent with a defined protocol and does not measure emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical emissions.

For further product details, visit the product listing at www.greenguard.org. If you have any questions, contact the GREENGUARD Environmental Institute at 1.800.427.9681.

Product Summary

SHUTTER BASICS

The basic shutter assembly is a shutter panel hinged to a frame. The panel consists of louvers which pivot open and closed, with stiles on the sides and rails on the top and bottom.

Louvers

3 Louver sizes are available: 2½", 3½" and 4½". They are supplied with invisible "seamless louver caps" inset into the louver. This ensures a sleek, finished look of a real wood shutter.

Colors

Available in 3 standard colors.

5136 – Cotton **5140 – Vanilla**

5151 – Pearl

Shutter Hinges

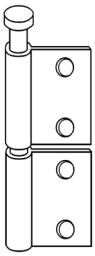
Hinge pins are always removable.

Hinge pins coordinate to hinge:

Painted (color coordinated)

Brass

Stainless Steel



Hinge and removable hinge pin

Panel Lock Mounting System

This standard system, with an adjustable tension feature, eliminates the use of magnets to hold the shutter panels closed.

Panel Lock Mounting System

Frame Styles

Inside Mounts: Z-Frame, Trim Frame, Deluxe Trim Frame, L-Frame, Casing Sill/ Decorative L & Hang Strip behind direct mount.

Outside Mounts: L-Frame, Casing Sill/ Decorative L & Casing Frame.

For Sliders: Bi-Fold, Closed By-Pass & Open By-Pass.

Tilt Options

Shutter louvers are opened and closed with one of 4 louver operation systems.

Traditional tilt, with center tilt rod offers a classic shutter look.

Clearview, with rear tilt rod offers a contemporary look and maximizes your view.

Off-Set tilt, with side tilt rod mounted on either front or back of louvers.

Split tilt, features separate tilt rod for top and bottom louvers offering maximum light and privacy control.

Clearview

Traditional tilt rod

Off-Set

Split tilt rod

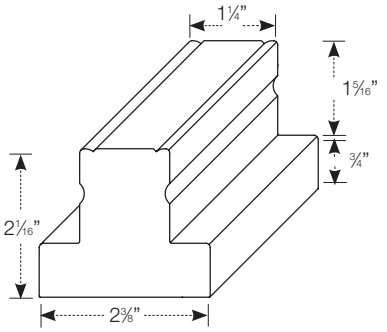
Other Panel Components

Light blocks fit on the side of the stile. They conceal fabrication hardware and provide a finished look to the stiles.

Interlock is a flange to block the light gap where two shutter panels meet in the back. It is not needed in single panel assemblies.

T-Post

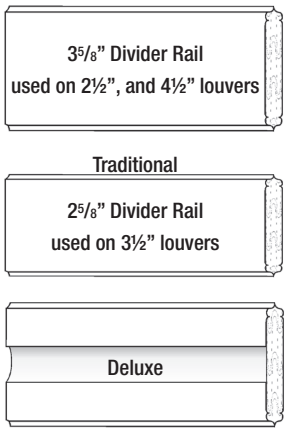
The T-post is a versatile structural component inserted vertically into shutter frames to separate shutter sections and allow for placement of more panels within the same opening. T-posts give added strength to wider openings. Panels can be hinged to T-posts similarly to how they are hinged to the frame.



Divider Rails

Divider rails add both beauty and strength to shutter panels. With a divider rail in place, the separate sections of the panel operate independently of each other. Two styles may be ordered, Traditional or Deluxe.

One divider rail is required for panels greater than **60"** in height.



French Door Cut-Outs

In most cases a "cut-out" will be required to clear the lever style handle.

French door cutouts are always outside mounted. This product may require build-out for proper clearance.

French Door Cutout

Pricing

Eclipse Shutter by Custom Brands Group are priced by THE SQUARE FOOT.

1. **Inside Mounts** – using window size determine width+height.

   Outside Mounts – add frame allowances of selected frame style.

2. **Calculate SQ. FT.** to determine base price.
   A) Multiply width x height to get total square inches.
   B) Divide by 144 to get SQ. FT. then round to two decimal point.
   C) Multiply SQ. FT. by price per SQ. FT.

   Example: 48 x 60 = 2880 SQ. INCHES
   ÷ 144 = 20.00 SQ. FT.
   20.00 x 14.00 = $280.00

3. **Add Surcharges** that may apply:

Closed Louver By-Pass	$110.00 NET
Open Louver By-Pass	$300.00 NET
Stackback for Closed Louver By-Pass	$5.00/LINEAR FT.
Stackback for Open Louver By-Pass	$10.00/LINEAR FT.
Bi Fold	$110.00 NET
Corner	$110.00 NET
Bay / Bow	$110.00 NET
Build Out	$30.00 NET
Cafe Style	$30.00 NET
Light Block	$10.00 NET
L Frame Cover Strips	$10.00 NET
Filler Strips	$10.00 NET
Tile Cut Outs	$10.00 NET
French Door Cut Outs	$110.00 NET
Corner Post	$20.00 NET
Bay Post	$40.00 NET

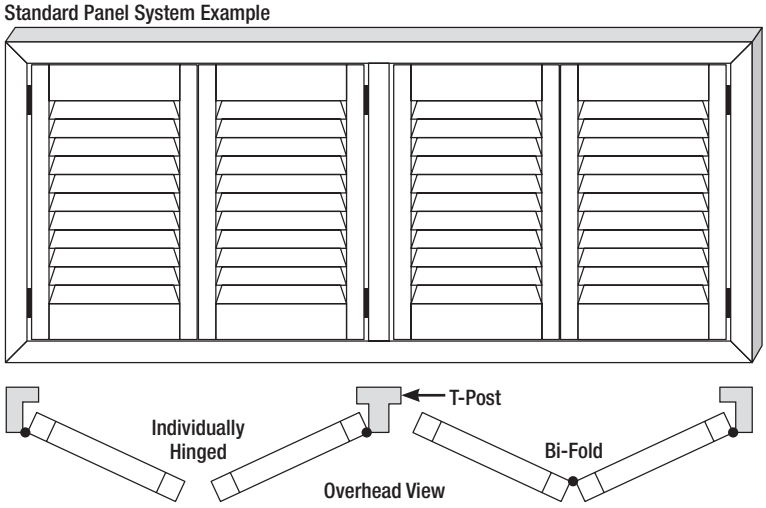
4. **Shipping**: 48 Contiguous States – $10 per window.
   Alaska/Hawaii – $25 per window.

STANDARD PANEL SYSTEMS

Standard panel systems can consist of multiple shutter panels in a variety of hinged configurations. In addition to being hinged from the frames, panels may be hinged from T-posts, which serve as intermediate vertical supports. Two panels may also be hinged together in a bi-fold design.

The possible types of standard panel systems are illustrated in the Product Configurations section, beginning on page 19.

Standard Panel System Example



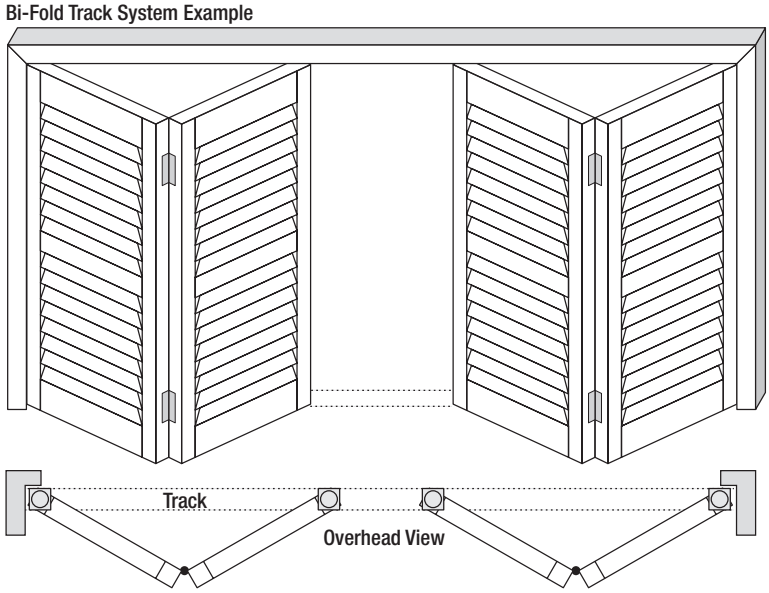
BI-FOLD TRACK SYSTEMS

In a bi-fold track system, the shutter panels are connected to a top track which supports the hinged panels and guides their folding movement. Up to eight panels may be hinged together in a bi-fold track system.

A special frame is used with bi-fold track systems, although the tracks may also be attached directly inside the door or window opening. In sliding door openings, the frames are usually three-sided.

Possible panel arrangements in a bi-fold track system are illustrated beginning on page 25.

Bi-Fold Track System Example



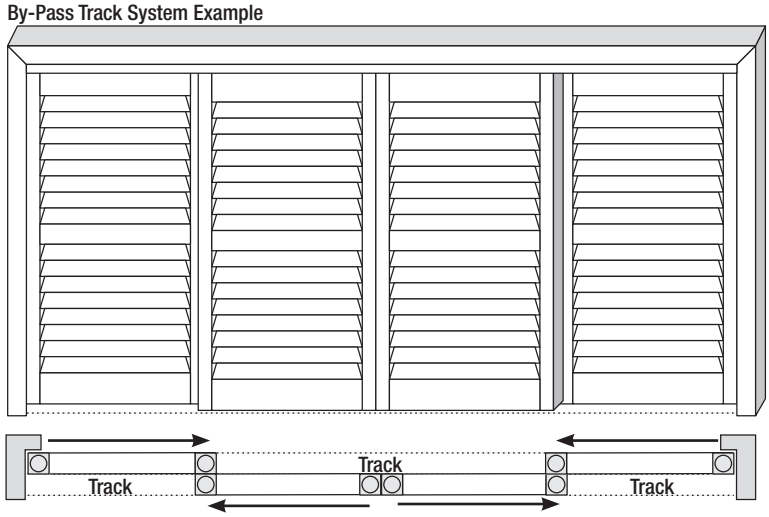
BY-PASS TRACK SYSTEMS

Shutter panels in a by-pass track system are not hinged. Instead, they slide on top tracks to open and close. Two tracks are required so that the panels, or connected pairs of panels, can slide past each other.

The tracks can be attached to a special by-pass frame or directly to the door or window opening. In door openings, the frames are usually three-sided.

Panel arrangements for by-pass track system are illustrated beginning on page 28.

By-Pass Track System Example



Product Specifications: Size Standards

NUMBER OF PANELS

Design The Panel Configuration Taking Into Account:

- Width of panel assembly (not including frame).
- Panel width limitations (see chart at right).
- Structure of window or door opening, taking into consideration the vertical and horizontal mullions.

Refer to Product Configurations section starting on page Pg. 19

Size Standards (not including frames)

	2½" Louver	3½" Louver	4½" Louver
Standard Panel System			
Minimum panel width	8"	8"	8"
Maximum panel width, single panels	36"	36"	36"
Maximum panel width, bi-fold panels	18"	18"	18"
Minimum panel height (2 louvers in panel)	11 3/8"	12 7/8"	14 7/8"
Maximum panel height	110"	110"	110"
Bi-Fold Track System			
Minimum panel width	12"	12"	12"
Minimum panel height	18"	18"	18"
Maximum panel width	24"	24"	24"
Maximum panel height	110"	110"	110"
By-pass Track System			
Minimum panel width	12"	12"	12"
Maximum panel width	36"	36"	36"
Maximum panel height	110"	110"	110"

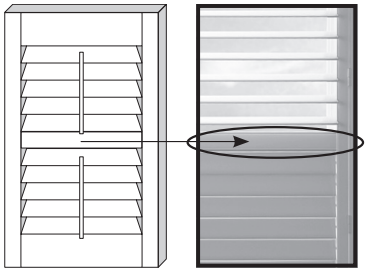
DIVIDER RAIL REQUIREMENTS

Divider Rails Add Strength And Rigidity To All Shutters.

Required on all windows taller than 60”

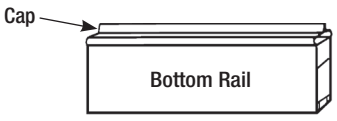
Two Dividers Required on Panels Over 90” in Height

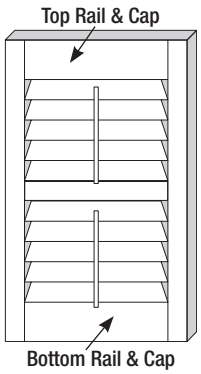
- Minimum panel height for divider rail: 36"
- Panels 36" to 60" in height: optional divider rail
- Minimum distance from divider rail to top or bottom of panel: 12"
- Maximum space between divider rails: 60"



EQUAL DISTANCE LOUVER SPACING

Top & Bottom Rail / Cap Combinations Ensure Perfect Louver Spacing.





- **Placement -** At the top and bottom of the panels to give you the maximum number of louvers per panel.

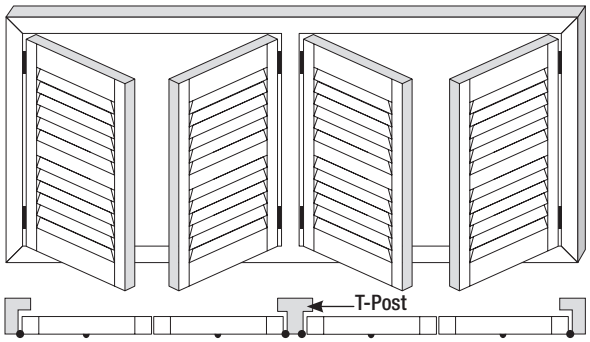
Minimum Rail Size = 3”
Maximum Rail Size = 5”

T-POST REQUIREMENTS

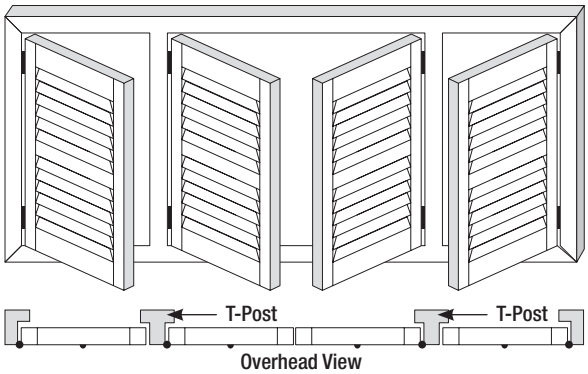
T-Posts Help Prevent Panel Sagging Over Time.

Required on all windows wider than 72”

LRTLR - ***Common for 6 foot windows***



LTLRTR - ***Common for 8 foot windows***



NUMBER OF HINGES PER PANEL HEIGHT

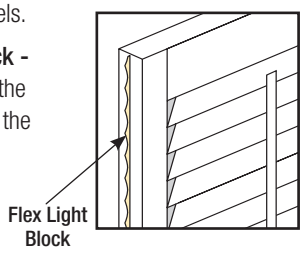
Hinges Per Panel Height			
Up to 35 3/4”	2 hinges	64 1/8” - 91”	4 hinges
35 1/8” - 64”	3 hinges	91 1/8” - 110”	5 hinges

Product Specifications: Shutter Components

LIGHT BLOCKS

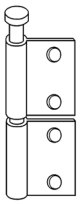
Flex light block - A rubber weatherstrip block is attached to the non-hinged side of the shutter panel. It helps cover light gaps and seals panels.

Flat light block - is attached to the hinged side of the panel and opposite flex light block.



HINGES

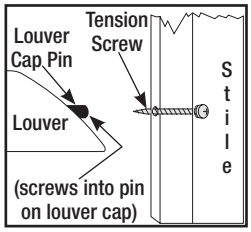
Two-part separating hinges with removable pins - Come standard on every shutter. This allows for easy panel installation and removal.



TIE LOUVERS

Tie louvers, sometimes called tension louvers, are used to draw two sides of a panel (the stiles) together for added strength. It works much like a divider rail and increases tension on the louvers.

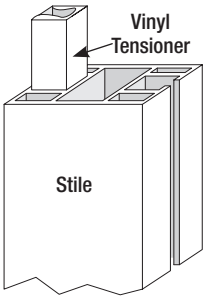
- **Placement -** Center of panel. Tie louvers are used in all panels over 50" high that do not have a divider rail.

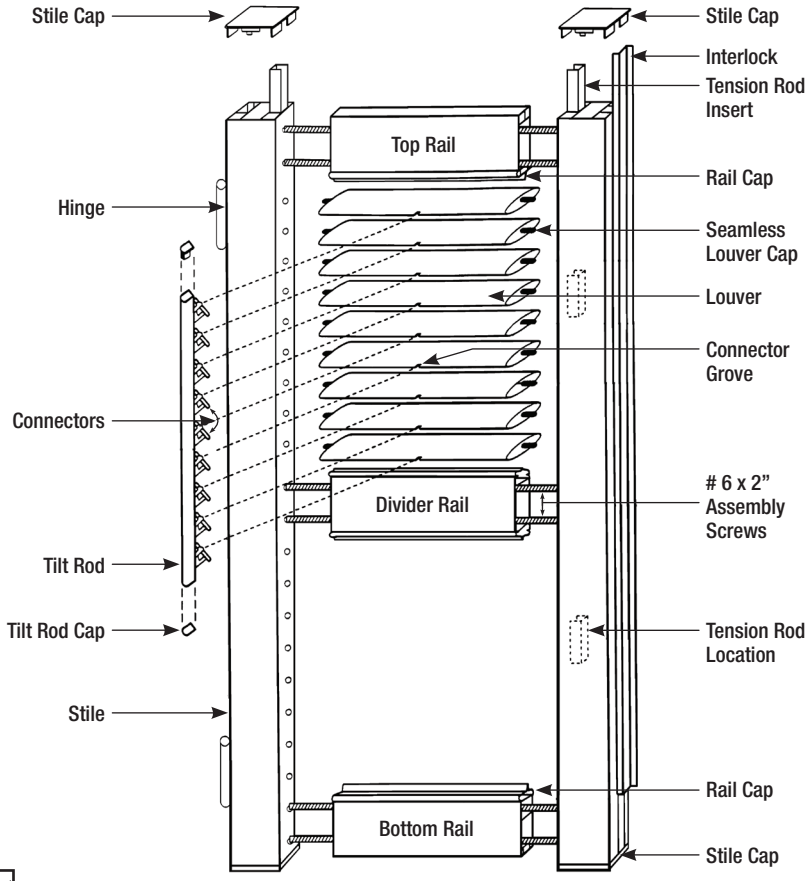


VINYL TENSIONERS

Vinyl tensioners, or tension rod inserts, control the amount of resistance or "drag" on the louvers for more precise louver rotation.

- **Placement -** Inserted into the panel stiles at the top and bottom of each stile. Also used on the top and bottom of a divider rail if one is present.
- **Applications -** Vinyl Tensioners, or tension rod inserts, are preset at the factory in every panel with the Traditional tilt rod. Clearview does not use vinyl tensioners because of their unique rear-tilt connector system.

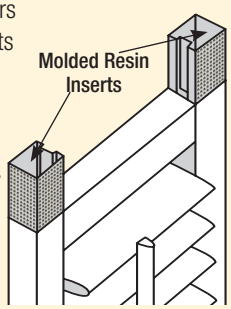




RESIN AND ALUMINUM PANEL REINFORCEMENTS

Adds strength without weight. Strategically placed lightweight molded resin interior supports mean superior integrity, without the extra weight of solid reinforcements that run throughout the panels.

- **Placement -** Upper corners of the panel which supports the width. Inserted into the stile, the assembly screws go through the reinforcement into the rail.
- **Wider panel widths -** 36" single panel widths available.
- **Fewer panels and stiles on wider window openings -** 36" panels means fewer panels, resulting in maximum visibility and light.

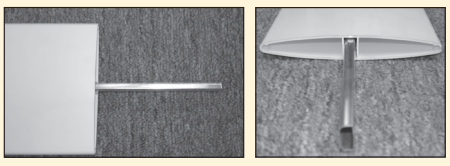


Applications

- **Standard panels 20" wide and wider -** always made with reinforcements.
- **Panels less than 20" wide -** Do not require the reinforcements due to their heavy gauge cellular vinyl extrusion.
- **Bi-folding panel -** 2 panels or more hinged together folding in one direction will include molded resin reinforcements.

ALUMINUM LOUVER REINFORCEMENTS

Lightweight aluminum is placed INSIDE each louver in all panels that exceed 20" width. Each reinforcement helps prevent louver warping over time.



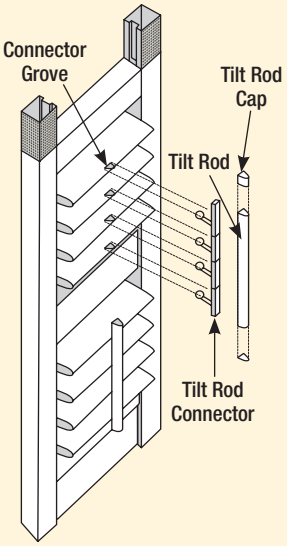
Aluminum Louver Reinforcements

Product Specifications: Tilting Options

NO SURCHARGES APPLY

TRADITIONAL TILT ROD

- **Tilt Rod Connectors**
- **Unbreakable -** if the louver becomes unattached simply push the connector back into the louver.
- **UV resistant -** resists yellowing and will not become brittle over time.
- **Tilt Rod Cap -** Finishes off the top and bottom ends of the tilt rod.



CLEARVIEW

- **Pegs** on the connector linkage insert into the hole at the rear of each slat.
- **Repairable if ever broken.**
- **Placement -** Located at the back of the louvers on the side where the panel is hinged. A peg fits into a hole on the back side of the louver cap. The connector arms interlock, joining the linkage system together.
- **Less Visible -** Cleaner appearance from the front because the tilt rod has been eliminated.
- **Louver Rotation -** Rotate any single louver up or down to rotate all the louvers open and closed.

OFF-SET TILT ROD

- Available on the front or rear of the panel.
- Good for hard to reach windows.
- Always 1" from the end of the louver on the hinged side.
- See Fig (1) for tilt rod placements.

SPLIT TILT RODS

- **Available with Traditional, Clearview or Off-Set options.**
- **Always measure from the bottom up to where you want the split.**
- Added light control and privacy.
- When no divider rail is used.
- Split locations can vary up to 2" up or down.
- A 1" section of the tilt bar is removed.

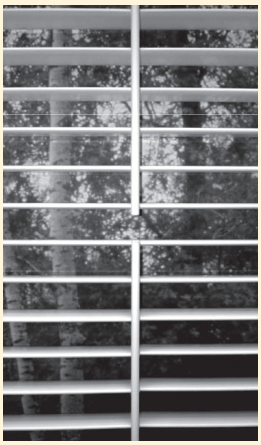
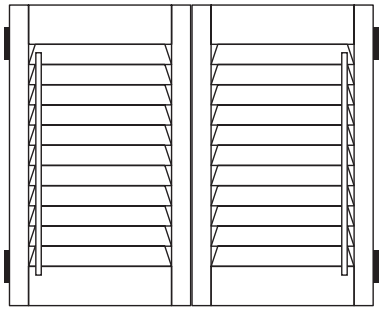
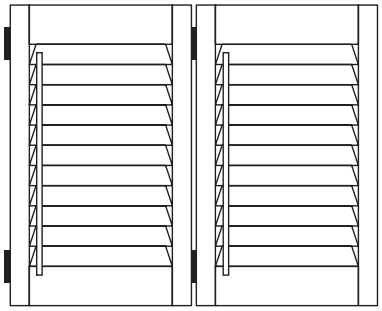


Fig. (1)



L/R Panels With Off-Set Tilt Rod
(Left panel hinged left, right panel hinged right)

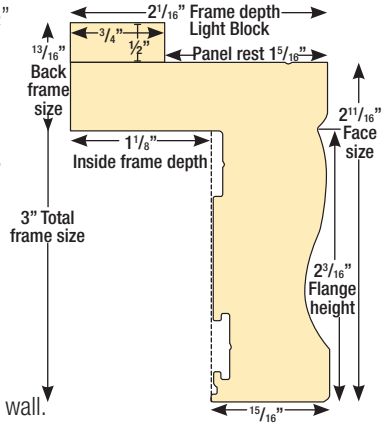


L/L Panels With Off-Set Tilt Rod
(2 panels hinged together on the left side)

Frame Options

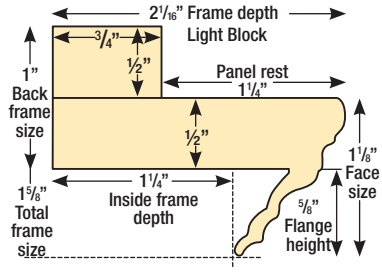
DELUXE TRIM FRAME - INSIDE MOUNT ONLY

- Use on windows up to 1 1/2" out of square.
- Use on bullnose rounded corner window openings.
- Elegant style that matches most existing molding styles.
- Pre-drilled installation holes.
- Available with a sill frame.
- Deluxe Trim Frame trim extends 2 3/16" to cover the wall.



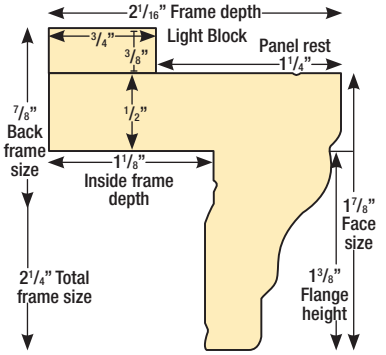
Z-FRAME - INSIDE MOUNT ONLY

- Only use on windows less than ½" out of square.
- Cannot be used on bullnose round wrapped windows.
- Pre-Drilled Installation holes.
- Good option for windows with existing molding.
- Z-frame trim extends 5/8" to cover the wall.
- Available with a sill frame.



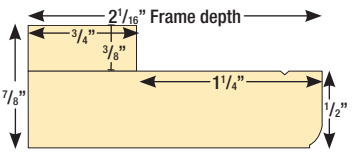
TRIM FRAME - INSIDE MOUNT ONLY

- Use on windows up to 1" out of square.
- Use on bullnose rounded corner window openings.
- Pre-Drilled Installation holes.
- Matches most common molding styles.
- Available with a sill frame.
- Trim Frame trim extends 1 3/8" to cover the wall.



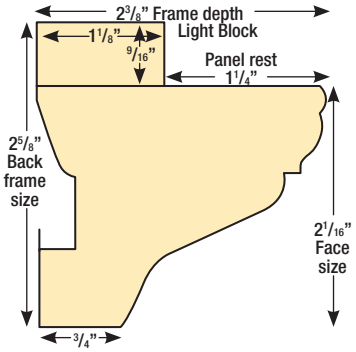
SILL FRAME:

DELUXE, Z & TRIM - SILL FRAME



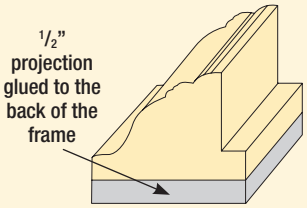
CASING FRAME - OUTSIDE MOUNT ONLY

- Bold, classic framing for large windows.
- 2 5/8" mounting surface required.
- Not recommended for windows with protruding sills.
- Pre-Drilled Installation holes.
- Sill frame not available.



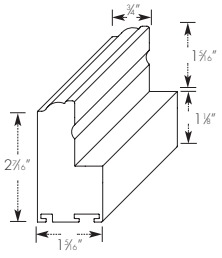
CASING FRAME PROJECTIONS -
Used to clear obstructions and build out a shutter

- Projections are 1/2" deep.
- 3 projections maximum.



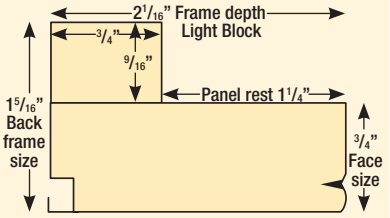
CASING SILL FRAME / DECORATIVE L

- Used in conjunction with the Casing Frame in outside mount applications, the Sill Frame will sit flat on a window sill. The Sill Frame will be positioned at the bottom unless otherwise specified. May also be used as a stand alone frame. Use the Casing Sill/Decorative L as an alternative to the L Frame in both inside and outside mount applications.



L-FRAME - INSIDE OR OUTSIDE MOUNT

- Outside mount for French doors, or anywhere outside the window.
- Inside mount for fully recessed installation when existing molding is present.
- Pre-Drilled Installation holes.
- Caulking or cover strips required for inside mount applications.
- Sill frame not available.



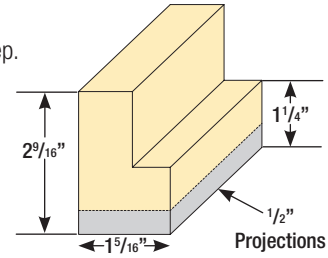
L-FRAME PROJECTIONS -
Used to clear obstructions and build out a shutter

- Each projection is 1/2" deep.
- 3 projection maximum.

½" = 1 block

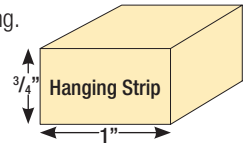
1" = 2 blocks

1½" = 3 blocks



STANDARD HANGING STRIP BEHIND

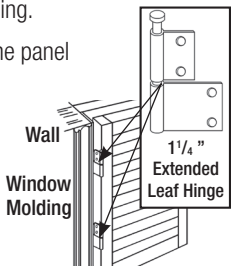
- Useful on windows with existing molding.
- 2-sided applications (left and right). Top and bottom light strips supplied.
- Only inside mount applications.
- Uses 1" x ¾" hanging strip.
- Non-adjustable bent leaf hinges only.



Caution: Hang strip applications should only be used on windows less than ¼" out of square.

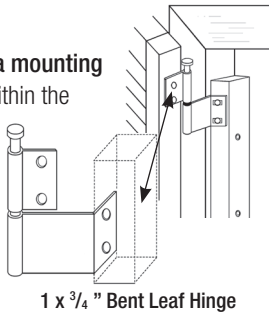
HINGE OPTIONS - FOR DIRECT MOUNT

- **5/8" Leaf Hinge –** Top of the leaf is attached to the shutter panel. The bottom leaf is installed into the opening.
- **1¼" Extended Leaf Hinge –** Projects the panel forward an additional 5/8" increasing the amount of clearance available to clear obstructions within the window opening, such as handles and window frames that project into the opening.



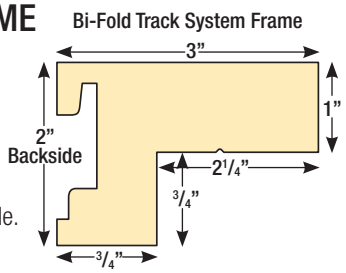
BENT LEAF HINGE WITH STANDARD HANGSTRIP

- **Standard hanging strip acts as a mounting surface** and secures the panels within the window opening, providing a stronger more stable point of installation for the shutter panels.
- **Placement –** The 5/8" flat portion of the hinge comes attached to the shutter panel.
- The bent leaf portion is attached to the hanging strip.



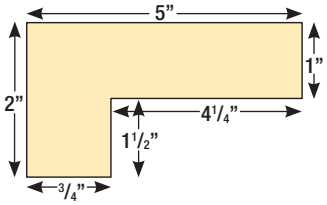
TRACK SYSTEM FRAMES
BI-FOLD TRACK FRAME

- Inside or outside mount.
- Pre-drilled installation holes.
- Build-outs available for louver clearance.
- Powder coated track is available.
- Comes with standard valance.

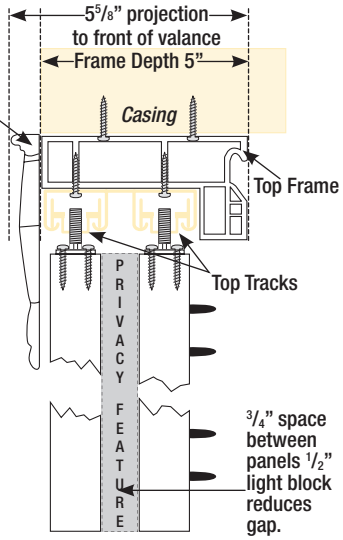


CLOSED LOUVER BY-PASS TRACK FRAME

- 5" Frame overall projection.
- Louvers **must be closed** for door operation.
- Standard with Designer Valance.
- Powder coated tracks are available.
- Pre-drilled installation holes.
- Build-outs available for louver clearance.
- Complete privacy feature.

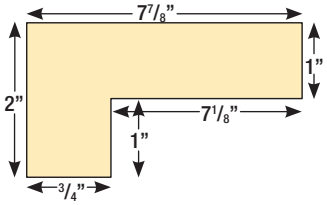


A panel guide mounts to the bottom of the panel to keep panels from hitting each other

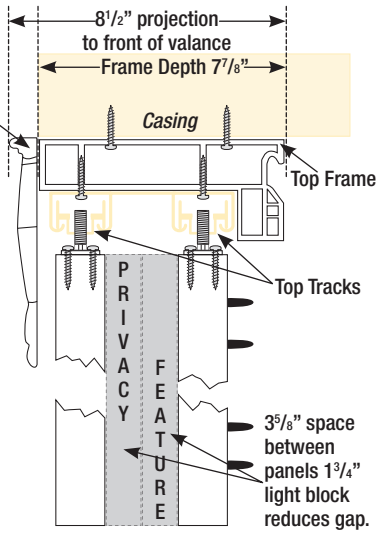


OPEN LOUVER BY-PASS TRACK FRAME

- 7 7/8" overall frame projection.
- Louvers can stay open during door operation.
- Standard with Designer Valance.
- Powder coated tracks are available.
- Pre-drilled installation holes.
- Build-outs available for louver clearance.
- Complete privacy feature.

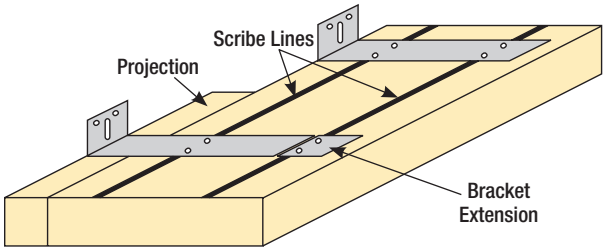


A floor guide is provide to keep the panels from moving when the shutter are fully extended across the opening.



BY-PASS SUPPORT BRACKETS

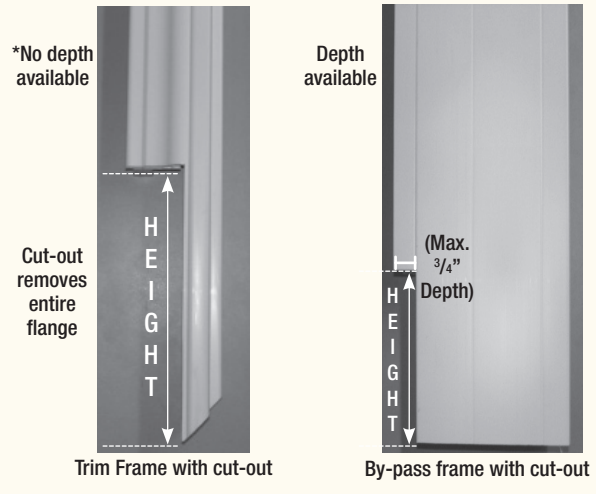
- All by-pass systems will include support brackets. Installation of these brackets is critical for the lifetime operation of your shutters.



- Brackets are powder coated.
- Available for Closed or Open Louver By-Pass frames.
- Bracket extensions are included when projection is ordered.

SPECIALTY FRAME CUT-OUTS

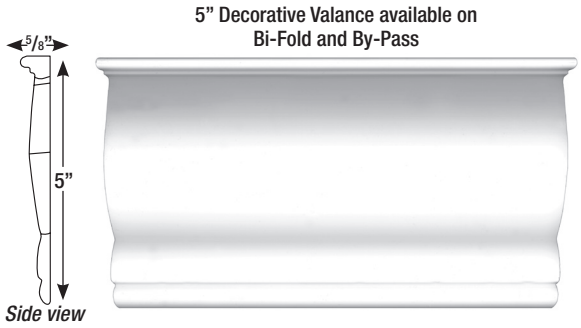
- Frame cut-outs are available on the following frames:
  - Deluxe Trim Frame
  - Z-Frame
  - Trim Frame
  - By-Pass Track Frames
  - Bi-Fold Track Frame
- Frame cut-outs are used to accommodate tile in windows and baseboards for sliding glass doors.

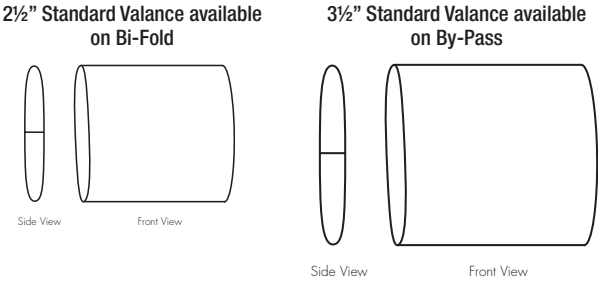


- Cut-outs are measured from the bottom to the top of the desired location.
- Only straight cut-outs are available.
- By-pass cut-outs can be cut at a specified depth to accompany all baseboard types.
- Maximum by-pass depth of cut-out is 3/4".
- Surcharges apply to all cut-outs.

TRACK SYSTEM VALANCES

- All valances come with a standard RETURN LENGTH.
- By-pass closed 5 5/8".
- By-pass open 8 1/2".
- Bi-fold 3".
- If mounting on moldings, longer return lengths can be ordered.

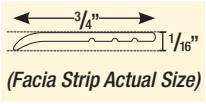




FILLER STRIPS AND COVER STRIPS

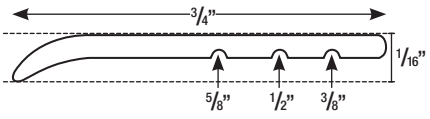
FACIA COVER STRIPS

- Facia is used to cover light gaps, installation screws and window irregularities.
- Glued on to the front or back of the frames.



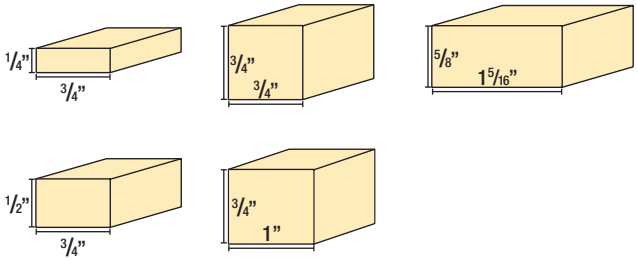
(Facia Strip Actual Size)

- 16 ft. roll is supplied.
- Scoring lines allow for custom installation.



FILLER STRIPS

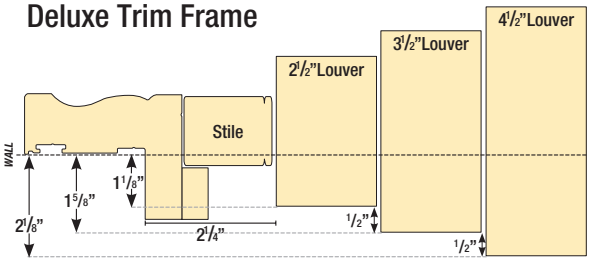
- Filler strips are used to fill in areas around shutter frames.
- Use fillers to build out **ALL INSIDE MOUNT FRAMES** to accommodate tile.
- 6 sizes available in all colors.



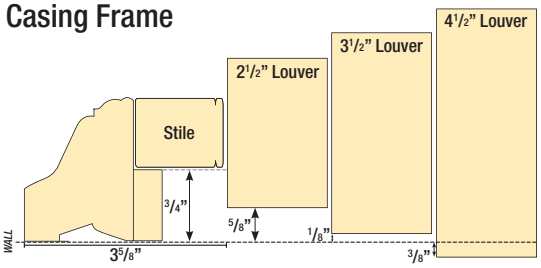
Clearances Chart

LOUVER REAR CLEARANCES - STANDARD TILT ROD
SEE CHART BELOW FOR REAR TILT & Clearview REQUIREMENTS

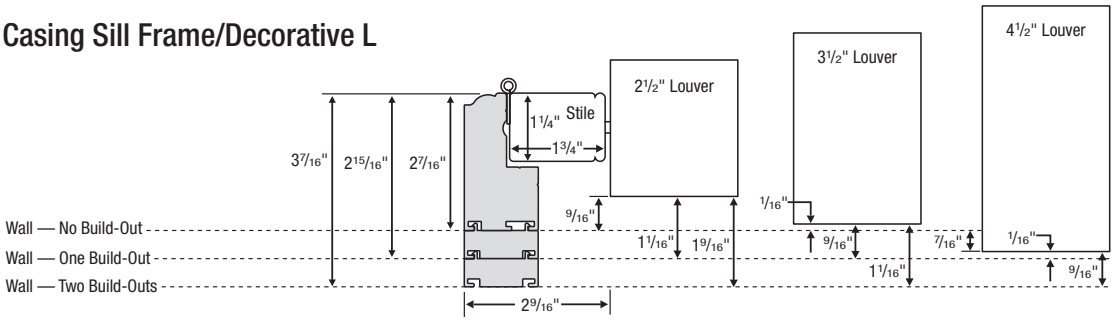
Deluxe Trim Frame



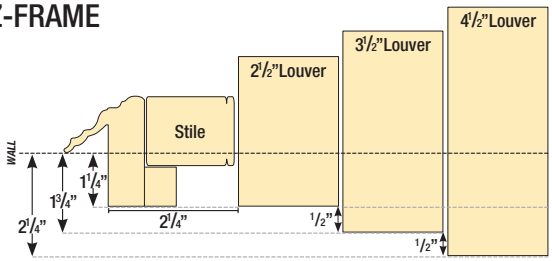
Casing Frame



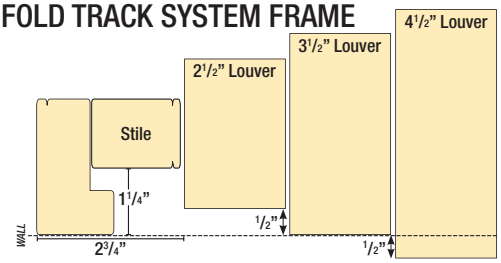
Casing Sill Frame/Decorative L



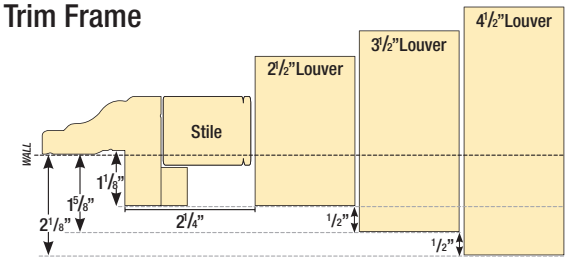
Z-FRAME



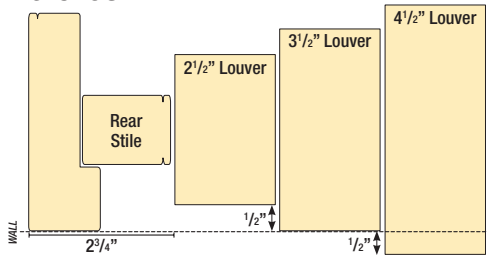
BI-FOLD TRACK SYSTEM FRAME



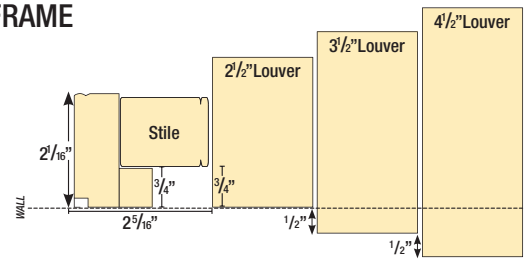
Trim Frame



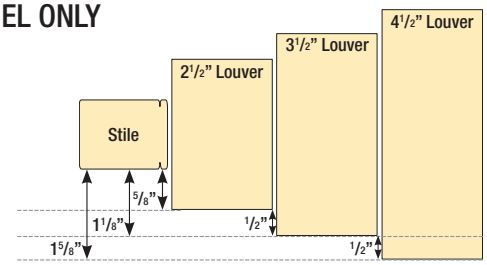
BY-PASS TRACK SYSTEM FRAMES - OPEN & CLOSED



L-FRAME



PANEL ONLY



ADDITIONAL DEPTH REQUIREMENTS

Clearview	Add ½"	Minimum
Off-Set Rear Tilt	Add 1"	Minimum

Panel Configuration Overview

PANEL CONFIGURATION KEY

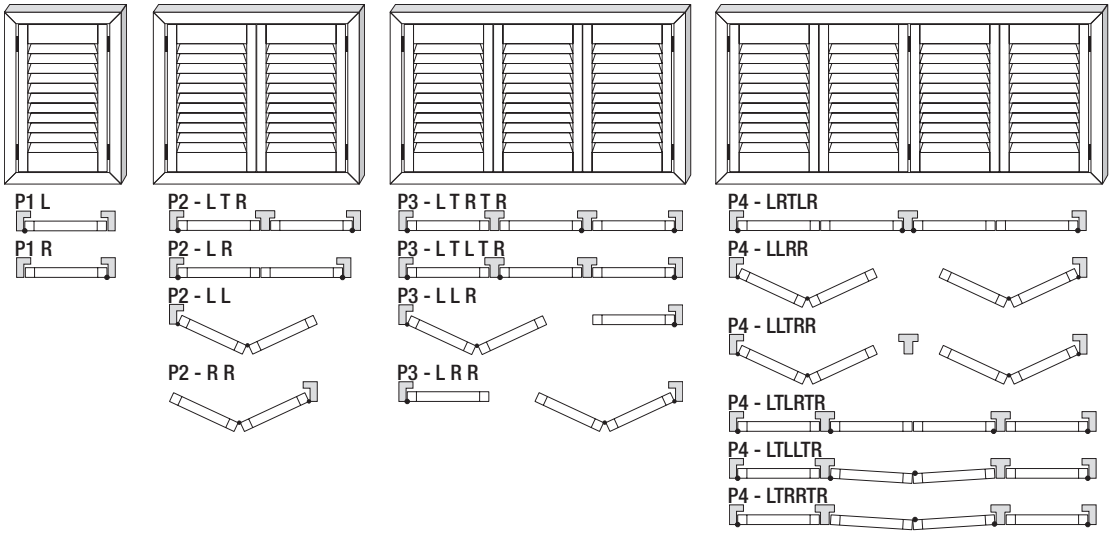
P = Panel

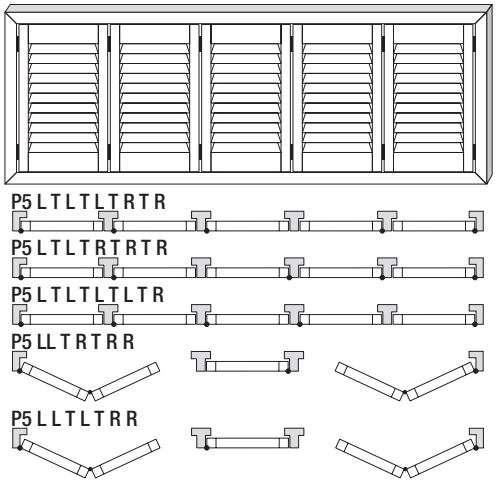
 # = Number of panels

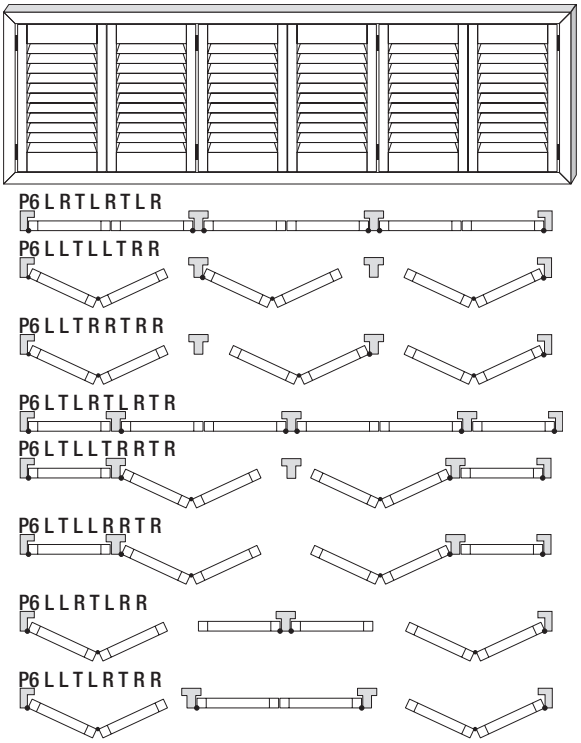
L = Left hinged panel

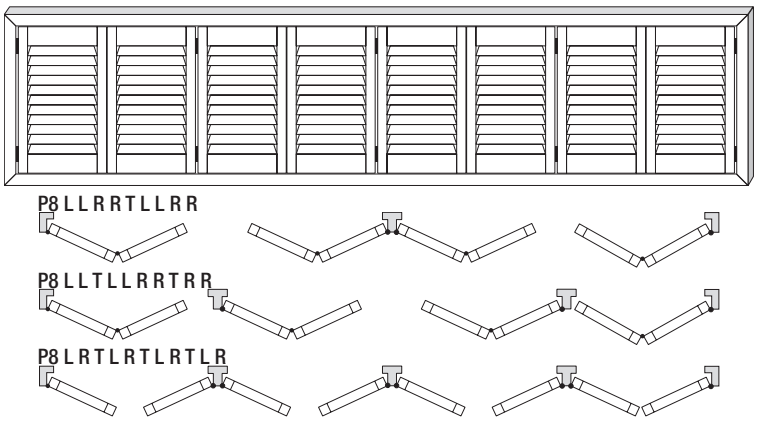
R = Right hinged panel

T = T-post





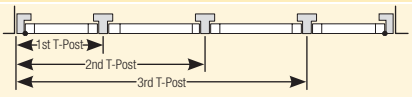




UNEQUAL PANELS, NO T-POST

Specify the number of panels. Then the size of each panel measuring from left to right. Sizes must include the frames.

UNEQUAL PANELS, WITH T-POST

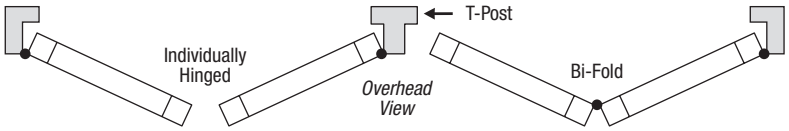


Measure from the left side of the window to the center of the first T-Post. From the far left side of the window to the center of the second T-Post. From the far left side of the window to the center of the third T-Post, etc...
For OB Frames, include frame with T-Post measurement.

Panel Configuration
Standard Systems

INTRODUCTION

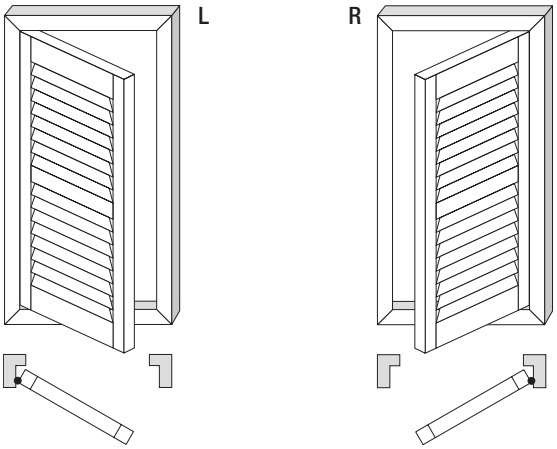
Standard panel systems can consist of multiple shutter panels in a variety of hinged configurations. In addition to being hinged from the frames, panels may be hinged from T-posts, which serve as intermediate vertical supports. Two panels may also be hinged together in a bi-fold design.



Note

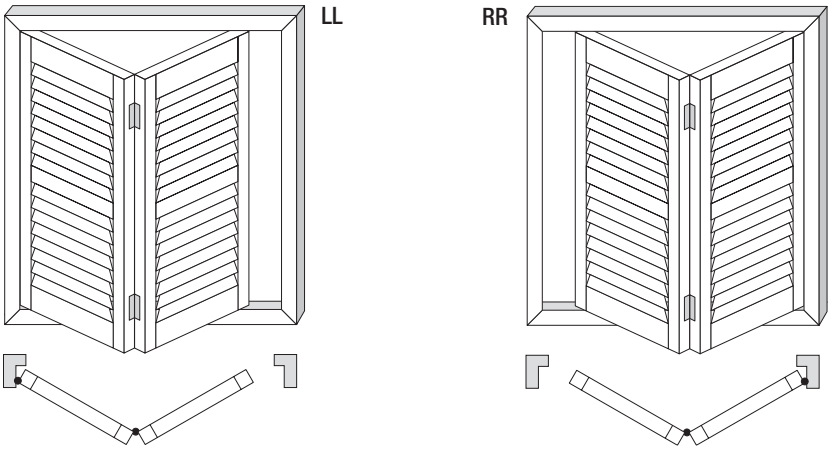
- The minimum and maximum panel dimensions do not include the frame.

ONE PANEL SYSTEM



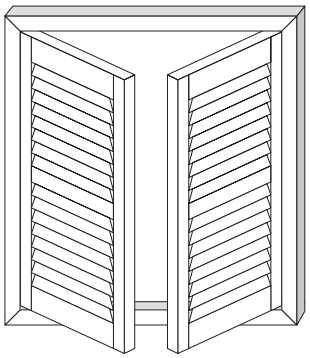
	PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	8"	8"	8"	12"
Maximum	36"	36"	36"	110"

TWO PANEL SYSTEM — BI-FOLD



Bi-Fold - COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	16"	16"	16"	12"
Maximum	36"	36"	36"	110"

TWO PANEL SYSTEM — INDIVIDUALLY HINGED



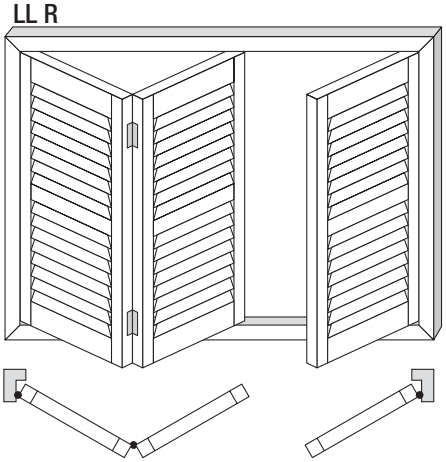
Center Open - COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	16"	16"	16"	12"
Maximum	72"	72"	72"	110"

Panel Configuration
Standard Systems

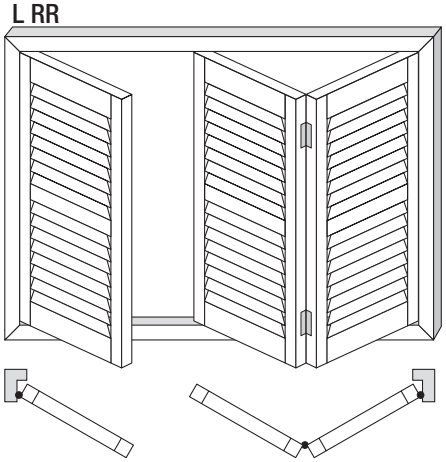
THREE PANEL SYSTEMS — BI-FOLD

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	24"	24"	24"	12"
Maximum	72"	72"	72"	110"

LL R



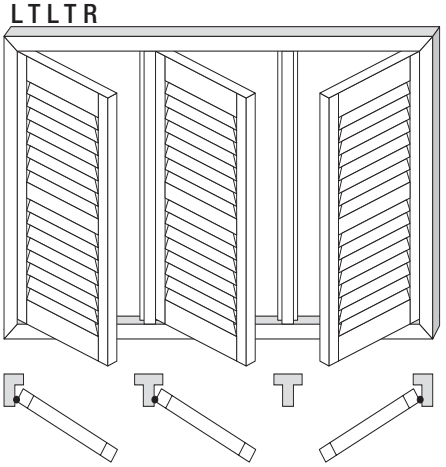
L RR



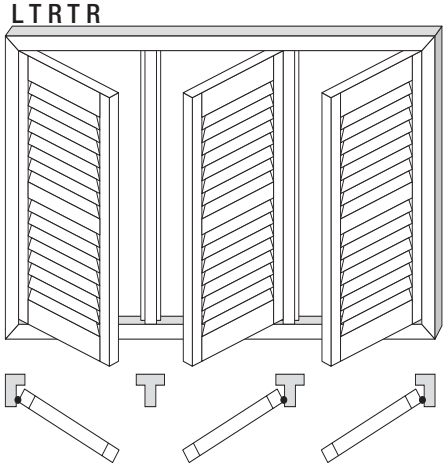
THREE PANEL SYSTEMS — INDIVIDUALLY HINGED

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	24"	24"	24"	12"
Maximum	108"	108"	108"	110"

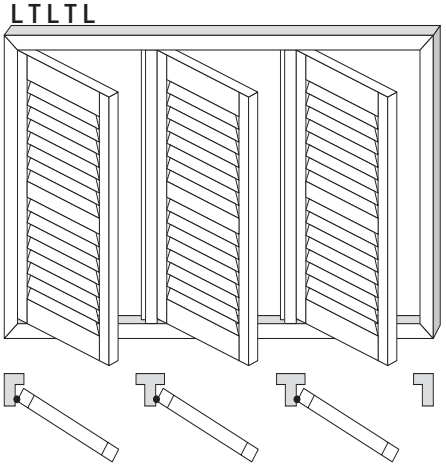
LTLTR



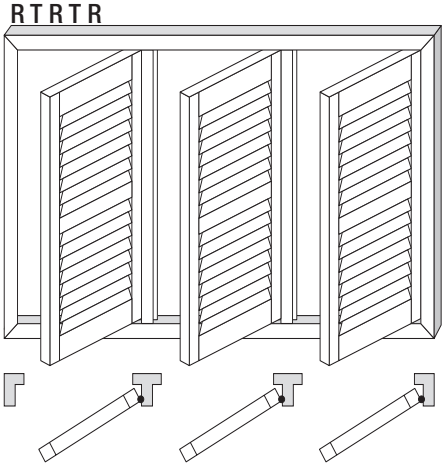
LTRTR



LTLTL



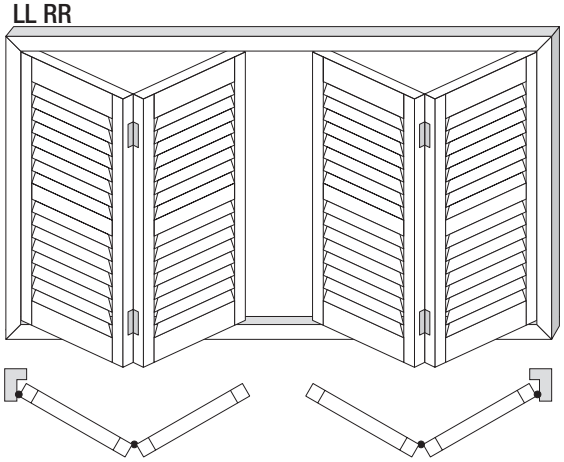
RTRTR



Panel Configuration
Standard Systems

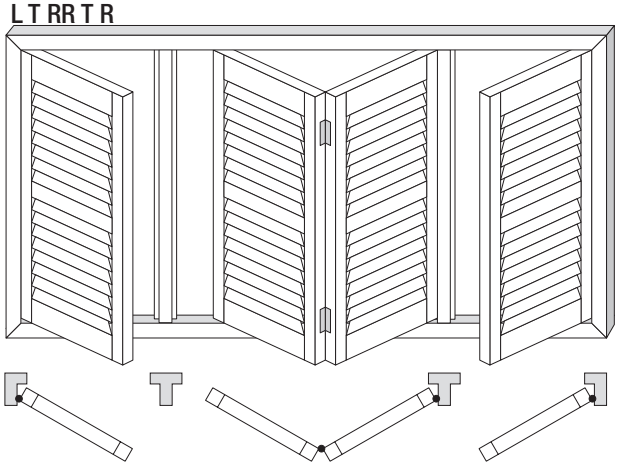
FOUR PANEL SYSTEMS — BI-FOLD

LL RR



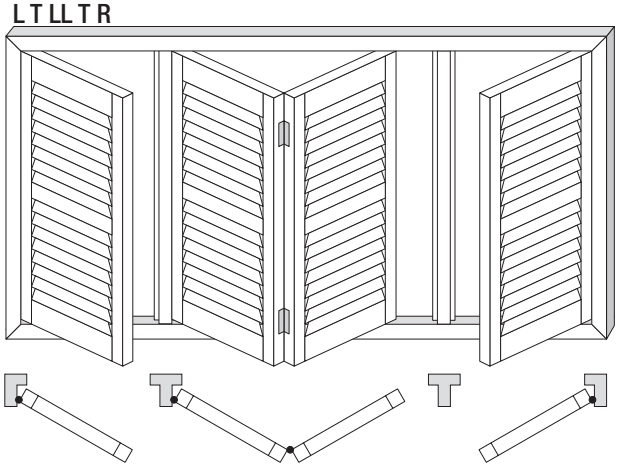
	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	32"	32"	32"	12"
Maximum	72"	72"	72"	110"

L T RR T R



	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	32"	32"	32"	12"
Maximum	108"	108"	108"	110"

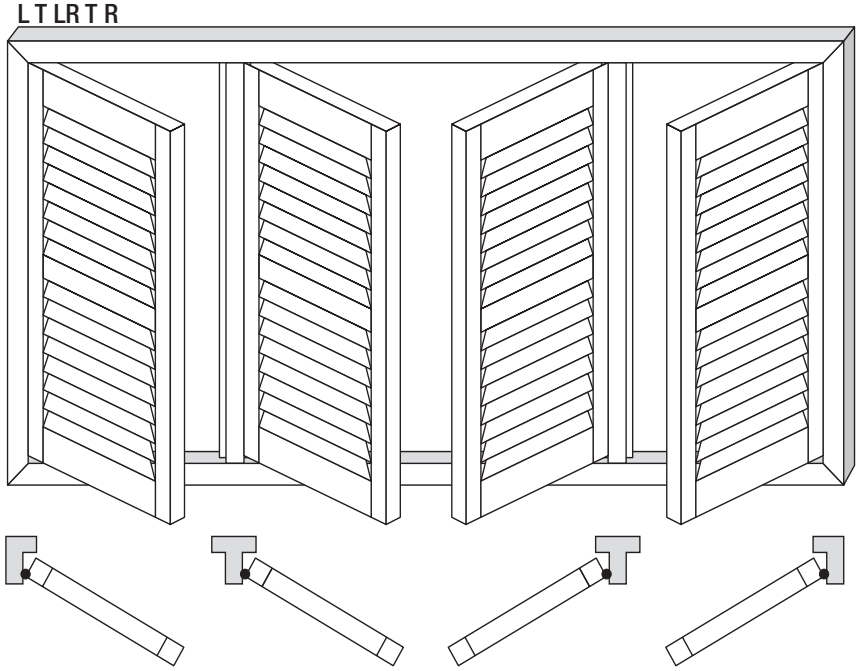
L T LL T R



Panel Configuration
Standard Systems

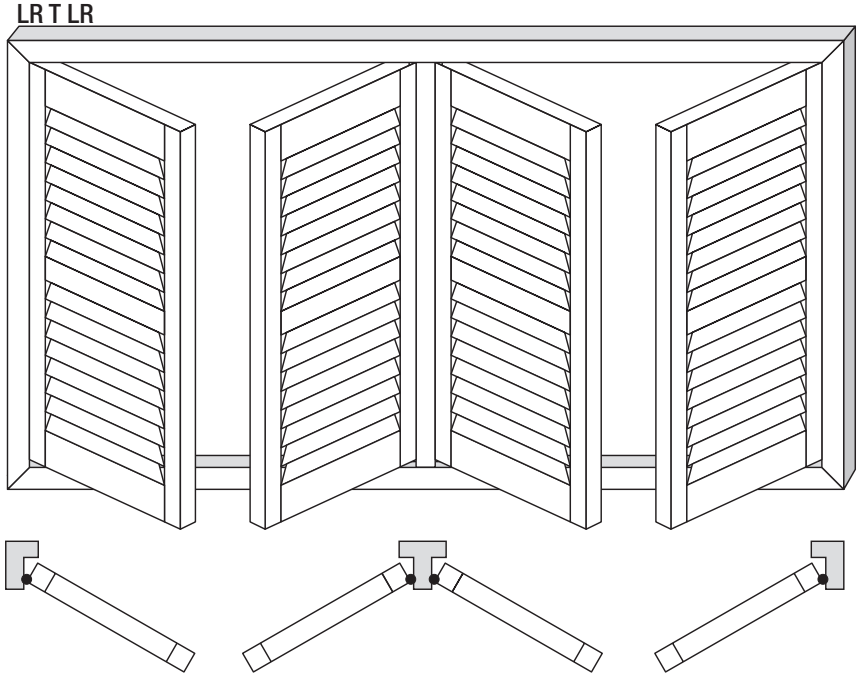
FOUR PANEL SYSTEMS — INDIVIDUALLY HINGED

L T LR T R



	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	32"	32"	32"	12"
Maximum	144"	144"	144"	110"

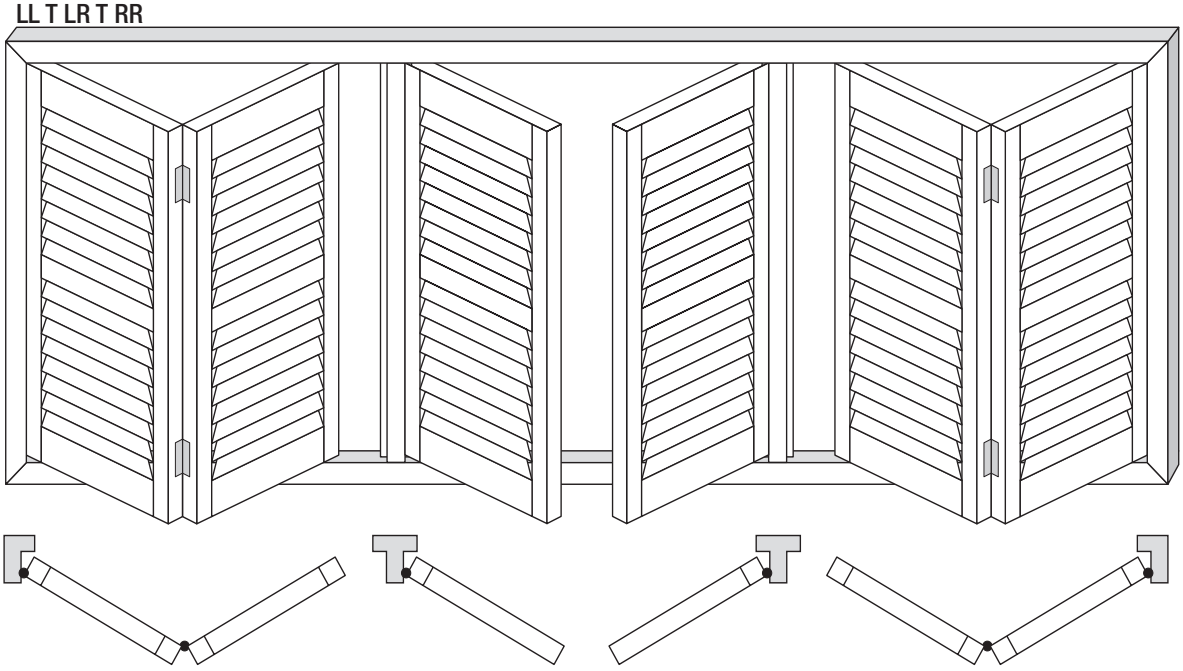
LR T LR



Panel Configuration
Standard Systems

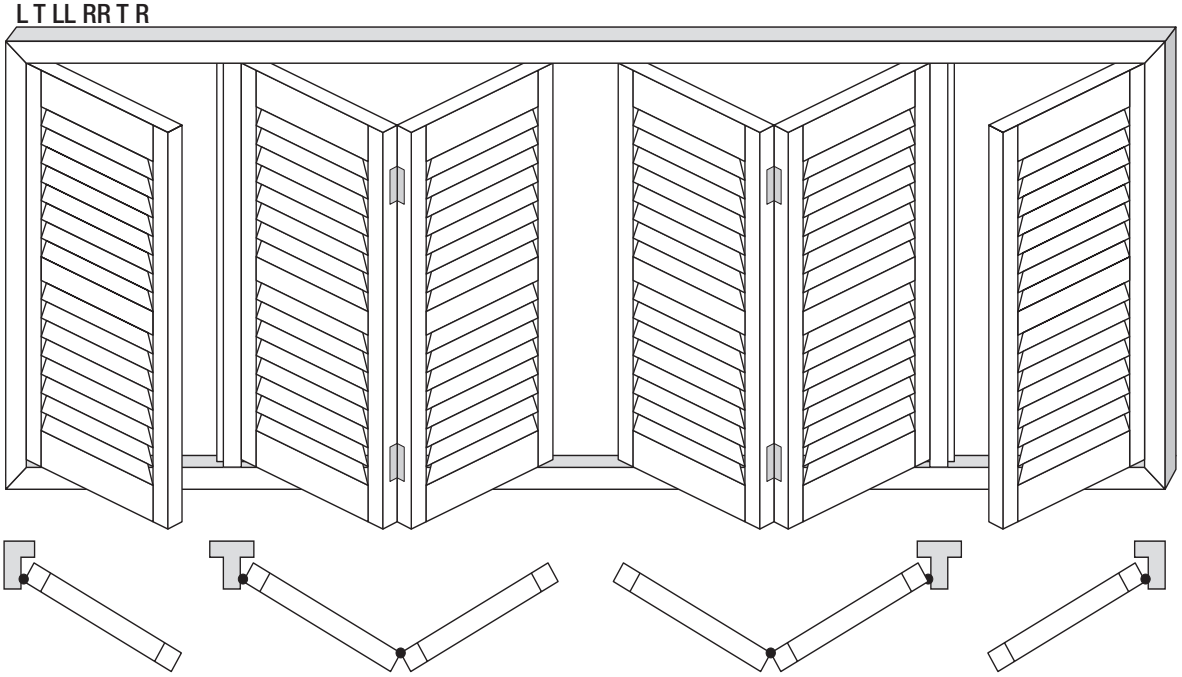
SIX PANEL SYSTEMS — BI-FOLD

LL T LR T RR



	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	48"	48"	48"	12"
Maximum	144"	144"	144"	110"

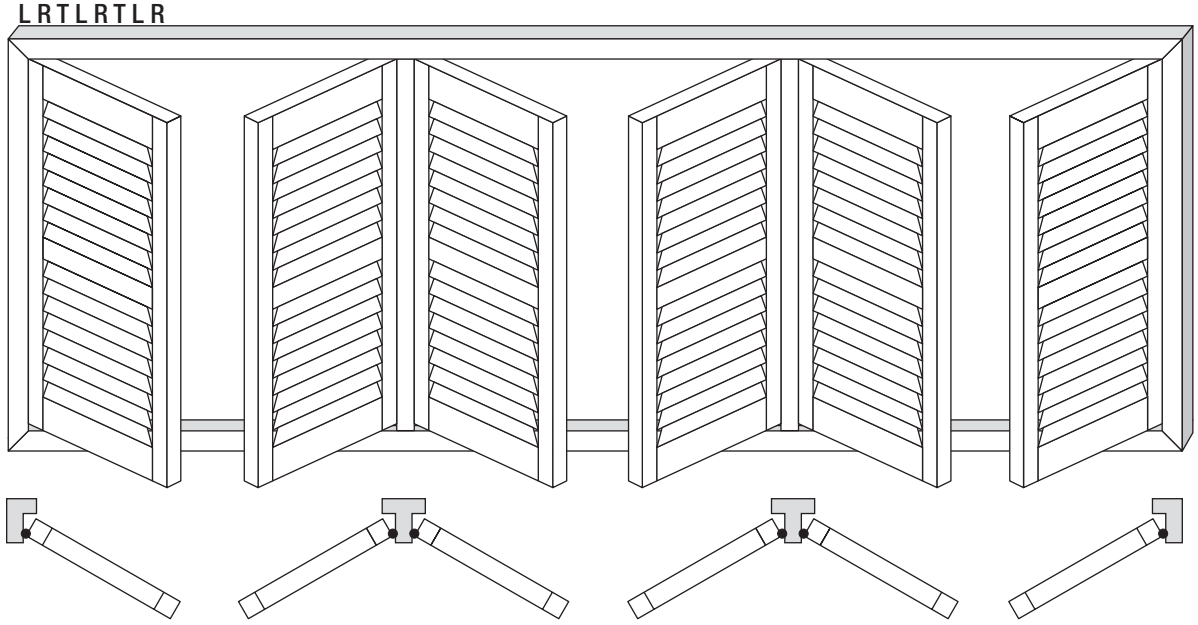
L T LL RR T R



Panel Configuration
Standard Systems

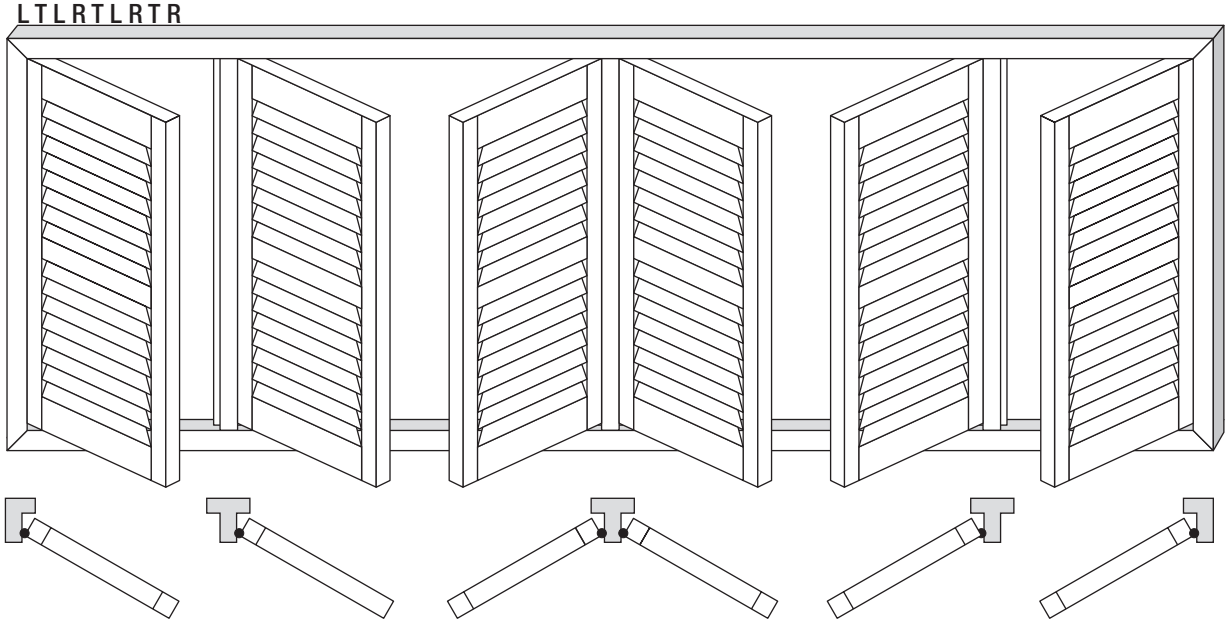
SIX PANEL SYSTEMS — INDIVIDUALLY HINGED

L R T L R T L R



	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	48"	48"	48"	12”
Maximum	216"	216"	216"	110”

L T L R T L R T R



Note

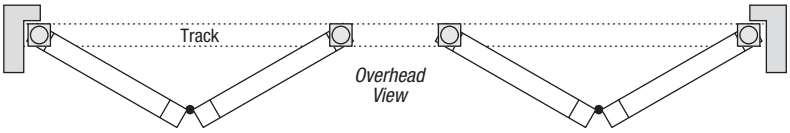
- Other multiple panel arrangements are possible including 8 and 10 panels. Please consult Customer Service.

Panel Configuration
Bi-Fold Track Systems

INTRODUCTION

In a bi-fold track system, the shutter panels are connected to a top track which supports the hinged panels and guides their folding movement. Up to eight panels may be hinged together in a bi-fold track system.

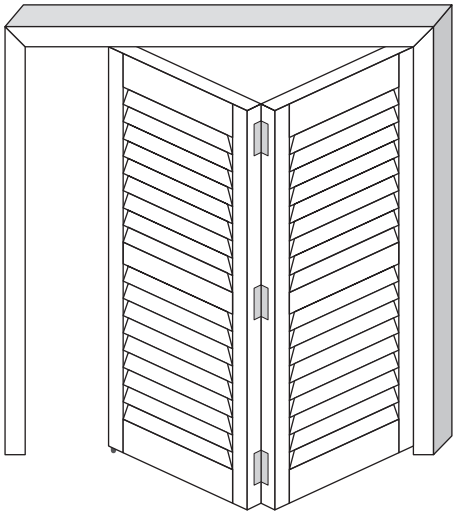
A special frame is used with bi-fold track systems, although the tracks may also be attached directly inside the door or window opening. In sliding door openings, the frames are usually three-sided, and open at the bottom.



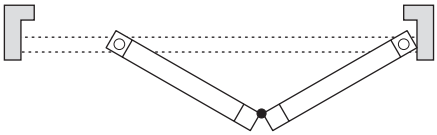
Note

- Factory tolerances are taken to allow proper floor clearance.

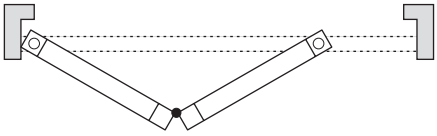
TWO PANEL SYSTEM



BF-2R

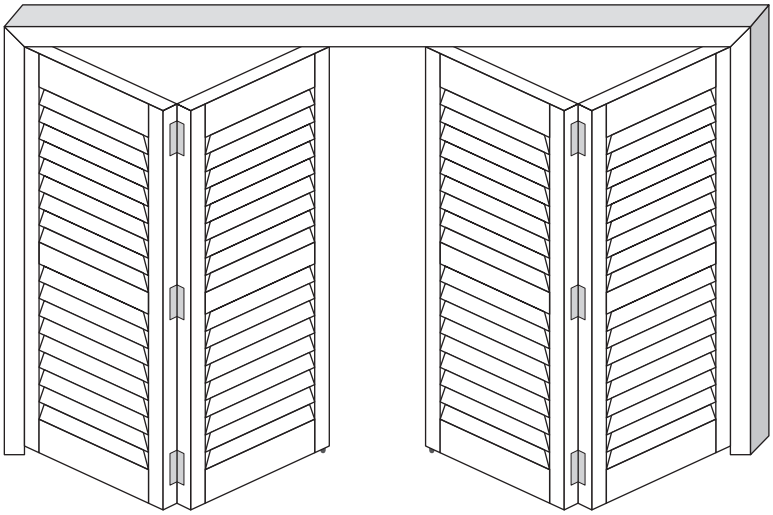


BF-2L

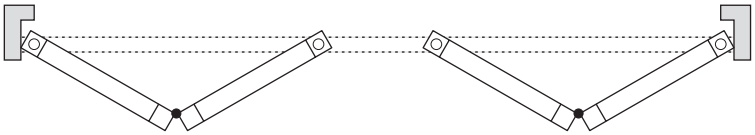


	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	24"	24"	24"	12”
Maximum	48"	48"	48"	110”

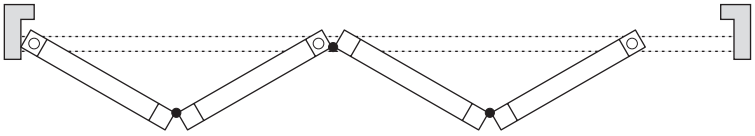
FOUR PANEL SYSTEM



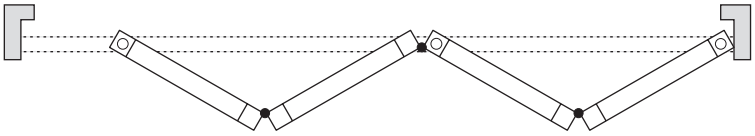
BF-2L/2R



BF-4L



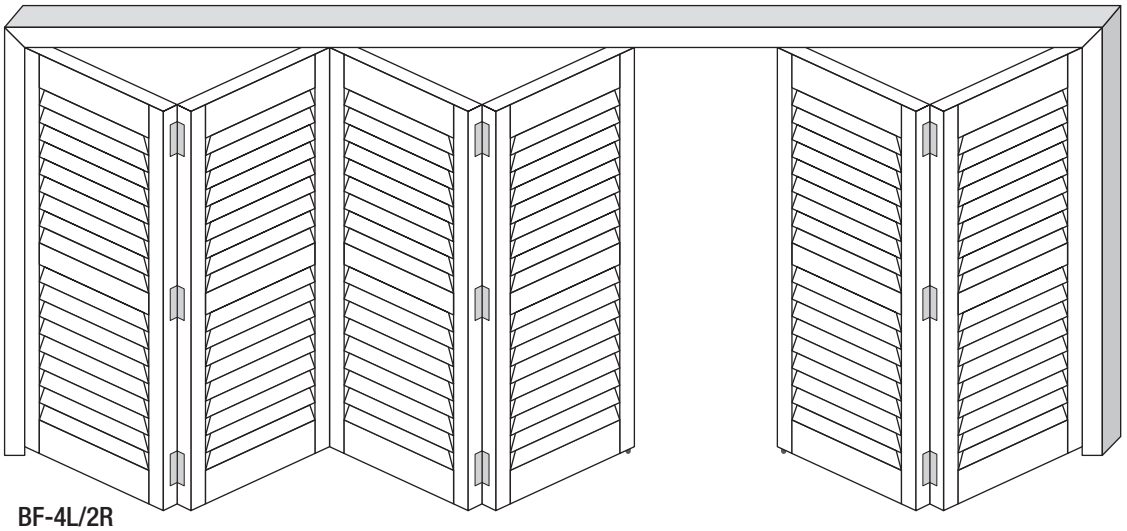
BF-4R



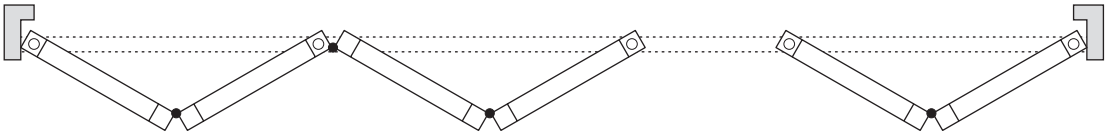
	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	48"	48"	48"	12”
Maximum	96"	96"	96"	110”

Panel Configuration
Bi-Fold Track Systems

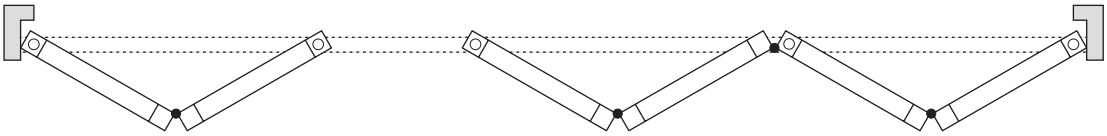
SIX PANEL SYSTEM



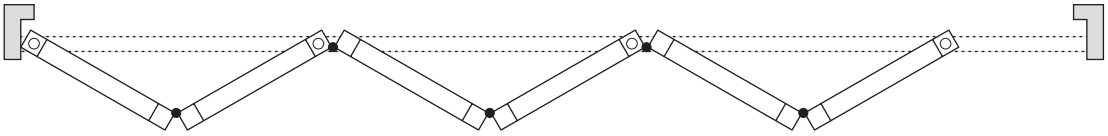
BF-4L/2R



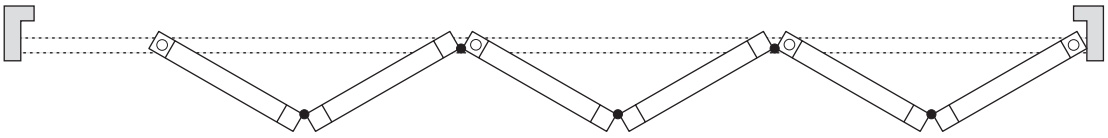
BF-2L/4R



BF-6L



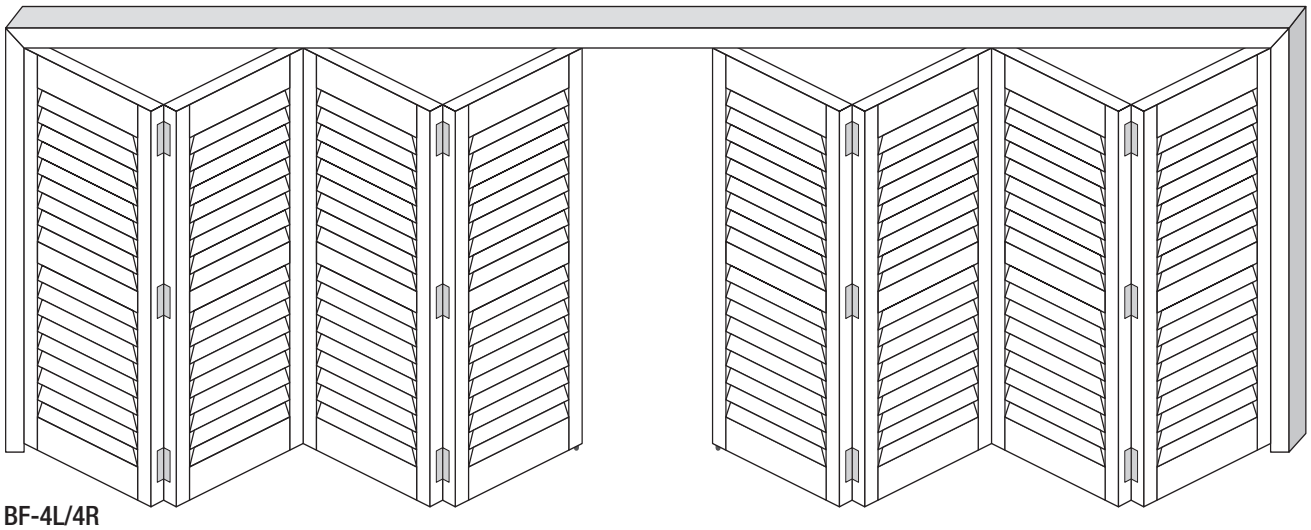
BF-6R



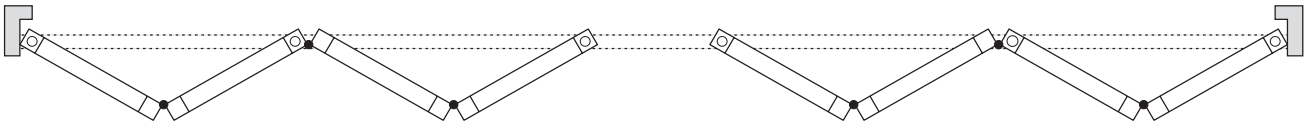
	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	72"	72"	72"	12”
Maximum	144"	144"	144"	110”

Panel Configuration
Bi-Fold Track Systems

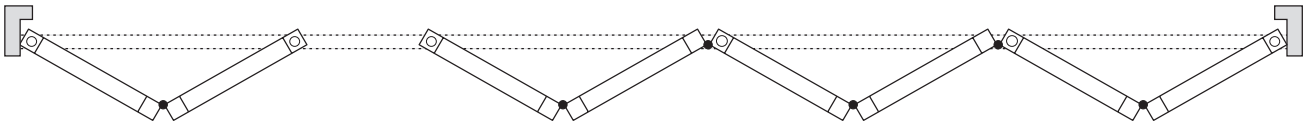
EIGHT PANEL SYSTEM



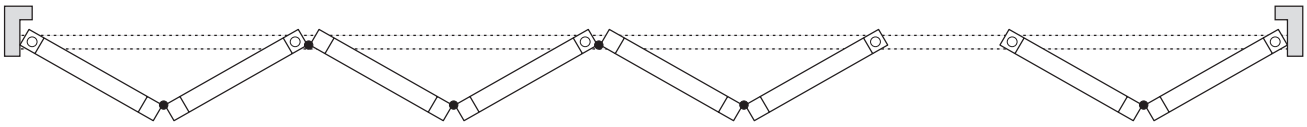
BF-4L/4R



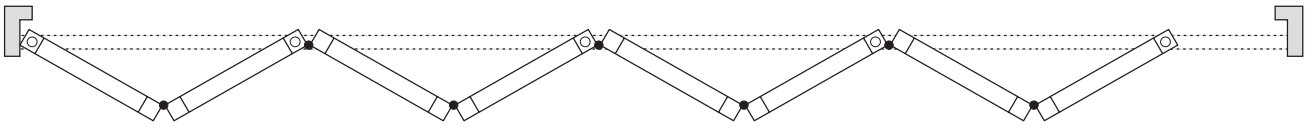
BF-2L/6R



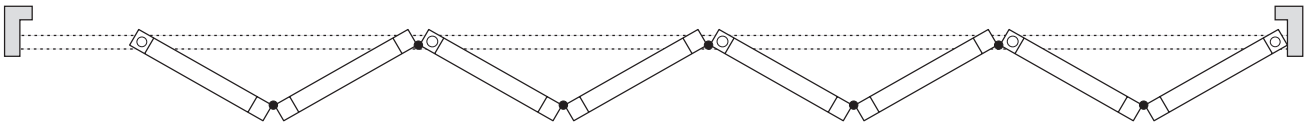
BF-6L/2R



BF-8L



BF-8R



	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	96"	96"	96"	12"
Maximum	188"	188"	188"	110"

Panel Configuration
Open & Closed Louver By-Pass Track Systems

INTRODUCTION

Shutter panels in a by-pass track system are not hinged. Instead, they slide on top tracks to open & close. Two tracks are always required so that panels can slide past each other.

Tracks can be attached to the by-pass frames or directly to the door or window opening. For sliding door applications, the frames will be 3-sided, open at the bottom.

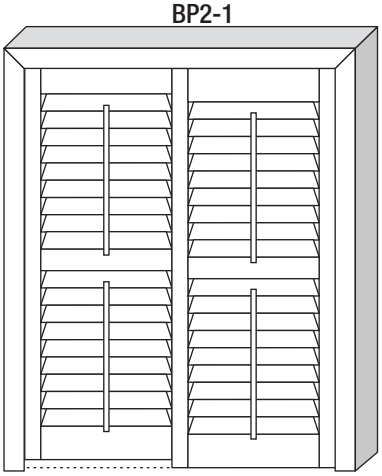
Note

- ALL CONFIGURATIONS SHOWN ARE AVAILABLE IN THE CLOSED OR OPEN STYLE FRAME.

PRIVACY FEATURE:

All By-pass sliders come standard with a privacy & light blocking feature. It is very important to order the correct configuration according to where the **sliding glass door handle is located**. This feature prevents any external view through from unwanted sources & provides a higher level of light blocking and comfort. An overlap of 1.625" where panels meet in the center to help with the lightblock.

BP2-1

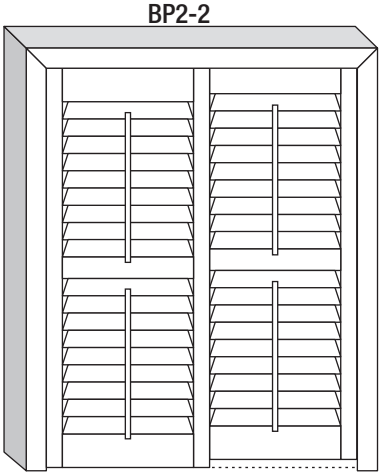


Slider door handle is on the right.

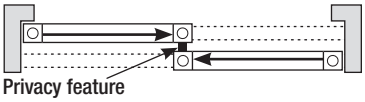
TWO PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	24"	24"	24"	12"
Maximum	72"	72"	72"	110"

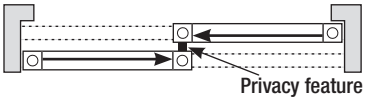
BP2-2



Slider door handle is on the left.

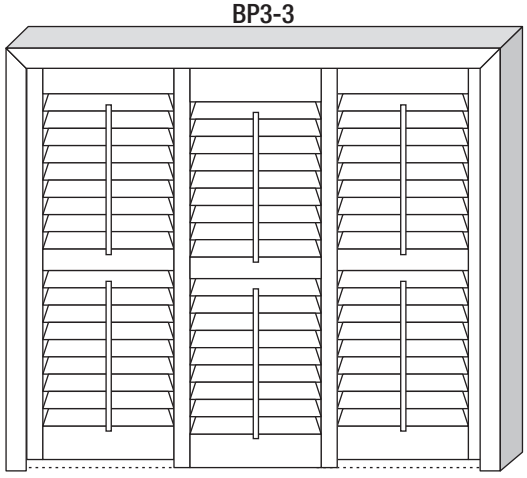


Privacy feature



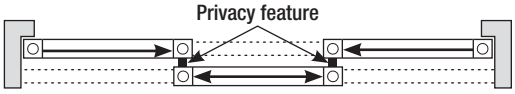
Privacy feature

BP3-3



THREE PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	36"	36"	36"	11"
Maximum	108"	108"	108"	110"

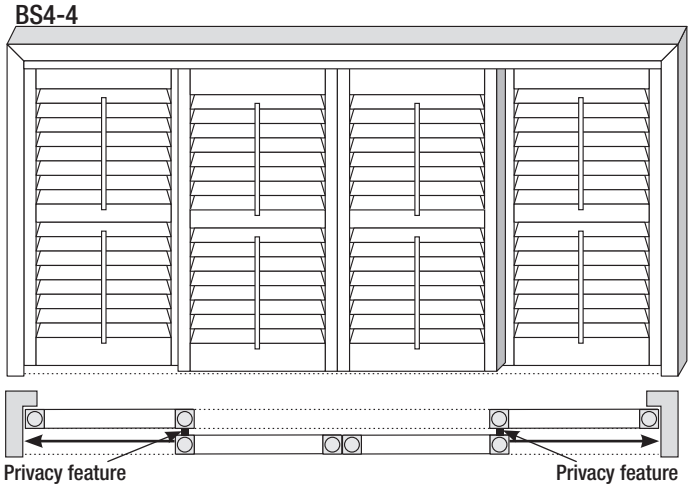


Privacy feature

Panel Configuration
Open & Closed Louver By-Pass Track Systems

FOUR PANEL SYSTEMS

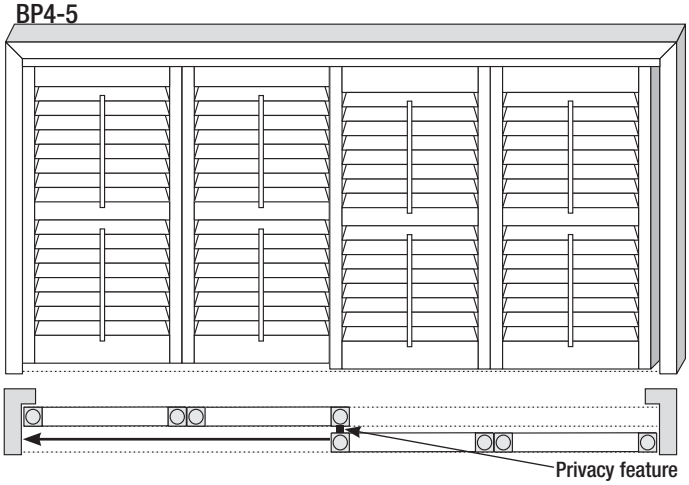
BS4-4



FOUR PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	48"	48"	48"	12”
Maximum	144"	144"	144"	110”

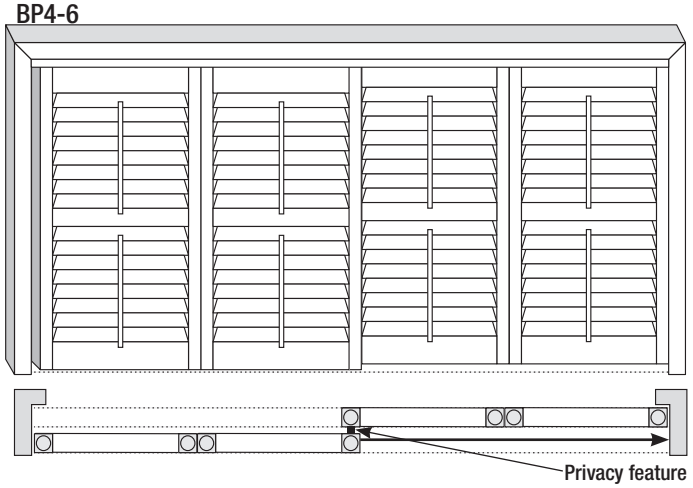
BP4-5



FOUR PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	48"	48"	48"	12”
Maximum	144"	144"	144"	110”

BP4-6



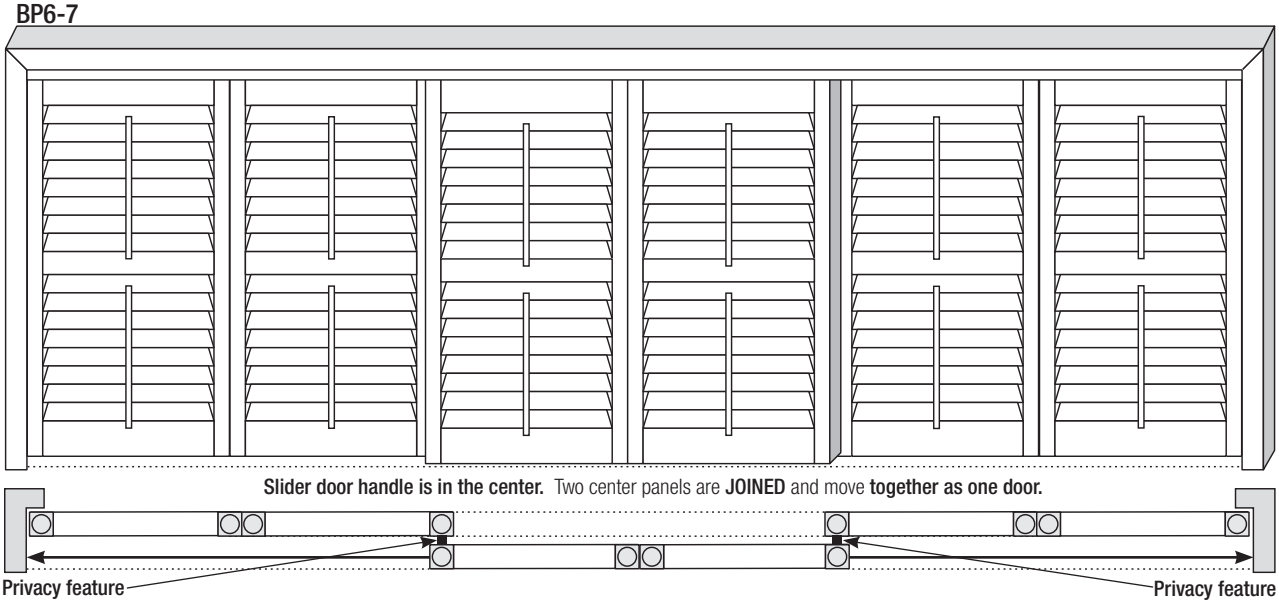
FOUR PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	48"	48"	48"	12”
Maximum	144"	144"	144"	110”

Panel Configuration
Open & Closed Louver By-Pass Track Systems

SIX PANEL SYSTEMS

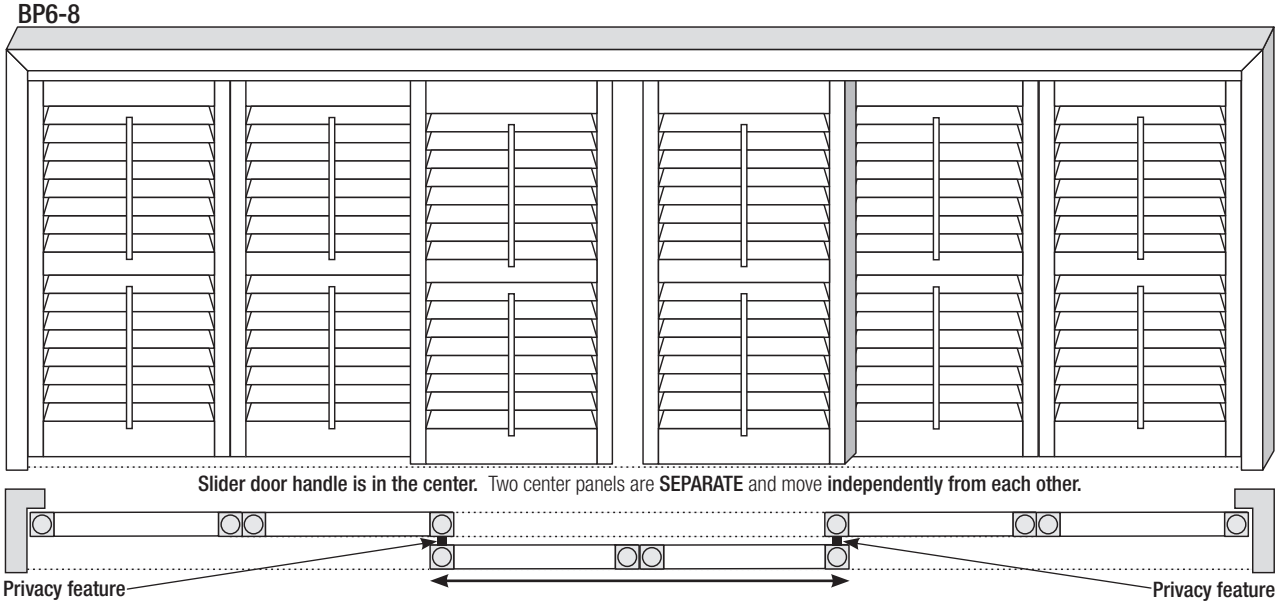
BP6-7



SIX PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	72"	72"	72"	12”
Maximum	188"	188"	188"	110”

BP6-8

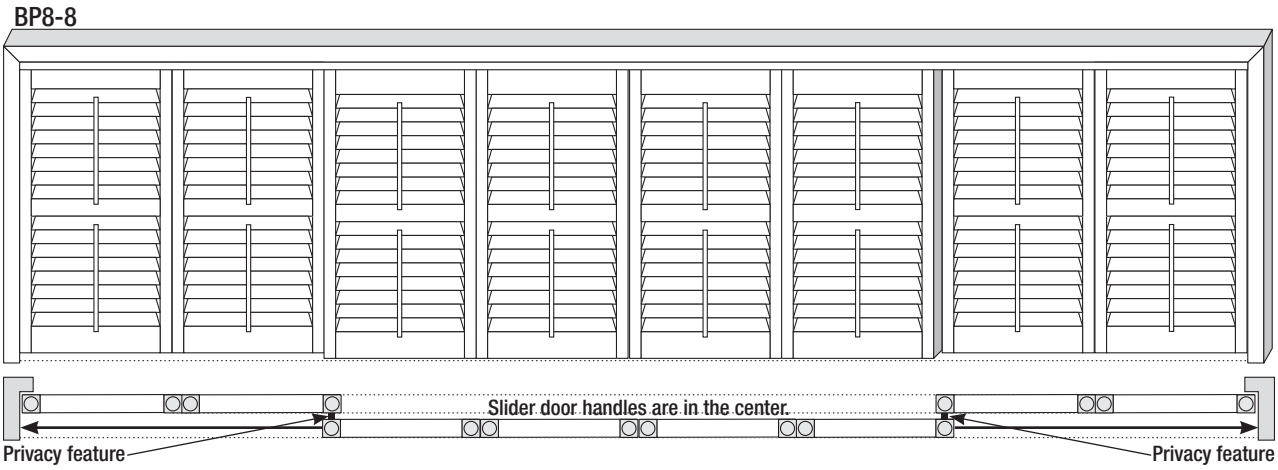


SIX PANEL SYSTEMS

	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	72"	72"	72"	12”
Maximum	188"	188"	188"	110”

Panel Configuration
Open & Closed Louver By-Pass Track Systems

EIGHT PANEL SYSTEM



EIGHT PANEL SYSTEMS

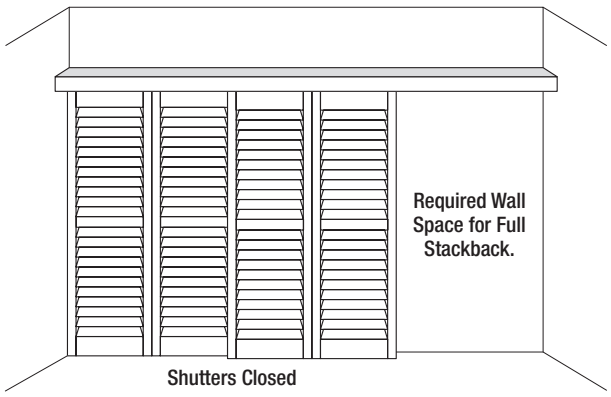
	COMBINED PANEL WIDTH 2½"	3½"	4½"	PANEL HEIGHT
Minimum	96"	96"	96"	12"
Maximum	188"	188"	188"	110"

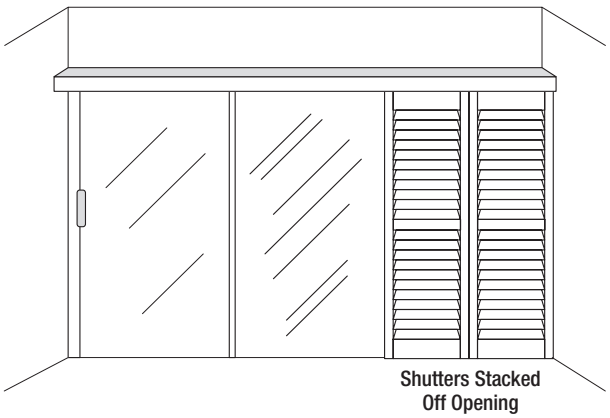
OPTIONAL STACKBACK DESIGN - SURCHARGE APPLIES

By-pass track systems may be designed to completely uncover the window opening by extending the top frame and tracks a distance equal to one-half the total panel widths. In the illustration below, a four panel by-pass track system is extended by a distance equal to the width of two panels. **Not all systems will allow full stackback. Check before ordering.**

Both the front and rear panels may be slid away from the opening to completely uncover it.

One or both of the side frames may be eliminated if the top frame abuts one or both walls. This provides a very clean look to the installation.



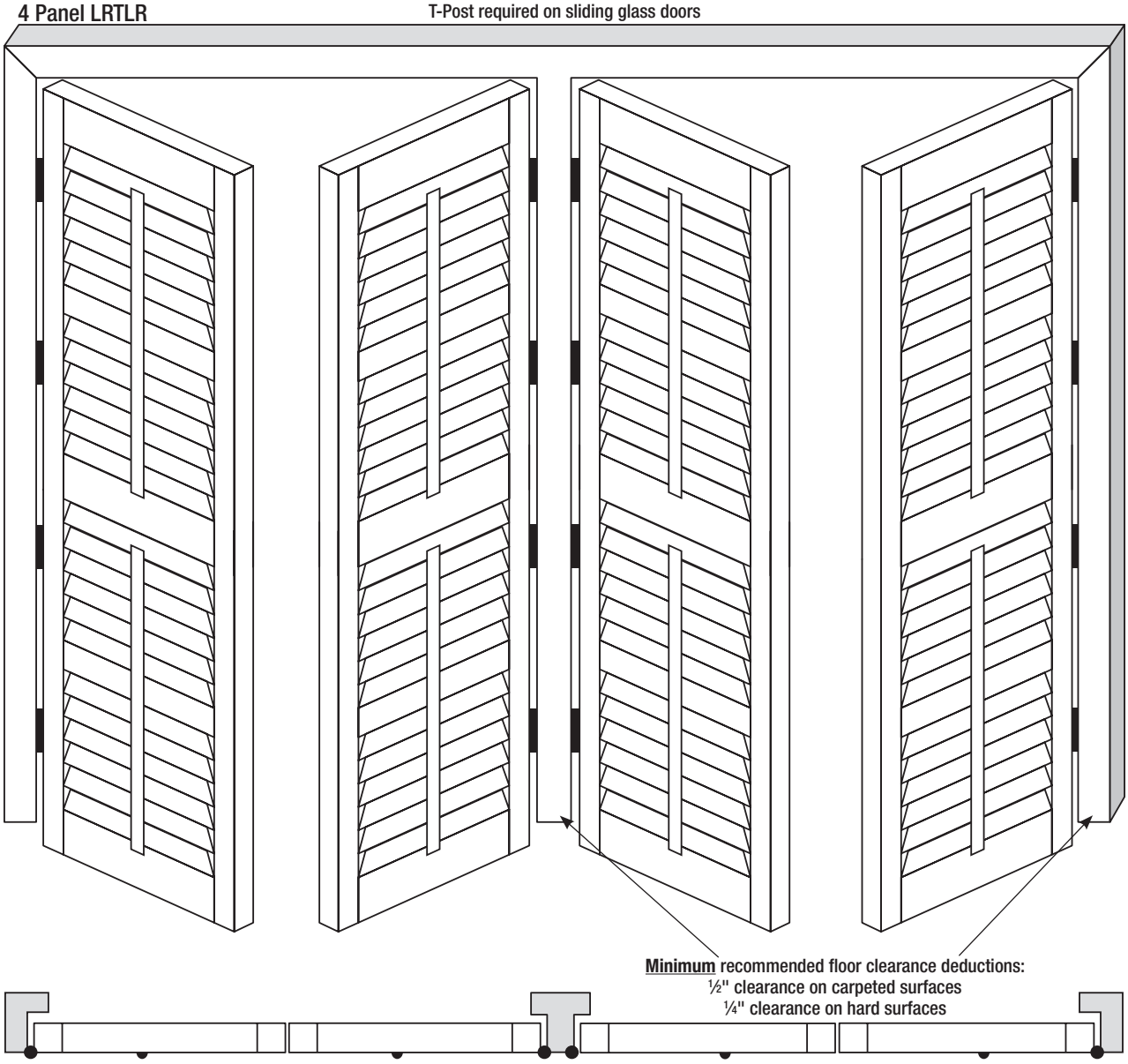


Panel Configuration
Alternate Slider Application

FRENCH SLIDER

4 Panel LRTLR

T-Post required on sliding glass doors



Specify floor clearance deductions on your order form.

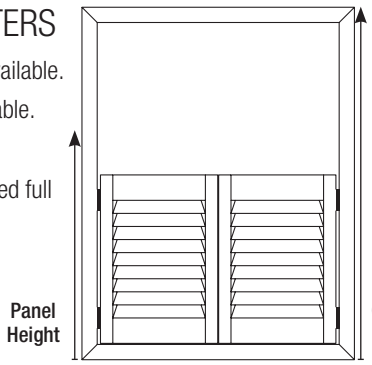
- No tracks are used in this style.
- Use a standard outside mount L-Frame or Casing Frame.
- Frame will come with 3 sides and a center T-Post.
- T-Post mounts directly into flooring surface.
- Sliders wider than 96” require conversion to a tracking system.
- Outside panels fold onto the wall.

	COMBINED PANEL WIDTH			PANEL HEIGHT
	2½"	3½"	4½"	
Minimum	48"	48"	48"	12”
Maximum	96"	96"	96"	110”

Panel Configuration
Café Style Shutters and French Door Systems

CAFÉ STYLE SHUTTERS

- Inside or Outside Mount Available.
- Full or partial frames available.
- Maximum of 4 panels.
- Surcharge applies to 4-sided full frame only.

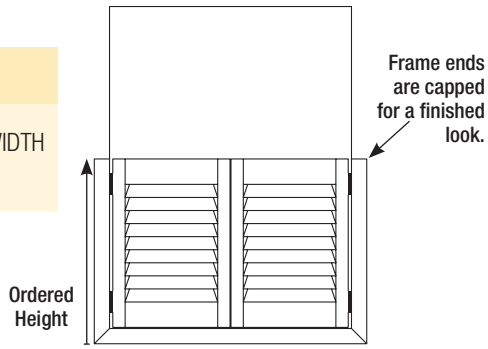


4-Sided Full Frame

- Measure and order the entire dimension of the window.
- Note the height where the panels will stop.
- Order 4 sides of framing Café style.

Note

MAXIMUM WIDTH IS 72”



3-Sided Partial Frame

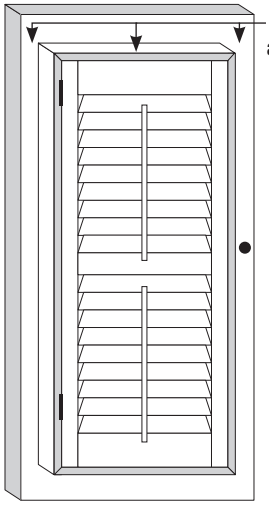
- Measure and order the height where the panels and frame will stop.
- Order 3 sides of framing Café style.

FRENCH DOOR SYSTEMS

- Outside Mount L-Frame Only.
- 3-sided or 4 sided frame options.
- Two styles available with or without cut-outs.

ROUND KNOB STYLES

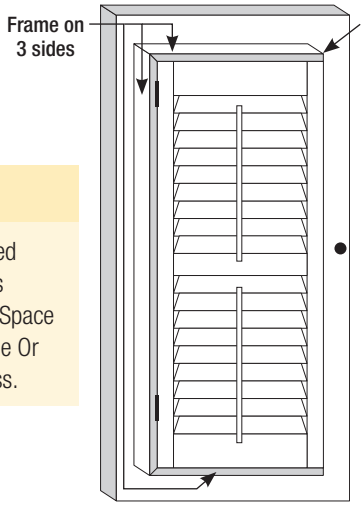
- Divider rails available.
- Worksheet required (page 44).
- No surcharge.



Full Frame

Note

- 3-sided Style Is Used When There Is Less Than ½” Mounting Space Between The Handle Or Collar And The Glass.

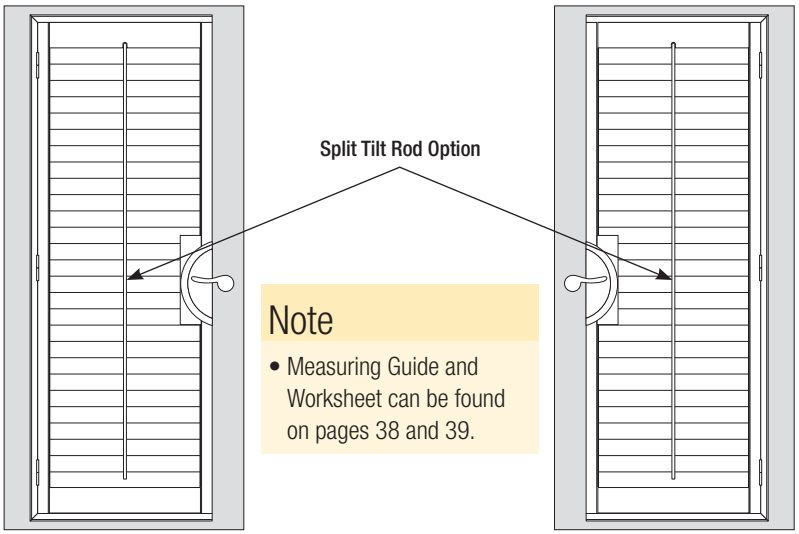


Open Frame On Handle Side

LEVER HANDLE STYLES

FDC - French Door Cut-Outs

- **Not available in 4½” louver size.**
- **No divider rails available.**
- 3-sided frames only.
- Split tilt controls only (recommended).
- Worksheet required (page 45).
- Surcharge applies.



Note

- Measuring Guide and Worksheet can be found on pages 38 and 39.

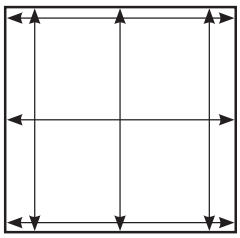
Measuring Guidelines
Standard Panel Systems

STANDARD INSIDE MOUNTS
Z-Frame/Trim Frame/Deluxe Trim Frame

Standard Inside Mount Z-Frame, Trim Frame & Deluxe Trim Frame deductions of **1/4" width & height** are automatically taken at our factory. If you require different deductions, make adjustments to your ordered sizes prior to placing your order.

STANDARD INSIDE MOUNT MEASURING RULES

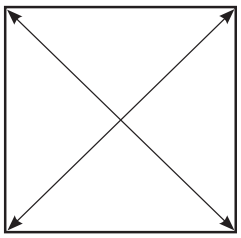
Step 1: Measure Width and Height



1) Measure the width in *3 places.*
2) Measure the height in *3 places.*
3) Use the smallest width and height measurement.
4) Round *down* to the nearest 1/8" increment if measurement is in the 1/16" range.

Step 2: Measure on the Diagonal

Compare the two diagonal measurements. If the measurements vary more than specified below for the frame you have selected, change to a frame style that will accommodate the irregularities, or measure and order as an outside mount:



- **3/8" Z-Frame**
- **1" Trim Frame**
- **1 1/2" Deluxe Trim Frame**
- **3/8" L-Frame**
- **For diagonal measurements that are 3/8" to 1" out-of-square,** divide the amount out-of-square **in half** and reduce the ordered **width** by that amount.

Step 3: Measure Window Depth

Make sure there is sufficient ***depth*** for the frame to be recessed and for the louvers to operate without hitting handles or other obstructions. *See page 17 for clearance requirements.*

Inside Mount with L-Frame

Factory deduction for an L-Frame is **1/8"** width and height.

- Standard Measuring Rules Apply.
- Primarily used on windows that are already cased with wood moldings.
- L-Frame does not overlap or interfere with existing wood trim.
- Facia Coverstrips or latex caulking must be used to cover or fill light gaps between the shutter frame and the window casing.
- Facia Coverstrips can be ordered from our factory. (Surcharge applies.)
- Caulking is not provided at the factory.
- Windows cannot be more than 3/8" out-of-square when using an inside L-Frame.

Inside Mount with No Frame

- Standard Measuring Rules Apply.
- Accurate Measurements are critical for this application to the smallest 1/8".
- If diagonal measurements are not equal, a framed shutter is strongly recommended.
- 4 sides of 3/4" x 3/4" sill light block will be sent to help block light gaps around the edges of the panels.
- Net panel sizes can be ordered.
- Factory will take noted deduction unless otherwise specified.

Direct mount deductions:

1 Panel 3/16"
2 Panels 3/16"
3 Panels 3/16"
4 Panels 3/16"
Height is 1/4"

Inside Mount with Hanging Strips

- Standard Measuring Rules Apply.
- If diagonal measurements are not equal, a framed shutter is strongly recommended.
- Accurate measurements are critical for this application to the smallest 1/8".
- Shutters are made with hanging strips behind the panel and light blocks will be sent for the top & bottom of the window opening.
- Net panel sizes can be ordered.
- Factory will take noted deduction unless otherwise specified.

Inside Mount Tip-To-Tip Net Frame Size

- Optional for Z-Frame/Trim Frame or Deluxe Trim Frame ordering.
- To be used when there is not adequate wall space for the decorative portion of the frame to overlap the wall or ceiling.
- Specify the net outside dimension of the trim of your frame.
- Tip-to-Tip dimensions can be specified for width & height.
- Must be clearly noted on your Order Form as "Tip to Tip".
- For use on:
  1) Drop ceilings.
  2) Windows that abutt to walls in corner applications.
  3) Windows between cabinets.
  4) Partial tile openings.
  5) Matching frame edges on window sills.

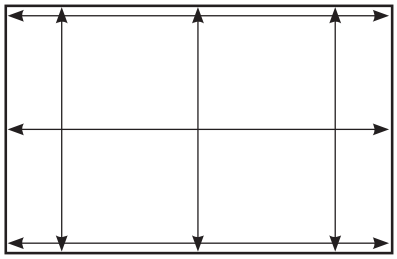
Measuring Guidelines
Standard Panel Systems

STANDARD OUTSIDE MOUNTS
Outside Mount

No frame deductions are taken on these applications. Factory will make to exact net dimensions specified on your work order, from the outside edge on all sides. Outside mounts are always ordered as net outside dimensions.

STANDARD MEASURING RULES
Step 1: Measure Width and Height

1) Measure the width in *3 places.*
2) Measure the height in *3 places.*
3) Use the largest width and height measurement.
4) Round *up* to the nearest $^1/_8$" increment if measurement is in the $^1/_{16}$" range.



If there are <u>no window moldings or sills</u>, add the appropriate frame overlap factors to all sides

FRAME OVERLAP FACTORS

- **L-Frame -** Minimum overlap + $1^1/_4$"
  Recommended overlap + 2"
- **Casing Frame -** Minimum overlap + $2^5/_8$"
  Recommended overlap + $3^1/_4$"

Overlap Factors must be added to each side you are framing.

EXAMPLE:

(No Sill/No Molding)
Window Measures: $46^1/_4$" W x $46^1/_4$" H
(L-Frame has been selected)
Ordered Size:
$46^1/_4$" + 2" on left
+ 2" on right = **$50^1/_4$" width**
$46^1/_4$" + 2" on top
+ 2" on bottom = **$50^1/_4$" height**

Windows <u>With Sills</u> But Without Moldings

- Use Standard Measuring Rules.
- Apply appropriate overlap factors.
- <u>Do not add overlap factor to the bottom</u> as the shutter frame will rest on the sill.
- Casing Frame is not available with sill frame.

EXAMPLE:

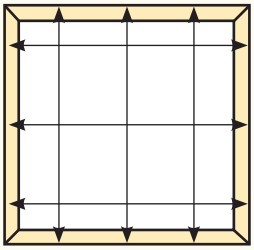
Window Measures:
$46^1/_4$" W x $46^1/_4$" H
(L-Frame has been selected)

Ordered Size:
$46^1/_4$" + 2" to left
+ 2" to right = **$50^1/_4$" width**

$46^1/_4$" + 2" **<u>to top only</u>** = **$48^1/_4$" height**

Outside Mount <u>On Top</u> (of Existing) Moldings

- As long as wood moldings are relatively flat to mount on, all Outside Mount frames can be installed safely & securely.
- Standard Measuring Rules Apply.
- Measure to the <u>Outside Edges</u> of the moldings in 3 places.



- Record the largest measurements.
- These measurements are your ordered sizes.

Frames Mounted <u>Outside</u> of Existing Moldings

- Use Standard Measuring Rules.
- Measure to outside edges of existing moldings.
- Use the largest measurements to $^1/_8$".
- Apply the appropriate Frame Overlap Factors.
- Projection may be required for louver clearance.

EXAMPLE
(With Molding/No Sill):

Molding Measures:
$49^1/_2$" W x $49^1/_2$" H
(L-Frame has been selected)

Ordered Size:
$49^1/_2$" + 2" to left
+ 2" to right = **$53^1/_2$" width**

$49^1/_2$" + 2" **<u>to top</u>**
+ 2" **<u>to bottom</u>** = **$53^1/_2$" height**

Outside Mounts Below Window Sills

- Not typically recommended due to sill projection.
- Use standard measuring rules.
- Add frame overlap factors.
- Height is measured from the bottom of the sill.
- Build-out will be required if: the forward projection of the sill beyond the opening is.

  L-Frame - $^3/_4$" or more
  Casing Frame - $1^1/_8$" or more

- To ensure full louver rotation and clear any obstructions, see page 17 for the louver clearance chart.

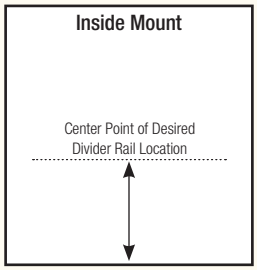
Measuring Guidelines
Standard Panel Systems

MEASURING FOR DIVIDER RAILS

- **Divider Rails are required for all panels over 60" in height.**
- Always measured from the bottom up.
- French Door Cut-Out systems are not available with divider rails so rules do not apply.
- Maximum of (2) Dividers may be placed in each panel.
- Always measured to the **center** of desired location.
- Divider Rail Warranty may be waived up to a maximum of 70" high.

INSIDE MOUNTS

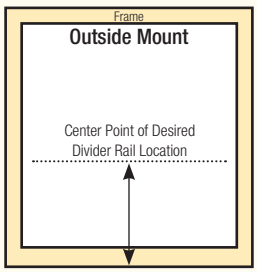
- Measure from the bottom inside of the opening to the center point of the desired location of the divider rail.



- See page 3 for divider rail sizes.

OUTSIDE MOUNTS

- Measure from the bottom of where the frame will be located to the center point of the desired location of the divider rail.

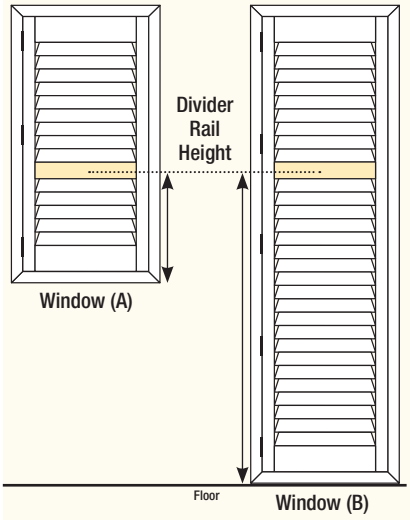


Sliding Glass Doors

- Measure from the floor, up to the center point of the desired location of the divider rail.

Matching Divider Rail Locations on Windows of Different Heights

1) Determine the desired divider rail location for all windows.
2) Mark that location on the wall at window (A).
3) Measure from the floor up to your mark for the desired divider rail height for window (B).



Divider Rail Variances

- Divider Rails may not always come at the exact centered location you desire.
- **3½" Louvers:** Divider can vary up to **1½"** above or below desired location.
- **2 1/2" & 4 1/2" Louvers:** Divider can vary up to **2"** above or below desired location.
- If your divider rail placement must be exact, make a special note on your work order & contact shutter customer service for your options.

Measuring for Split Tilt Rods

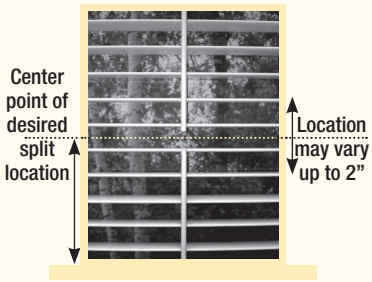
- Tilt rods can be split for all operating systems.

A) Clearview Hidden Controls

B) Traditional Tilt Rods

C) Offset Front or Rear Tilt Rods

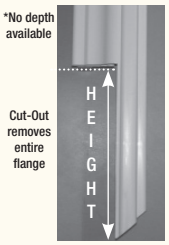
- Split Tilt Rods are always measured from the bottom up to the desired split location.
- Must be specified at the time of order and noted under "Special Instructions".



- All Tilt Rods can be split in the field.

Measuring for Tile Cut-Outs & Baseboard Cut-Outs

- Available only on Z-Frame, Trim Frame or Deluxe Trim Frame.
- Measured from the bottom to the top of the tile on both sides.
- Baseboard cut-outs are available for all sliding glass door shutters.



Trim Frame with cut-out

By-pass frame with cut-out

- Measure the height & the depth of the baseboard on both sides to determine cut-outs.
- Note all cut-outs in "Special Instructions".
- Max. ¾" depth of cut-out.

Measuring Guidelines
Standard Panel Systems

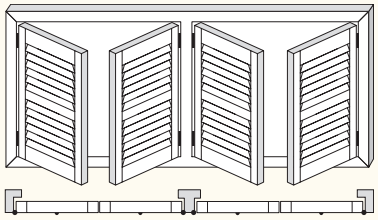
T-POST MEASURING

The T-Post is a vertical component inserted between the top and bottom frame of your shutters. It allows for the placement of more panels within the same window opening and adds strength to the shutters to help prevent panel sagging over the life of the product.

T-Posts Are Required On Windows Over 72" Wide

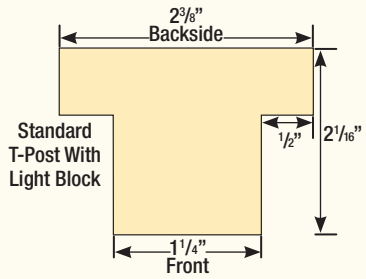
Equal Panel Widths

- T-Post(s) location must be specified on the order form, even in the case of equal panel widths.



Typical 4 panel shutter with 1 T-Post.

- Panels are hinged to the T-Post in the same manner by which they are attached to the frames.



Pre-Drilled T-Post Assembly

- All T-Posts are pre-drilled at the factory to ensure proper fit during installation.
- All T-Posts are labeled directionally to eliminate unnecessary installation time.

Unequal Panel Widths With T-Post

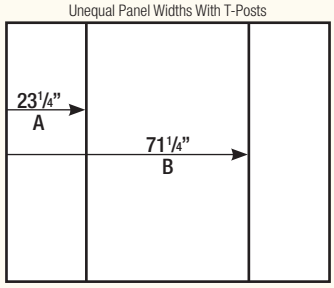
Shutters can be made to specific panel sizes if multiple T-Posts have been ordered.

When a specified T-Post location is ordered, it is always measured to the center of the post.

1) Measure from the left most point of your entire width (including the frame for outside mounts) to the center of the first vertical mullion or break.
2) Measure from the left most point of your entire width to the center of the second vertical mullion or break.
3) Repeat, always from the left, for any additional T-Posts you are ordering.

EXAMPLE:

Unequal Panel Widths With T-Posts



- T-Post locations are to be noted in the "Special Instructions" area on your Work order Form. T-post location can be noted on line 12 of the order form. If you have more than 4 t-post please note in special instructions.

Measuring Note for T-Posts

- On all windows that require T-Posts, it is extremely important to check if a T-Post will prevent window locks from opening.
- If the depth of the window or extension of the lock will prevent proper operation, the T-Posts must be shifted slightly for clearance.

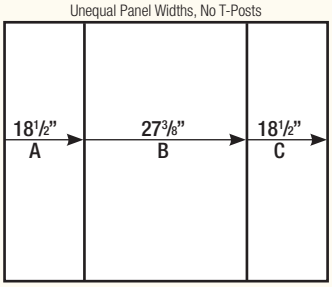
Unequal Panel Widths Without T-Posts

Shutters can be made to specific panel sizes even if no T-Posts have been ordered.

1) Specify the number of panels.
2) Specify the size of each panel measuring from left to right.
3) Sizes will include the frames on the left and right.

EXAMPLE:

Unequal Panel Widths, No T-Posts



- There can be a maximum of (4) panels for any opening configured with unequal panel sizes.
- When ordering unequal panel widths, it must be noted in the "Special Instructions" area on your work order form.

T-Post Warranty Waiver

- If you wish to order your Shutters wider than 72" without a T-Post, you must sign a Warranty Waiver Form.
- This will waive the Limited Lifetime Warranty on your purchase that protects against Panel Sagging.
- We cannot manufacture this shutter without a warranty release.
- Where T-Post warranties have been waived, your shutters will only be available with 4-sided frames.

Measuring Guidelines
By-Pass & Bi-Fold Tracking Systems

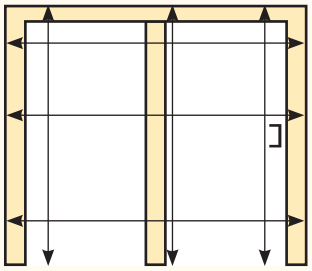
All Tracking Systems applications can be used as inside or outside mount. Most tracking systems are used for sliding glass doors, pass-throughs, room dividers or closet doors. Typically, they will always be ordered as a 3-sided frame without the bottom frame.

Track Units come with standard 1/2" floor clearance from factory.

Standard Measuring Rules Outside Mount

- **Sliders Without Wood Molding:**

A) Measure the width & height in 3 places to the outside edge of the slider.



B) Use the largest measurement rounded up to the nearest 1/8".

C) Add frame overlap factors as shown.

TRACK FRAME OVERLAP FACTORS

ALL SYSTEMS		
Minimum WIDTH Overlap	2" to each side	4" total
Recommended WIDTH Overlap	2 1/4" to each side	4 1/2" total
Minimum HEIGHT Overlap	2" to overall height	
Recommended HEIGHT Overlap	3" to overall height	

EXAMPLE:

Slider Measures:
70 1/2" W x 81 5/8" H

Ordered Sizes:
70 1/2" W + 2 1/4" on left
+ 2 1/4" on right = 75" width

81 5/8" H + 3" on top = 84 5/8" height

Overall:
75" W x 84 5/8" H

Sliders With Wood Molding

- Track systems can be mounted on existing moldings, or outside of existing molding.
- If moldings are relatively flat and at least 2" wide, it is recommended to mount on top of the molding for these reasons.

A) Molding provides a natural build-out or projection of the frame which ensures full louver rotation and helps with depth requirements.

B) It prevents covering light switches that usually accompany sliders.

C) It prevents any issues from arising with baseboards that may obstruct a clean installation or require cut-outs.

IMPORTANT NOTE:

When ordering track systems designed to install on top of pre-existing molding, you must order top valance returns longer.

EXAMPLE:

Typical molding is 5/8" thick.

Notes on your order should read:

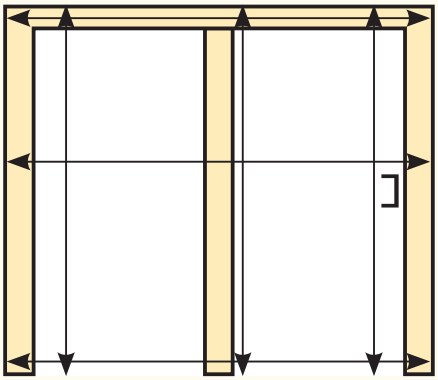
"Send Valance Returns 5/8" Longer Than Standard."

**This ensures that your valance will return & come flush with the wall.*

Measuring to Mount on the Molding

A) Measure the width & height in 3 places to the outside edge of the molding.

B) Record the largest measurement to the nearest 1/8".



THESE MEASUREMENTS ARE YOUR ORDERED SIZES

Measuring Guidelines
By-Pass & Bi-Fold Tracking Systems

Measuring to Mount outside the Molding

A) Measure to the outside of the molding.

B) Add frame overlap factors, note top overlap is only 2 1/4"

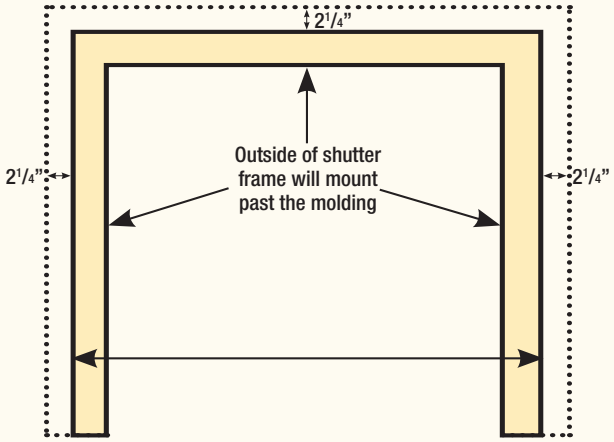
EXAMPLE:

Molding to molding measurements are
74 3/8" W x 83 1/2" H

Ordered Sizes:
74 3/8" W + 2 1/4" on left
+ 2 1/4" on right = 78 7/8" width

83 1/2" H + 2 1/4" = 85 3/4" height

Overall:
78 7/8" W x 85 3/4" H



Projection Requirements

- To ensure full louver rotation and clear handles or moldings, **see page 17 for the louver clearance chart** to order appropriate build-outs.

Door Handle Location

- It is very important to note the side where the slider handle is located and order the appropriate style. **Slider style options can be found on pages 28 thru 31.**

Inside Mount

- For measuring, see page 34 for inside L-Frame measuring guidelines.
- Inside Mount tracking systems should be done with caution.
- Top Frame only or No-Frame applications are available.
- Due to depth restrictions, it is uncommon that Inside Mount Systems will accommodate slider doors.
- Inside Mount Track Systems are typically done only in pass-throughs, closets or as room dividers.

ECLIPSE™
SHUTTERS

Date:	Ship To:
Account #:	
P.O.#:	
Sidemark:	
Ordered by:	
Phone #:	
Fax #:	

Page of	Job #:

		Room Line #	Room Line #	Room Line #	Room Line #	
1	Shutter Application					1
2	Quantity					2
3	Color #	Shutter	Shutter	Shutter	Shutter	3
4	Tilt Options	○T ○C	○T ○C	○T ○C	○T ○C	4
		Split Height:	Split Height:	Split Height:	Split Height:	
5	Hinge Color	○P ○S ○B	○P ○S ○B	○P ○S ○B	○P ○S ○B	5
6	Louver Size	○2-1/2 ○3-1/2 ○4-1/2	○2-1/2 ○3-1/2 ○4-1/2	○2-1/2 ○3-1/2 ○4-1/2	○2-1/2 ○3-1/2 ○4-1/2	6
7	Mount	○IM ○OM	○IM ○OM	○IM ○OM	○IM ○OM	7
8	Frame					8
9	Ordered Size	Width	Width	Width	Width	9
		Height	Height	Height	Height	
10	# Panels & Configuration	# Configuration	# Configuration	# Configuration	# Configuration	10
11	Frame Detail	Config Frame Detail T_____ L_____ R_____ B_____	Config Frame Detail T_____ L_____ R_____ B_____	Config Frame Detail T_____ L_____ R_____ B_____	Config Frame Detail T_____ L_____ R_____ B_____	11
12	T-post	1. 2.	1. 2.	1. 2.	1. 2.	12
		3. 4.	3. 4.	3. 4.	3. 4.	
13	Build-Out					13
14	Divider Rail	1. 2.	1. 2.	1. 2.	1. 2.	14
15	Divider Style	○S ○D	○S ○D	○S ○D	○S ○D	15
16	Cafe Height	Cafe:	Cafe:	Cafe:	Cafe:	16
17	Closure System	○P ○M	○P ○M	○P ○M	○P ○M	17

ADDITIONAL FILLER

1/4" x 3/4": QTY _____ SIZE _____
1/2" x 3/4": QTY _____ SIZE _____
3/4" x 3/4": QTY _____ SIZE _____
3/4" x 1": QTY _____ SIZE _____
5/8" x 1 5/16": QTY _____ SIZE _____
FACIA COVER STRIP # OF ROLLS: _____

SPECIAL INSTRUCTIONS

_____
_____
_____
_____
_____
_____

CUSTOM BRANDS GROUP

Phone: 800-829-6333 Fax: 866-291-2016
EMAIL: kishutterfax@custombrandsgroup.com

REV 8/7/13

ECLIPSE™ SHUTTERS

Order Form Key

1) **Room and Line #**

2) **Quantity**

3) **Color** = 5136 Cotton
5140 Vanilla
5151 Pearl

4) **TILT OPTION**
T = Traditional
C = Clearview

SPLIT TILT
C = Center
Or a specific location (For IM from the bottom of the window to middle of the divider rail. For OM from the bottom of the frame to the middle of the divider rail.)

5) **HINGE COLOR**
P = Painted Color Coordinated
S = Stainless Steel
B = Brass

6) **Louver Size:**
2-1/2"
3-1/2"
4-1/2"

7) **MOUNT**
IM-INSIDE MOUNT (I)
On the inside mounts, diagonal measurements must be taken. If diagonal measurements are not equal, control making greater deduction that the standard 1/2" (framed) or 3/16" (without frame)

Use the smallest measurements.

DELUXE and TRIM FRAMES: Factory takes standard frame deductions of 1/4" (1/8" per side) from the width & height.

L FRAME: (IM) Factory takes 1/8" deduction (1/16" per side) from the width & height

---

OM-OUTSIDE MOUNT (O)
Factory takes NO deduction submitted size will be finished shutter size. When measuring the opening of a typical window for OM, we recommend adding the width of the frame plus 1/4", per finished size, to the largest width and height measurement this provides a 1/4" reveal around the entire window opening. Use the largest measurement of the three measurements.

L FRAME – MINIMUM OVERLAP + 1-1/4"
RECOMMENDED OVERLAP + 2"
CASING FRAME – MINIMUM OVERLAP + 2 5/8"
RECOMMENDED OVERLAP + 3-1/4"

* OVERLAP MUST BE ADDED TO EACH SIDE OF PANEL YOU ARE FRAMING

8) **FRAME TYPE**

IM	**OM**
PO=Panels Only	
DM=Direct Mount	C=Casing Frame
HS=Hang Strip	CDL=Casing Sill/Decorative L
L=L-Frame	L=L-Frame
Z=Z-Frame	
T=Trim Frame	
D=Deluxe Frame	

If you want a sil please put that in FRAME DETAIL.

OM **Track Frame Overlap Factors**	**ALL SYSTEMS**	
Minimum WIDTH Overlap	2" to each side	4" total
Recommended WIDTH Overlap	2-1/4" to each side	4-1/2" total
Minimum HEIGHT Overlap	2" to overall height	
Recommended HEIGHT Overlap	3" to overall height	

9) **ORDERED SIZE**

10) **PANEL CONFIGURATION**
ONE PANEL: L OR R
TWO PANEL BIFOLD LL
THREE PANEL: LRR
FOUR PANEL AND ONE TPOST: LRTLR

11) **FRAME DETAIL**
3 (3 sided)
4 (4 sided)
4 sil (4 sil at location stated on the frame detail stated with the S)
T = TOP FRAME _____
L = LEFT SIDE _____
R = RIGHT FRAME _____
B = BOTTOM FRAME _____

EX: T = T (T-Frame) L = T (T-Frame)
R = T (T-Frame) B = S (Sil Frame)

12) **TPOST LOCATION**
E = Even
Starting from the left, indicate in inches from left side of the shutter to the center of the tpost. (If there is more than 1 tpost go back to the left and measure to the 2nd tpost and repeat for any further tpost)

13) **BUILD OUT:** (FOR OM ONLY)
1 = 1/2" Extension
2 = 1" Extension
3 = 1-1/2" Extension
(If you don't want attached please state in special instructions)

14) **DIVIDER RAIL**:
C = Center
Specific Measurement:
IM – From bottom of window to middle of divider rail.
OM – From bottom of frame to the middle of the divider rail.

15) **DIVIDER RAIL STYLE**:
S = Standard
D = Deluxe

16) **CAFÉ HEIGHT**: Panel Measurement

17) **CLOSURE SYSTEM**
P = Panel Lock
M = Magnet

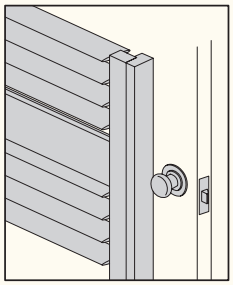
Measuring Guidelines
French Door Systems

Shutters are available for nearly all types of French Doors. They are available as outside mounts only and should be specified as single panel units.

Options for Round Knob Doors

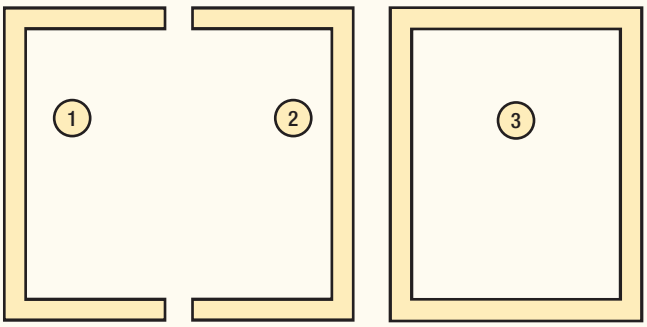
Frame Options:

Only the standard L-Frame is available on all French Doors.



Frame Styles:

There are a few different frame styles to choose from, depending on your application.



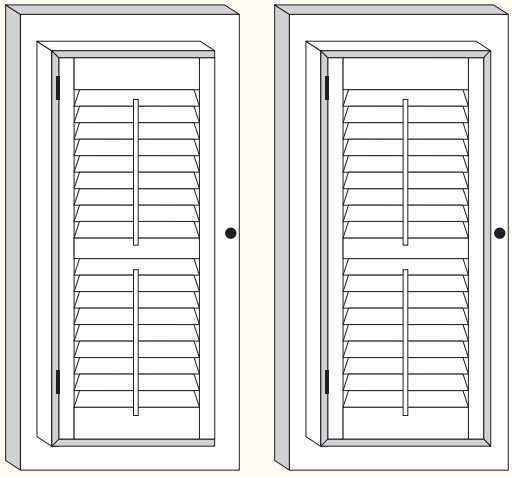
3-sided open on the right

3-sided open on the left

Full 4-sided

No frame next to door handle

Panel framed on all 4 sides



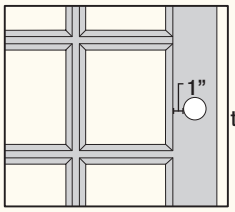
3-Sided L-Frame

4-Sided L-Frame

IMPORTANT NOTE (French Door ONLY): When to Use Each Frame Style:

3-Sided frames are used when there is not adequate space next to the door knob.

- A minimum of 1" mounting space is recommended to use a 4-sided frame. If less than 1/2", a 3-sided frame must be specified.



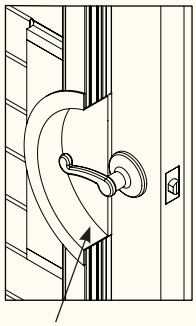
4-Sided frames can be used if the requirements are met.

- Caution: If proper mounting space is not adequate, installation screws must be angled to avoid glass.

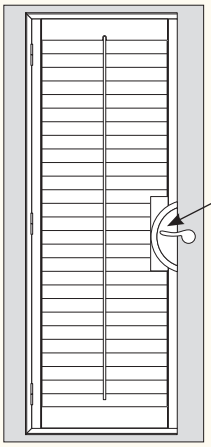
Options for Lever Style Doors

Shutters can also be used on French Doors with lever style handles, known as FDC.

- 4 1/2" Louver size is not available.
- A surcharge applies to all shutters with French Door Cut-Outs.



The FDC cut-out is part of the shutter panel, not the frame.

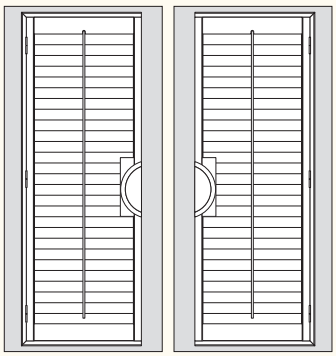


Framed French Door Panel With Cut-Out

Measuring Guidelines
French Door Systems

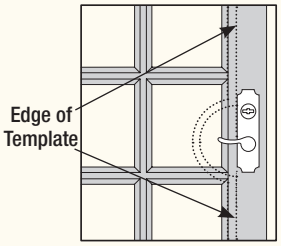
Important Considerations for FDC Shutters

- All FDC systems are only available with 3-sided frames.
  - A left hinged shutter will have a right side cut-out.
  - A right hinged shutter will have a left side cut-out.



Handle Sizes

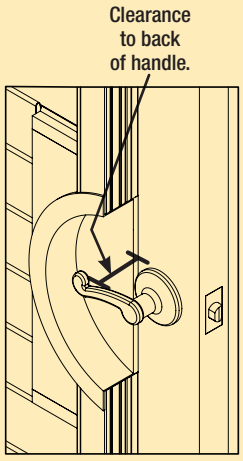
- French Door levers must fully rotate inside the cut-out area.
  (See FDC template on page 39)



Handle Depth Clearance

- There must be adequate distance behind the lever for the panel to rest.
- A minimum of 3/4".
- If 1/2" frame build-out is ordered, you need **1 1/4"** space behind the handle.
- If 1" frame build-out is ordered, you need **1 3/4"** space behind the handle.

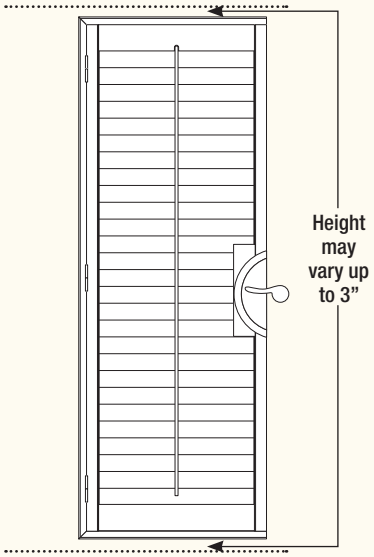
The Cut-Out is Part of the Panel, Not the Frame.



Minimum Clearance is required behind the handle.

Height Variances:

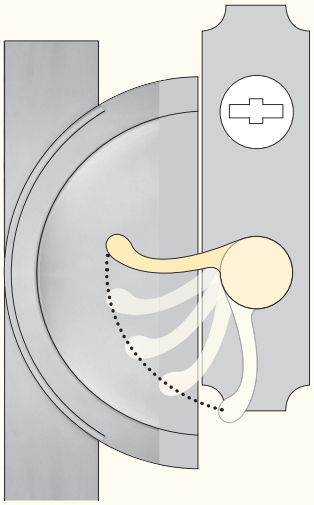
- The ordered height of the shutter may increase up to 3" to ensure the cut-out is centered in your desired location.



All French Door Order Form Worksheets Can Be Found On Pages 44 & 45

Handle Rotation

- Lever handles must fully rotate 90° for the shutter panel to open.



- If the handle does not rotate out of the way, it may trap the shutter panel behind the door handle, preventing it from opening.
- If this happens, remove the hinge pins from the panel and remove the shutter door for cleaning purposes.

Divider Rails

- Divider rails are not offered with FDC systems.
- Split tilt rods are optional & recommended.

Companion Doors W/Out Cut-Outs

- It is important to note on the FDC worksheet if there is a side-by-side companion door that does not require a cut-out.
- It must be noted to ensure both shutters will be identical in height.

French Door With L-Frame Worksheet - **Round Style Door Knobs**

ACCT #: _____

ACCOUNT NAME: _____

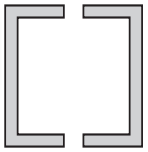
SIDEMARK	LINE #	PAGE #

1. DETERMINE ORDERED WIDTH

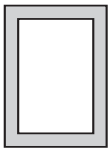
A		MAX. 1½" B		+ 1½" =	ORDERED WIDTH
	+		+		

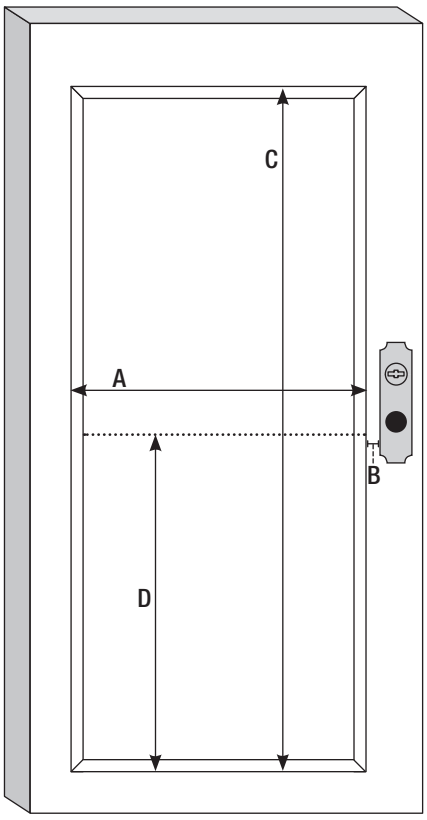
2. DETERMINE FRAME STYLE

IF "B" IS LESS THAN 1" ENTER 3-SIDED FRAME → _____



IF "B" IS 1" OR MORE ENTER 4-SIDED FRAME → _____





Round Style Knob

3. DETERMINE ORDERED HEIGHT

C			ORDERED HEIGHT
	+ 3" =		

4. DETERMINE DIVIDER RAIL LOCATION

D		*(Frame Overlap On Bottom)*		DIVIDER RAIL LOCATION
	+ 1½" =			

5. CHECK FOR LOUVER CLEARANCE

_____ ENTER PROJECTION NEEDED ½" OR 1"

ORDERING NOTES

- Transfer final dimensions to your shutter order form.
- Attach a copy or fax a copy of this worksheet with your order.
- Check for louver clearance & order projection when needed.
- Split tilt rods are optional in lieu of divider rails.

WORKSHEET KEY

Box A = Outside glass/molding measurement width.

Box B = Distance between collar and glass.

Box C = Outside glass/molding measurement height.

Box D = Outside glass/molding measurement to desired divider rail location.

French Door Cut-Out Worksheet - Lever Style Handles

ACCT #: _____

ACCOUNT NAME: _____

SIDEMARK	LINE #	PAGE #

TEMPLATE MUST BE USED TO ENSURE HANDLE ROTATION.

1. DETERMINE ORDERED WIDTH

A		B (MAX. 1½")		1½"	=	ORDERED WIDTH
	+		+		=	

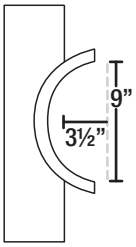
2. DETERMINE ORDERED HEIGHT

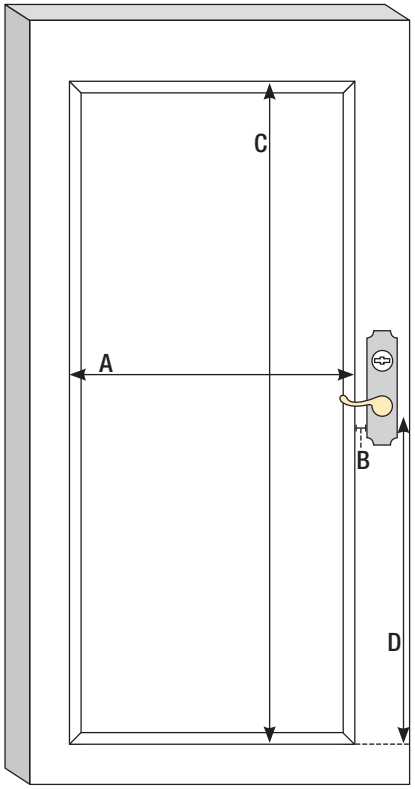
C		3"	=	ORDERED HEIGHT
	+		=	

(Divider Rails Are Not Available)

3. DETERMINE FRENCH DOOR CUT-OUT LOCATION

D		1½"	=	FRENCH DOOR CUT-OUT LOCATION
	+		=	





Lever Style Handle

4. CHECK FOR LOUVER CLEARANCE

ENTER PROJECTION NEEDED ½" OR 1"

ORDERING NOTES

- Transfer final dimensions to your shutter order form.
- To ensure exact cut-out locations, **THE HEIGHT MAY INCREASE UP TO 3" .**
- Attach a copy or fax a copy of this worksheet with your order.
- The french door cut-out is placed behind the handle. A minimum of ¾" **HANDLE PROJECTION** is required to clear the cut-out.
- If ordering frame projection, re-check handle clearance. See page 43 for clearance.
- All french door cut-outs will come standard with 3-sided frames.
- Split tilt rods are optional and recommended.
- **Not available with 4½" louver size.**

WORKSHEET KEY

Box A = Outside glass/molding measurement width.

Box B = Distance between collar and glass, maximum of 1½"

Box C = Outside glass/molding measurement height.

Box D = Outside glass/molding measurement to center of handle.

SIDE-BY-SIDE COMPANION DOORS WITHOUT CUT-OUT

- At times, there may be side-by-side companion doors that don't require a cut-out. To ensure heights are the same, please mark **"COMPANION".**

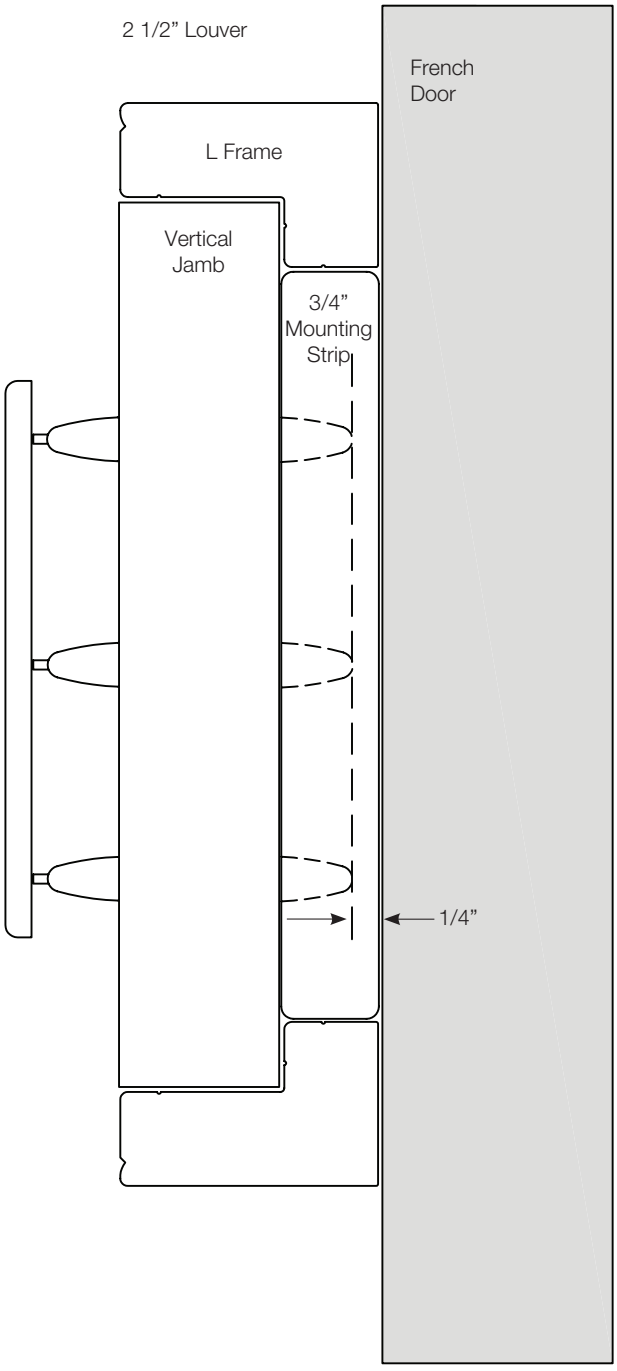
COMPANION: YES ☐ *OR* NO ☐ IF "YES" PLEASE INDICATE LINE #: ☐

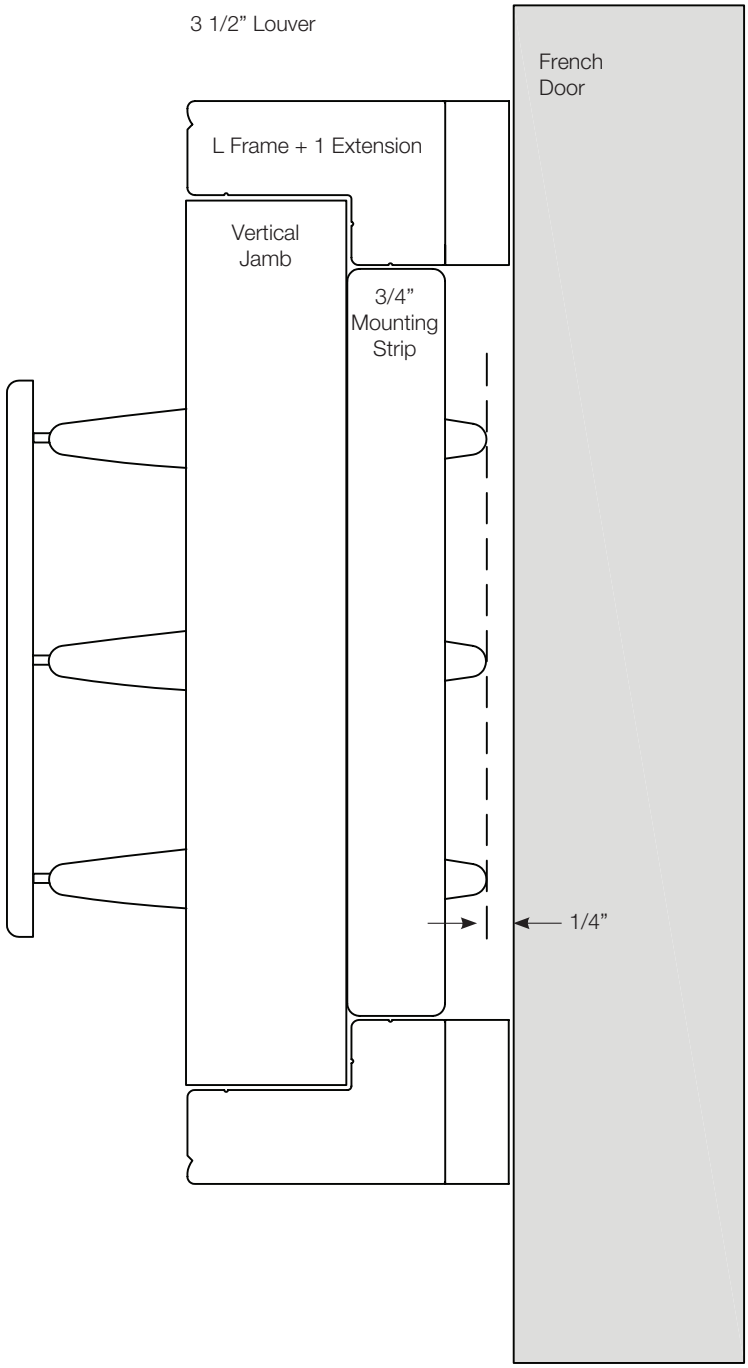
Outside Mount French Door - No Molding Around Glass

Depth Clearance

With Tilt Bar
2 1/2” Louver = (0) L Frame Extensions Required
3 1/2” Louver = (1) L Frame Extension Required
4 1/2” Louver = Not Available

With Clearview
2 1/2” Louver = (1) L Frame Extension Required
3 1/2” Louver = (2) L Frame Extensions Required
4 1/2” Louver = Not Available





Note: 3/4” x 3/4” Mounting Strip is included on the back side of each jamb. Additional Mounting Strip may be requested on the order, which can be used to fill any remaining light gap.

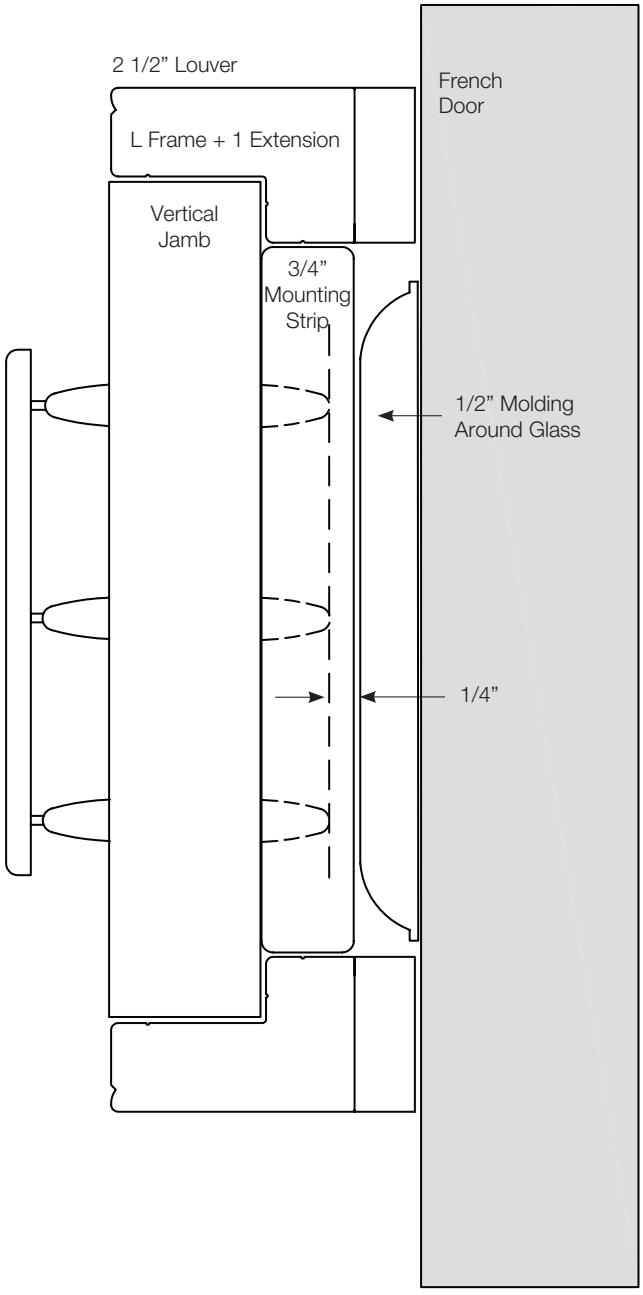
** It is recommended to use samples from the shop-at-home bag to ensure proper clearance for locks, latches, tilting windows or any other obstruction.*

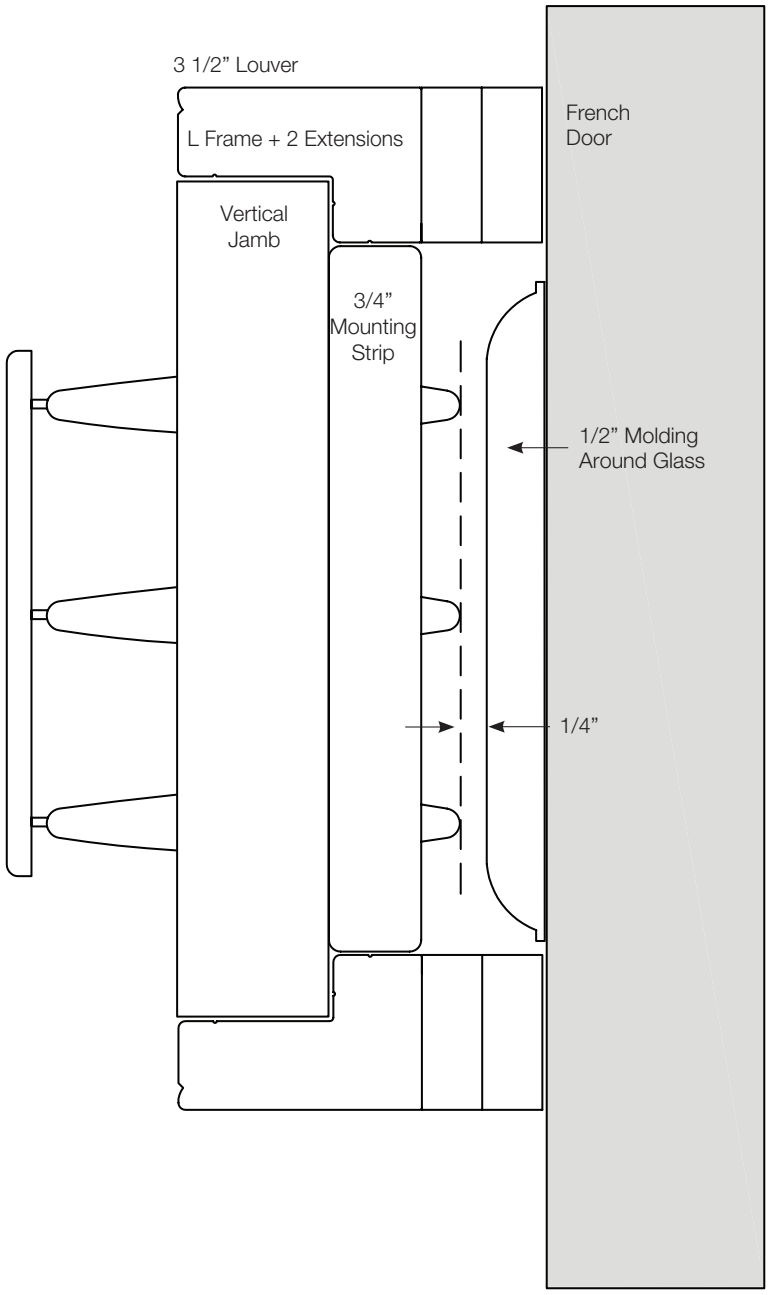
Outside Mount French Door - With Molding Around Glass

Depth Clearance

With Tilt Bar
2 1/2” Louver = (1) L Frame Extension Required
3 1/2” Louver = (2) L Frame Extensions Required
4 1/2” Louver = Not Available

With Clearview
2 1/2” Louver = (2) L Frame Extensions Required
3 1/2” Louver = (3) L Frame Extensions Required*
4 1/2” Louver = Not Available
*Note: *Handle extension may be required*





Note: 3/4” x 3/4” Mounting Strip is included on the back side of each jamb. Additional Mounting Strip may be requested on the order, which can be used to fill any remaining light gap.

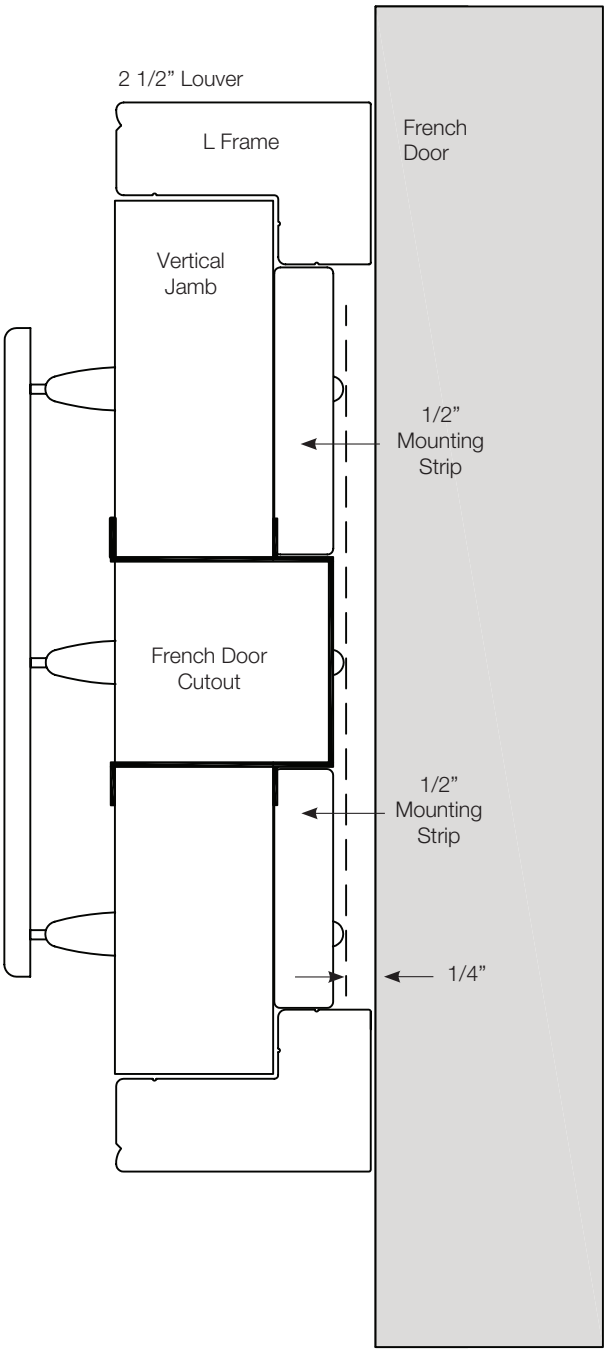
** It is recommended to use samples from the shop-at-home bag to ensure proper clearance for locks, latches, tilting windows or any other obstruction.*

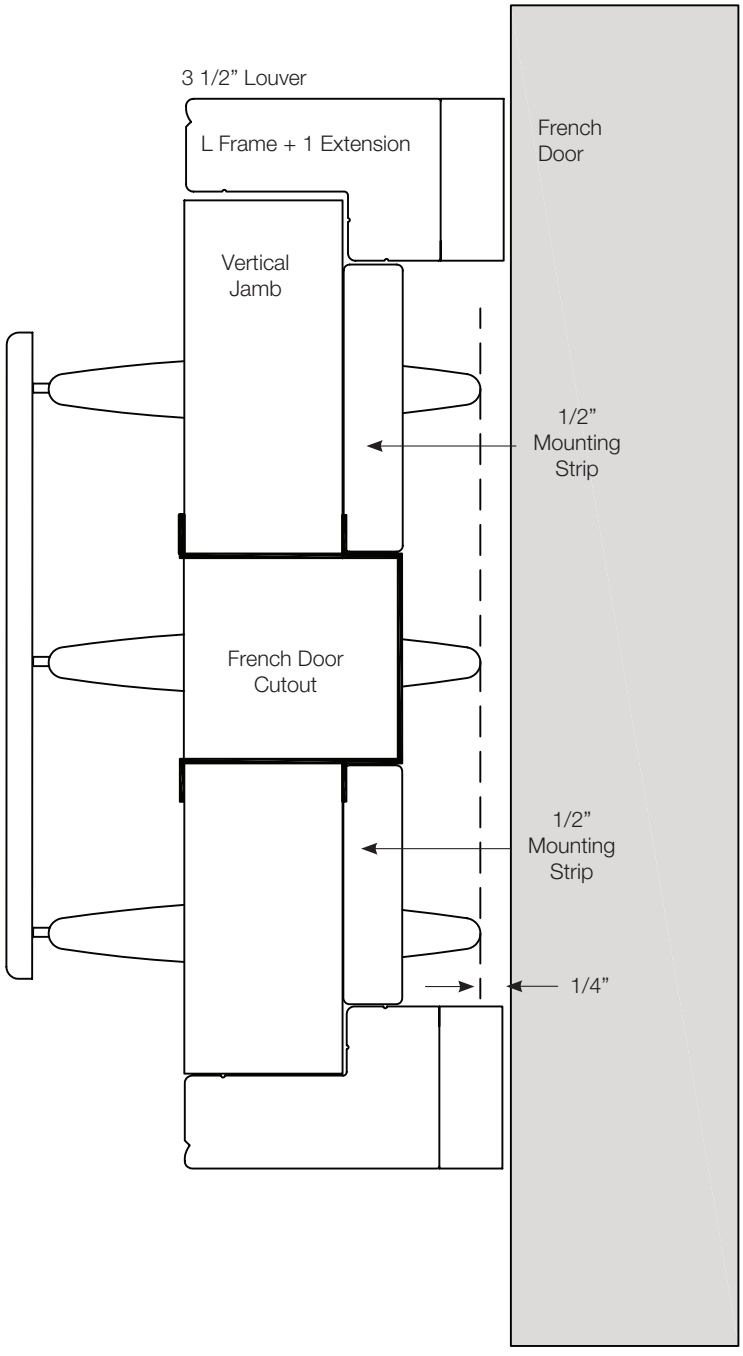
Outside Mount French Door With Cutout - No Molding Around Glass

Depth Clearance

With Tilt Bar
2 1/2” Louver = (0) L Frame Extensions Required
3 1/2” Louver = (1) L Frame Extension Required
4 1/2” Louver = Not Available

With Clearview
2 1/2” Louver = (1) L Frame Extension Required
3 1/2” Louver = (2) L Frame Extensions Required
4 1/2” Louver = Not Available





Note: 1/2” x 3/4” Mounting Strip is included on the back side of each jamb. Additional Mounting Strip may be requested on the order, which can be used to fill any remaining light gap.

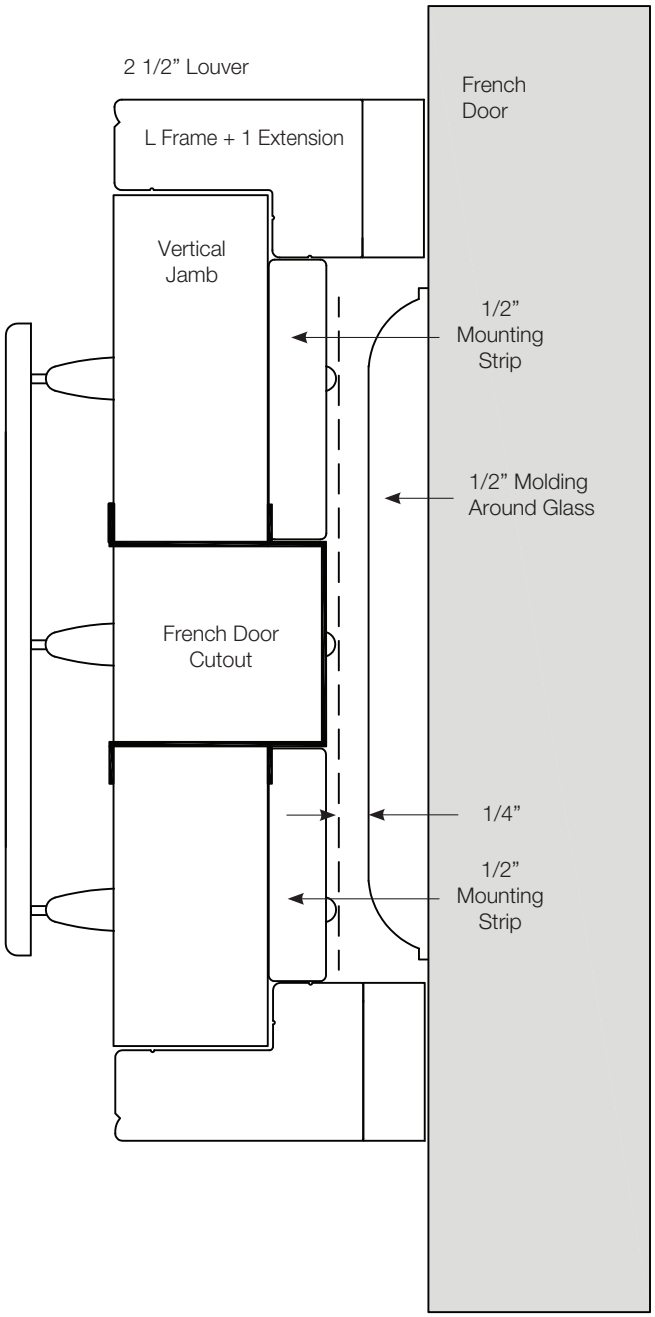
** It is recommended to use samples from the shop-at-home bag to ensure proper clearance for locks, latches, tilting windows or any other obstruction.*

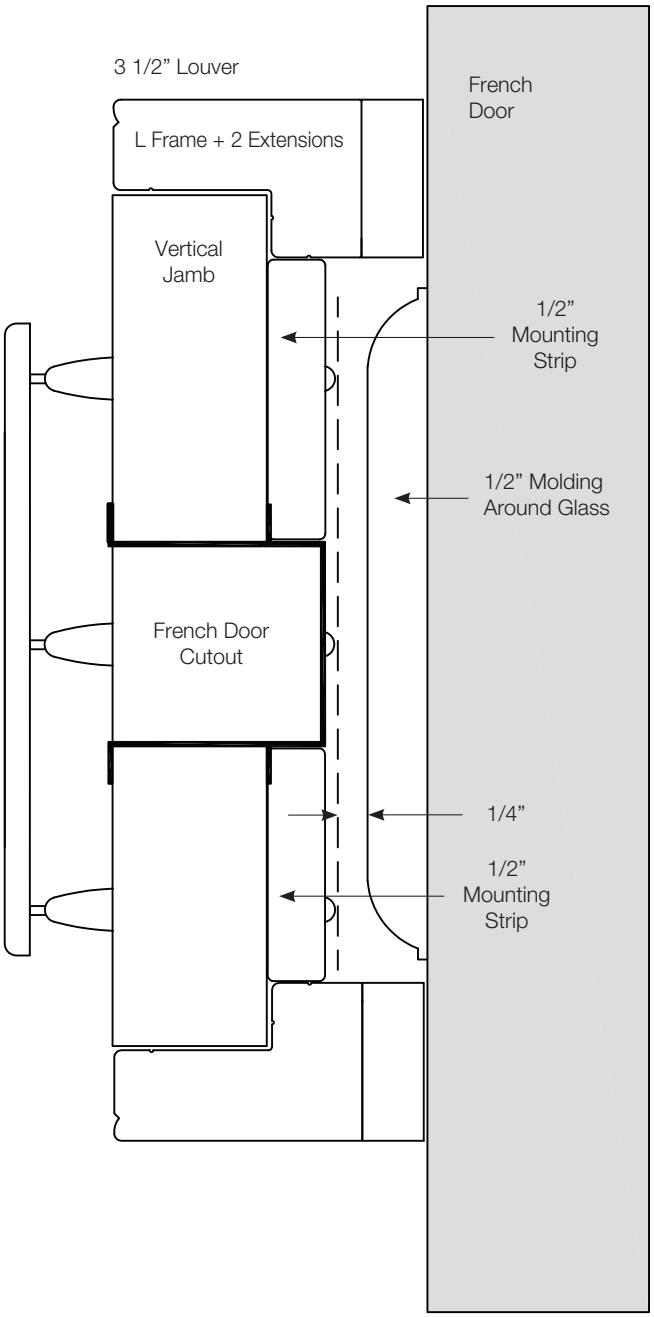
Outside Mount French Door With Cutout - With Molding Around Glass

Depth Clearance

With Tilt Bar
2 1/2” Louver = (1) L Frame Extension Required
3 1/2” Louver = (2) L Frame Extensions Required
4 1/2” Louver = Not Available

With Clearview
2 1/2” Louver = (2) L Frame Extensions Required
3 1/2” Louver = (3) L Frame Extensions Required*
4 1/2” Louver = Not Available
*Note: *Handle extension may be required*





Note: 1/2” x 3/4” Mounting Strip is included on the back side of each jamb. Additional Mounting Strip may be requested on the order, which can be used to fill any remaining light gap.

** It is recommended to use samples from the shop-at-home bag to ensure proper clearance for locks, latches, tilting windows or any other obstruction.*

French Door Cut-Out Template

FRENCH DOOR CUT-OUT
TO SCALE

DOOR HANDLE MUST FULLY
ROTATE INSIDE THE
CUT-OUT AREA.

IF HANDLE OBSTRUCTS,
MOVE THE CUT-OUT
AWAY FROM THE COLLAR
UNTIL CLEARANCE
IS ACHIEVED.

THIS BECOMES YOUR
NEW MEASURING
POINT FOR THE
ORDERED WIDTH.

Measuring Guidelines
Corner Window

Shutters can be used in nearly all corner window applications. Shutters for corner windows consist of two separate framed shutters that butt together in the corner. Hidden filler strips are used to attach shutter frames together and control light gaps in between their frames.

FRAME OPTIONS

All frame types may be used, both inside & outside mount.

SPECIALTY SILL FRAMES

Inside mount shutters that have the decorative trim removed are most commonly used to sit flat on wood sills.

For corner windows, a sill frame can be specified for any side of the opening that you desire.

If ordering specialty sill frames, please note each one in the "Special Instructions" portion of your workorder form.

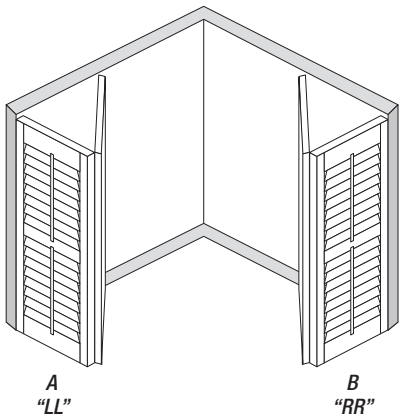
PANEL CONFIGURATIONS

All standard panel configurations may be ordered for corner windows. It is recommended that they be ordered so they open away from the corner for the best results.

This only applies for windows that measure 36" in width of less, or you can apply a warranty waiver for panel sagging and order any configuration you choose.

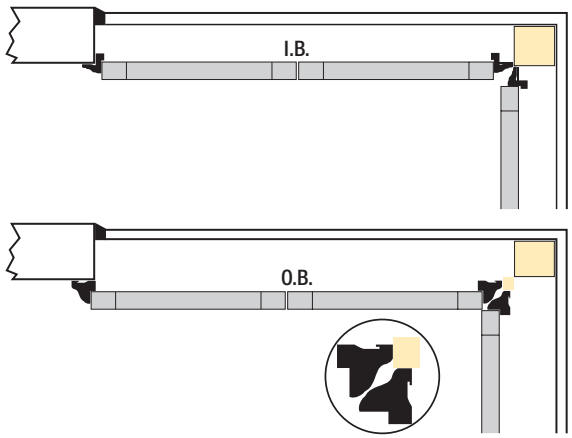
THE PREFERRED SYSTEM:

Window A: Configured as an LL
Window B: Configured as an RR

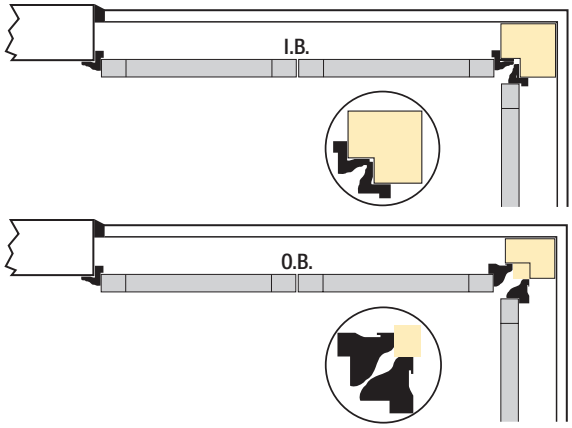


Corner Window Worksheets Are Located On Page 52.

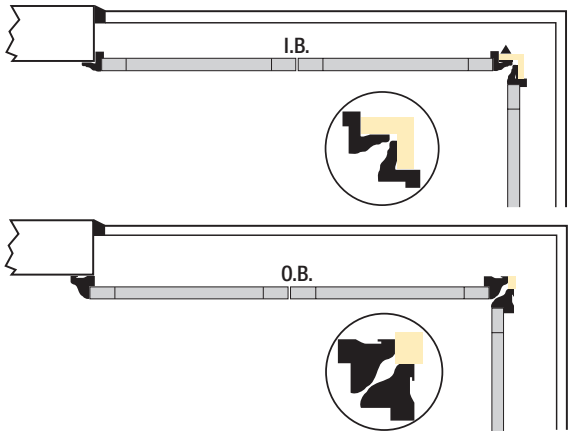
Type "A" Corner Windows - Most Common
No Wall Space



Type "B" Corner Windows - Less Common
Wall Space



Type "C" Corner Windows - Less Common
No-Post - Glass to Glass



FACTORY MAKES ALL ALLOWANCES

Framed Corner Window Worksheet

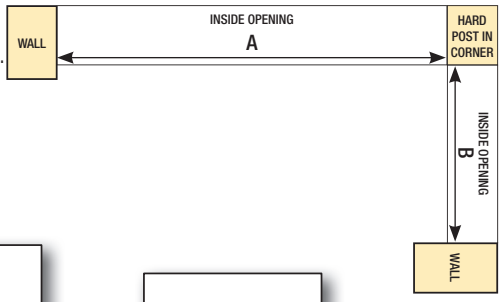
ACCT #: _____

ACCOUNT NAME: _____

SIDEMARK	A LINE #	B LINE #	PAGE #

Type "A" Corner Window - *Most Common

- Hard post in the corner with no wallspace.
- Measure inside width from wall to cornerpost - record smallest.
- Measure inside height for each window - record smallest.
  Both windows should be ordered at the same height.
- Transfer measurements to your shutter order form.
- Fax or send worksheet w/ your order.



CHECK THE APPROPRIATE TYPE:

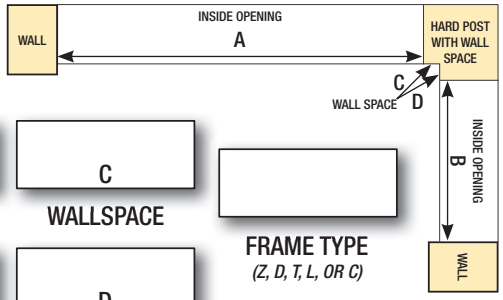
A

WINDOW A: A WIDTH ____ *HEIGHT ____ FRAME TYPE *(Z, D, T, L, OR C)* ____

WINDOW B: B WIDTH ____ *HEIGHT ____

Type "B" Corner Window - *Less Common

- Hard post in the corner with wallspace.
- Measure inside width from wall to cornerpost - record smallest.
- Measure inside height for each window - record smallest.
- Measure the wall space on each face of the post.
  Both windows should be ordered at the same height.
- Transfer measurements to your shutter order form.
- Fax or send worksheet w/ your order.



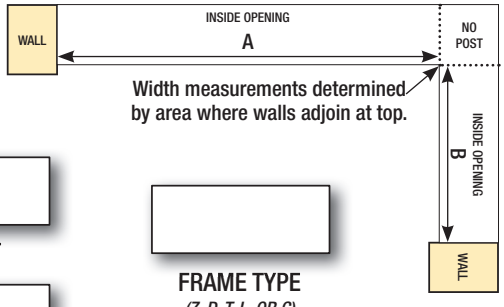
WINDOW A: A WIDTH ____ *HEIGHT ____ C WALLSPACE ____ FRAME TYPE *(Z, D, T, L, OR C)* ____

WINDOW B: B WIDTH ____ *HEIGHT ____ D WALLSPACE ____

B

Type "C" Corner Window - *Less Common

- No post in the corner. Glass to glass corner.
- Measure inside width from wall to wall - at top of opening - record smallest.
- Measure inside height for each window - record smallest.
  Both windows should be ordered at the same height.
- Transfer measurements to your shutter order form.
- Fax or send worksheet w/ your order.



WINDOW A: A WIDTH ____ *HEIGHT ____ FRAME TYPE *(Z, D, T, L, OR C)* ____

WINDOW B: B WIDTH ____ *HEIGHT ____

C

Measuring Guidelines
Bay Window

In addition to corner windows, shutters can also be used in most bay window applications. Either Inside Mount (IB) or Outside Mount (OB) frame styles are available.

- For windows with depth or without.
- For Retro-fit bay windows with a window seat or drop ceiling.
- As 3 individual framed shutters mounted separately where there is adequate wall space in-between windows.
- As individual shutters with factory assembled posts where there is not adequate wall space in-between windows.

BAY WINDOW TYPES

TYPE "B"

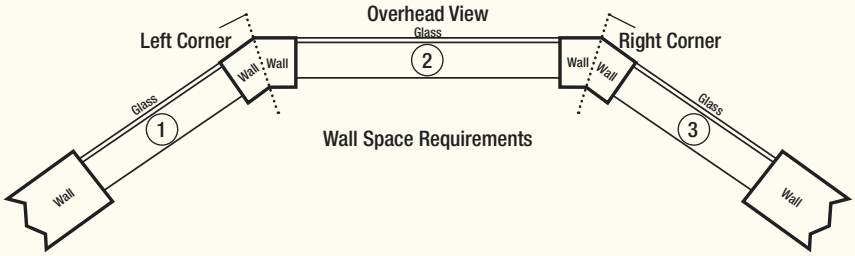
Bay windows that consist of 3 separately framed openings are considered type "B". Wall space exists in-between each window.

- Type "B" bay windows are always ordered as 3 separate windows.
- Standard measuring rules will apply, consult page 34 to 37 for inside & outside mount rules.
- For the best look, it is recommended to order the same height for all shutters in the bay.

WALL SPACE REQUIREMENTS

TYPE "B"

- To ensure that all shutter frames will not overlap each other in-between windows, use this guide when selecting a frame type.



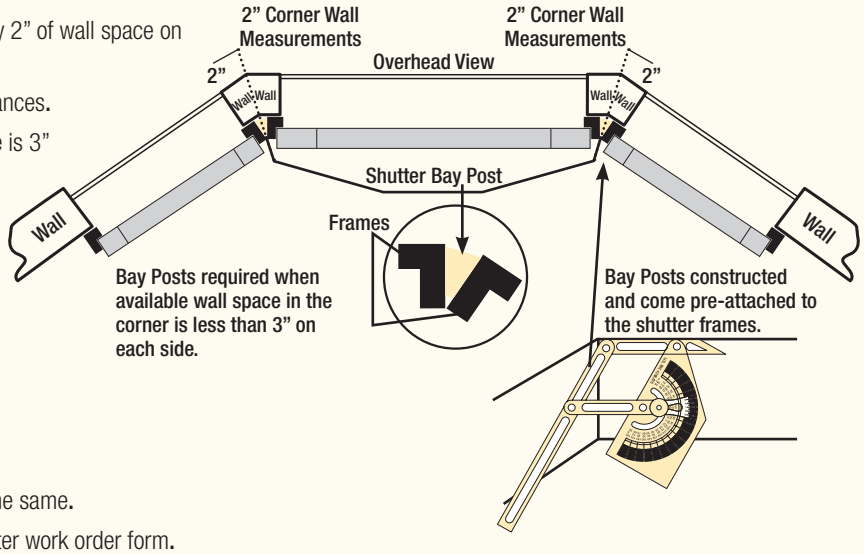
Frame Type	Required Wall Space On Each Side
Z-Frame	**3/4" Minimum - 1 1/2" Total in between windows**
Deluxe Trim Frame	**2 1/4" Minimum - 4 1/2" Total in between windows**
Trim Frame	**1 1/2" Minimum - 3" Total in between windows**
L-Frame (IB)	**0" - Just check depth requirements**
L-Frame (OB)	**3" Minimum - 6" Total in between windows**
Casing Frame Casing Sill/Decorative L	**Not Available**

ORDERING EXAMPLE - Trim Frame			
1) Left Window	I.B. Dimensions	*34 1/2" x	**58 1/8"
2) Center Window	I.B. Dimensions	*58 1/2" x	**58 3/8"
3) Right Window	I.B. Dimensions	*34 1/8" x	**58 1/2"
* **All Width Dimensions Should Be Ordered As Measured.**			
****All Height Dimensions Should Be Ordered As 58 1/8" (The Smallest) For A Consistent Look.** ***Make sure you have chosen a frame type with molding that will cover your gaps.***			

Measuring Guidelines
Bay Windows

TYPE “B” OUTSIDE MOUNT “L” FRAME EXAMPLE
Without Adequate Wall Space *BAY POSTS REQUIRED*

- This example assumes that there is only 2” of wall space on each side of the bay.
- Factory will make all bay window allowances.
- Bay posts are required when wall space is 3” or less on each side.
- Shutter frames will overlap into the window slightly depending on the wall space in each corner.
- Factory will construct & assemble bay posts.
- Use a general protractor to determine the bay angles.
- Transfer these angles to a blank paper.
- Never assume angles on (L) & (R) are the same.
- Send angles & drawings with your shutter work order form.
- Send bay window worksheet.
- Surcharges apply.

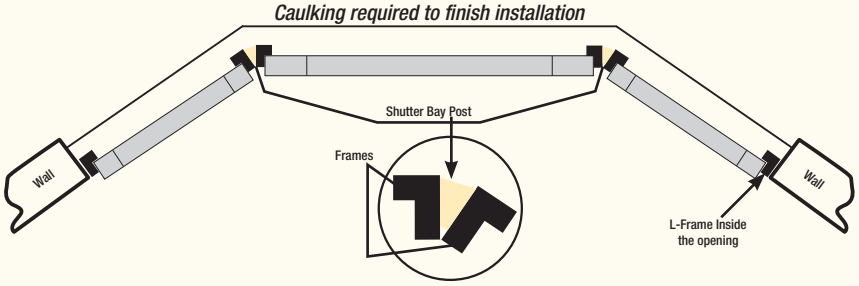


TYPE “C” L-FRAME ONLY - INSIDE OR OUTSIDE MOUNT
No Wall Space, All Windows Are Glass To Glass *BAY POSTS REQUIRED*

- L-Frame can be mounted IB or OB.

1) IB L-Frame should be checked for proper louver clearance.

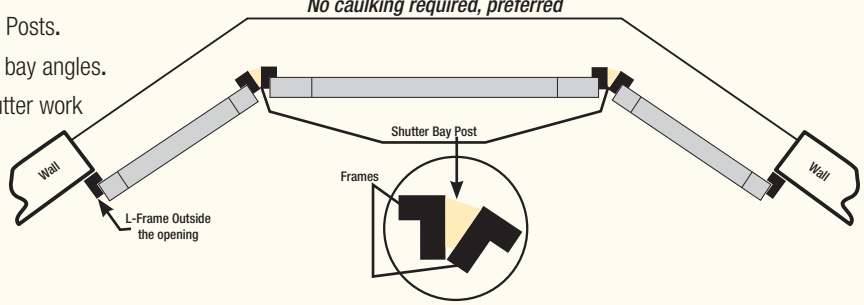
IB DIAGRAM
Caulking required to finish installation



1) Bay angles should be measured at the wall <u>above</u> the windows.

- Factory will make all Bay Window allowances.
- Factory will construct & assemble Bay Posts.
- Use a General Protractor to determine bay angles.
- Send angles & drawings with your shutter work order form.
- Send bay window worksheet.
- Surcharges apply.

OB DIAGRAM
No caulking required, preferred



BAY WINDOW WORKSHEETS

- **SEE PAGE 55 FOR BAY WINDOW WORKSHEETS**

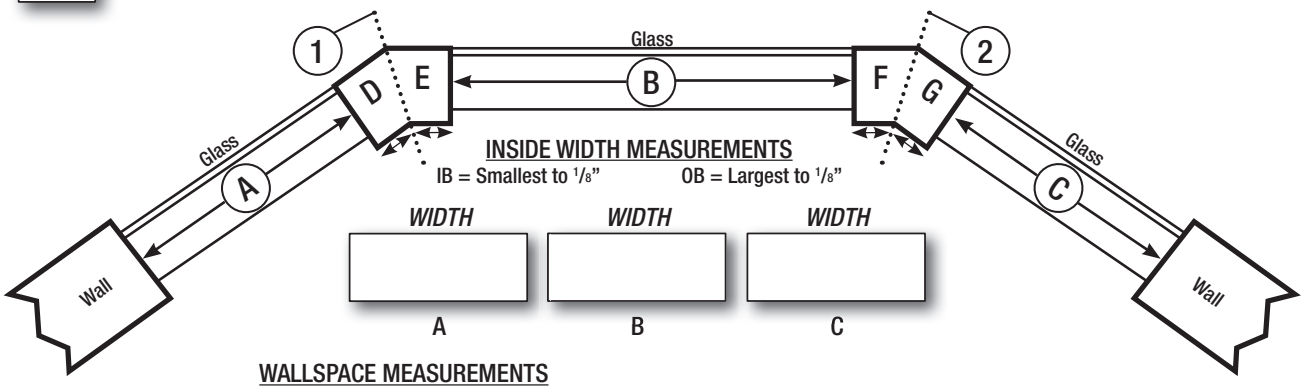
Bay Window Worksheet

ACCT #: _____

ACCOUNT NAME: _____

SIDEMARK | LINE #'S | PAGE #

Type "B" Individual Openings With Wall Space In the Bay.



INSIDE WIDTH MEASUREMENTS

IB = Smallest to 1/8" OB = Largest to 1/8"

WIDTH	WIDTH	WIDTH
A	B	C

WALLSPACE MEASUREMENTS

D	E	F	G

BAY ANGLE MEASUREMENTS

Use a protractor or send business cards taped together

(Only required when wall space is not adequate)

BAY 1 | BAY 2

OVERALL HEIGHT OF WINDOWS

HEIGHT

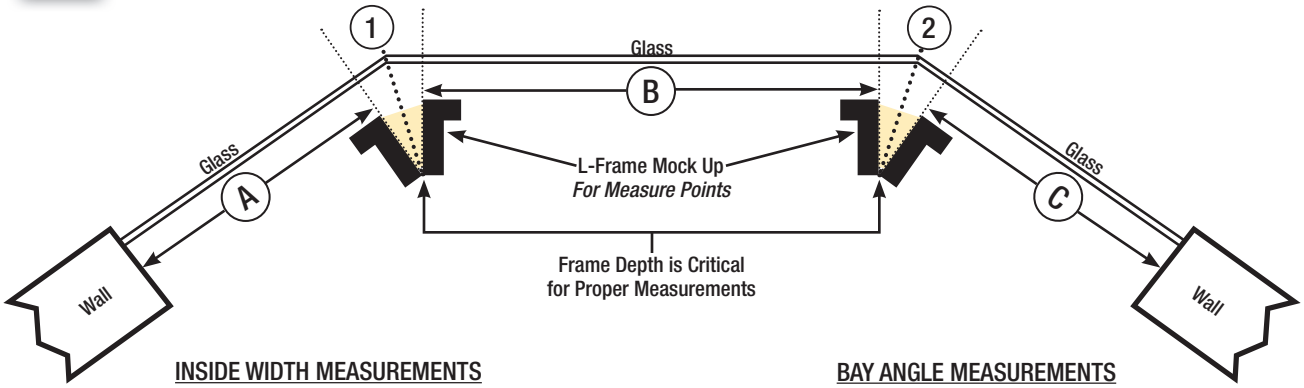
IB = Smallest overall to 1/8"
OB = Largest overall to 1/8"

SELECTED FRAME TYPE

- Z-Frame
- Trim Frame
- Deluxe Trim Frame
- OB L-Frame
- IB L-Frame

Type "C" Continuous Opening Glass To Glass No Wall Space In Bay.

- Use (2) pieces of L-Frame to mock up measuring points.



INSIDE WIDTH MEASUREMENTS

IB = Smallest to 1/8" OB = Largest to 1/8"

A	B	C

BAY ANGLE MEASUREMENTS

Use a protractor or send business cards taped together

BAY 1 | BAY 2

OVERALL HEIGHT OF WINDOWS

IB = Smallest overall to 1/8" OB = Largest overall to 1/8"

HEIGHT

SELECTED FRAME TYPE

- IB L-Frame
- OB L-Frame

Installation Guidelines
Getting Started

Eclipse Shutters are built using the highest quality materials.
When properly installed, these shutters will provide a lifetime of beauty and performance.

Installation Overview

Panel shutters come in many configurations — individually hinged, bi-fold panels, with and without T-posts, track systems comprised of from one to many panels, French door shutters and specialty shapes. There are also a variety of frames for inside or outside mounting.

Whatever the configuration, installation procedures are basically the same for most. The frame is assembled and fastened to the window at two points. Then the shutter panels are individually installed and racked, during which time frame attachment is completed. Panel locking system adjustment or magnet mounting, caulking and other finish work complete a typical installation.

Unpacking

Carefully unpack the shutters. The package will include:

- Shutter panels
- Disassembled frames (frames for specialty shapes are typically assembled)
- Miscellaneous hardware (hinge pins, button covers, etc.)

Tools and Fasteners Needed

- Variable speed drill (⅜") with 3⁄32" and ⅜" drill bits
- 3" Robertson #6 and #8 bits, #1 and #2 head
- Flat blade, Phillips, and Robertson #1 and #2 screwdrivers
- Measuring tape
- Level
- Rubber mallet
- Miscellaneous tools for non-typical installations (jig saw, hack saw, Dremmel tool, etc.)

Screws are provided. Other types of fasteners may also be needed depending upon the specific mounting surface (concrete, plaster, etc.) and mounting method.

Additional Materials

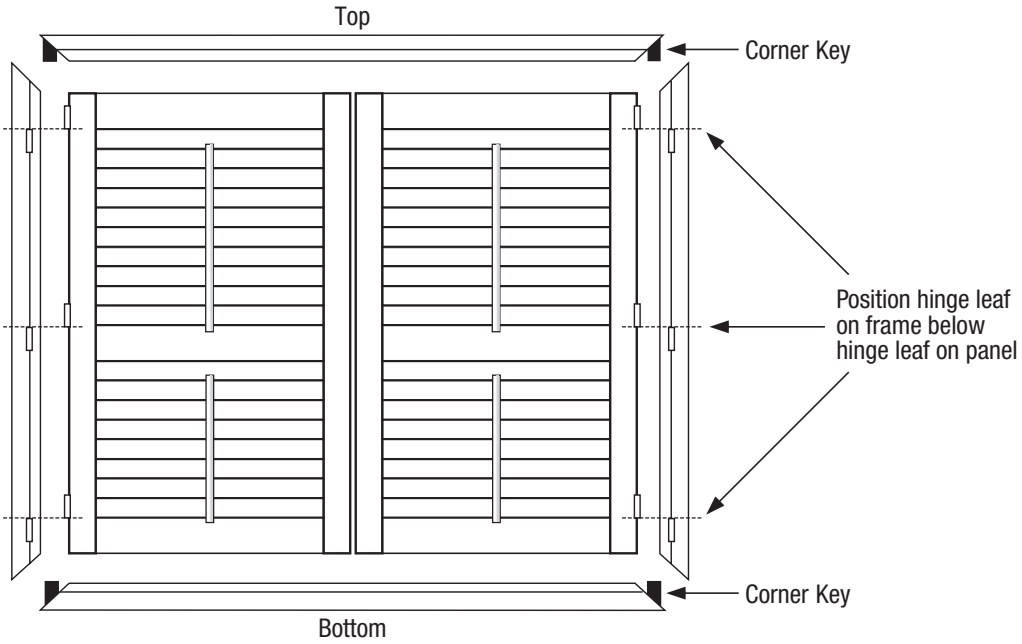
Additional materials required for shutter installation include:

- Canvas drop cloth large enough for unpacking and frame assembly
- Clean fabric cloth and a mild cleaning spray solution
- Finishing supplies (caulk, sealant, etc.)
- Instant adhesive or contact cement (outside mount L-frames only)

Panel Systems Frame Assembly

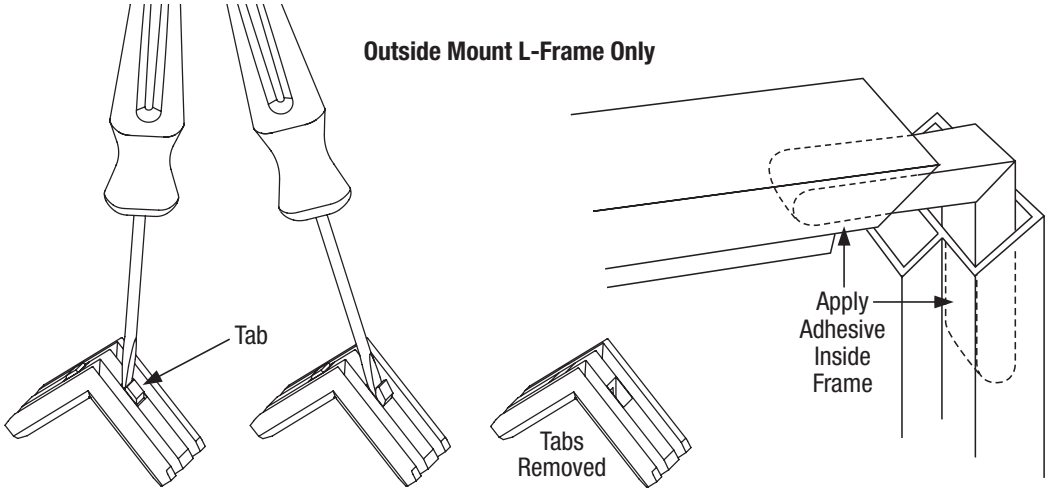
Prepare the work area. Lay the shutter panels on your drop cloth face up as they will appear in the window. Then follow the procedure below.

1. Lay the side frames beside the panels, so that the panel hinges are above the frame hinges. If one or more T-posts are used, lay them in the proper position, as well.

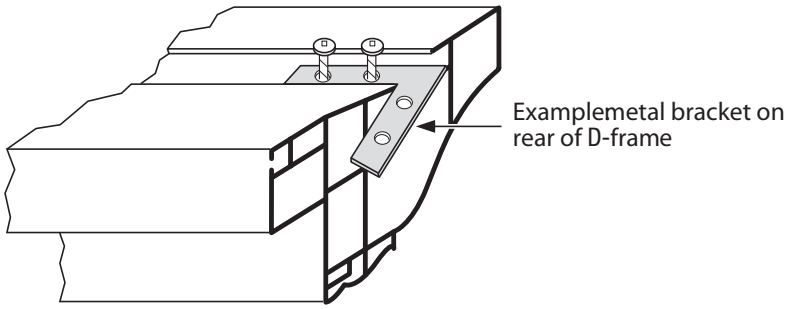


2. Insert the plastic corner keys into the ends of the top and bottom frames.

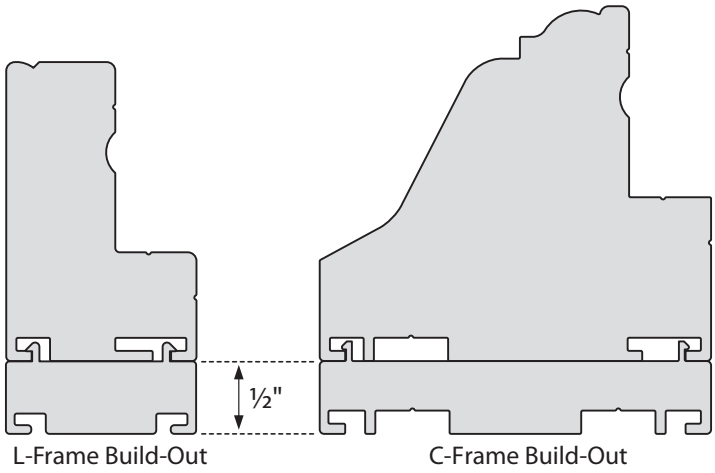
IMPORTANT: With outside mount L-frames only, glue the corner key into position as illustrated. This prevents the frame from bowing. First remove the tabs off the corner key with a flat blade screwdriver. Then apply a small amount of instant adhesive or contact cement to the inside of the frame. Insert the corner key into the end of the frame and hold firmly until set. (Note. Be sure the frames match before gluing. The corners cannot be detached after the adhesive has set.)



3. With the C-frame, T-frame and Z-frame, install 90-degree metal brackets on the back of the corners for a tight, more secure assembly.



4. C-frame and outside mount L-frame only: If build-out is needed for additional clearance, install the build-out onto the back of the frame.
   - ➤ The build-out snaps onto the back of the frame.
   - ➤ The frame build-out is also screwed into the back of the frame.



5. If one or more T-posts are used, attach them as explained on pages 61 & 62.

   IMPORTANT: T-post attachment begins before the bottom frame piece is attached.

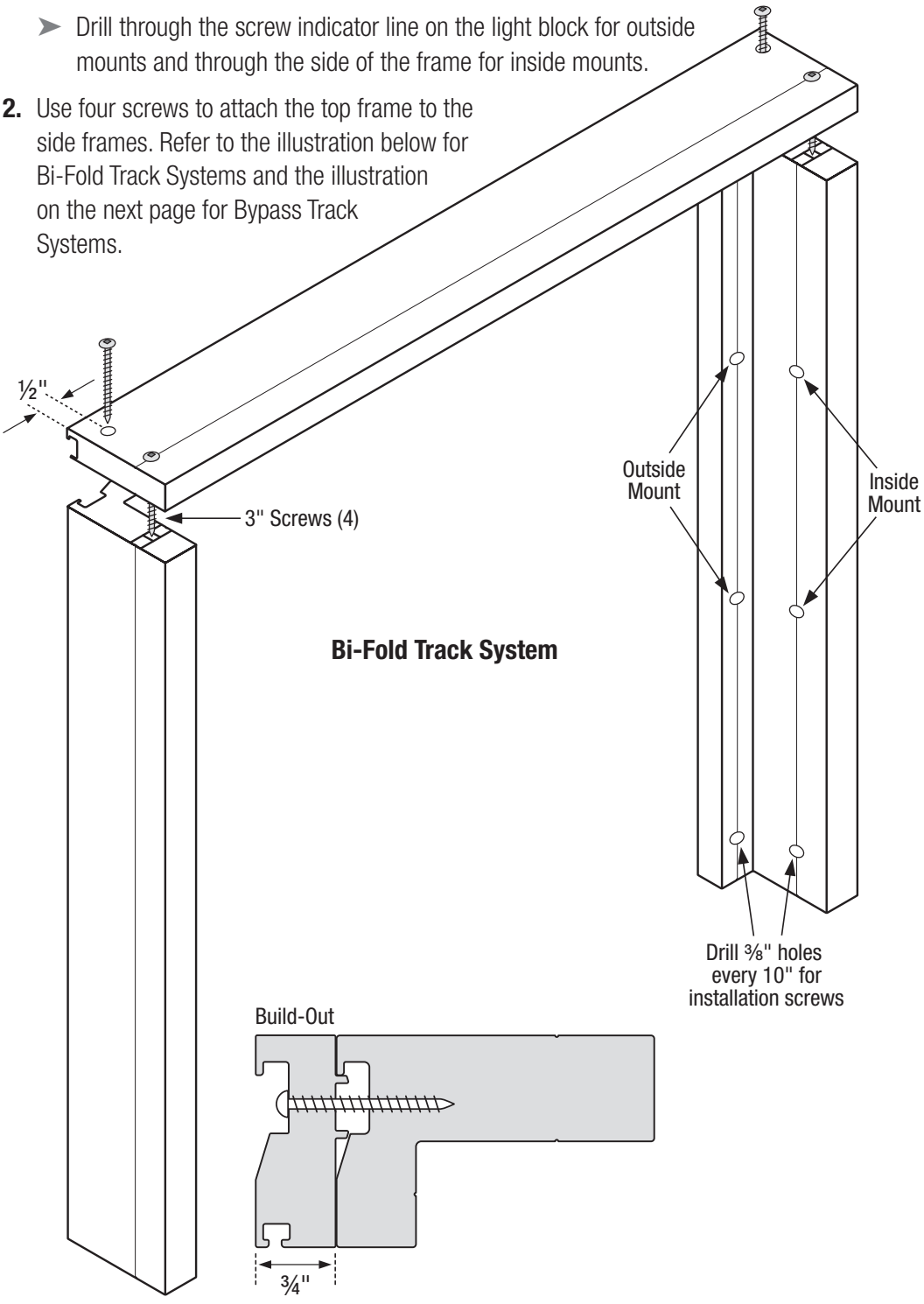
Track Systems Frame Assembly

Prepare the work area. Lay the frame pieces on your drop cloth in their proper orientation. Then follow the procedure below.

1. Drill ⅜" installation holes in the frame pieces **through the first layer of vinyl only**.

- ➤ Start at each end and space holes every 10".
- ➤ Drill through the screw indicator line on the light block for outside mounts and through the side of the frame for inside mounts.

2. Use four screws to attach the top frame to the side frames. Refer to the illustration below for Bi-Fold Track Systems and the illustration on the next page for Bypass Track Systems.

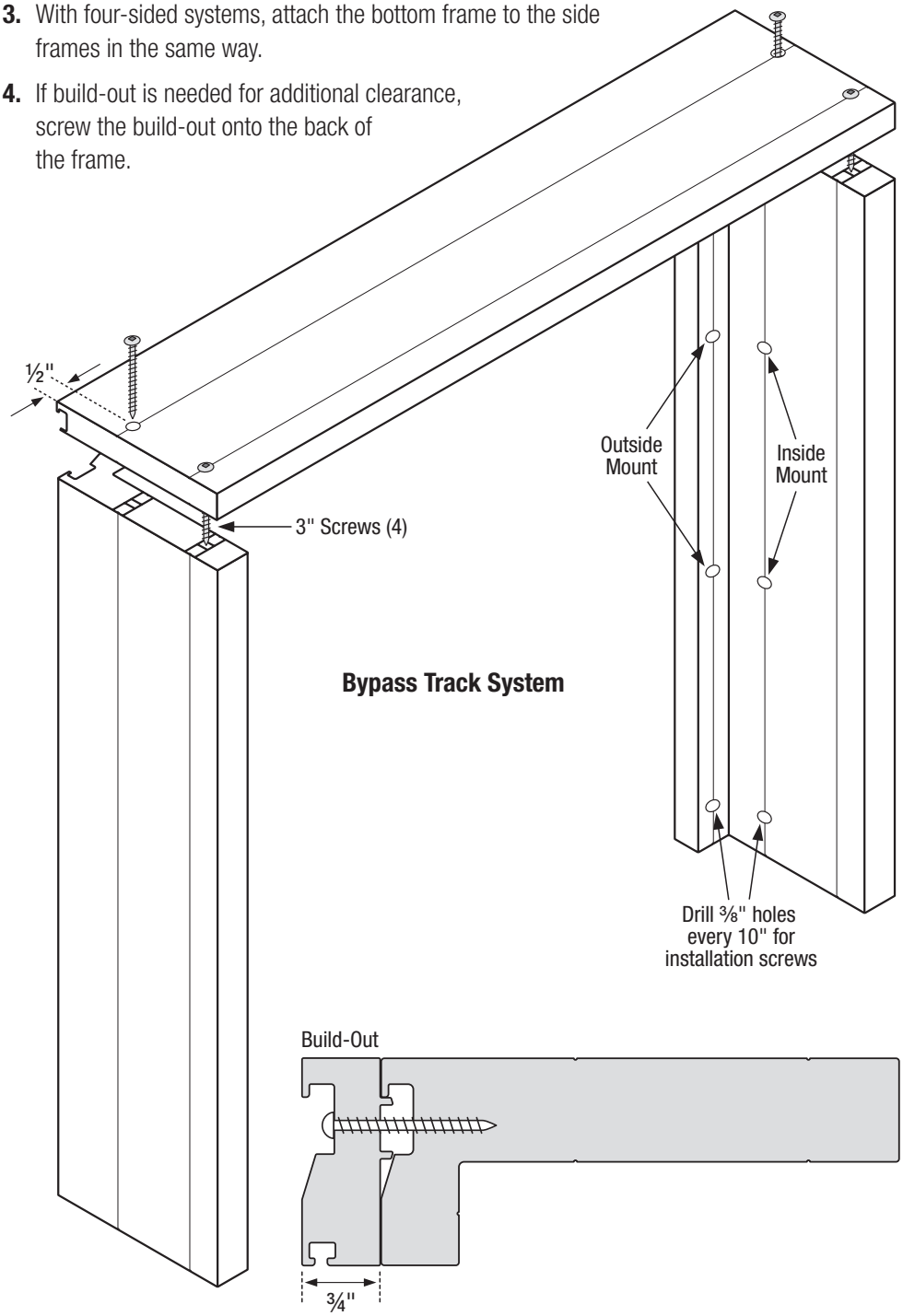


Bi-Fold Track System

Installation Guidelines
Frame Assembly – Track Systems

3. With four-sided systems, attach the bottom frame to the side frames in the same way.

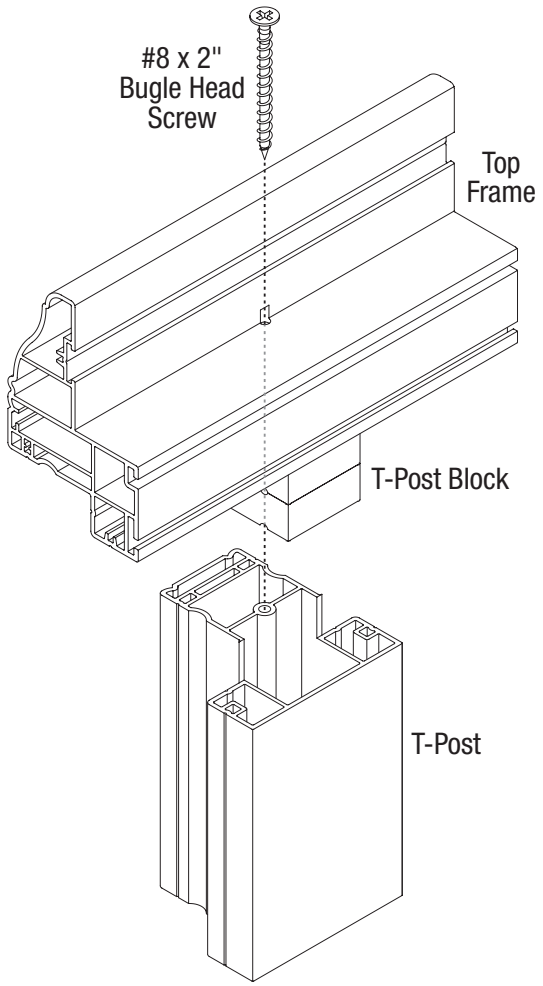
4. If build-out is needed for additional clearance, screw the build-out onto the back of the frame.



Bypass Track System

T-Post Attachment

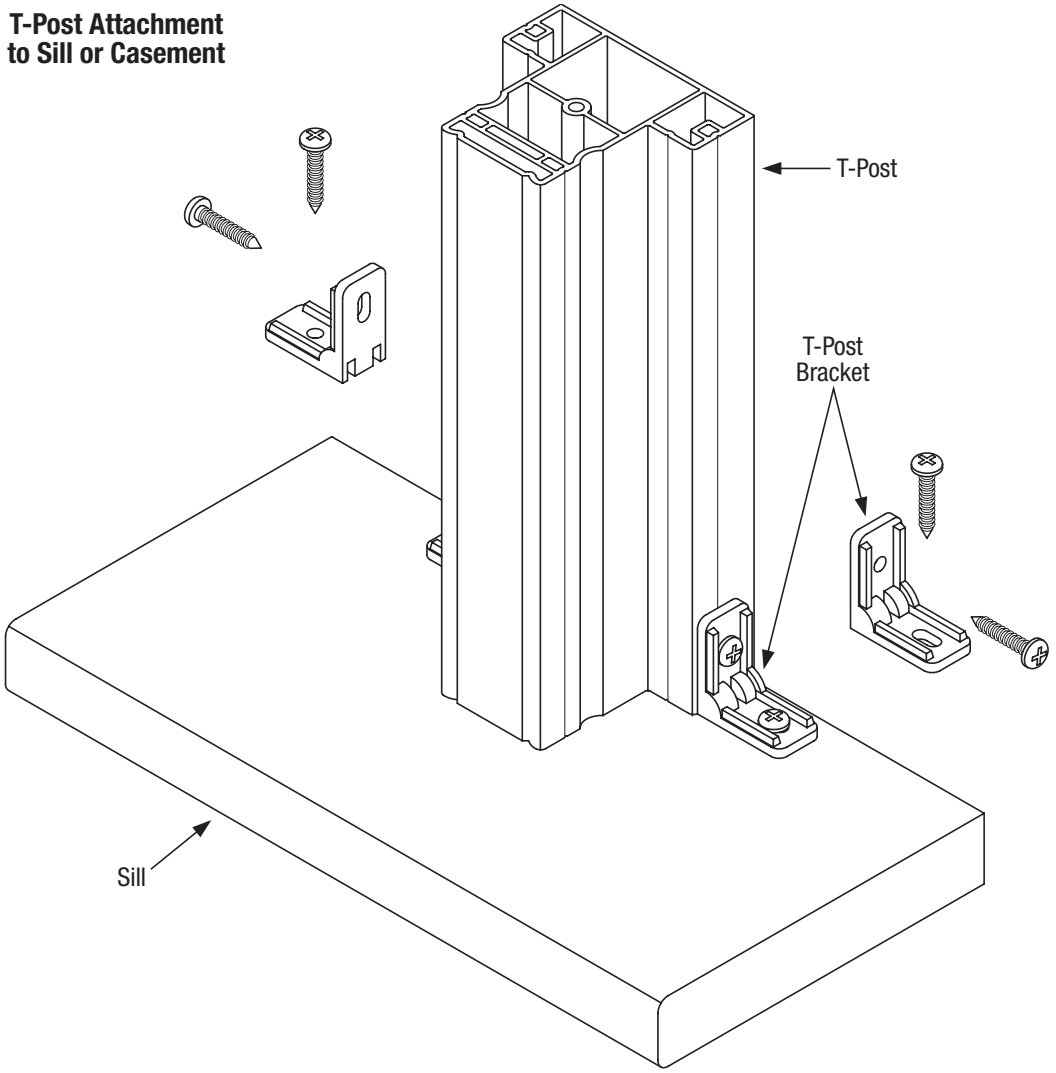
- T-post blocks will be pre-attached to the top and bottom frame pieces.
- Slide the T-post onto the T-post block on the top frame piece and secure the T-post to the block using a #2 Phillips bit to drive the provided bugle head screw.



2. With 3-sided frames or inside mounts with no frame, T-post brackets are used to attach the T-post to the sill or casement after the frame has been installed. Refer to the illustration below.

- ➤ Attach the brackets to the sill or casement using the slotted hole on the bracket to allow for side-to-side adjustment.
- ➤ Be sure to square the T-post before tightening the brackets.
- ➤ T-post brackets can also be used to attach T-posts to frames when T-post blocks are not provided.

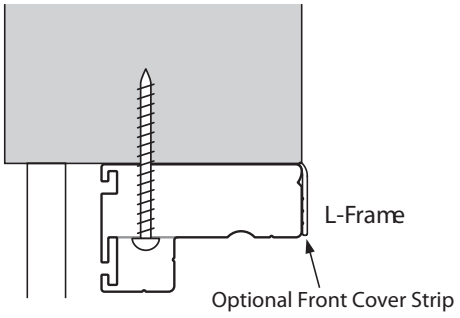
T-Post Attachment to Sill or Casement

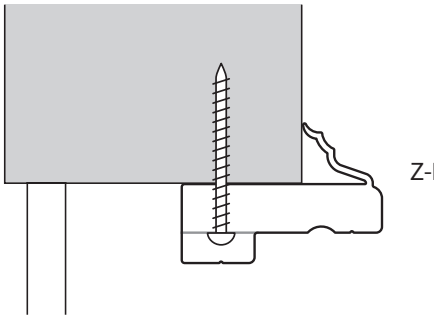


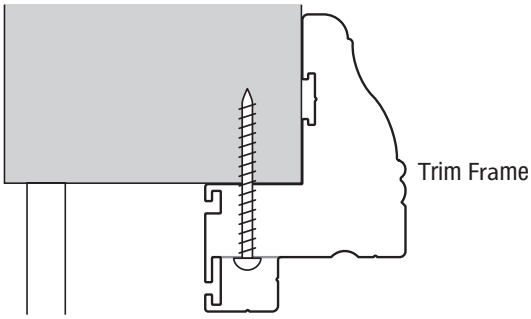
Installation Guidelines
Inside Mount Framed

Inside Mount Framed Installation

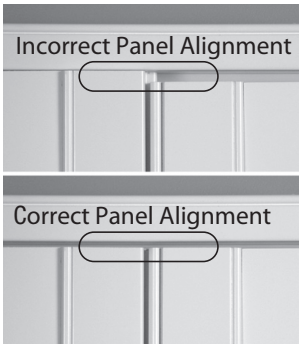
This section covers inside mount installation of shutters with L-frame and Z-frame.



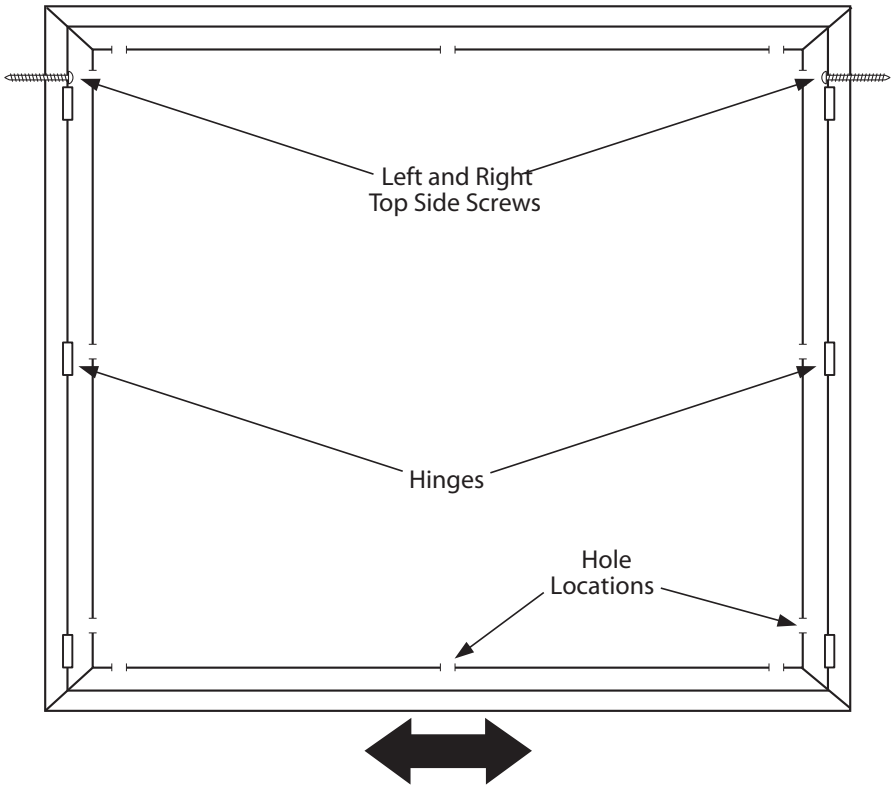




1. Place the assembled frame in the opening.
   - ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
   - ➤ The left and right sides of the frame are labeled.
2. Attach the left and right sides of the frame. Insert Robertson screws through the hole above the top hinge on each side.
   - ➤ Most frames have pre-drilled holes for ease of installation.
   - ➤ Center the frame in the opening, then set the screws into the jambs.
   - ➤ Tighten the screws snugly, but do not overtighten. If the screws are too loose, the framed opening will be smaller than ordered. If the screws are too tight, the framed opening will be larger than ordered.
3. Hang the panels and check for proper panel alignment.
   - ➤ If the panels are misaligned, rack the shutters by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
   - ➤ With larger shutters, mark this frame location.
   - ➤ Note that the panel lock system is designed to help level the panels within the frame.



Installation Guidelines
Inside Mount Framed

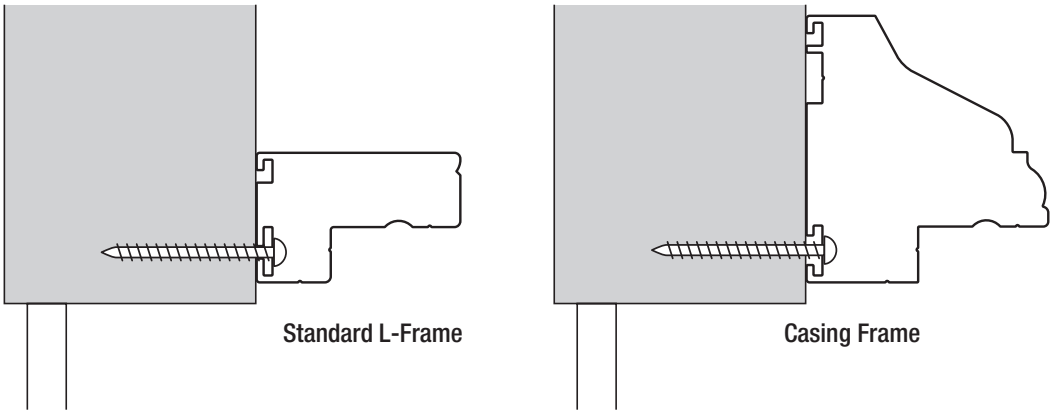


To square the panels move bottom frame left or right

4. When the panels are aligned and square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.
5. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.
6. Adjust the panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.
   ➤ If necessary, install panel lock ramps on the sill or casement (see page 85).
7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
8. If necessary, glue front cover strips to the front of the L-frame.
9. If necessary, install magnets and plates (see page 86).
10. Perform any necessary finish work (see page 87).

Outside Mount Framed Installation

This section covers outside mount installation of shutters with L-frame and C-frame.



1. Place the assembled frame over the opening.

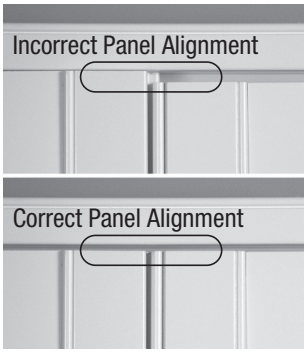
- ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
- ➤ The left and right sides of the frame are labeled.

2. Attach the left and right sides of the frame. Insert Robertson screws through the hole above the top hinge on each side.

- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Center the frame over the opening, then set the screws into the mounting surface.
- ➤ Tighten the screws snugly, but do not overtighten.

3. Hang the panels and check for proper panel alignment.

- ➤ If the panels are misaligned, rack the shutters by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the panel lock system is designed to help level the panels within the frame.



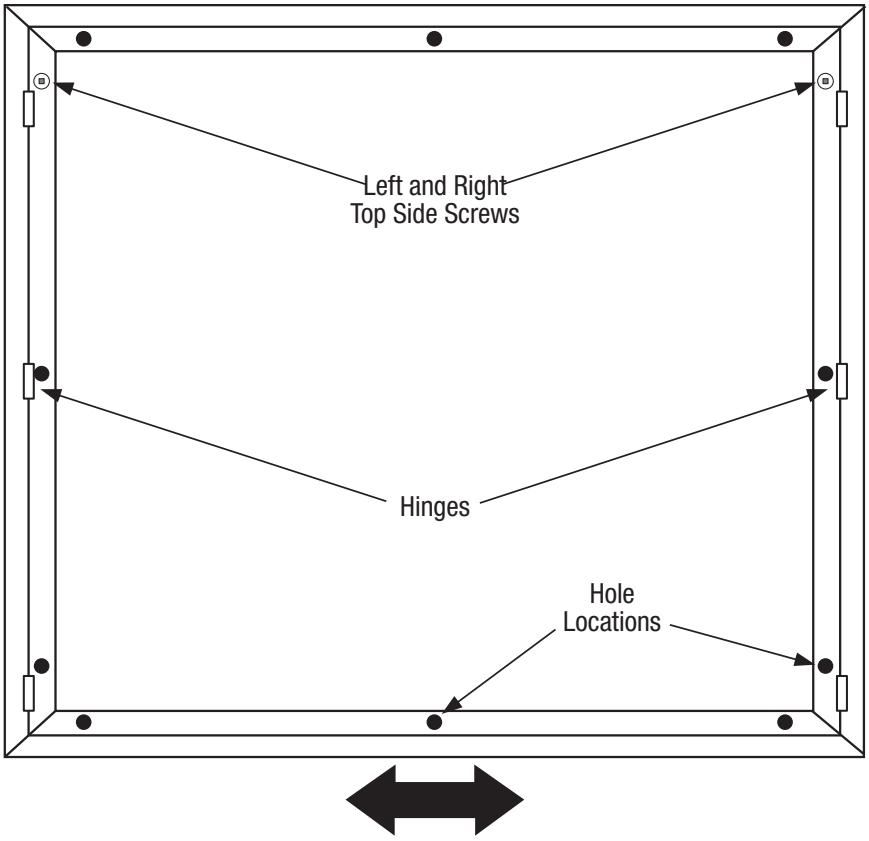
4. When the panels are aligned and square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.

5. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.

6. Adjust the panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.

- ➤ If necessary, install panel lock ramps on the sill (see page 85).

Installation Guidelines
Outside Mount Framed



7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
8. If necessary, install magnets and plates (see page 86).
9. Perform any necessary finish work (see page 87).

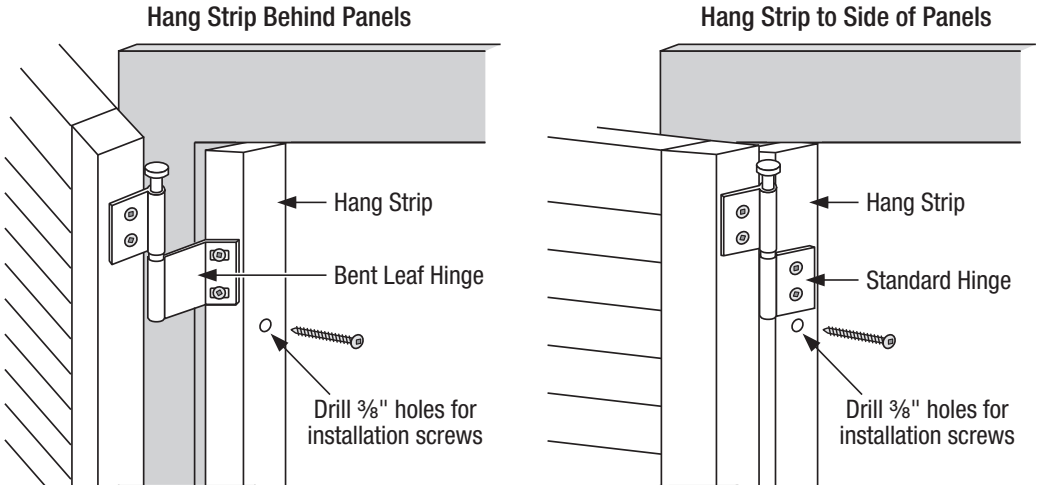
Inside Mount Installation with Hang Strip

Hang strip installations are two-sided.

1. Drill ⅜" installation holes in the hang strips **through the first layer of vinyl only**.

- ➤ Drill through the side of the hang strips.
- ➤ Drill installation holes below each hinge. (The top of the hang strip is indicated by the greater distance between the top hinge and hang strip end, versus the smaller difference between the bottom hinge and hang strip end.)
- ➤ Space holes similarly on hang strips without hinges.

Inside Mount



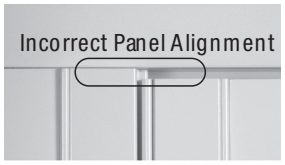
Installation Guidelines
Inside Mount with Hang Strip

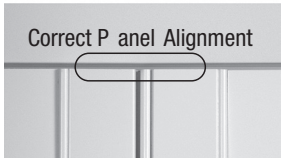
2. Attach the side hang strips inside the opening.

- ➤ Insert a Robertson screw into the top and bottom holes only, then set the screws into the mounting surface.
- ➤ Tighten the screws snugly, but do not overtighten.

3. Hang the panels. Square and align the panels to the opening.

- ➤ If necessary, adjust the bent-leaf hinges by loosening the hinge screws and moving the hinge left or right.
- ➤ Re-tighten the hinge screws once the panels are square and aligned.





4. Insert screws into the remaining holes and check that the panels are still level after each screw has been tightened. Re-adjust if necessary.

5. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins.

6. Cap all screw holes with the provided button plugs.

7. Install panel lock ramps (see page 85).

8. Perform any necessary finish work (see page 87).

Inside Mount Installation with No Frame

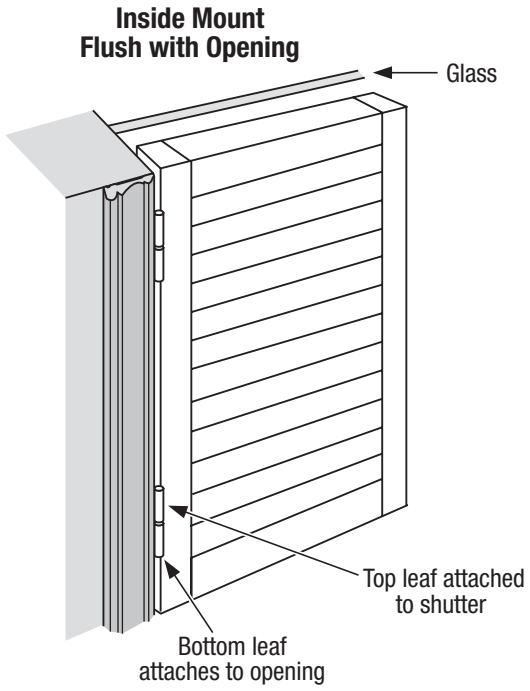
Unframed inside-mounted shutters may be installed flush with the opening or projected out from the opening using extended leaf hinges, which can add up to ⅝" additional clearance.

1. Install the top window jamb hinge.

- ➤ Position the left panel in the opening so that it has equal clearance at the top and bottom. Mark where the bottom of the top hinge is located.
- ➤ Align the top of the window jamb hinge with the mark and attach it using one screw.
- ➤ To check for accurate placement, install the panel by its top hinge, inserting a hinge pin to hold the panel in place. Adjust placement of the window jamb hinge if necessary.
- ➤ If placement is accurate, remove the panel and install the second screw into the window jamb hinge.

2. Install the bottom window jamb hinge.

- ➤ Again, install the panel by its top hinge, inserting a hinge pin to hold it in place.
- ➤ Mark where the bottom of the bottom panel hinge is located.
- ➤ Align the top of the bottom window jamb hinge with the mark and attach it using one screw.
- ➤ To check for accurate placement, install the panel into the two hinges. Adjust placement of the bottom window jamb hinge if necessary.
- ➤ If placement is accurate, install the second screw into the bottom window jamb hinge.



3. Repeat steps 2 and 3 for the right panel, if applicable. Be sure to align the right panel to the left panel.
   - ➤ When the panel lock system is used, turn the adjustable plunger if minor support or leveling is required.
   - ➤ If necessary, shim using the provided hinge shims.
4. Once the panels are level and square in the opening, install the remaining window jamb hinges while the panels are hanging.
   - ➤ Open the panels.
   - ➤ Install the window jamb hinges onto the panel hinges using the hinge pins.
   - ➤ Screw the window jamb hinges in place.
   - ➤ If necessary, shim using the provided hinge shims.
5. Install panel lock ramps or magnets and plates (see page 85-86).
6. Perform any necessary finish work (see page 87).

Installation Guidelines
Bi-Fold Track System

Bi-Fold Track System Installation

Typically, Bi-Fold track systems have three-sided frames; however, they may also be two-sided or four-sided. The basic installation procedure is the same whatever the configuration.

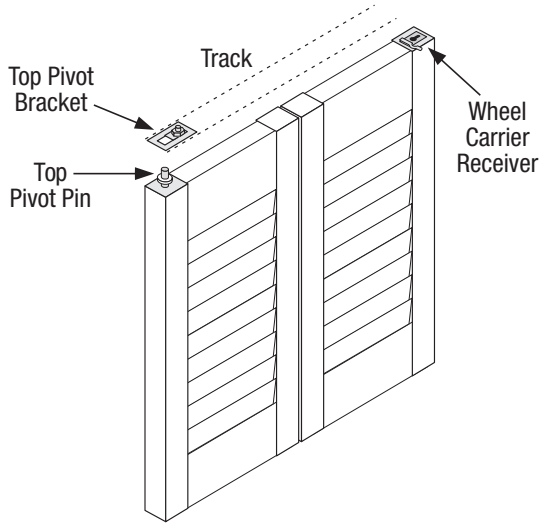
1. During frame assembly you should have pre-drilled installation holes through the frame pieces. If you have not, refer to those pages for instructions.
2. Install the assembled frame. For both inside and outside mounts, be sure there is sufficient rear clearance for louver movement.
   - ➤ Inside mount: Using the provided screws, fasten the top of the frame to the opening and level. Square the side frames and fasten to the sides of the opening. Use shims as necessary to ensure a level and square installation.
   - ➤ Outside mount: Center the frame over the opening.
     - — Attach the top frame first, starting within 3" of the highest corner.
     - — Place a four foot level on the top frame and secure the second fastener in the top frame within 3” of the other corner, ensuring the top frame is level.
     - — Finish attaching the top frame by securing one screw at each stud, 16” to 24” apart, depending on the type of construction.
     - — Square the side frames and fasten to the sides of the opening.
3. Assemble components onto the aluminum track.
   - ➤ Side stack (all panels stack to one side): Insert the proper number of wheel carriers into the top track. Then insert the top pivot on the side where the panels stack.
   - ➤ Split stack (panels stack to both sides): Insert the proper number of wheel carriers into the top track. Then install a top pivot on each end.
4. Mount the track to the top frame.
   - ➤ Position the front of the track flush with the front of the frame. With side stack designs, be sure the top pivot is on the correct end.
   - ➤ Attach the track through the pre-drilled holes using the provided screws.
5. Hang the pivoting panel(s).
   - ➤ A bottom pivot pin is installed at the bottom of the pivoting panel(s). Insert the pin into the bottom pivot bracket.
   - ➤ Push one of the door plates onto the adjustable nut of the top pivot, and push the other onto the adjustable nut of the first wheel carrier.
   - ➤ Lock the panel in place by rotating the plastic slide around the neck of the adjustable nuts on the top pivot and wheel carrier.
   - ➤ With split stack designs, repeat these steps for the other pivoting panel.
   - ➤ To square the panel(s), loosen the set nut on the top pivot bracket. Rotate the adjustable nut until the panel is square, then re-tighten the set nut.

6. Hang the remaining panel(s).

- ➤ Hang the panel(s) from the wheel carriers as described in step five.
- ➤ Connect all hinges using the hinge pins.
- ➤ Adjust the panel(s) to level using the adjustable nut on the wheel carriers.

7. Side stack only: Install the stop bumper and stile channel.

- ➤ Attach the stop bumper on the side opposite where the panels stack. Position it approximately 12" down from the top of the frame, on the screw indicator line.
- ➤ Attach the stile channel on the same side as the stop bumper, approximately 3" from the bottom of the frame, on the screw indicator line.



8. Attach the valance, if applicable.

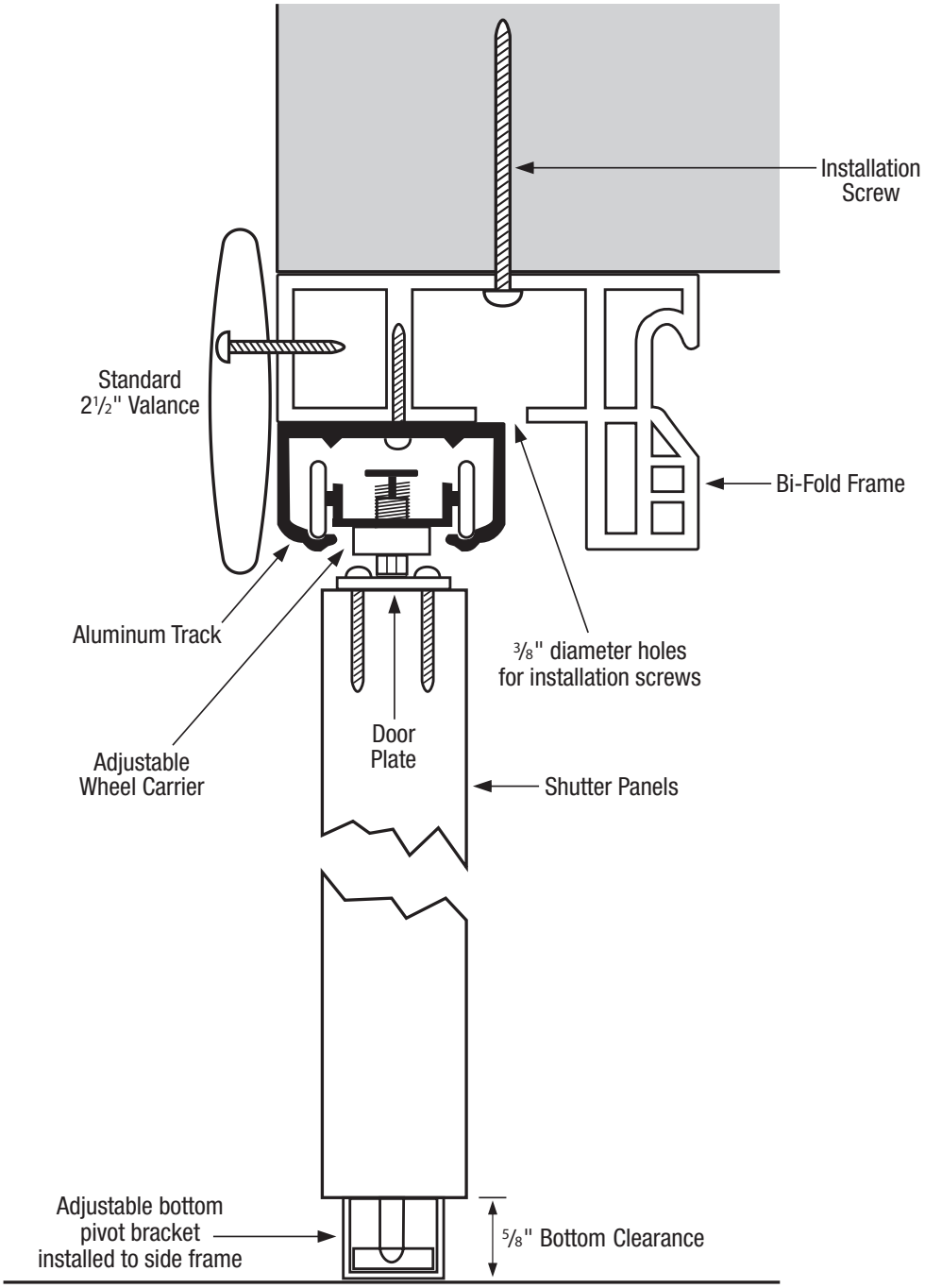
- ➤ Drill ⅜" installation holes **through the first layer of vinyl only**.
- ➤ Space the holes 20" apart.
- ➤ Glue or use double-sided tape to attach the valance returns, if applicable.
- ➤ Attach the valance to the top frame with the screws provided. Alternate valance attachment options include gluing or using double-sided tape.

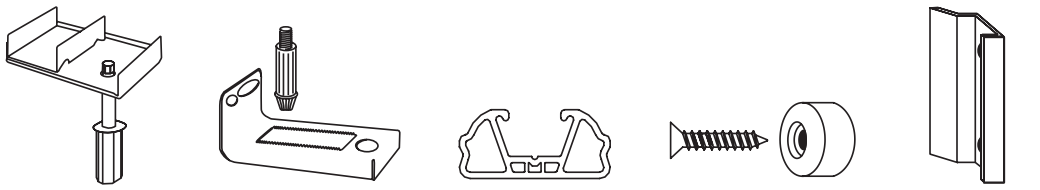
9. Cap all screw holes with the provided button plugs.

10. Perform any necessary finish work (see page 87).

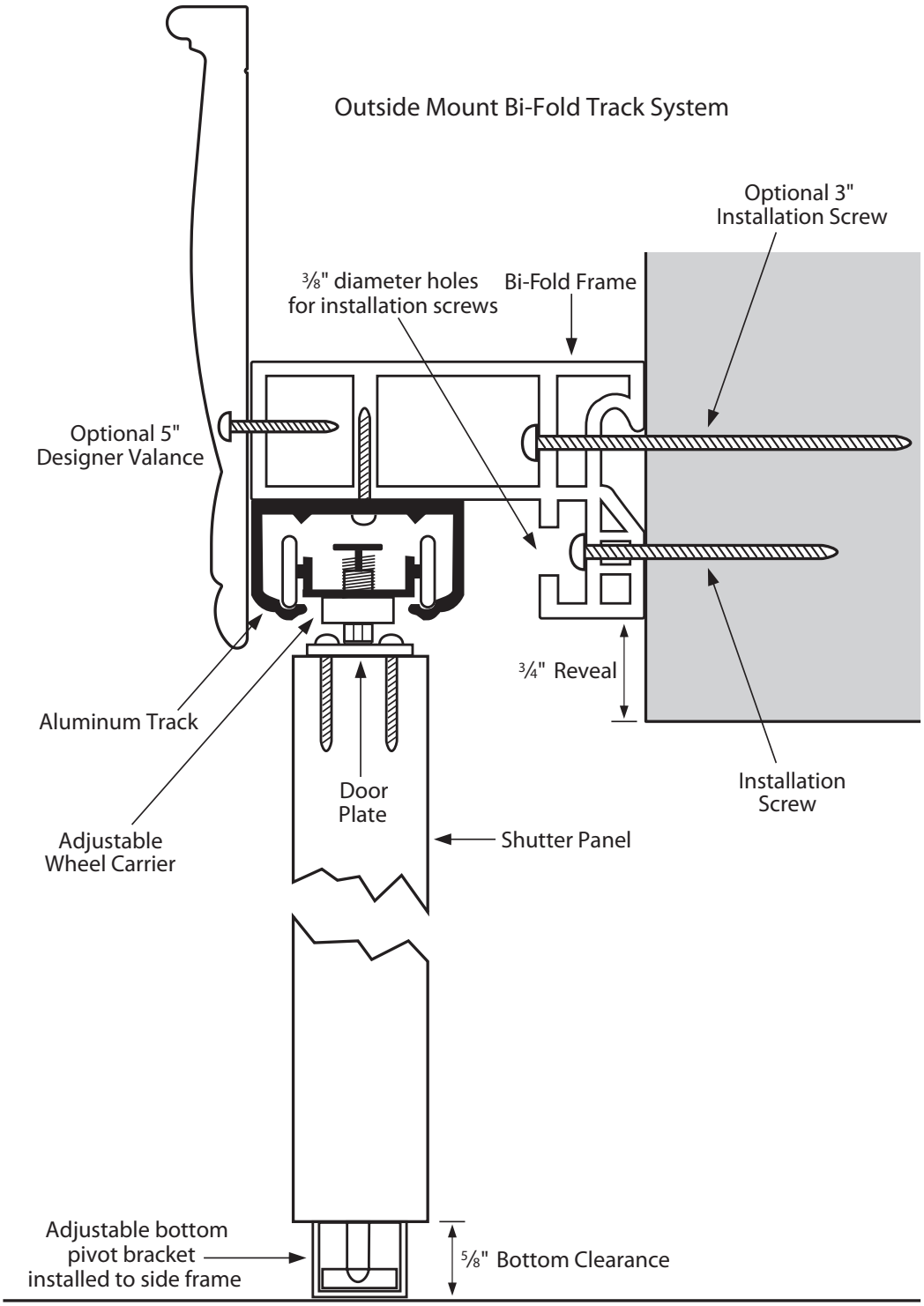
Installation Guidelines
Bi-Fold Track System

Inside Mount Bi-Fold Track System





Installation Guidelines
Bi-Fold Track System

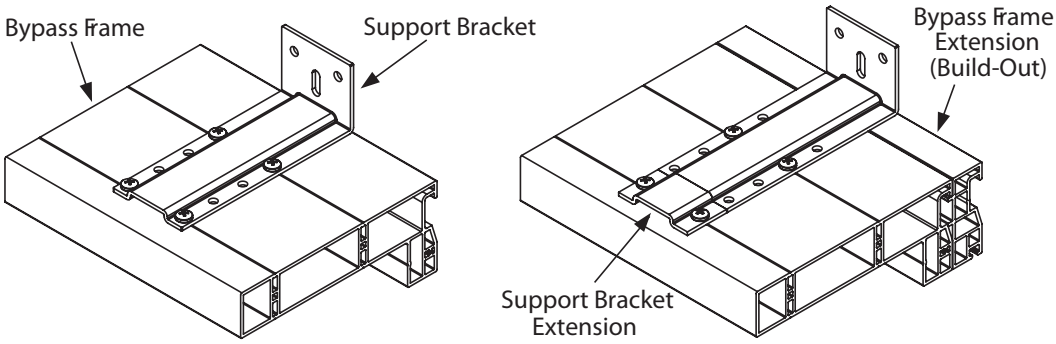


Installation Guidelines
By-Pass Track System

Bypass Track System Installation

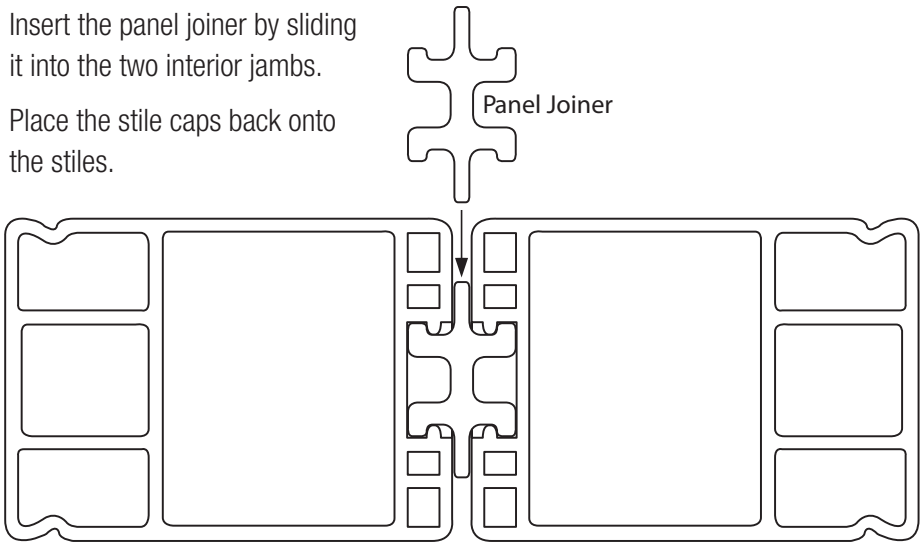
Typically, Bypass track systems have three-sided frames; however, they may also be two-sided or four-sided. The basic installation procedure is the same whatever the configuration.

1. During frame assembly you should have pre-drilled installation holes through the frame pieces. If you have not, refer to those pages for instructions.
2. Outside mount only: Attach support brackets to the top of the frame.
   - ➤ Position the end brackets 1"–2" away from the installation holes on the end of the top frame, with additional brackets spaced between them no more than 32" apart.
   - ➤ Screw the brackets into the frame at the extrusion lines, with the back of the bracket flush with the back of the frame.
   - ➤ Use support bracket extensions if bypass frame extension (build-out) is attached to the frame when greater projection or louver clearance is needed.



3. Install the assembled frame. For both inside and outside mounts, be sure there is sufficient rear clearance for louver movement.
   - ➤ Inside mount: Using the provided screws, fasten the top of the frame to the opening and level. Square the side frames and fasten to the sides of the opening. Use shims as necessary to ensure a level and square installation.
   - ➤ Outside mount: Center the frame over the opening.
     - — Attach the top frame first, starting within 3" of the highest corner.
     - — Place a four foot level on the top frame and secure the second fastener in the top frame within 3” of the other corner, ensuring the top frame is level.
     - — Finish attaching the top frame by securing one screw at each stud, 16” to 24” apart, depending on the type of construction.
     - — Square the side frames and fasten to the sides of the opening.
     - — Screw the support brackets to the mounting surface.
4. Insert wheel carriers onto the aluminum tracks.
   - ➤ Insert the proper number of wheel carriers into each track. There are two wheel carriers per panel; check the panel configuration to determine the correct number per track.

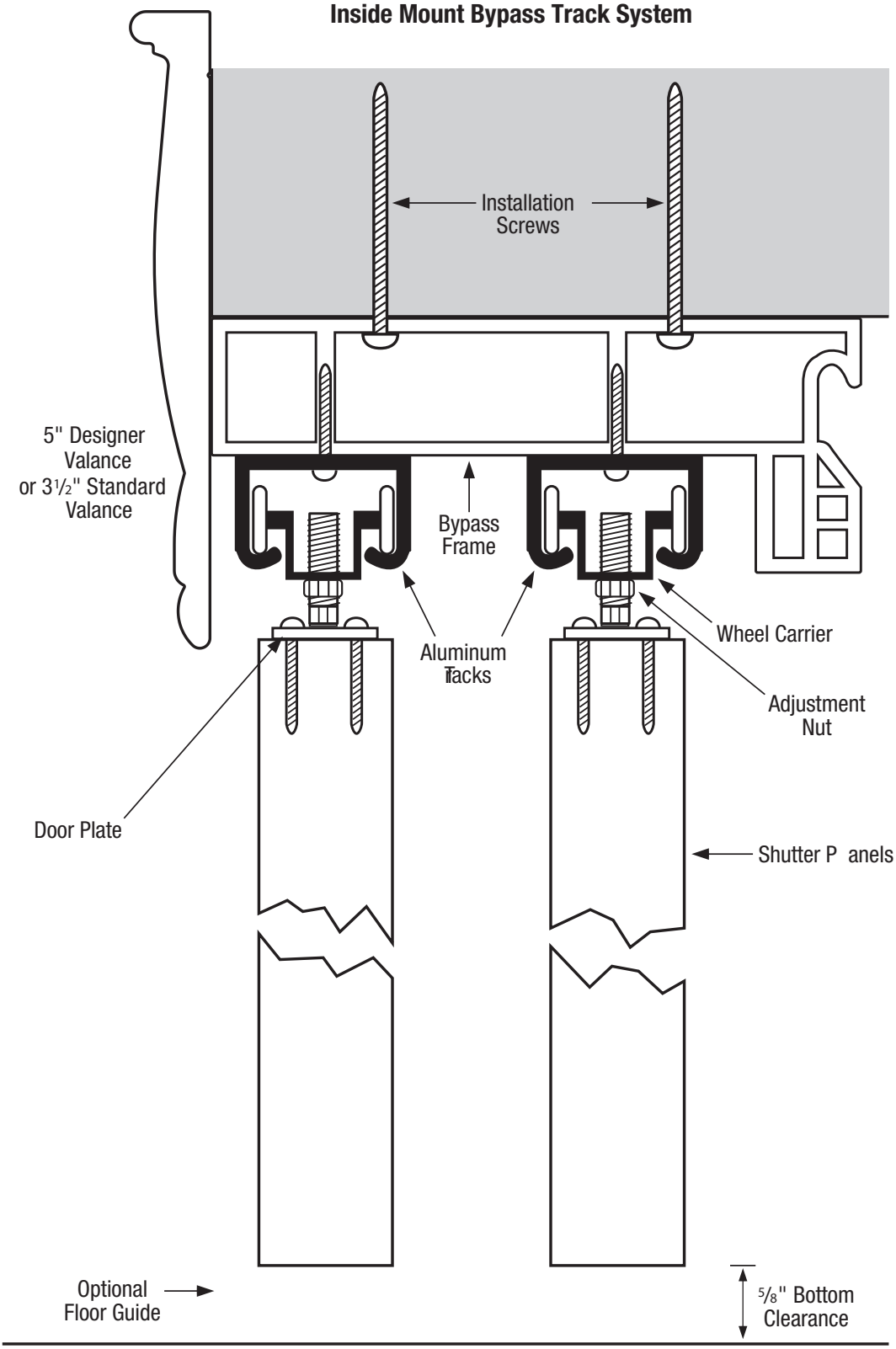
5. Mount the tracks to the top frame.
   - ➤ Using the provided screws, mount the track through the pre-drilled holes in the track to the extrusion lines on the underside of the frame.
6. Attach double panels if applicable.
   - ➤ When two panels are designed to be operated together, lay the panels face up and side-by-side on the floor.
   - ➤ Remove the two interior stile caps at the top of the panels.
   - ➤ Insert the panel joiner by sliding it into the two interior jambs.
   - ➤ Place the stile caps back onto the stiles.



7. Hang the shutter panels.
   - ➤ 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 adjustable nut on the carriers.
   - ➤ To level the panels, turn the adjustable nut on the wheel carrier using the provided wrench tool.
8. Optional: Install floor guides between each set of moving panels. The guides prevent the panels from swinging forward into the room or back into the opening.
9. Attach the valance, if applicable.
   - ➤ Drill ⅜" installation holes **through the first layer of vinyl only**.
   - ➤ Space the holes 20" apart.
   - ➤ Glue or use double-sided tape to attach the valance returns, if applicable.
   - ➤ Attach the valance to the top frame with the screws provided. Alternate valance attachment options include gluing or using double-sided tape.
10. Cap all screw holes with the provided button plugs.
11. Perform any necessary finish work (see page 87).

Installation Guidelines
By-Pass Track System

Inside Mount Bypass Track System

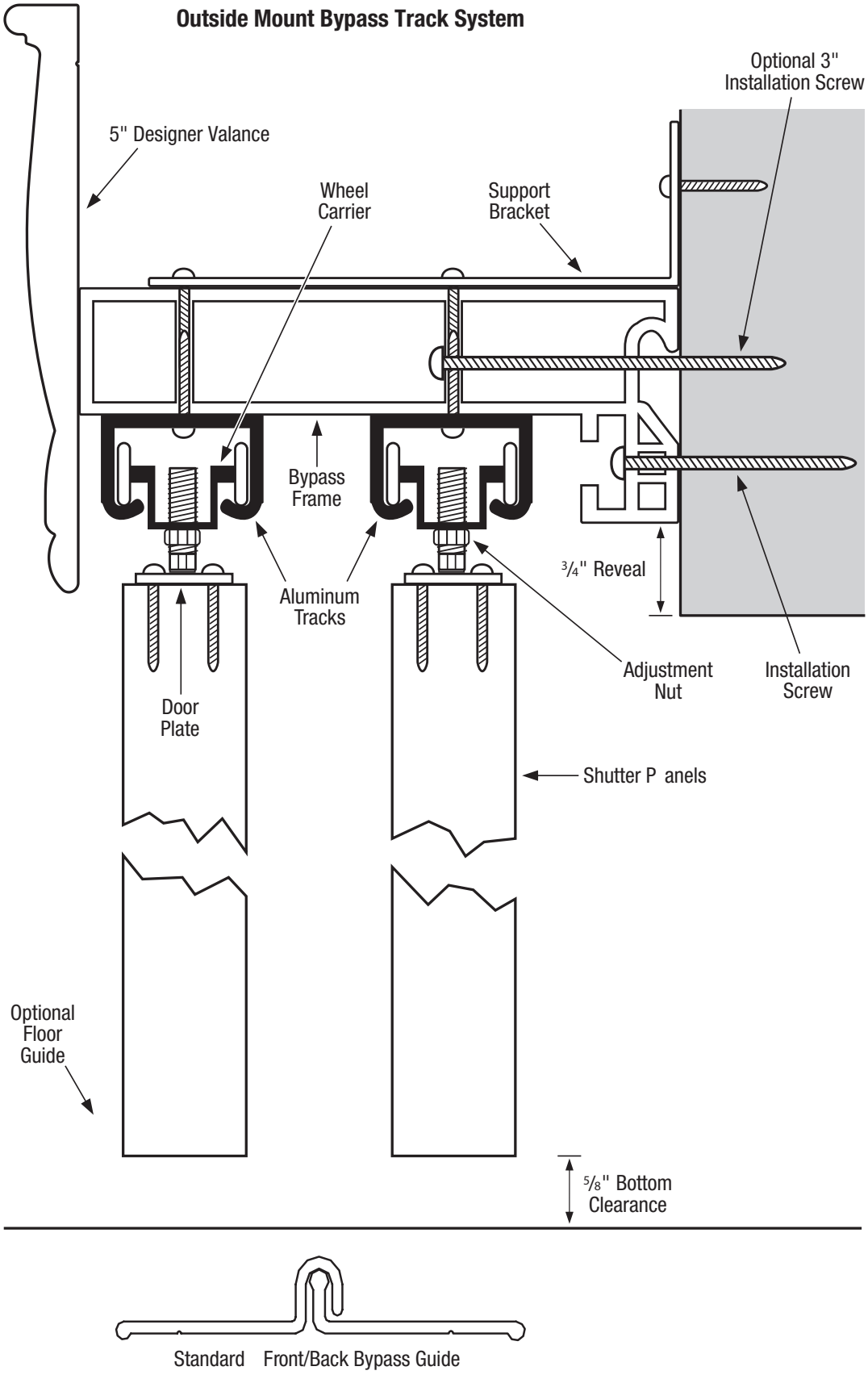


This is standard on a closed by-pass.

Optional Front/Back Bypass Guide

Installation Guidelines
By-Pass Track System

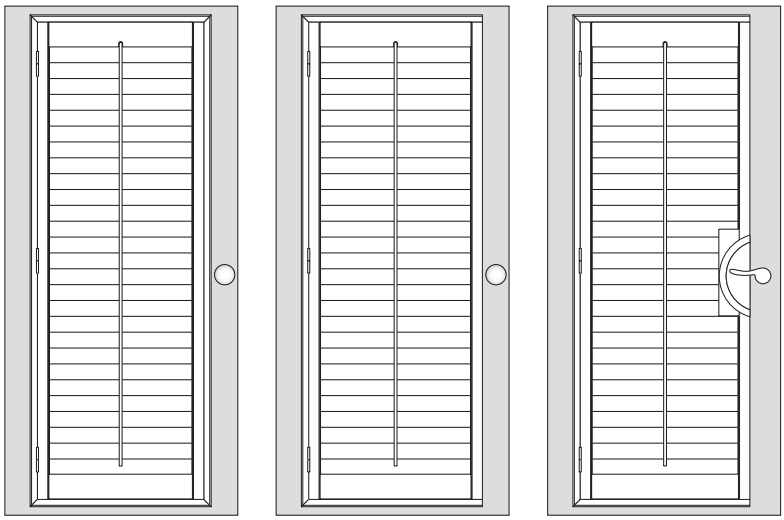
Outside Mount Bypass Track System



Standard Front/Back Bypass Guide

French Door Shutter Installation

French door shutters are mounted using the L-frame, either 3-sided or 4-sided. Installation procedures for French door cut-outs are the same as those for full panel French door shutters.



French Door Shutter with 4-Sided F rame | French Door Shutter with 3-Sided F rame | French Door Cut-Out with 3-Sided Frame

1. Place the assembled L-frame over the opening.

- ➤ The top of the frame is indicated by the greater distance between the top hinge and top frame, versus the smaller difference between the bottom hinge and bottom frame.
- ➤ The left and right sides of the frame are labeled.

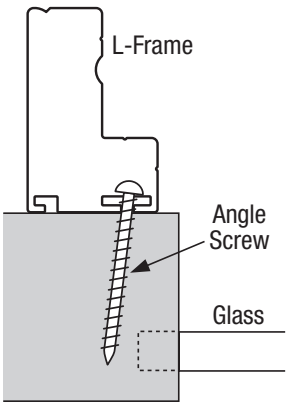
2. Attach the left and right sides of the frame. Insert Robertson screws through the top hole on each side.

- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Center the frame over the opening, then set the screws into the mounting surface.

  IMPOR TANT: Angle the screws to avoid breaking the glass.

  IMPOR TANT: With French door cut-outs, make sure the cut-out is centered on the door knob.

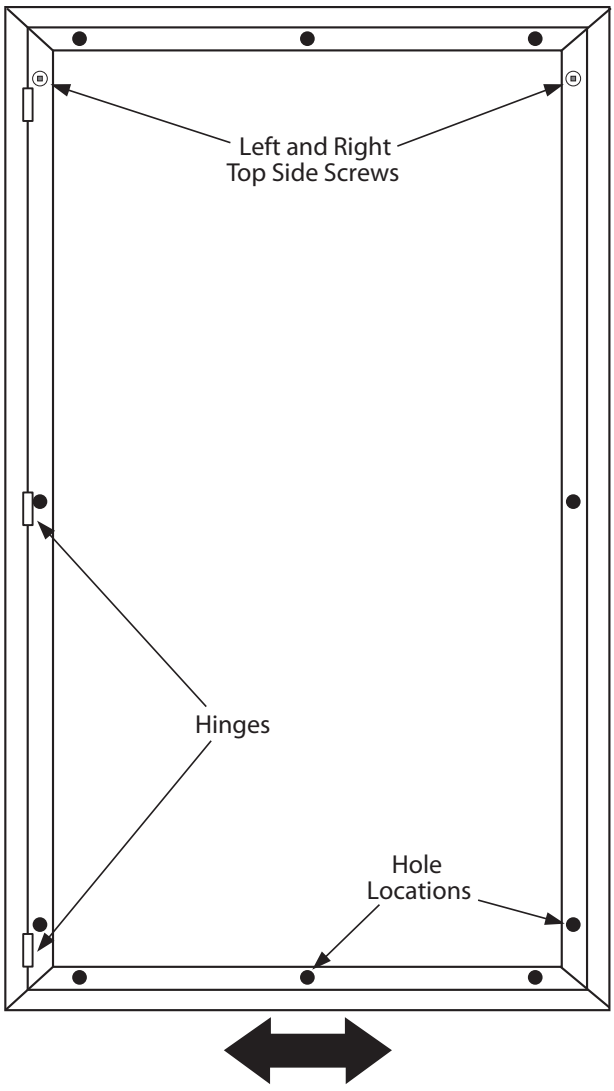
- ➤ Tighten the screws snugly, but do not overtighten.



3. Hang the panel and check for squareness.

- ➤ If the panel is not square, rack the shutter by grasping the frame at the bottom corners and moving it from side to side until proper alignment is achieved.
- ➤ With larger shutters, mark this frame location.
- ➤ Note that the panel lock system is designed to help level the panel within the frame.

Installation Guidelines
French Door Shutters



To square the panel, move bottom frame left or right

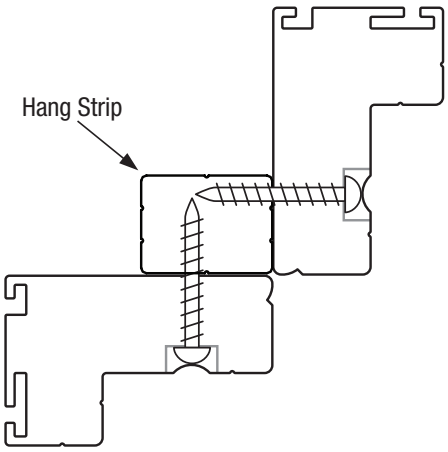
4. When the panel is square within the frame, hold the bottom frame in position and attach it with a screw through the middle bottom frame hole. Check that the panel is still square and re-adjust if necessary.
5. Insert screws into the remaining holes and check that the panel is still aligned after each screw has been tightened. Re-adjust if necessary.
6. Adjust the panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.
7. Once all screws have been installed and the panels checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
8. If necessary, install magnets and plates (see page 86).
9. Perform any necessary finish work (see page 87).

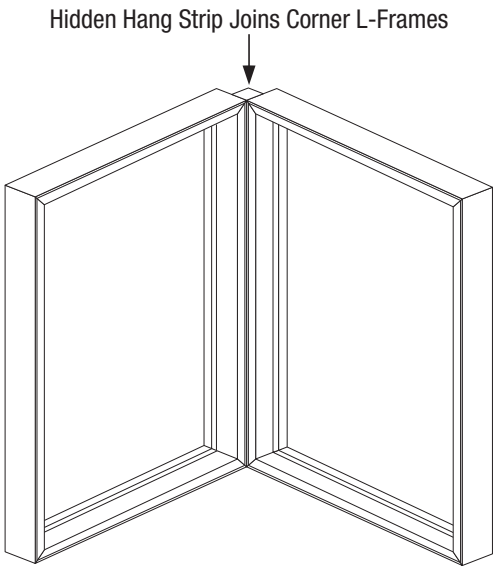
Corner Window Shutter Installation

Corner window shutters are two framed shutters connected together at a 90-degree angle. Before performing a corner window installation, you should be familiar with the framed shutter installation procedures described on previous pages.

1. Connect the two assembled frames.

- ➤ Position the provided hang strip flush with the front of the right side of the left frame. Attach it with screws through the frame, on the screw indicator line.
- ➤ Attach the left side of the right frame to the hang strip in a similar fashion.

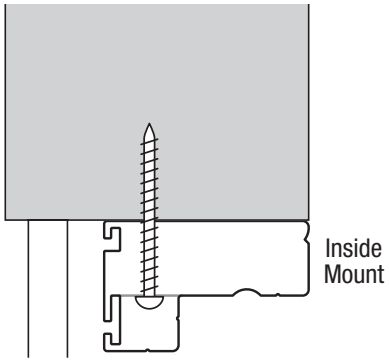


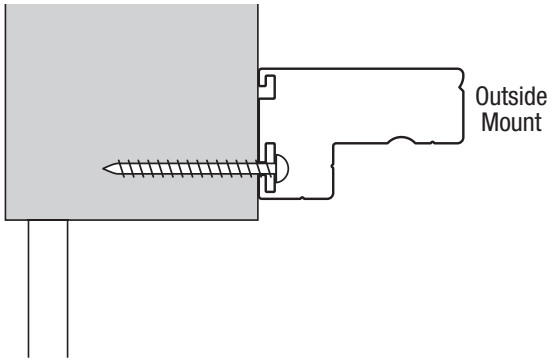


2. Place the connected frames in or over the opening.

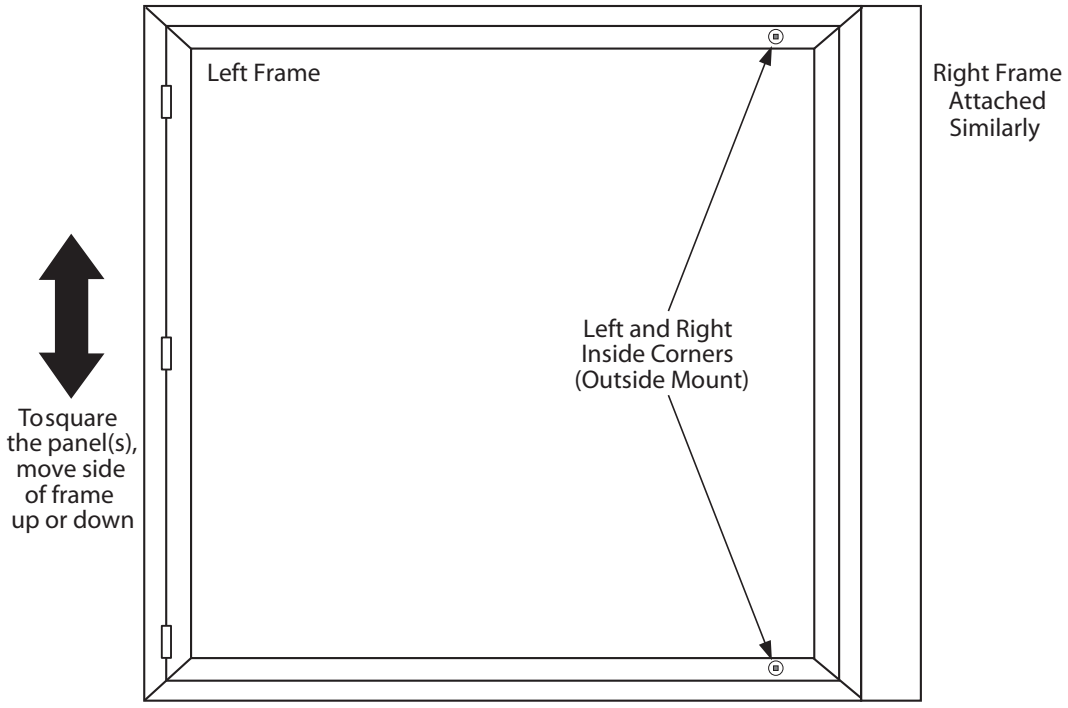
3. Attach the inside corners of the left and right frames. Insert Robertson screws through the holes nearest the hang strip on the top and bottom frame pieces.

- ➤ Most frames have pre-drilled holes for ease of installation.
- ➤ Tighten the screws snugly, but do not overtighten.





4. Hang the panel(s) in the left frame and check for proper panel alignment.
   - ➤ If the panel(s) are not square or misaligned, rack the shutters by grasping the frame at its outside corners and moving it up and down until proper alignment is achieved.
   - ➤ With larger shutters, mark this frame location.
   - ➤ Note that the panel lock system is designed to help level the panels within the frame.

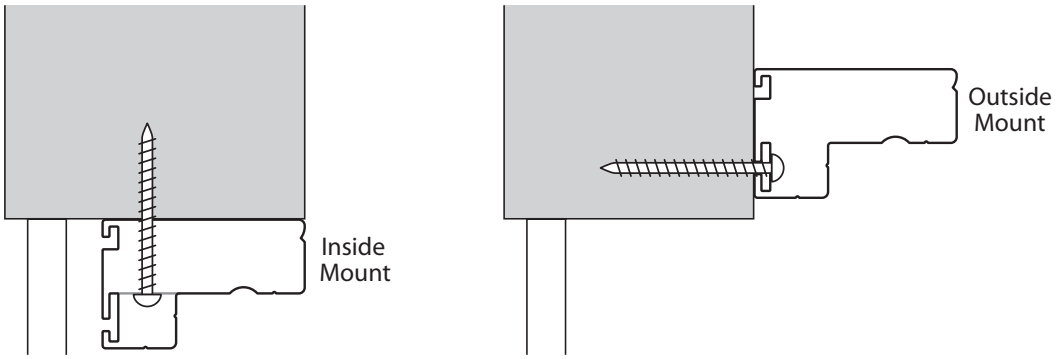


5. When the panels are aligned and square within the frame, hold the bottom of the left frame in position and attach it with a screw through the middle bottom frame hole. Check that the panels are still aligned and re-adjust if necessary.
6. Insert screws into the remaining holes and check that the panels are still aligned after each screw has been tightened. Re-adjust if necessary.
7. Adjust the panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.
8. Once all screws have been installed and the panel(s) checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
9. Repeat the panel installation and frame attachment procedures for the right frame.
10. If necessary, install magnets and plates (see page 86).
11. Perform any necessary finish work (see page 87).

Bay Window Shutter Installation

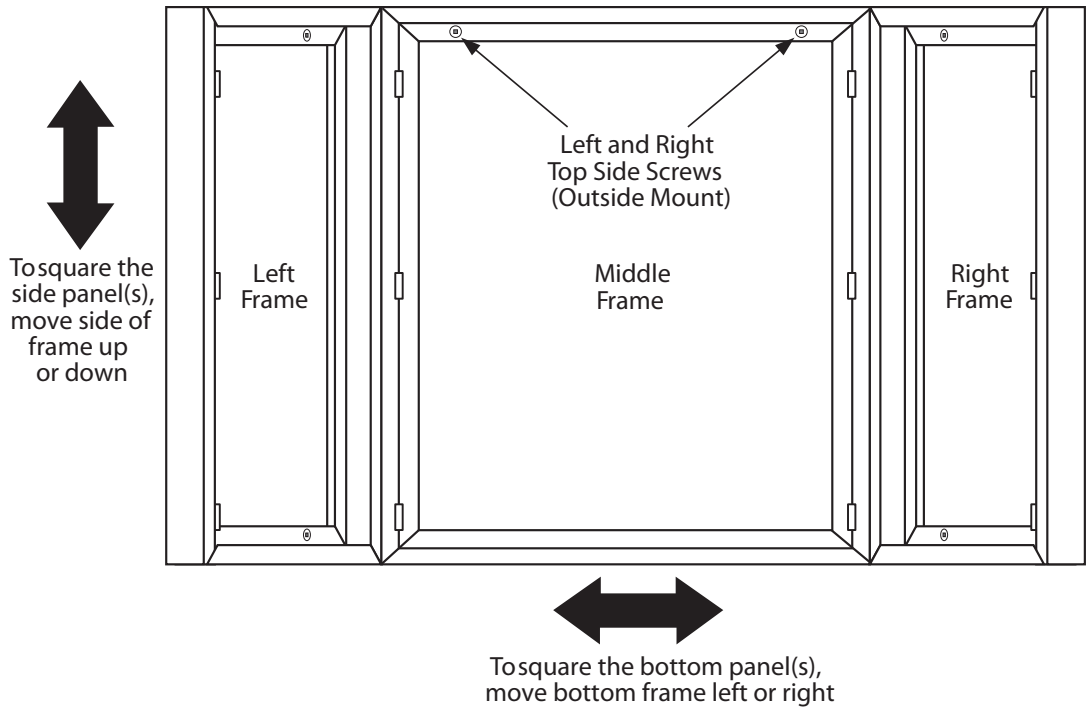
Bay window shutters are three individually framed shutters (left, middle and right) abutted together in the window. Before performing a bay window installation, you should be familiar with the framed shutter installation procedures described on previous pages.

1. Place the middle frame in or over the opening.
2. Insert a Robertson screw into the left and right holes in the top of the frame.
   - ➤ Center the frame in or over the opening, then set the screws into the mounting surface. Tighten snugly, but do not overtighten.



3. Hang the panel(s) in the middle frame. Rack the panels and complete frame installation as described on previous pages.
4. Attach the left frame as you would for a corner installation with Robertson screws through the holes nearest the middle frame on the top and bottom frame pieces.
   - ➤ Abut the left frame to the middle frame.
   - ➤ Set the screws into the mounting surface. Tighten snugly, but do not overtighten.
5. Hang the panel(s) in the left frame.
   - ➤ Rack the panels by moving the left side of the left frame up or down.
   - ➤ Complete left frame frame installation, checking squareness and alignment after setting each screw.
6. Attach the right frame in a similar fashion, with Robertson screws through the holes nearest the middle frame on the top and bottom frame pieces.
   - ➤ Set the screws into the mounting surface. Tighten snugly, but do not overtighten.
7. Hang the panel(s) in the right frame.
   - ➤ Rack the panels by moving the right side of the right frame up or down.
   - ➤ Complete right frame frame installation, checking squareness and alignment after setting each screw.

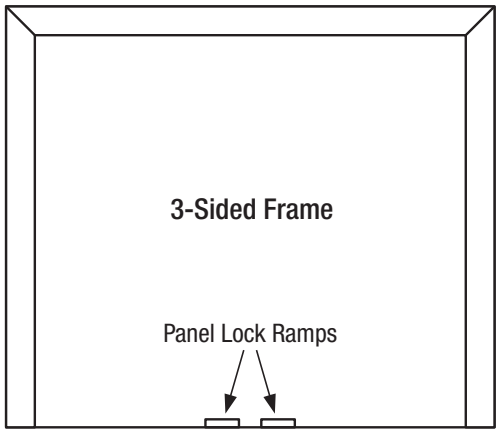
Installation Guidelines
Bay Window Shutters



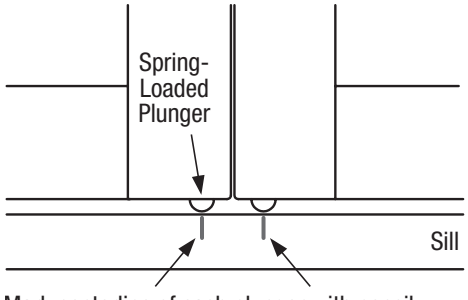
8. Adjust the panel lock assemblies with a flat blade screwdriver so all doors stay firmly shut.
9. Once all screws have been installed and the panel(s) checked for alignment, insert any remaining hinge pins and cap all screw holes with the provided button plugs.
10. If necessary, install magnets and plates (see page 86).
11. Perform any necessary finish work (see page 87).

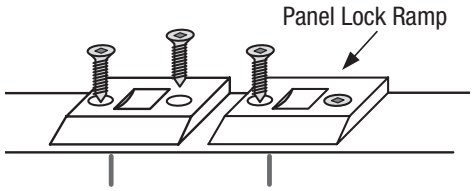
Install Panel Lock Ramp(s),If Applicable

The panel lock system with spring-loaded plunger is installed on panels and frames during fabrication. If your panel configuration is a 3-sided frame application, install panel lock ramps on the bottom sill.



1. With the shutter panel(s) closed, make a pencil mark on the sill to show where the center of each spring-loaded plunger is located.
2. Mark where to drill screw pilot holes.
   - ➤ Open the shutter panel(s). Place the panel lock ramp on the sill with the sloped edge facing front.
   - ➤ Center the panel lock ramp on the line marking the plunger location.
   - ➤ Mark the center of the ramp's screw holes. Repeat for all panel lock ramps.
3. Drill pilot holes for each panel lock ramp using a 3⁄32" drill bit.



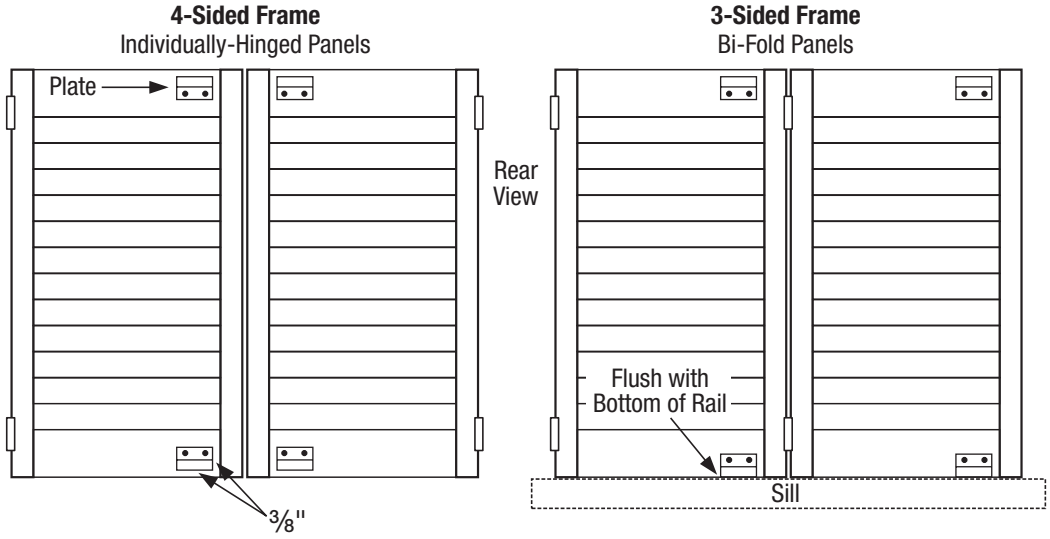


4. Attach the panel lock ramps to the sill using the Robertson screws provided.
5. Close the shutter panels to check function and closure.
6. The spring-loaded plungers can be adjusted using a flat blade screwdriver.
   - ➤ If closure is too tight, push in on the plunger and rotate clockwise to recess the plunger.
   - ➤ If closure is too loose, push in and rotate the plunger counterclockwise to extend it.
   - ➤ Rotate the plunger in one-half turn increments to maintain alignment with the style cap.

Install Magnets and Plates, If Applicable

If the shutter panels do not have panel locks, you may need to install magnets and plates if they are not already installed.

1. Review the diagrams below. Plates are installed at the top and bottom of all shutter panels. Magnets are installed behind the plates to the frame or sill.



2. Using a pencil, mark the frame (top and bottom) where the stile meets the top and bottom rails, on the side where the shutter closes against the frame.

➤ With three-sided frames, mark the sill at the bottom.

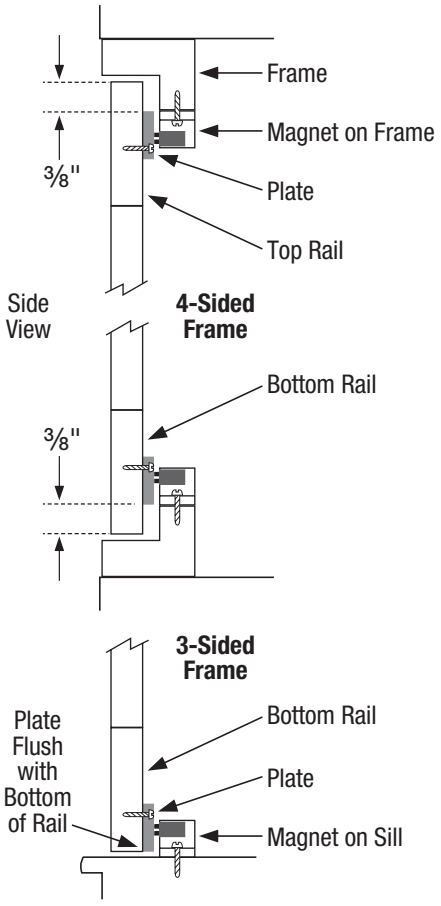
3. Install the magnets to the frame's light block so that the magnets are ⅜" in from the mark, toward the center of the shutter panel.

➤ With three-sided frames, install the magnet to the sill ⅜" in from the mark. Align the magnet with the frame's light block.

4. Install the plates on the rear of the panels so that they align with the magnets. The corner of the plates should be ⅜" in from the stile and the edge of the top or bottom rail.

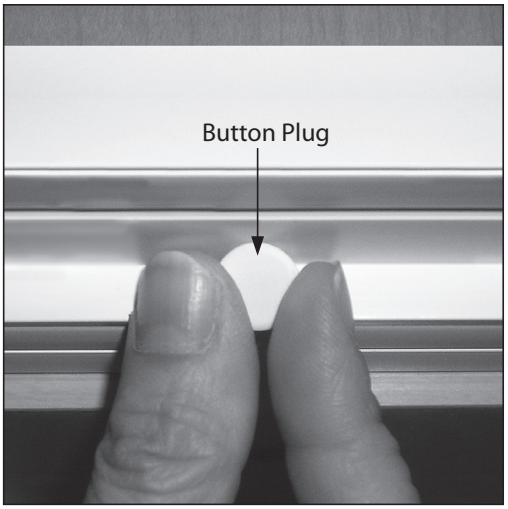
➤ With three-sided frames, install the bottom plates flush with the edge of the bottom rail.

5. Close the shutter panels to check function and closure. Adjust magnet or plate position, if necessary.



Perform Any Necessary Finish Work

- If you have not done so already, cap all screw holes with the provided button plugs.
- If you have not done so already, on inside-mounted L-frame applications glue L-frame cover strips to the front of the L-frame to fill gaps between the frame and window jamb.
- Apply sealant as needed to fill gaps between frames and window jambs or between mitered corners.



- Wash any dirt or grease from the shutter using a clean cloth and mild detergent solution. Never use ammonia-based products.
- Invite the home owner to inspect the installation. Give the home owner the warranty card. Demonstrate proper operation of the shutters and show the customer the location of their individual authenticity plate serial number.

Operation

- Tilt the louvers by grasping one louver and moving it. Do notuse the tilt bar to tilt the louvers.
- Open the shutter panel by grasping the stile through open louvers and pulling out. Do not use the tilt bar to open the shutter panel.

Care

- Clean using a dry and soft feather duster, clean cloth, dust cloth or dusting mitt. A vacuum with the soft brush attachment can also be used.
- Shutters may be washed using a mild detergent solution. Never use ammonia-based products.
- Ultrasonic cleaning or use of chemical solvents and scrubbing cleansers are not recommended. This will damage the product.
- When cleaning any window, spray glass cleaner on a cloth rather than spraying directly on the window.

Problem: Panels Won't Stay Closed

- **Check the panel lock.** Check to ensure that the panel lock plunger is seated properly in the panel lock ramp. Possible problems include:
  - ➤ The panel lock plunger is too far inside the panel. Adjust the plunger as described in step 6 on page 85.
  - ➤ The plunger does not sit in the "dip" in the panel lock ramp. Reposition the ramp, if necessary. Refer to steps 1 through 5 on page 85.
  - ➤ Check plunger and stile cap alignment. The plunger is designed to lock into grooves on the stile cap to prevent unwanted rotation. If they are not aligned, the plunger will remain inside the cap. To adjust, use a flat blade screwdriver to rotate the plunger until it is properly aligned and able to extend beyond the stile cap.
- **Check the number of magnets.** If magnets are used for closure, check that there are two per panel, one at the top and one at the bottom. Refer to the magnet installation section on page 86. (Note: Café style shutters use only one magnet.)
- **Check magnet contact.** If magnets are used for closure, check that the magnets and magnet plates have full contact with each other. Possible problems include:
  - ➤ The magnet and plate are not aligned. The magnet or magnet plate may need to be moved to achieve proper alignment. Refer to the magnet installation section on page 86.
  - ➤ The magnet is at a slight angle, with only one side of the magnet touching the plate. Loosen one of the screws on the magnet to allow it to be straightened so that it makes full contact with the plate.
  - ➤ The magnet plate is not flush with the panel, so that only one side touches the magnet. Adjust the screws so that the magnet plate becomes flush with the panel.
- **Check panel load.** Load is created when the installation is not square. This places load on the stile, which can force the panel to open with a spring-back effect. If the load is excessive, the louvers may be difficult to close, as well. Possible solutions include:
  - ➤ If load is detected with framed applications, tighten or loosen 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, checking for load after each one.
  - ➤ If there is load on a bi-fold panel, remove the second bi-fold panel and resolve the problem with the first hinged panel as described above. Then re-attach the second panel and check that the problem has been resolved.
  - ➤ If load is detected with unframed applications, shim the hinges to square the panels. Remove all hinge pins except for the top and bottom. Shim those hinges as needed until the problem is resolved. Continue with the other hinges, one at a time, checking for load after each one.

Problem: Panels Won't Stay Closed (continued)

- **Check for obstructions that prevent panels from closing.** Possible problems include:
  - ➤ Window cranks can prevent panels from closing. Take the crank off the rotator and see if the panel is still obstructed. If the panel closes, replacing the window crank with a T-crank can often solve the problem. Otherwise, build-out may be required to add clearance. For panels without a frame, an extension hinge may be used to bring the panel into the room an extra ⅝".
  - ➤ Window locks are other possible obstructions. Add clearance as described above.
  - ➤ Patio door handles can prevent louvers from opening. If a handle stops a panel from closing, the shutter must be built-out.
  - ➤ Bowed sills or casements can prevent inside-mounted shutter panels from closing if the narrowest height and width measurements were not ordered. Double-check the inside measurements and compare them with the measurements ordered and received.
- **Check for a twisted panel.** Panels can sometimes be twisted by weight leaned against it or by extreme heat. Fortunately, the material can be "tweaked" back to its original shape with gentle force. To do this, use your hand to support the middle of the panel's outside stile and bend the top or bottom back into position until the panel remains closed.

Problem: Panels Are Too Tight

- **Check that the frame is installed properly.** If the frame is not installed correctly, it may cause the inside opening of the frame to be too narrow at a specific point, causing the panels to be too tight. To check if the installation screws have been tightened the correct amount, measure the top or bottom width and compare it to the width where the panel appears to be too wide. Adjust the installation screws to square the frame.
- **Check that the panel is in the correct opening.** When multiple windows are of similar size, panels can sometimes be placed into the wrong opening or with the incorrect panel grouping. Check the labels and order form instructions to ensure that the panels are in the correct opening and with the correct panel group.
- **Check that the panel width is correct.** To determine a manufacturing or ordering error, check the measurement of the panel versus the measurement on the label. If the label measurements are correct, then measure the inside width of the opening in three locations to verify the correct width was ordered. If a panel is made or ordered too wide, it can possibly be cut down.
- **Check that the frame width is correct.** If the frame is manufactured too small, the panels will be too tight. Measure the back installation part of the frame and check it against the ordered width, taking into account the fabricator deductions.

Problem: Panels Are "Sagging"

- **Check the squareness of the installation.** If the stiles are not square, the panels can appear to be sagging.
  - ➤ Measure the top and bottom frame widths. If there is any variation, make the top and bottom widths the same by adjusting the installation screws or, in extreme cases, shimming the frame.
  - ➤ If the top and bottom frame widths are the same, check the two diagonal measurements. If uneven, the frame is out of square. Adjust it as described above.

Problem: Louvers Are Too Tight

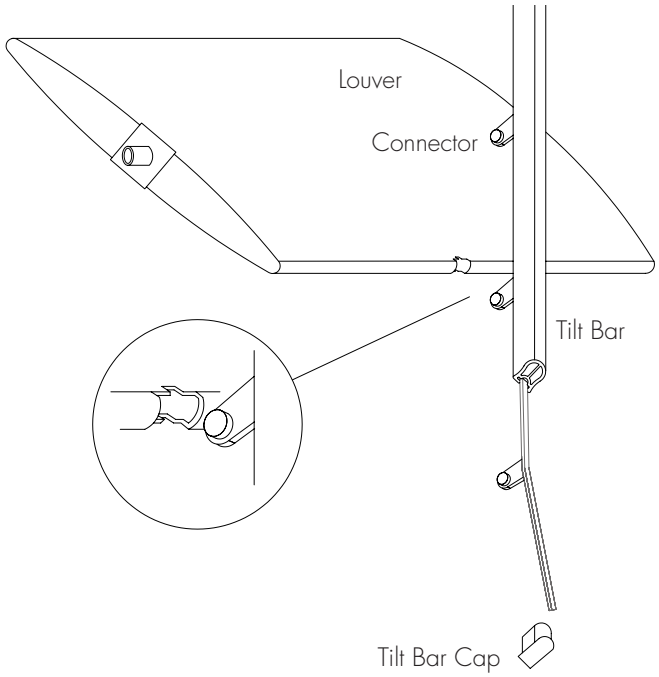
- **Check for overtightening between the stiles and rails.** If there is less play near any rail and the rail and louver widths have been checked, there is a possibility the screws attaching the stiles to the rails have been overtightened. To loosen the screws, carefully remove a stile cap and slide out the light block. This will expose the assembly holes. Use a #8 Robertson drill bit to release the tightness.
- **Check panel load.** Review the procedures.
- **Check louver widths.** There should be some play between louvers and stiles. Move the louvers side to side. If there are some louvers that appear to be tighter, measure and compare the widths of the louvers. If they are not the same, then there may be a fabrication error requiring the louvers to be replaced or cut down.
- **Check rail widths.** Measure all horizontal rails, including divider rails, to ensure that all are exactly the same width.

Problem: Louvers Are Warped

- **Check tolerances.** This problem presents itself as variations in light penetration or light leakage when the louvers are closed. There are two possible causes:
  - ➤ Panels with louvers over 20" wide come with aluminum reinforcement to prevent sag. The polysatin material can be tweaked back to its original shape with gentle force.
  - ➤ The louver holes in the stile have a tolerance of 0.01". While this may not seem to be much, it may cause slight variations in light penetration when the louvers are closed — the louvers overlap slightly differently in different locations. This is a normal, inherent characteristic and not a defect.
  - ➤ The natural effects of gravity and heat can cause slight variations in level, especially on wider panels. However, the product should never have a level variation exceeding 1⁄16".

Replacing Damaged Tilt Bar Connectors

- Remove tilt bar cap. It may be tight, so use a sharp object (e.g., screwdriver).
- Slide tilt bar off connectors.
- Remove broken connector(s).
- Replace connector in slat groove by holding the louver and snapping the new connector into the T-shaped notch in the louver. Note: replace connectors with similar length piece.
- Slide tilt bar over connectors and replace cap. (New cap may be required).

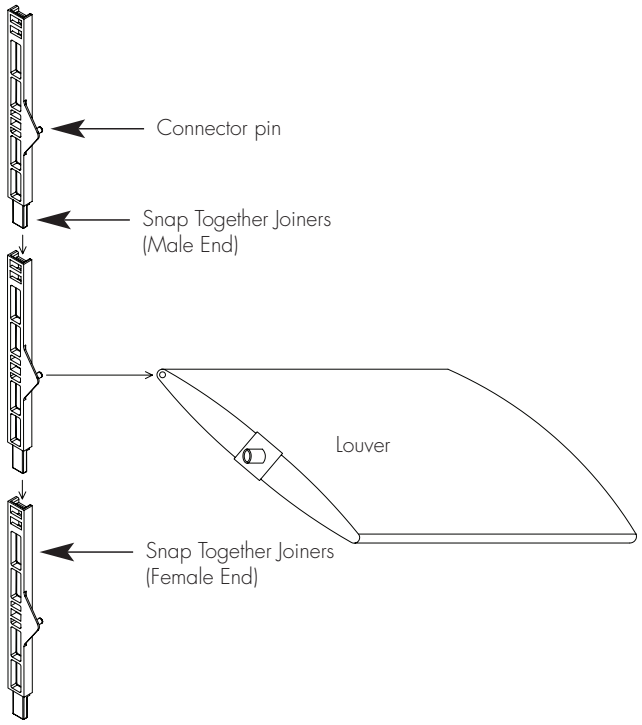


Note: It is possible to re-insert the tilt bar connectors without damage. Simply hold the louver, place the connector in the notch and press firmly. It is not necessary to remove the tilt bar.

Replacing Damaged Tilt Bar Connectors

- Remove broken joiners.
- Snap joiner pin into louver.
- Snap top and bottom of replacement joiner into joiner above and below the replacement joiner.
- These joiners are made to stay together. If joiners do not come apart, then replace all joiners in that section.

Connectors for Seamless Caps



Note: The top and bottom joiners in a panel are shorter. Replace these joiners with the same type joiners.

Louvers are discoloring!

Check for residue build-up.
The Polyresin3® 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. To prove discoloration is a result of build-up, an abrasive cleaner should be enough to take any build-up off the panel. If it is felt that the panels are discolored and warranted to be repaired or remade, the panels should be sent to our laboratory for analysis. Any costs related to the tests for non-warranty issues will be the responsibility of the consumer.

Product is scratched!

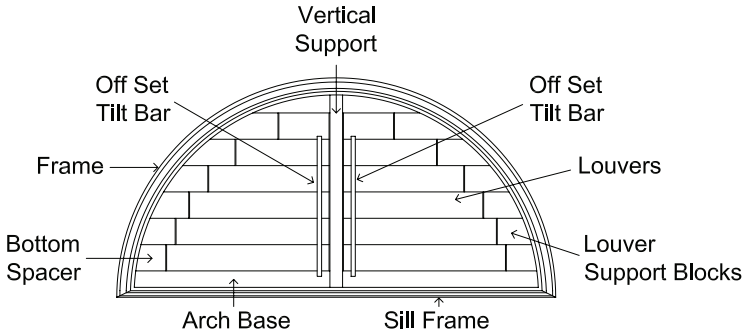
Check for pull lines.
Pull lines are an inherent bi-product of the extrusion process. Polyresin3® pellets are softened to be able to be pulled through the extrusion machinery. It would be cost prohibitive to pull the Polyresin3® through the machinery at a slow enough rate that would eliminate pull lines. The pull lines are similar to wood grains in the fact that they follow the same direction of the process. They are not defective issues.

Check for shine lines.
Shine lines are another inherent bi-product of the extrusion process. While the softened Polyresin3® pellets are being pulled through the machinery, some of the pellets create a different sheen. These shine lines can run in any direction and are impossible to control. They are not defective issues.

Check for surface inconsistencies.
To determine if the apparent scratch is a line or scratch simply run your finger over the area. Touch will in most cases determine any imperfection.

Features and Benefits
Specialty Shapes

Eclipse Shutter Specialty Shapes (patent pending) have been uniquely designed to incorporate horizontal louvers which provides a consistent look with the shutters below. Vertical supports divide larger arches into multiple sections which can also match the shutter below. By using the same frames, louvers, and tilt control as our traditional shutters, the result is a stunning, seamless look.

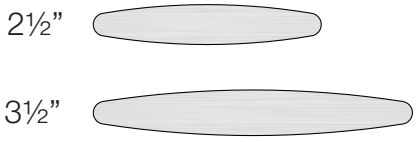


LOUVER OPTIONS

Louvers operate freely in both directions

- 2½"
- 3½"

Note: 4½" Louver not available

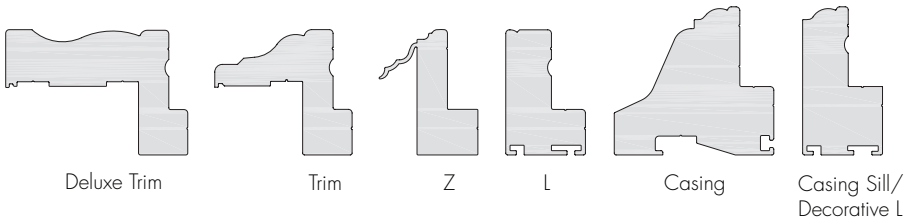


COLORS

• Cotton • Pearl • Vanilla

FRAME OPTIONS

- Deluxe Trim Frame (Inside Mount Only)
- Trim Frame (Inside Mount Only)
- Z Frame (Inside Mount Only)
- L Frame (Inside or Outside Mount)
- Casing Frame (Outside Mount Only)
- Casing Sill/Decorative L (Inside or Outside Mount)
- No Frame (Magnet Attachment)



PRICING

Arch pricing is based on the linear ordered width of the arch (rounded up to the next full inch), regardless of height. Shipping charges apply. Linear Width (in Inches) x Price Per Linear Inch = Arch Price + Shipping Charges

Net – $9.00 per linear ordered width

TEMPLATES

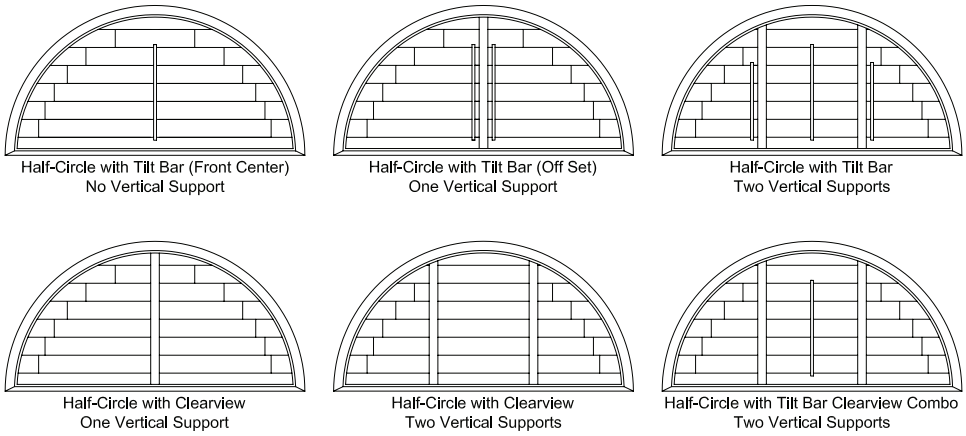
Templates are not required unless the radius is inconsistent (see page 111 for details). The order form has been designed to capture the information required for building an arch. It may be necessary to provide a sketch that contains all dimensions of the opening.

TILT OPTIONS

- Tilt Bar - Available for any arch, either front or rear center or front off set.
- Clearview - Available only if the arch has a full length straight side or a vertical support.
- Tilt Bar / Clearview Combo - Available when 2 or more vertical supports are specified. The center section includes Tilt Bar (front center) and the outer sections include Clearview (back side against the vertical support)

The size and configuration of the shutter will, in many cases, determine the tilt mechanism.

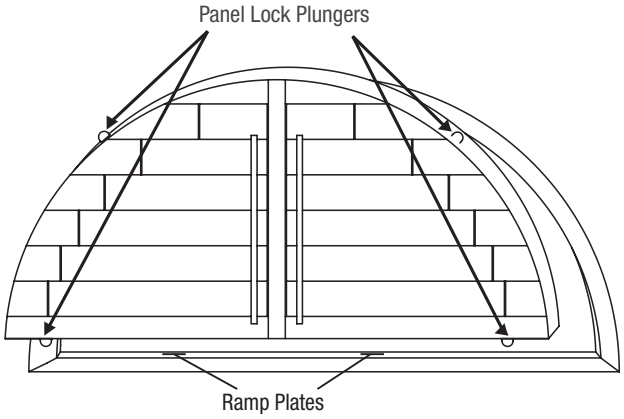
Example: A half-circle with no vertical support would have a tilt bar (either front or rear), but a half-circle with 1 vertical support could have either Clearview on each section or an off-set tilt bar. See the diagrams below.

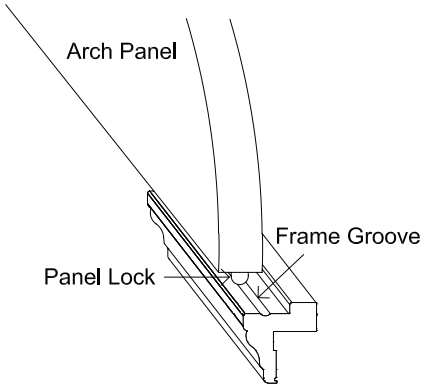


Each section of an arch includes its own set of louvers and a tilt mechanism (tilt bar or Clearview).

ARCH PANEL ATTACHMENT

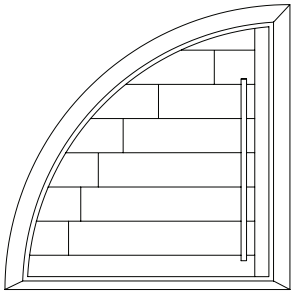
- Panel Lock - spring loaded plungers, lock into a groove in the frame or ramp attached to the frame.
- Frames with grooves - the D Frame, T Frame and L Frame include a groove designed into the frame. The panel lock plunger locks into this groove.
- Panel ramp plates come installed with specialty shapes to maintain spacing between the panel and frame.
- Once the frame is installed, the panel snaps into place. Magnets will be supplied to ensure the panel is secure.
- Magnets are used for no frame mounts.



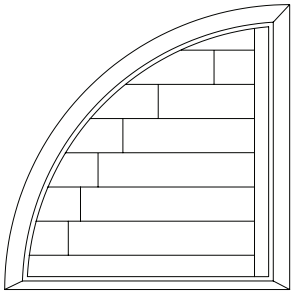


Shapes and Specifications
Specialty Shapes

QUARTER-CIRCLE LEFT

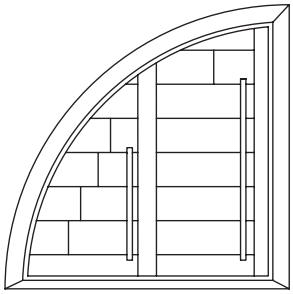


Quarter-Circle Left with Tilt Bar
& No Vertical Support

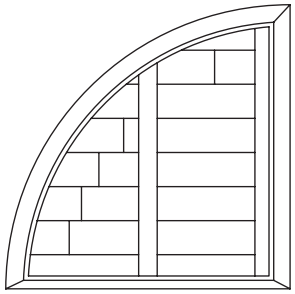


Quarter-Circle Left with Clearview
& No Vertical Support

Minimum Width:	12”
Maximum Width:	30”
Minimum Height:	12”
Maximum Height:	30”



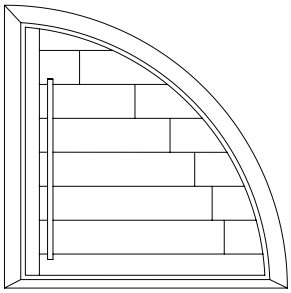
Quarter-Circle Left with Tilt Bar
& 1 Vertical Support



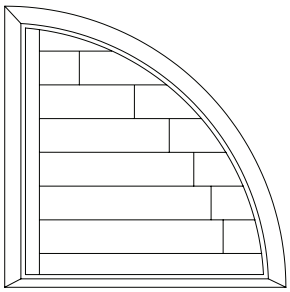
Quarter-Circle Left with Clearview
& 1 Vertical Support

Specifications - One Vertical Support	
Minimum Width:	24”
Maximum Width:	40”
Minimum Height:	24”
Maximum Height:	40”

QUARTER-CIRCLE RIGHT

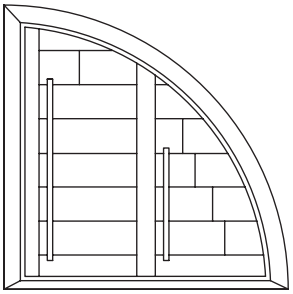


Quarter-Circle Right with Tilt Bar
& No Vertical Support

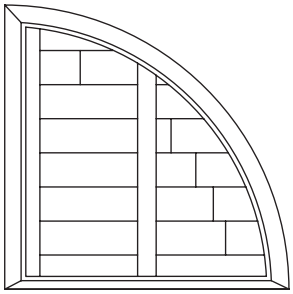


Quarter-Circle Right with Clearview
& No Vertical Support

Specifications - No Vertical Support	
Minimum Width:	12”
Maximum Width:	30”
Minimum Height:	12”
Maximum Height:	30”



Quarter-Circle Right with Tilt Bar
& 1 Vertical Support



Quarter-Circle Right with Clearview
& 1 Vertical Support

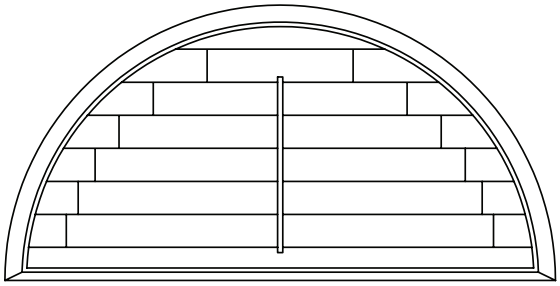
Specifications - One Vertical Support	
Minimum Width:	24”
Maximum Width:	40”
Minimum Height:	24”
Maximum Height:	40”

Note: The height of a quarter-circle equals the width.

See Page 87 for available tilt options.

Shapes and Specifications
Specialty Shapes

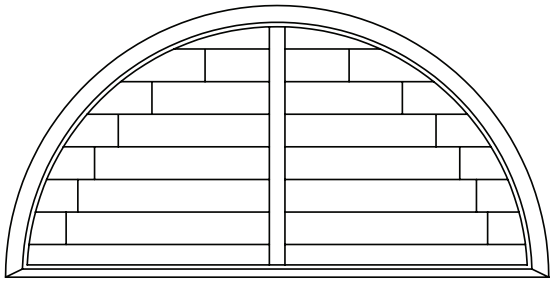
HALF-CIRCLE



Half-Circle with Tilt Bar & No Vertical Support

Specifications - No Vertical Support	
Minimum Width:	24”
Maximum Width:	30”
Minimum Height:	12”
Maximum Height:	15”

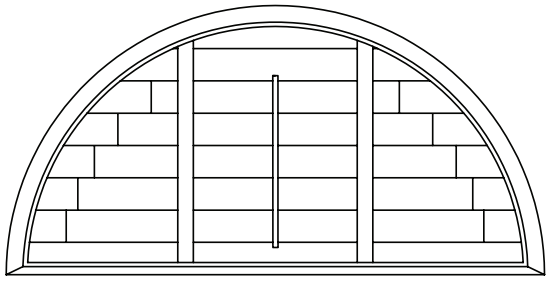
Clearview ***not*** *available*



Half-Circle with Clearview & 1 Vertical Support

Specifications - One Vertical Support	
Minimum Width:	24”
Maximum Width:	60”
Minimum Height:	12”
Maximum Height:	30”

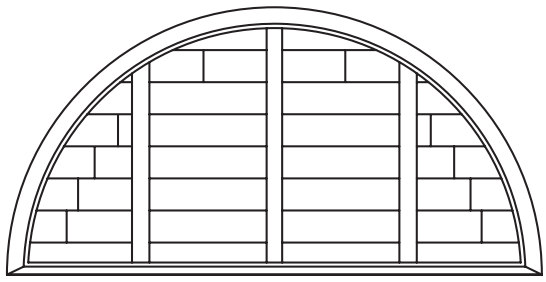
Clearview or off-set tilt bar optional



Half-Circle with Clearview & Tilt Bar, and 2 Vertical Supports

Specifications - Two Vertical Supports	
Minimum Width:	24”
Maximum Width:	72”
Minimum Height:	12”
Maximum Height:	36”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)



Half-Circle with Clearview & Tilt Bar, and 3 Vertical Supports

Specifications - Three Vertical Supports	
Minimum Width:	24”
Maximum Width:	92”
Minimum Height:	12”
Maximum Height:	46”

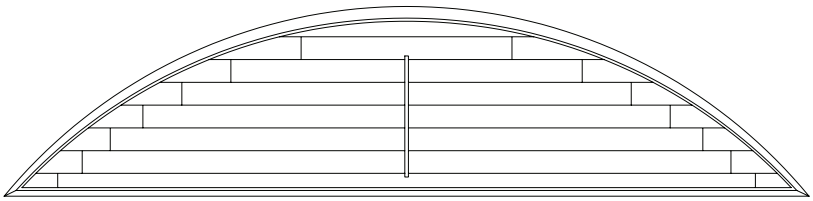
Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

Note: The height of a half circle measures 1/2 the width. If the height measures more than 1” over half the width, then specify a tunnel. If the height measures 1” less than half the width, then specify an elliptical.

See Page 87 for available tilt options.

Shapes and Specifications
Specialty Shapes

ELLIPTICAL

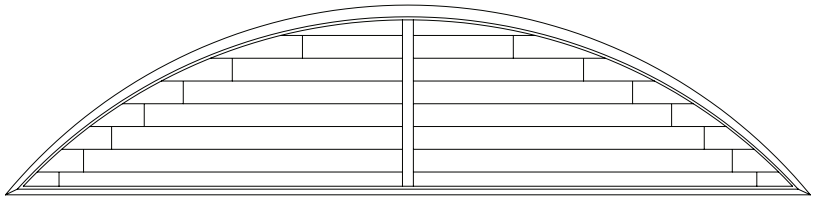


Elliptical with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24”
Maximum Width:	30”
Minimum Height:	12”
Maximum Height:	15”

Clearview ***not*** *available*

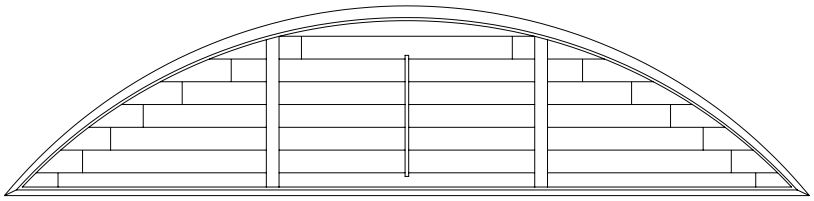


Elliptical with Clearview & 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24”
Maximum Width:	60”
Minimum Height:	12”
Maximum Height:	30”

Clearview or off-set tilt bar optional

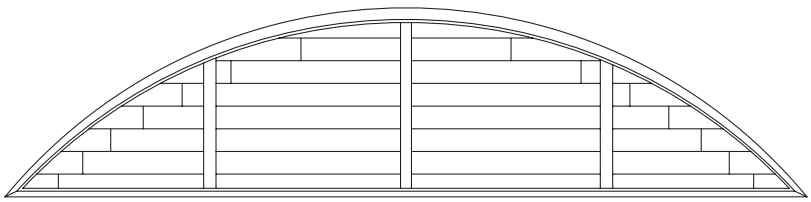


Elliptical with Clearview & Tilt Bar, and 2 Vertical Supports

Specifications - Two Vertical Supports

Minimum Width:	24”
Maximum Width:	72”
Minimum Height:	12”
Maximum Height:	36”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)



Elliptical with Clearview & Tilt Bar, and 3 Vertical Supports

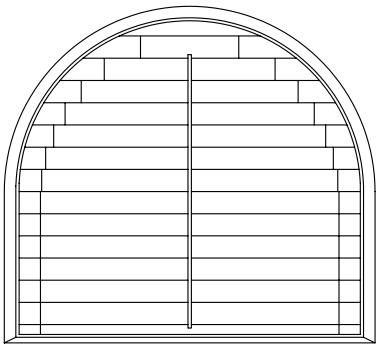
Specifications - Three Vertical Supports

Minimum Width:	24”
Maximum Width:	92”
Minimum Height:	12”
Maximum Height:	46”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

See Page 87 for available tilt options.

TUNNEL

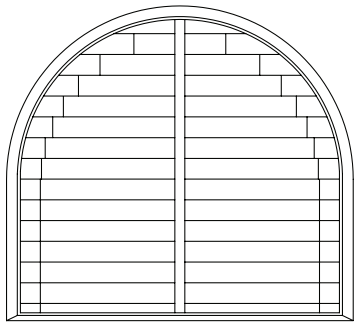


Tunnel with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24”
Maximum Width:	30”
Minimum Height:	16”
Maximum Height:	39”
Minimum Leg Length:	3.5”
Maximum Leg Length:	24”

Clearview **not** *available*

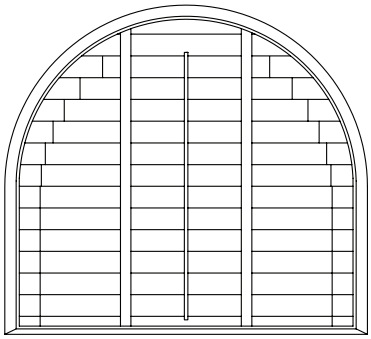


Tunnel with Clearview & 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24”
Maximum Width:	39”
Minimum Height:	16”
Maximum Height:	39”
Minimum Leg Length:	3.5”
Maximum Leg Length:	24”

Clearview or off-set tilt bar optional

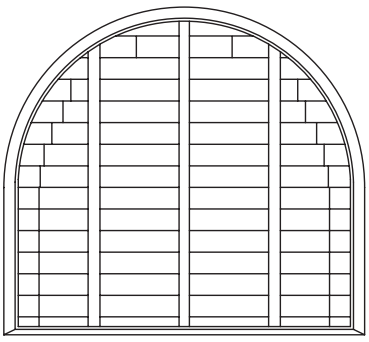


Tunnel with Tilt Bar and Clearview, and
2 Vertical Supports

Specifications - Two Vertical Supports

Minimum Width:	24”
Maximum Width:	48”
Minimum Height:	16”
Maximum Height:	39”
Minimum Leg Length:	3.5”
Maximum Leg Length:	24”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)



Tunnel with Clearview, and
3 Vertical Supports

Specifications - Three Vertical Supports

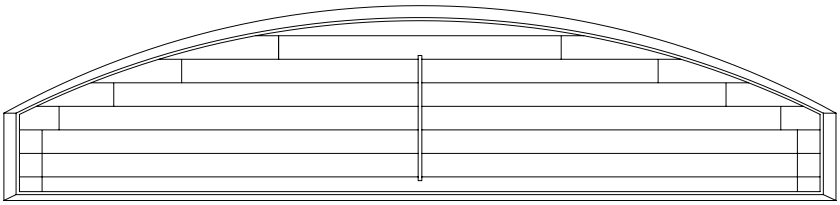
Minimum Width:	24”
Maximum Width:	48”
Minimum Height:	16”
Maximum Height:	39”
Minimum Leg Length:	3.5”
Maximum Leg Length:	24”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

See Page 87 for available tilt options.

Shapes and Specifications
Specialty Shapes

EYEBROW

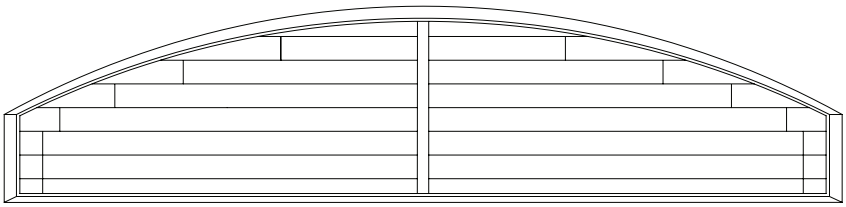


Eyebrow with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24”
Maximum Width:	30”
Minimum Height:	12”
Maximum Height:	36”
Minimum Leg Length:	7”
Maximum Leg Length:	24”

Clearview ***not*** *available*

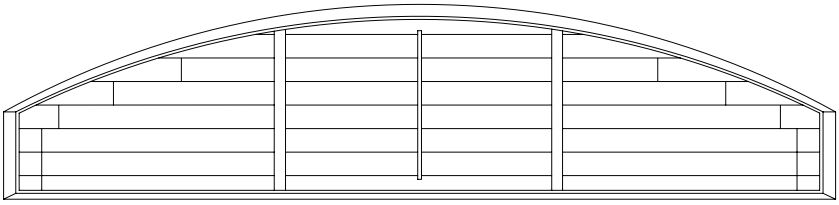


Eyebrow with Clearview & 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24”
Maximum Width:	60”
Minimum Height:	12”
Maximum Height:	36”
Minimum Leg Length:	7”
Maximum Leg Length:	24”

Clearview or off-set tilt bar optional

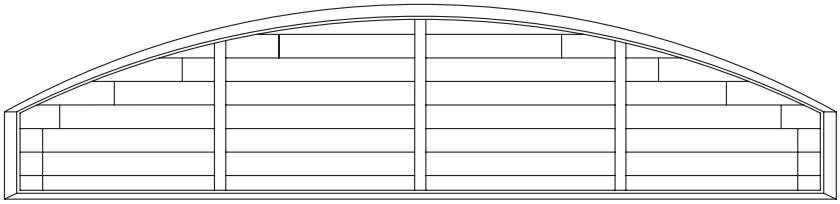


Eyebrow with Clearview & Tilt Bar, and 2 Vertical Supports

Specifications - Two Vertical Supports

Minimum Width:	24”
Maximum Width:	72”
Minimum Height:	12”
Maximum Height:	36”
Minimum Leg Length:	7”
Maximum Leg Length:	24”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)



Eyebrow with Clearview, and 3 Vertical Supports

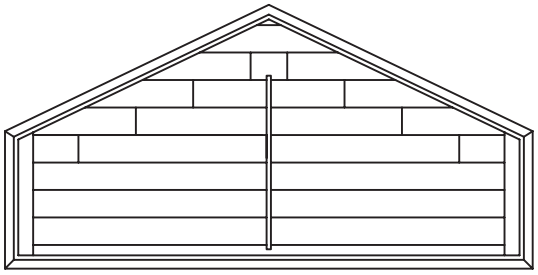
Specifications - Thee Vertical Supports

Minimum Width:	24”
Maximum Width:	108”
Minimum Height:	12”
Maximum Height:	36”
Minimum Leg Length:	7”
Maximum Leg Length:	24”

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

Shapes and Specifications
Specialty Shapes

FULL RAKE

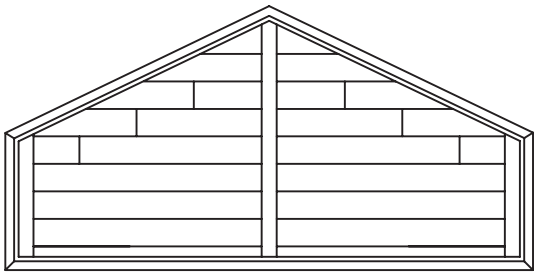


Full Rake with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	48″
Minimum Leg Length:	7″
Maximum Leg Length:	24″

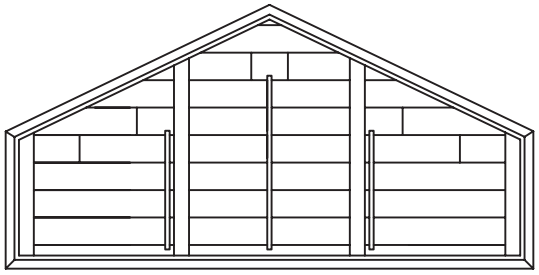
Clearview ***not*** *available*



Full Rake with Clearview & 1 Vertical Support

Minimum Width:	24″
Maximum Width:	60″
Minimum Height:	12″
Maximum Height:	48″
Minimum Leg Length:	7″
Maximum Leg Length:	24″

Clearview or off-set tilt bar optional



Full Rake with Tilt Bar, and 2 Vertical Supports

Specifications - Two Vertical Supports

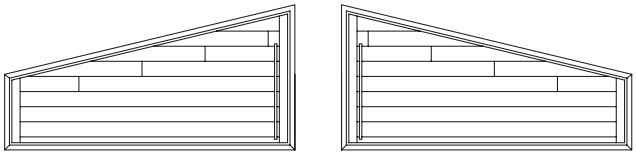
Minimum Width:	24″
Maximum Width:	72″
Minimum Height:	12″
Maximum Height:	48″
Minimum Leg Length:	7″
Maximum Leg Length:	24″

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

Note: A Tunnel is an extended Half Circle. The height minus the leg height should equal 1/2 of the width. See Page H2 for available tilt options.

Shapes and Specifications
Specialty Shapes

HALF RAKE (LEFT & RIGHT)

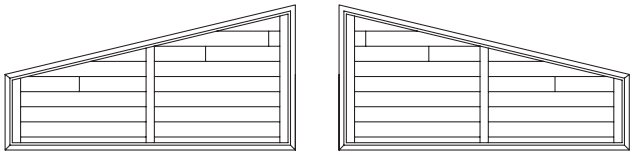


Half Rake with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	30″
Minimum Leg Length:	7″
Maximum Leg Length:	30″

Clearview ***not*** *available*

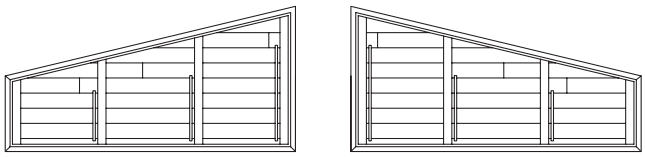


Half Rake with Clearview and 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24″
Maximum Width:	60″
Minimum Height:	12″
Maximum Height:	40″
Minimum Leg Length:	7″
Maximum Leg Length:	40″

Clearview or off-set tilt bar optional



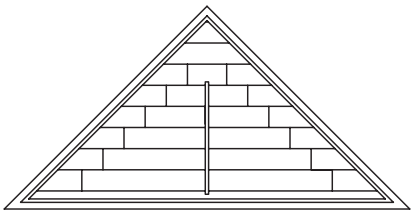
Half Rake with Tilt Bar, and 2 Vertical Supports

Specifications - Two Vertical Supports

Minimum Width:	24″
Maximum Width:	72″
Minimum Height:	12″
Maximum Height:	60″
Minimum Leg Length:	7″
Maximum Leg Length:	60″

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

SYMMETRICAL ANGLE TOP

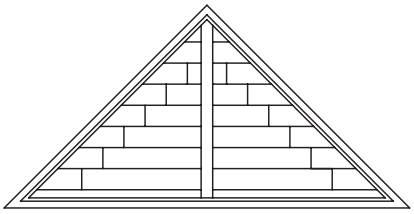


Symmetrical Angle Top with Tilt Bar & No Vertical Support

Specifications - No Vertical Support

Minimum Width:	24″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	15″

Clearview ***not*** *available*

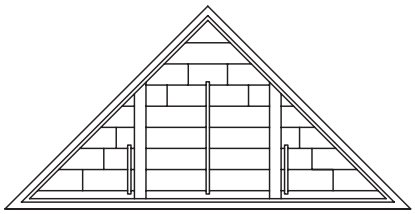


Symmetrical Angle Top with CLearview and
1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24″
Maximum Width:	60″
Minimum Height:	12″
Maximum Height:	30″

Clearview or off-set tilt bar optional



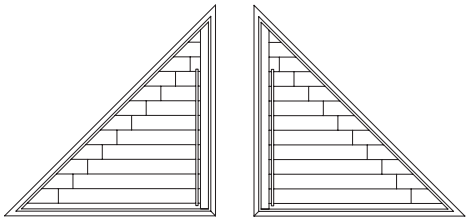
Symmetrical Angle Top with Tilt Bar, and
2 Vertical Supports

Specifications - Two Vertical Supports

Minimum Width:	24″
Maximum Width:	72″
Minimum Height:	12″
Maximum Height:	36″

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

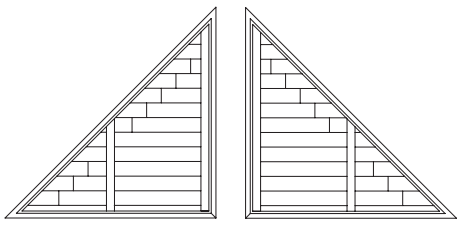
ANGLE TOP (LEFT & RIGHT)



Angle Top with Tilt Bar & No Vertical Support

Minimum Width:	12″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	30″

Clearview ***not*** *available*

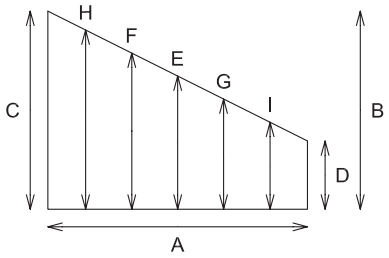


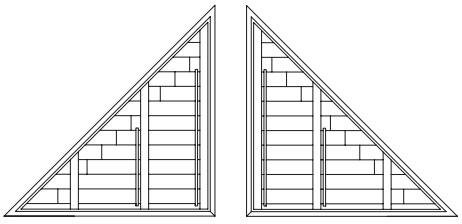
Angle Top with Clearview and 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	24″
Maximum Width:	40″
Minimum Height:	24″
Maximum Height:	40″

Clearview or off-set tilt bar optional





Angle Top with Tilt Bar, and 2 Vertical Supports

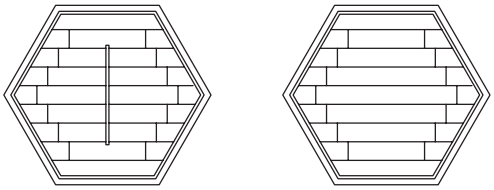
Specifications - Two Vertical Supports

Minimum Width:	24″
Maximum Width:	60″
Minimum Height:	24″
Maximum Height:	60″

Clearview and tilt bar optional (tilt bar on outside sections will be off-set only)

Shapes and Specifications
Specialty Shapes

HEXAGON

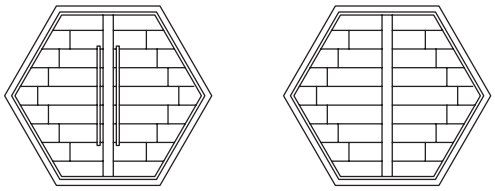


Hexagon with No Vertical Support

Specifications - No Vertical Support

Minimum Width:	12″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	30″

Clearview ***not*** *available*

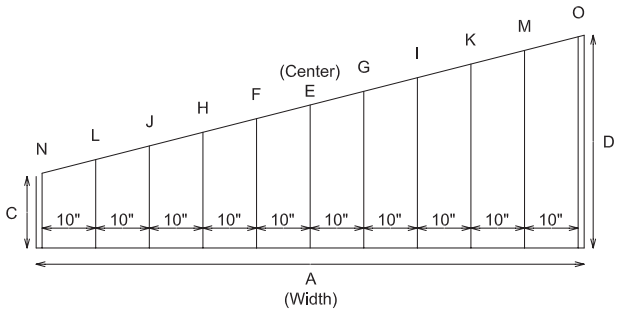


Hexagon with 1 Vertical Support

Specifications - One Vertical Support

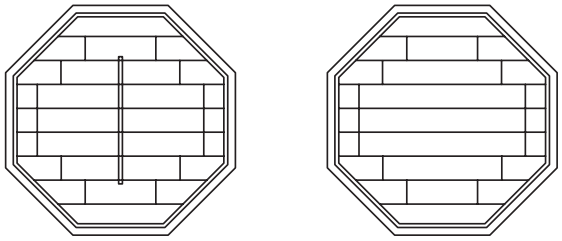
Minimum Width:	30″
Maximum Width:	40″
Minimum Height:	30″
Maximum Height:	40″

Clearview or off-set tilt bar optional



Shapes and Specifications
Specialty Shapes

OCTAGON

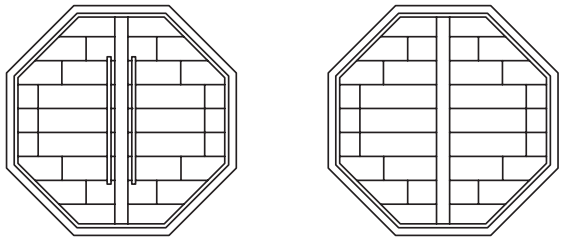


Octagon with No Vertical Support

Specifications - No Vertical Support

Minimum Width:	12″
Maximum Width:	30″
Minimum Height:	12″
Maximum Height:	30″

Clearview ***not*** *available*

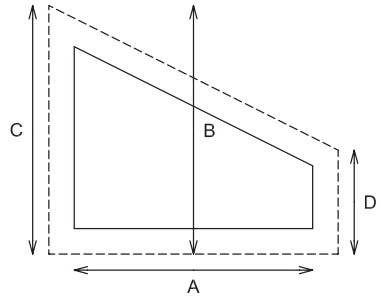


Octagon with 1 Vertical Support

Specifications - One Vertical Support

Minimum Width:	30″
Maximum Width:	40″
Minimum Height:	30″
Maximum Height:	40″

Clearview or off-set tilt bar optional

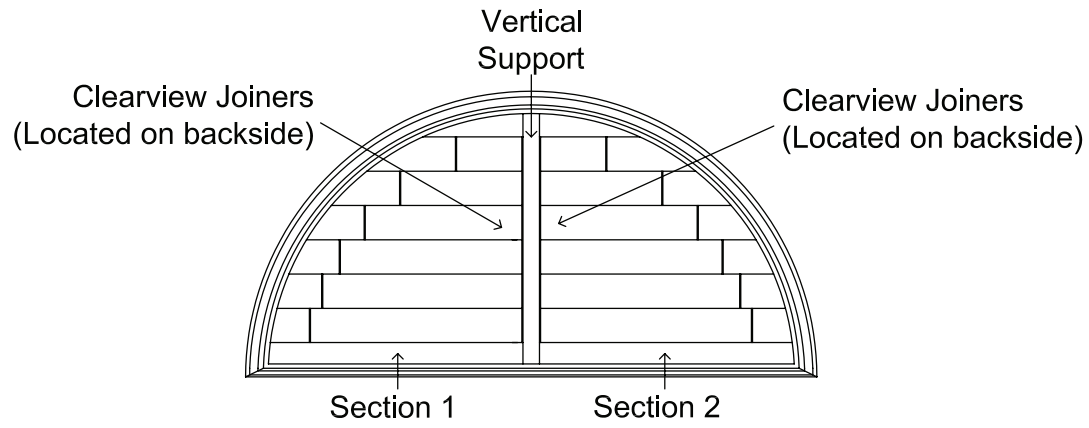


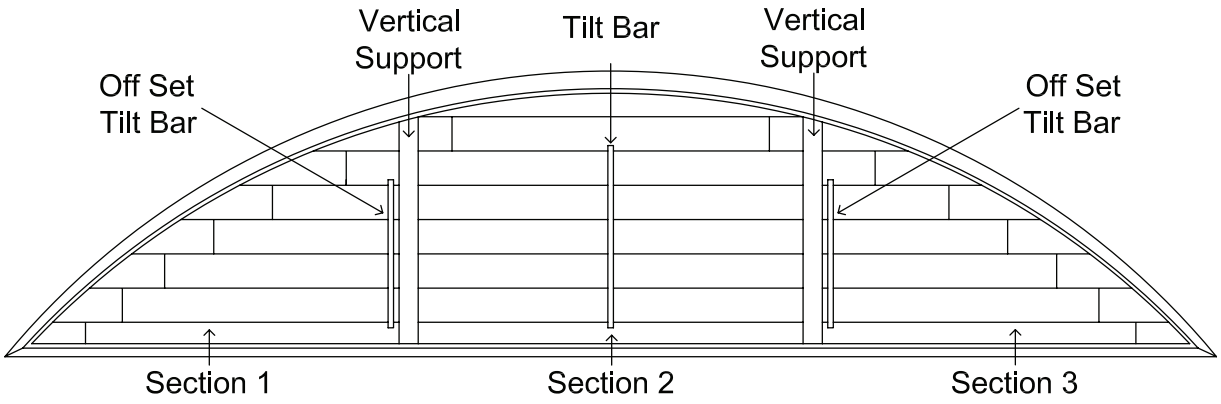
Vertical Support
Specialty Shapes

A Vertical Support is the vertical member of the arch that divides the arch into multiple sections and provides strength and rigidity. Smaller arches (less than 30") do not require Vertical Supports but may be ordered with them. Vertical Supports are required based on width. The specifications are listed below.

VERTICAL SUPPORT REQUIREMENTS

- 0 Vertical Supports = 0" - 30"
- 1 Vertical Support = 30 1/8" - 60"
- 2 Vertical Supports = 60 1/8" - 72"
- 3 Vertical Supports = 72 1/8" - 108"





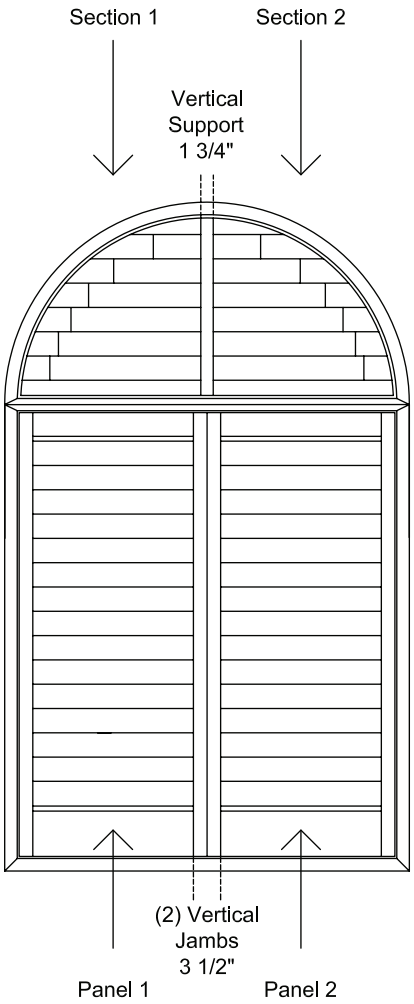
Vertical Support
Specialty Shapes

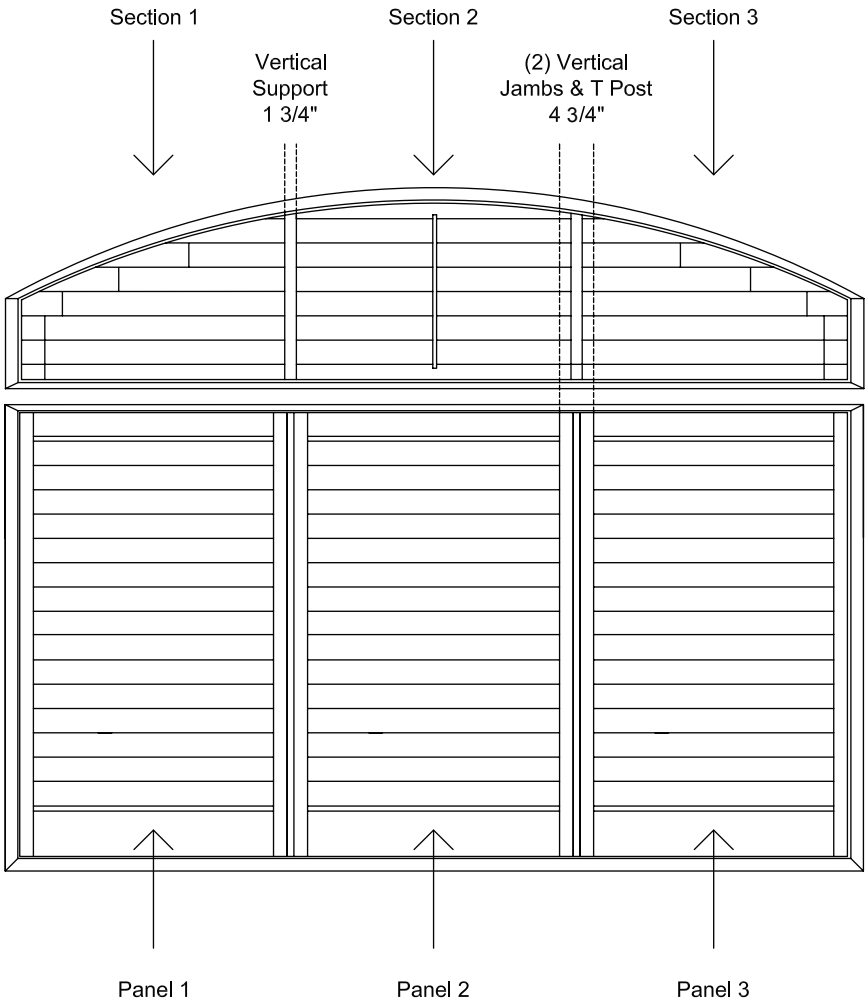
When ordering larger shutters that require Vertical Supports or when adding Vertical Supports to smaller shutters, it is important to remember that there will be a size difference between the Vertical Support, Vertical Jambs, and the T Posts in the shutter below.

Vertical Support Width = 1 3/4"
(2) Vertical Jamb Widths = 3 1/2"
(2) Vertical Jamb Widths + T Post = 4 1/4"

Example: See diagram below. The two panel shutter has a two section arch above. The Vertical Support in the arch is half the size of the jambs but is in alignment with the vertical jambs of the panel below.

Note: In order to achieve a consistent look, order the shutter below and the arch above with the same number of panels and sections. Submit the shutter and arch orders together.



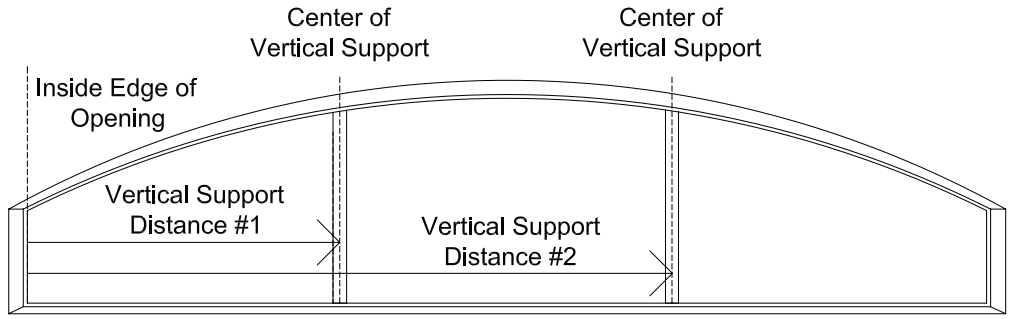


UNEVEN VERTICAL SUPPORT LOCATIONS

Inside Mount

1. Record the number of sections on the Eclipse Specialty Shape Order Form
2. Measure from the left inside edge of the opening to the center of the first Vertical Support location
3. Record this measurement on the order form under Vertical Support locations
4. Repeat steps 2 and 3 measuring from the left edge of the opening to the center of the second Vertical Support
5. Submit the shutter and arch orders together

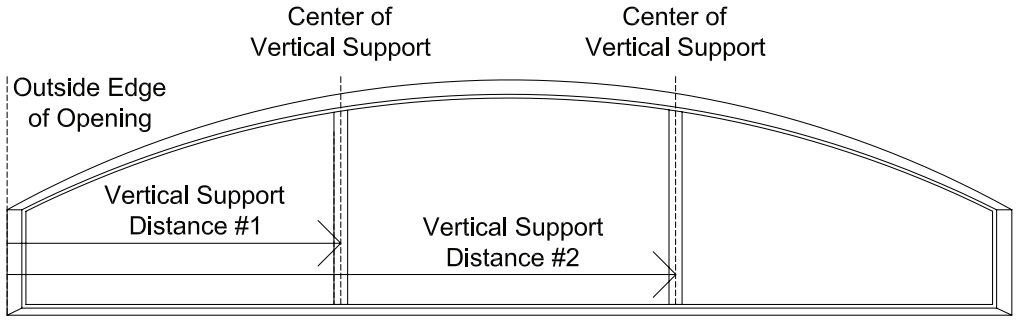
Note: When 3 vertical supports are ordered with specific locations, the middle vertical support will be in the center of the arch.



Outside Mount

1. Record the number of sections on the Eclipse Specialty Shape Order Form
2. Measure from the left outside edge of where the arch is to be installed to the center of each Vertical Support location
3. Record this measurement on the order form under Vertical Support locations
4. Repeat steps 2 and 3 measuring from the left edge of the opening to the center of the second Vertical Support
5. Submit the shutter and arch orders together

Note: When 3 vertical supports are ordered with specific locations, the middle vertical support will be in the center of the arch.

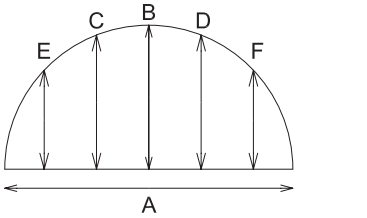


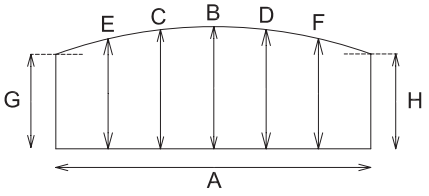
Note: The maximum distance between vertical supports is 32 ½".

Measuring Guidelines
Specialty Shapes

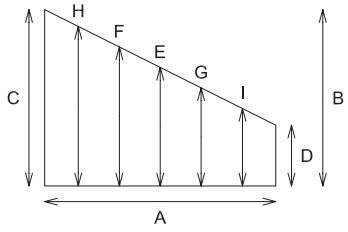
INSIDE MOUNT

1. Measure the width - measure the inside width of the window frame along the bottom of the opening (A)
2. Measure the height
    A) Measure the inside height of the window frame at the center to the highest vertical point (B)
    B) From center point B, measure out every 9” and make a mark
    C) At each mark, measure vertically to the edge of the opening
    D) Note each vertical dimension on the order form or supply sketch and include all dimensions
    E) See page 18 for details

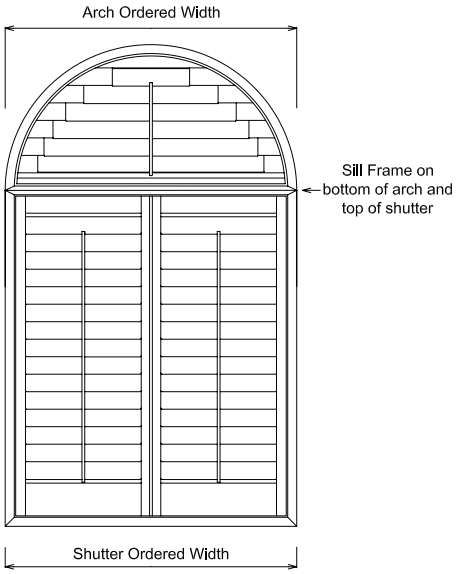




3. Measure legs (Tunnels and Eyebrows only)
    A) Measure from the bottom of where the arch will be located to the point at which the radius begins (G & H)
    B Measure both sides and record the smallest measurement.



3. Depth clearance - ensure there is enough depth clearance to install the arch and enough room to operate the louvers (specialty shape clearances are the same as standard shutters)
4. Create template for any specialty shape that does not have a consistent radius
5. Framed arch mounted to framed shutter
    A) The width of the arch and the width of the shutter below must be the same dimension
    B) Measure the shutter opening to first determine the width
    C) Measure the shutter opening and determine the height of the shutter, mark this point since this will be the measuring point for the arch
    D) Measure the width of the arch from the top of the shutter to the top of the opening
    E) When using the T Frame, D Frame or Z Frame, the arch must include Sill Frame at the bottom and the shutter must include Sill Frame at the top

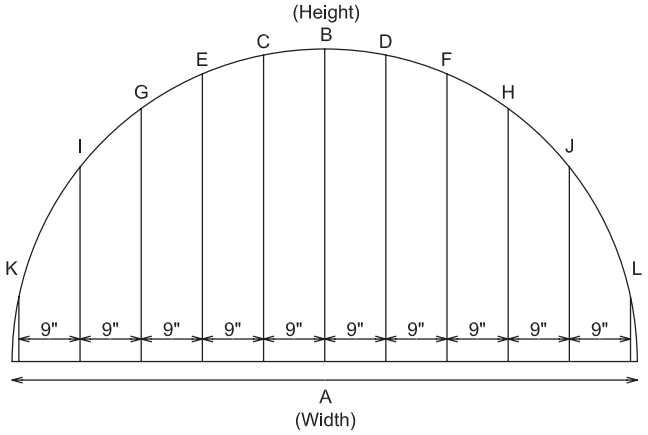


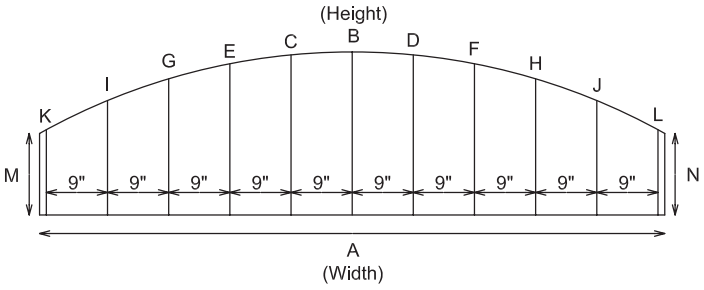
    F) If needed, decrease the dimension of the shutter below to allow for proper fit of the arch
    G) T Frame and D Frame are recommended due to the size of the flanges which allows the shutter to be undersized slightly but ensures the frame will cover the increased gap between the frame and the opening

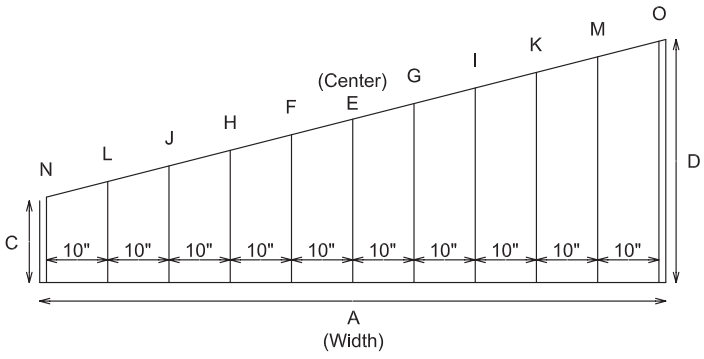
Measuring Guidelines
Specialty Shapes

INSIDE MOUNT - INTERMEDIATE HEIGHTS

1. Determine center point across the width of the opening
2. Measure out from the center point every 9” in both directions and make a mark
3. At each mark, measure vertically to the edge of the opening (If the measurement is not perpendicular to the base, the actual dimensions will be inaccurate.)
4. Make sure that the corresponding dimensions are the same or very similar (Ex: Measurements C and D should be the same, E and F the same, etc.)
5. The specialty shape shutter will be built to fit the smallest measurement provided.
6. If the order form does not contain enough blanks to provide all necessary information, then please supply a sketch with all dimensions. Submit sketch along with the specialty shape order form.



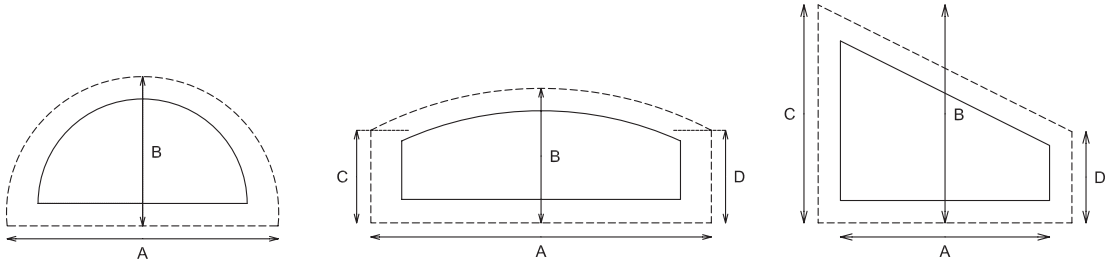




Measuring Guidelines
Specialty Shapes

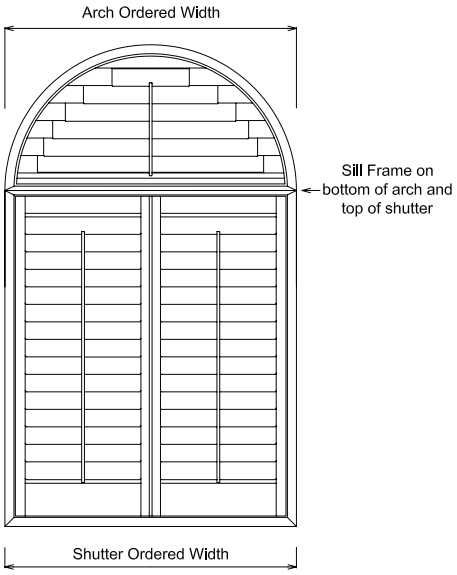
OUTSIDE MOUNT

1. Measure the width - measure to the outermost desired point to which the arch frame will extend across the bottom of the opening (A)
2. Measure the height - measure from where the outside bottom of the arch will be to the highest point at the center of the opening (B)
3. Measure legs (Tunnels and Eyebrows only)
    A) Measure from the bottom of where the arch will be located to the point at which the radius begins (C & D)
    B) Measure both sides and split the difference if any



4. Depth clearance - ensure there is enough depth clearance to install the arch and enough room to operate the louvers

   (specialty shape clearances are the same as standard shutters)
5. Create template for any specialty shape that does not have a consistent radius.
6. Framed arch mounted to framed shutter
    A) The width of the arch and the width of the shutter below must be the same dimension
    B) Measure the shutter to first determine the width
    C) Measure the shutter and determine the height of the shutter, mark this point since this will be the measuring point for the bottom of the arch
    D) Measure the height of the arch from the mark indicating the top of the shutter
    E) If needed, adjust the dimension of the shutter below to allow for proper fit of the arch



Ordering
Specialty Shapes

COMPLETING THE ORDER FORM

1. Line Number
2. Room – enter the room location for each arch
3. Arch Type – enter the desired arch type. Select from one of the 11 available shapes.
4. Width – measure in inches across the bottom of the opening, make sure this matches the shutter below if applicable
5. Height – measure the height in inches from the base of the opening to the highest point of the arch
6. Louver Size – select louver size
   A) 2 ½" B) 3 ½"
7. Color – select from one of four colors
   A) Cotton B) Pearl C) Vanilla
8. Tilt Bar – tilt control is determined by the type of arch, configuration, size and vertical support
   A) Tilt Bar B) Clearview
9. Tilt Bar Location – select the location of the Tilt Bar
   A) Front B) Rear
10. Mount – select either Inside Mount or Outside Mount
11. Frame Type
    A) Deluxe Trim Frame B) Trim Frame C) Z Frame D) L Frame E) Casing Frame F) Casing Sill Frame G) No Frame (magnets only)
12. Sill Frame– select (Yes or No) if arch will sit on top of a framed shutter or a protruding sill
13. Sill Frame Location - select from Top, Bottom, Left or Right (or select a combination of sill locations)
14. Frame Extensions - L Frame and Casing Frame are each available with either none or one frame extension
15. Vertical Support (Yes or No) – creates multiple louvers sections horizontally within the arch, the size of the arch will also dictate the number of vertical supports required
16. Quantity of Vertical Supports – vertical supports can be added to an arch that does not require them, or a second vertical support can be added to an arch that only requires one (limit of 3 per arch)
17. Arch Attached or Aligns with Shutter - select "Yes" if the arch is to be attached to the shutter below or if the width must align with the shutter below
18. Measure Straight Side – measure from the bottom of the opening up the straight side to the point at which the radius or angle begins.
19. Vertical Support Locations - enter the distance from the left of the opening to the center of where the first vertical support should be, repeat for the second vertical support (See Page H17)
20. Notes – enter any special instructions that need to be added
21. Submit Specialty Shape Order Form and Shutter Order Form together to ensure a consistent look between the shutter and the arch above

Line #	Room	Arch Type	Width	x	Height	Louver Size	Color	Tilt Bar	Tilt Bar Location	Mount	Frame Type	Sill Frame	Sill Frame Location	Frame Extension	Vertical Support	No. of Vertical Supports	Arch Attached or Aligns with Shutter
		Quarter-Circle L Quarter-Circle R Half-Circle Elliptical Eyebrow Tunnel	Inside Mount - Smallest Opening Size Outside Mount - Largest Opening Size			2½" 3½"	Cotton Pearl Vanilla	Yes No Note: Vertical Support required for Clearview option	Front Rear	IM (Inside) OM (Outside)	Deluxe Trim Trim Frame Z Frame L Frame Casing Frame No Frame	Yes No	Top Bottom Left Right Etc.	Yes No	Yes No Note: Vertical Supports required for shapes over 30" wide	0 1 2 3	Yes No
①	②	③	④	x	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰

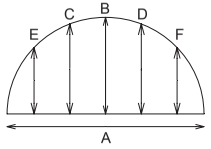
ECLIPSE™ SHUTTERS

SPECIALTY SHAPES ORDER FORM

To be completed by the dealer				Ordered by:	To be completed by fabricator	SPECIAL INSTRUCTIONS
Acct No:	Acct Name:			Deliver/Ship to:	Date Received: Date Entered:	
Address:				Address:	Projected Completion Date:	
City:	State:	Zip:	Check One: ☐ Deliver ☐ Will Call ☐ Ship	City: State: Zip:	Reference No:	
P.O.:	Sidemark:		Phone #: Fax #:	Page of Pages	Units this page: Total Units this Orders:	

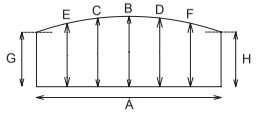
Line #	Room	ARCH TYPE	WIDTH	X	HEIGHT	LOUVER SIZE	COLOR	TILT BAR	TILT BAR LOCATION	MOUNT	FRAME TYPE	SILL FRAME	SILL FRAME LOCATION	FRAME EXTENSION	VERTICAL SUPPORT	NO. OF VERTICAL SUPPORTS	ATTACH OR ALIGN WITH SHUTTER
		Quarter-Circle Left Quarter-Circle Right Half Circle Tunnel Elliptical Eyebrow Angle Top Left Angle Top Right Symmetrical Angle Top Full Rake Half Rake Left Half Rake Right Hexagon Octagon	Inside Mount = Smallest Opening Size Outside Mount = Largest Opening Size			2 1/2" or 3 1/2"	Cotton Pearl Vanilla	Yes No Note: Vertical Support required for Clearview option.	Front or Rear	IM (Inside) or OM (Outside)	Deluxe Trim Frame Trim Frame Z Frame L Frame Casing Frame	Yes or No	T B TB TBL Etc	Yes or No	Yes or No Note: Vertical Supports required on shapes over 30" wide.	0 1 2 3	Yes or No
				X													

EXAMPLE: HALF CIRCLE



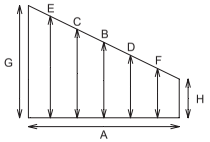
Half-Circles, Ellipticals, & Quarter-Circles require width and height measurements.

EXAMPLE: EYEBROW



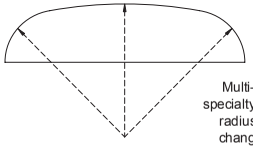
Eyebrows, Tunnels, Full Rake & Half Rakes require an additional measurement of the leg height.

EXAMPLE: HALF RAKE



The center measurement for Half Rakes, Angle Tops and Quarter Circles will be different than the overall height.

MULTI-RADIUS ARCHES



Multi-radius arches are specialty shapes in which the radius or curved portion changes. These shapes always require templates.

DRAW SHAPE & INCLUDE ALL MEASUREMENTS IN THE BLANKS PROVIDED BELOW

Measure height to the tallest point of the shape

B HEIGHT

Measure the left side leg height

C LEG HEIGHT

Measure the right side leg height

D LEG HEIGHT

Vertical Support dimensions not required if supports are evenly spaced

Left Vertical Support

Measure the width to the widest point of the shape

A WIDTH

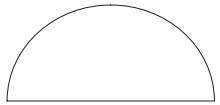
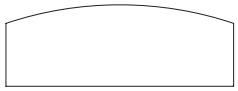
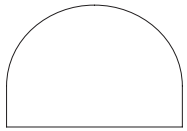
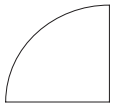
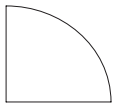
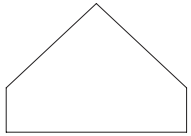
The center Vertical Support will always be centered on shapes with 3 Verticals

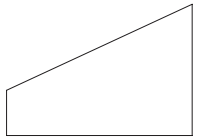
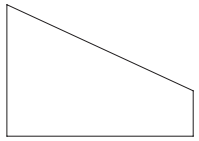
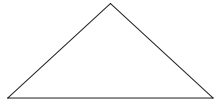
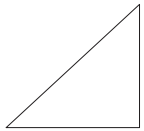
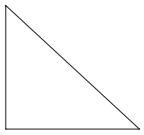
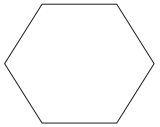
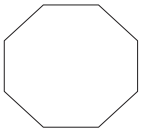
Right Vertical Support

Find center point of shape. Measure out from the center every 10", then measure vertically. Provide thes measurements.

P	N	L	J	H	F	E	G	I	K	M	O	Q
LEFT #6	LEFT #5	LEFT #4	LEFT #3	LEFT #2	LEFT #1	CENTER	RIGHT #1	RIGHT #2	RIGHT #3	RIGHT #4	RIGHT #5	RIGHT #6

ECLIPSE SHUTTERS SPECIALTY SHAPE SPECIFICATIONS

SHAPE	# OF VERTICALS	WIDTH MIN	WIDTH MAX	HEIGHT MIN	HEIGHT MAX	LEG MIN	LEG MAX
 HALF CIRCLE	Half Circle Specifications						
	0	24"	30"	12"	15"		
	1	24"	60"	12"	30"		
	2	24"	72"	12"	36"		
	3	24"	92"	12"	46"		
 ELLIPTICAL	Elliptical Specifications						
	0	24"	30"	12"	15"		
	1	24"	60"	12"	30"		
	2	24"	72"	12"	36"		
	3	24"	92"	12"	46"		
 EYEBROW	Eyebrow Specifications						
	0	24"	30"	12"	36"	7"	24"
	1	24"	60"	12"	36"	7"	24"
	2	24"	72"	12"	36"	7"	24"
	3	24"	108"	12"	36"	7"	24"
 TUNNEL	Tunnel Specifications						
	0	24"	30"	16"	39"	3.5"	24"
	1	24"	39"	16"	39"	3.5"	24"
	2	24"	48"	16"	39"	3.5"	24
	3	24"	48"	16"	39"	3.5"	24"
 QUARTER CIRCLE LEFT	Quarter Circle Left Specifications						
	0	12"	30"	12"	30"		
	1	24"	40"	24"	40"		
	2						
	3						
 QUARTER CIRCLE RIGHT	Quarter Circle Right Specifications						
	0	12"	30"	12"	30"		
	1	24"	40"	24"	40"		
	2						
	3						
 FULL RAKE	Full Rake Specifications						
	0	24"	30"	12"	48"	7"	24"
	1	24"	60"	12"	48"	7"	24"
	2	24"	72"	12"	48"	7"	24"
	3						

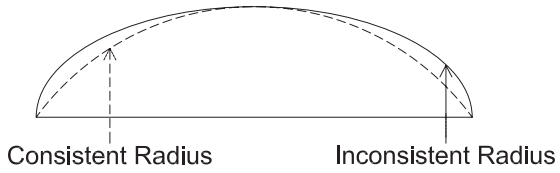
SHAPE	# OF VERTICALS	WIDTH MIN	WIDTH MAX	HEIGHT MIN	HEIGHT MAX	LEG MIN	LEG MAX
 HALF RAKE LEFT	Half Rake Left Specifications						
	0	24"	30"	12"	30"	7"	24"
	1	24"	60"	12"	40"	7"	24"
	2	24"	72"	12"	60"	7"	24"
	3						
 HALF RAKE RIGHT	Half Rake Right Specifications						
	0	24"	30"	12"	30"	7"	24"
	1	24"	60"	12"	40"	7"	24"
	2	24"	72"	12"	60"	7"	24"
	3						
 SYMMETRICAL ANGLE TOP	Symmetrical Angle Top Specifications						
	0	24"	30"	12"	15"		
	1	24"	60"	12"	30"		
	2	24"	72"	12"	36"		
	3						
 ANGLE TOP LEFT	Angle Top Left Specifications						
	0	12"	30"	12"	30"		
	1	24"	40"	24"	40"		
	2	24"	60"	24"	60"		
	3						
 ANGLE TOP RIGHT	Angle Top Right Specifications						
	0	12"	30"	12"	30"		
	1	24"	40"	24"	40"		
	2	24"	60"	24"	60"		
	3						
 HEXAGON	Hexagon Specifications						
	0	12"	30"	12"	30"		
	1	30"	40"	30"	40"		
	2						
	3						
 OCTAGON	Octagon Specifications						
	0	12"	30"	12"	30"		
	1	30"	40"	30"	40"		
	2						
	3						

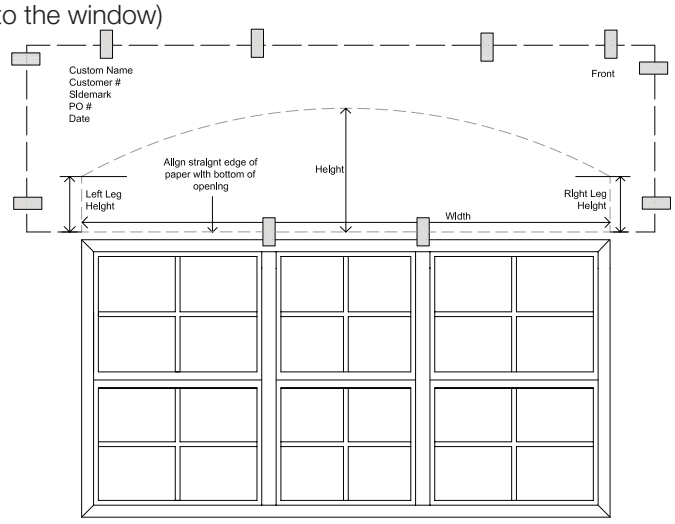
Creating A Template (Inside Mount)
Specialty Shapes

CREATING A TEMPLATE FOR AN ARCH SHUTTER - TEMPLATES ARE ONLY REQUIRED FOR SHAPES THAT DO NOT HAVE A CONSISTENT RADIUS

Note: An arch with an inconsistent radius is one that the radius varies or changes along the arc. Example: the top center of the arc has a gradual curve while the sides curve sharply. Templates are required in these situations.

1. Use heavy paper such as craft paper or butcher paper
2. Make sure the paper will extend beyond the entire arch window both in width and height (tape multiple sheets together, if necessary)
3. The paper should be applied with tape (preferably painters tape so that it won't remove paint from the walls) or thumb tacks
4. The paper should be smooth and tight over the entire opening
5. Align straight edge of paper with the bottom of the opening
6. Using a pencil, outline or trace the perimeter of the arch
7. Make sure that all lines are clear and precise
8. Once the outline of the arch is complete, remove the template
9. Carefully measure the template for accuracy
10. If the template is not accurate, then modify the template or remake it
11. Note all dimensions on the room side of the template
    - A) Width
    - B) Height (measure perpendicular to the bottom of the opening at the exact center)
    - C) Side Legs (if applicable)
    - D) Location of Vertical Supports (if applicable)
12. The measurements of the template, measurements on the template, and the measurements on the order form must all match.
13. Write "front" on the front side of the template (this will be the side of the paper facing in towards the room when it was attached to the window)
14. The following information must appear on the template:
    - A) Company Name
    - B) Customer Account Number
    - C) Sidemark
    - D) Purchase Order Number
    - E) Date
15. Roll the template and send to local fabricator along with copy of the order form. (Do not fold template)



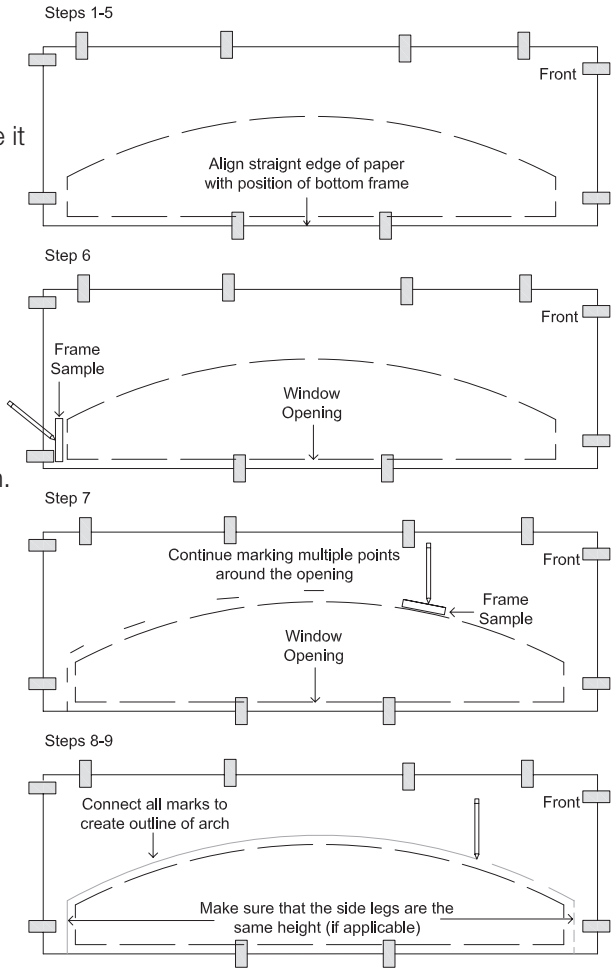


Note: Templates will be retained for a period of 12 months, in case of remakes, damages, etc.

Creating A Template (Outside Mount)
Specialty Shapes

CREATING A TEMPLATE FOR AN ARCH SHUTTER - TEMPLATES ARE ONLY REQUIRED FOR SHAPES THAT DO NOT HAVE A CONSISTENT RADIUS

1. Use heavy paper such as craft paper or butcher paper
2. Make sure the paper will extend beyond the entire arch window both in width and height (tape multiple sheets together, if necessary)
3. The paper should be applied with tape (preferably painters tape so that it won't remove paint from the walls) or thumb tacks
4. The paper should be smooth and tight over the entire opening
5. Align straight edge of paper with the bottom of the opening or the desired location of the bottom of the arch
6. Place the selected frame on the template at the desired distance away from the opening. Using a pencil, make a mark on the template behind the frame
7. Repeat step 6 in multiple locations to outline the entire arch
8. Connect all pencil marks to complete the shape
9. Make sure that all lines are clear and precise
10. Once the outline of the arch is complete, remove the template
11. Carefully measure the template for accuracy
12. If the template is not accurate, then modify the template or remake it
13. Note all dimensions on the room side of the template
    - A) Width
    - B) Height (measure perpendicular to the bottom of the opening at the exact center)
    - C) Side Legs (if applicable)
    - D) Location of Vertical Supports (if applicable)
14. The measurements of the template, measurements on the template, and the measurements on the order form must all match.
15. Write "front" on the front side of the template (this will be the side of the paper facing in towards the room when it was attached to the window)
16. The following information must appear on the template:
    - A) Company Name
    - B) Customer Account Number
    - C) Sidemark
    - D) Purchase Order Number
    - E) Date
17. Roll the template and send to local fabricator along with copy of the order form. (Do not fold template)



Note: Templates will be retained for a period of 12 months, in case of remakes, damages, etc.

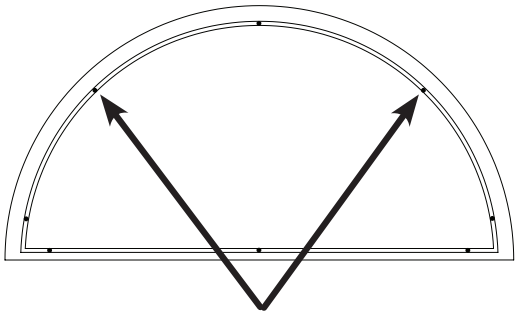
Installation Guidelines
Specialty Shapes

ARCH FRAME AND PANEL INSTALLATION - INSTALLED INDEPENDENT OF STANDARD SHUTTER

Step 1:
If multiple arches have been ordered for the same job, then review the labels for each arch to correctly identify which arch is used in each opening.

Step 2:
Set the frame in the opening and center. Make sure the bottom frame of the arch is level.

Step 3:
Install (2) screws into the curved portion of the frame. Screws should be placed in the top left and top right of the curve as illustrated below.



BEGIN WITH 2 INSTALLATION HOLES
DO NOT OVERTIGHTEN

Step 4:
With only (2) screws in place, it is safe to dry fit the panel. Make sure that the panel fits properly and the gap between the panel and the frame is consistent.

Step 5:
Move the bottom frame of the arch left or right to create the proper gaps around the arched panel. Make a vertical line on the bottom frame of the arch and onto the opening.

Step 6:
Remove the panel and move the bottom frame of the arch left or right until it is in alignment with the line on the opening.

Step 7:
Set a screw into the bottom frame of the arch to secure it to the window opening.

Step 8:
Place the panel back in the frame and make sure that the panel fits properly.

Step 9:
Set all remaining screws, making sure not to over-tighten. Set the panel back in place at any point to ensure proper alignment.

Step 10:
The panel will be held in place by the Panel Lock system. Adjust the depth of the plungers if necessary to provide good fit and hold the panel in the frame.

Step 11:
Magnets will be supplied with each arch depending on size. The magnets are used to help ensure the panel remains secure in the frame. Attach a magnet to the top center of the opening or evenly space magnets across the top frame.

Step 12:
Install screw cover button plugs to hide installation holes. If button plugs will not seat properly, tighten the screw inside the installation hole so it does not interfere.

Installation Guidelines
Specialty Shapes

ARCH FRAME AND PANEL INSTALLATION - INSTALLED DIRECTLY TO SHUTTER BELOW

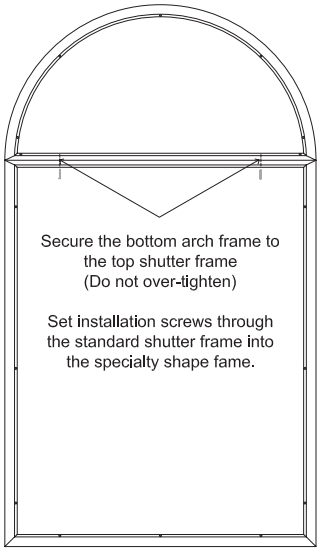
Step 1:
If multiple arches have been ordered for the same job, then review the labels for each arch to correctly identify which arch is used in each opening.

Step 2:
If an arch is to be mounted directly to the top of a shutter below, then install the shutter first. See Standard Window Installation Guidelines for details.

Step 3:
Set the frame in the opening. Align the bottom frame of the arch with the top frame of the shutter. (Use hand clamps to clamp the frames together while installing)

Step 4:
Set (2) 1" by-pass screws (or similar) through the top frame of the shutter into the bottom frame of the arch.

Step 5:
With only (2) screws in place, it is safe to dry fit the panel. Make sure that the panel fits properly and the gap between the panel and the frame is consistent.



Step 6:
Move the top frame of the arch left or right to create the proper gaps around the arched panel. Make a vertical line on the top frame of the arch and onto the opening.

Step 7:
Remove the panel and move the top frame of the arch left or right until it is in alignment with the line on the opening.

Step 8:
Set a screw into the top frame of the arch to secure it to the window opening.

Step 9:
Place the panel back in the frame and make sure that the panel fits properly.

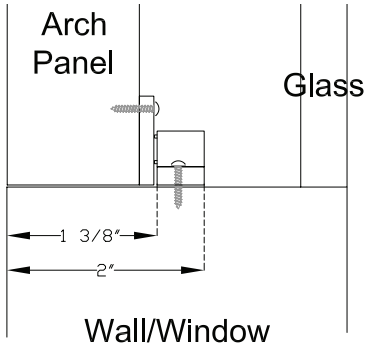
Step 10:
Set all remaining screws, making sure not to over-tighten. Set the panel back in place at any point to ensure proper alignment.

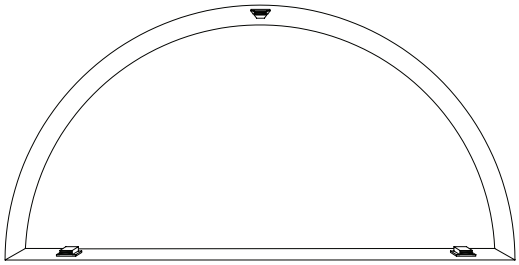
Step 11:
The panel will be held in place by the Panel Lock system. Adjust the depth of the plungers if necessary to provide good fit and hold the panel in the frame.

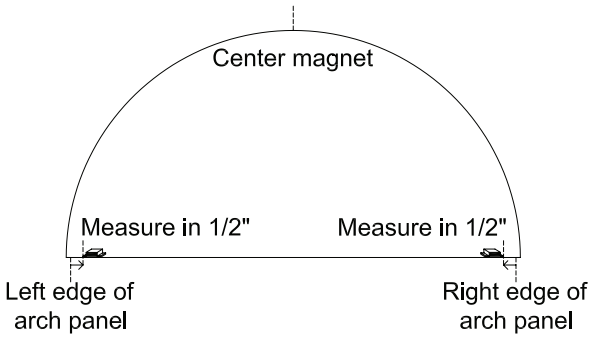
Step 12:
Magnets will be supplied with each arch depending on size. The magnets are used to help ensure the panel remains secure in the frame. Attach a magnet to the top center of the opening or evenly space magnets across the top frame.

Step 13:
Install screw cover button plugs to hide installation holes. If button plugs will not seat properly, tighten the screw inside the installation hole so it does not interfere.

ARCH FRAME INSTALLATION - NO FRAME (INSIDE MOUNT ONLY)







Policies & Cleaning

Cancellations

Merchandise is custom made to your specifications and cannot be cancelled once the materials are cut. Cutting often takes place within one hour of order placement. We are not responsible for verbal cancellations. When your cancellation is accepted, you will be given a cancellation number. We do not cancel or change orders without this number. We do not accept responsibility for any cancellation without a cancellation number.

General Return Policy

All returned merchandise must have prior approval. Call your Customer Service for an RGA (Returned Goods Authorization). Be prepared to provide this information.

- Your account name and number.
- The sidemark, quantity and size.
- The work order number and line item number.
- Clear and specific details on why the product is being returned.

Replacement

When replacement is applicable, the order will be entered on a rush basis and delivered to you as quickly as possible. However, you will be charged for the replacement until the original item is returned to the factory and verified. Only when the original is returned and the error verified, will a credit be issued.

Reimbursement

Returns for credit must be authorized prior to return.

- The original product must be returned to our factory within 45 days for a credit.
- We are not responsible for installation or reinstallation charges.

Care & Cleaning

Regular dusting with a soft cloth or magnetic dusting wand will maintain the beauty of your shutters.
Over time, shutters collect a layer of surface dust which normal dusting may not remove. A more thorough cleaning can be achieved by using the following procedures.

1) Mix a mild solution of diluted household liquid cleaner such as dishwashing liquid with water.
2) Do not spray cleaner directly onto the shutter.
3) Never use a cleaner with any kind of abrasive or ammonia based products.
4) Never use WD-40. It is oil based and may stain the shutters.

CAUTION: DO NOT USE ABRASIVES OR SOLVENTS TO CLEAN SHUTTERS.

FOR WARRANTY PURPOSES, SHUTTERS MUST BE CLEANED REGULARLY.

25 YEAR WARRANTY

ECLIPSE™
SHUTTERS

Shutters are warranteed by

ECLIPSE™ SHUTTERS
The Manufacturer

To: The Original Owner

Purchaser's Name

Purchaser's Address

Purchased at: Name of Retailer/Dealer Date Purchased:

Installed by: Name of Installation Company Date Installed:

Eclipse Shutters are intended for interior use only. See reverse for terms and conditions contained in this 25 Year Warranty.

March 2007

25 YEAR WARRANTY REGISTRATION CERTIFICATE

Purchasers Name

Purchasers Address

Purchased at: Name of Retailer/Dealer Date Purchased:

Installed by: Name of Installation Company Date Installed:

25 YEAR WARRANTY

Warranty on Shutter Frame and Shutter Panel

Shutters are warranted against such defects in material that might result in blistering, peeling, flaking, corroding, and fading of the shutter frame or panel members for a period of twenty-five (25) years from the date of installation.

This Warranty on the Polyresin3® frame and Polyresin3® panels shall remain in effect only if normal cleaning practices are followed periodically (see section "Maintenance and Cleaning").

5 Year Warranty on Hardware

Eclipse™ warrants that the hardware will remain in good operational condition for a period of five (5) years from the date of installation.

General Conditions

This Warranty must be validated by having the Registration Certificate completed by the installer and the original purchaser and received by Eclipse™ Shutters no later than thirty (30) days after the completed installation. This will ensure the property owner is entitled to this 25 Year Warranty.

The Warranty stipulated in this document is the only warranty applicable to Eclipse™ Shutters and is granted in lieu of any warranties otherwise implied by law or equity and no such warranties shall apply to Eclipse™ Shutters 25 Year Warranty.

1. Product Use

This Warranty applies only in respect to products used strictly for the purpose for which they were intended. Eclipse Shutters are intended for internal use only.

2. Warranty Limitations

Eclipse™ Shutters liability is limited solely and exclusively to replacement, at the option of Eclipse™ and under no circumstances will Eclipse™ be liable for incidental or consequential charges such as, but not limited to, labor costs for any purpose, inconvenience, damage or injury to persons or to property, or any other expense.

3. Replacement Parts

Eclipse™ reserves the right to discontinue or change any Eclipse™ shutter as currently manufactured. If an exact replacement part is not available, Eclipse™ reserves the right to substitute parts of equal quality at its sole option.

Exclusions from Warranty Coverage

The following are excluded from coverage under this Warranty:

a. Exposure to air pollutants and normal atmospheric conditions may cause all Polyresin3® surfaces to gradually suffer an accumulation of surface dirt or stains. These are normal occurrences and are not covered under the Eclipse™ Warranty.
b. Any defect, malfunction, or failure to perform which has occurred because of unreasonable use, improper application, or failure to perform reasonable or necessary maintenance.
c. Any damage to the shutters or components of the shutters caused by settlement or structural defects of the building in which they are installed.
d. Any damage caused by wind, hail, lightning, or other acts of God, intentional acts, accidents, negligence, or exposure to harmful chemicals or pollutants.
e. Damage caused by improper handling or installation.
f. Any shutter which has been repaired or modified or attempted to have been repaired or modified by any person other than a duly authorized representative of Eclipse™ Shutters.
g. Shutters are light controlling but not black out.
h. Shutters made without divider rails, too wide, too high, or over the maximum square footage are not warranted.

Effective Date of Warranty

This Warranty will take effect from the date the installation of the shutters has been completed at the premises identified in the warranty certificate. The registration certificate must be submitted to Eclipse™ no later than thirty (30) days from the date of installation.

Maintenance and Cleaning

Polyresin3® materials are closer to "maintenance free" than any other building material.

However, surfaces may become dirty. Normal maintenance requires washing with mild soap and water using a soft cloth. For difficult to remove dirt and stains, water-based household cleaners can be used. Chlorine-based cleaners or other cleaners containing organic solvents could affect the surface appearance and durability of the product.

Procedure and Conditions of Warranty Remedy

Eclipse™ will not be responsible for any costs incurred in transporting shutters to and from the Eclipse™ plant.

In the event that the Eclipse™ obligation under this Warranty is sought, the Owner must notify the Dealer/ Distributor in writing within thirty (30) days after the defect has first appeared. Such notification must contain the following:

a. Name and address of the Owner.
b. Date of installation.
   A brief description of the defect.

ECLIPSE™
SHUTTERS

Custom Brands Group
12800 Center Court Dr., Suite 450
Cerritos, 90703