# **COMPOSITE SHUTTERS**

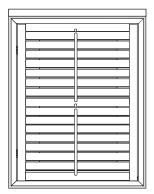
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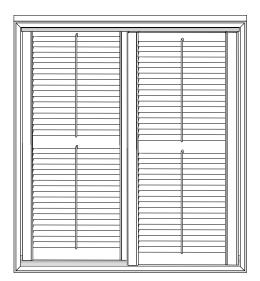


## **Features**

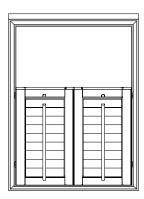
## SHUTTER STYLES



**Standard Panel:** A rectangular-shaped panel that can be installed using any frame style. Panel covers the entire window opening.



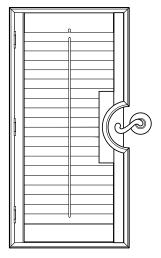
**Bypass Track System:** Shutter panels slide on a top track to open and close. The track system can be attached to a frame or mounted directly to a window casing or the ceiling. Ideal for patios or closet doors.



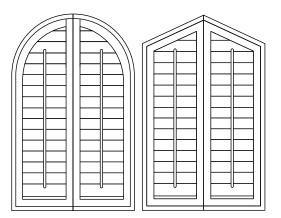
**Café:** Classic style covers the bottom part of the window, allowing light to enter while protecting your privacy. A good choice for bedrooms or bathrooms. Not recommended – tops are not finished.

## **Features**

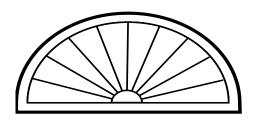
## CAFÉ SHUTTERS



**French Doors:** Add the beauty of shutters to French Doors. Curved or rectangular cutout options complement contemporary door handles or traditional door knobs.



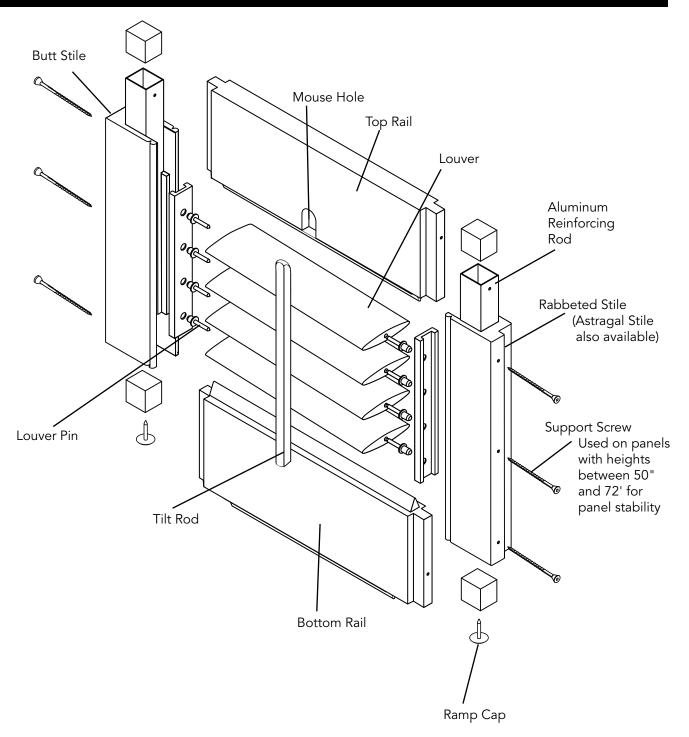
Arched or Angled Top Panels: Provide whole window solutions that fit the rounded shape of full arch windows perfectly. Angled panels accommodate slanted windows. Available in full arch or angle, ½ arch, or ¼ angle.



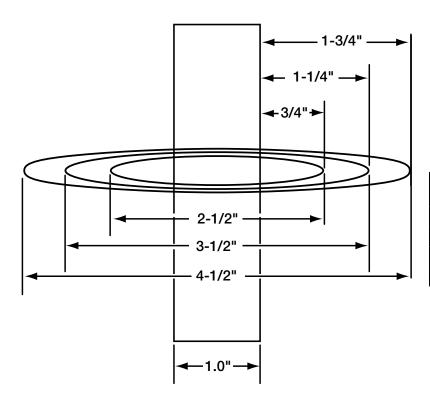
**Sunburst Arches:** Sunburst patterned louvers cover unique window silhouettes such as half round, eyebrow, elongated, and elliptical arches.

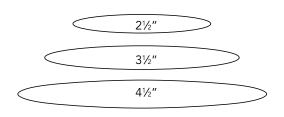
# **Features**

## PRODUCT ILLUSTRATION



## **LOUVER**





<b>Minimum Clearance Needed</b> From Back Panel Surface					
Louver Size Standard Tilt Hide-a-Tilt™					
2½"	3/4"	11//8"			
3½"	1%"				
4½" 1¾" 2½"					

Note: Hide-a-Tilt requires an additional 3/8" window clearance

#### 2½" Louver

- Traditional in style; most widely used louver size
- Minimal window depth needed
- Shutters are focal point of the room

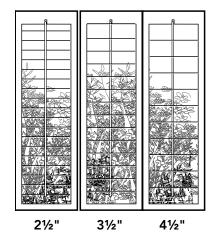
#### 3½" Louver

- Offers more visibility and light control than 21/2" louver
- Design flexibility when working with space around shutter

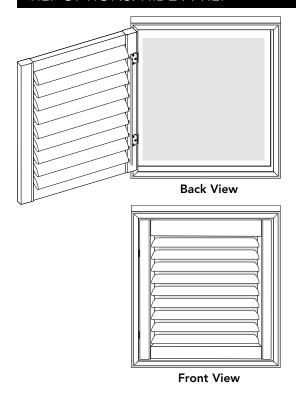
#### 4½" Louver

- Provides the greatest visibility through the open louvers
- Looks most proportionate in a larger window; view beyond the window becomes more important
- Louvers almost disappear when open

#### **Composite Louver Sizes**



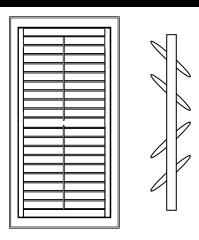
## TILT OPTIONS: HIDE-A-TILT™



Hide-a-Tilt Option offers the tilt mechanism in the back of the shutter panel, eliminating the traditional tilt bar and creating an unobstructed view, as well as a clean linear appearance. A thin stainless steel tilt bar is attached to the louvers in the rear of the panel. Operation of the shutter is as simple as positioning one louver into position; all of the other louvers will follow.

- Hide-a-Tilt bar will always be stainless steel color
- Hide-a-Tilt is mounted on hinge side for standard shutters
- No mouse hole in the panel
- Hide-a-Tilt allows the shutter to be closed in the upward or downward position

#### TILT OPTIONS: SPLIT TILT



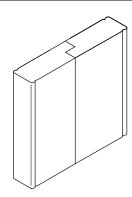
#### Split Tilt

No divider rail. Splits one large louver set into two individually operated louver sets by cutting the tilt bar.

- All louver sizes
- Can be ordered at desired location
- Front tilt bar or Hide-a-Tilt

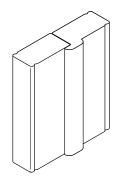
Consideration: Upper and lower louvers cannot be positioned at opposing angles because the edges of the louvers will touch.

## PANEL OVERLAP STYLES



#### Rabbet Style Panel Overlap

- · Factory standard
- Right over left overlap only
- Left over right overlap not available

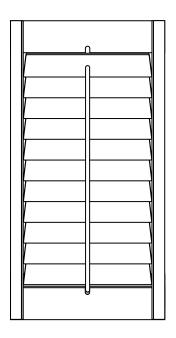


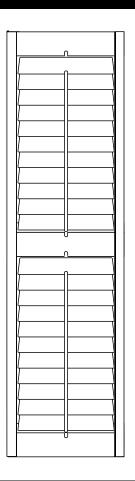
#### Astragal Style Panel Overlap

- No charge option
- Right over left overlap standard
- Left over right overlap optional

# DOUBLE MOUSE HOLE

A mouse hole on the rail above and below each louver section allows the louvers to be closed in the upward or downward position.





## **COLOR OPTIONS**

Composite - Whites

Silk White	2922
Off White	2185
Sweet White	2729

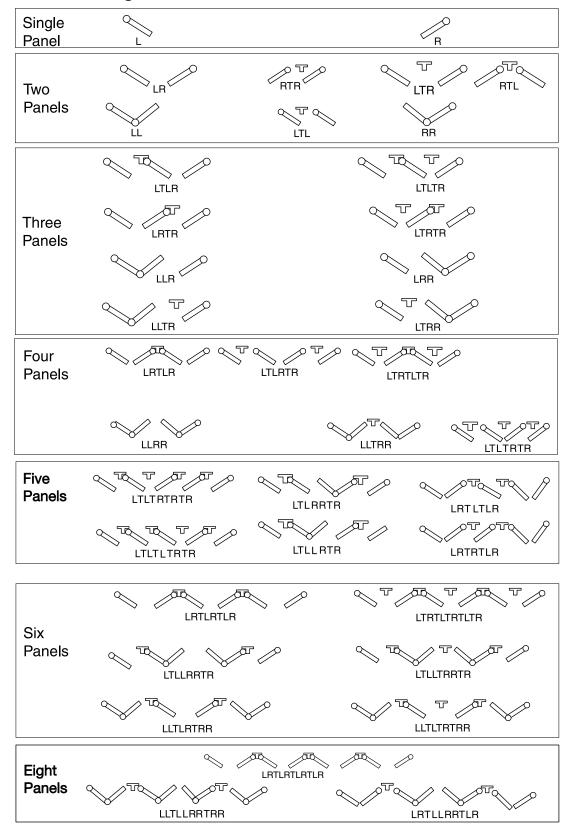
## **HINGE COLORS**

Select the hardware color that best fits your decor:

- White
- Off White
- Antique Brass
- Oil Rubbed Bronze
- Satin Nickel
- Bright Brass

## PANEL CONFIGURATIONS: STANDARD, ARCH AND ANGLED TOP SHUTTERS

## Panel Configurations Must Be Selected From This Chart



△GRABER 8

# Size Considerations

MINIMUM ANI	D MAXIMUM ORDER S	SIZES B	Y PANEI	L CON	FIGURA	TION:	2½" & 3	8½" LOI	JVERS
	CHUTTER CONFIGURATIONS	HANG AND T	MOUNT, S STRIP ILT-OUT AME	SIGN	OARD & ATURE AMES	L-FR	AME	DECO	FRAME
PANEL	SHUTTER CONFIGURATIONS WITH COMBINATIONS OF	W-C	Size	W-C	Size	F-F	Size	F-F	Size
CONFIGURATION	PANELS AND T-POSTS	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1 Panel	L, R	93/16"	30¾6"	11"	31%"	11¾16"	321/4"	141/4"	34¼"
2 Panel	LR	181/16"	60"	197⁄8"	6111/16"	201/16"	621/16"	241/16"	641/16"
2 Panel, 1 T-Post	LTR, LTL, RTR, RTL	19%"	61%"	21¾6"	631/16"	21%"	637/16"	251/16"	657/16"
1 Bi-Fold	LL, RR	181/16"	48"	19%"	4911/16"	201/16"	501/16"	241/16"	521/16"
1 Panel, 1 Bi-Fold	LLR, LRR	27¾16"	78¾6"	291/16"	80"	291/4"	801/4"	241/16"	821/16"
1 Panel, 1 Bi-Fold, 1 T-Post	LLTR, LTRR	281/4"	79¾16"	301/16"	80%"	301/4"	811/4"	351/4"	831/4"
3 Panel, 1 T-Post	LTLR, LRTR	281/4"	91¾16"	301/16"	927/8"	301/4"	931/4"	351/4"	951/4"
3 Panel, 2 T-Post	LTLTR, LTRTR	29%16"	92%16"	31¾"	941/4"	31%16"	94%"	36%"	96%"
2 Bi-Fold	LLRR	365/16"	95%"	381/4"	975/16"	385/16"	9711/16"	4311/16"	9911/16"
2 Bi-Fold, 1 T-Post	LLTRR	371/8"	97"	3815/16"	9811/16"	391/8"	991/16"	451/16"	1011⁄16"
4 Panel, 1 T-Post	LRTLR	371/8"	121"	3815/16"	12211/16"	391/8"	1231/16"	451/16"	1251/16"
4 Panel, 2 T-Post	LTLRTR	387/16"	122%"	401/4"	1241/16"	407/16"	1247/16"	467/16"	1267/16"
4 Panel, 3 T-Post	LTRTLTR, LTLTRTR	39¾"	123¾"	41%16"	1257/16"	41¾"	12513/16"	4713/16"	12713/16"
3 Panel, 1 Bi-Fold, 2 T-Post	LTLRRTR, LTLLRTR	475/8"	140%6"	51¼"	14315/16"	51%"	14411/16"	6011/16"	14811/16"
5 Panel, 2 T-Post	LRTLTLR, LRTRTLR	475/16"	1525/16"	50¹⁵⁄₁₀"	15515/16"	51¾6"	159¾6"	5413/16"	16413/16"
5 Panel, 4 T-Post	LTLTRTRTR, LTLTLTRTR	501/16"	15415/16"	51%"	1565/8"	521/16"	157"	60"	159"
2 Panel, 2 Bi-Fold, 2 T-Post	LTLLRRTR	5611/16"	158%6"	58½"	160%"	5811/16"	160%6"	66%16"	162%16"
2 Panel, 2 Bi-Fold, 2 T-Post	LLTLRTRR	56¾16"	158¾"	58"	1601/16"	58¾6"	1607/16"	667/16"	1627/16"
6 Panel, 2 T-Post	LRTLRTLR	56¾16"	182"	58"	18311/16"	58¾6"	1841⁄16"	667/16"	1861/16"
2 Panel, 2 Bi-Fold, 3 T-Post	LTLLTRRTR, LLTLTRTRR	57½"	159¾"	595/16"	1611/16"	59½"	1617/16"	67¾6"	163 7/16"
6 Panel, 5 T-Post	LTRTLTRTLTR	601/4"	1861/%"	621/16"	187¹³⁄₁ሬ"	621/4"	188¾6"	70¾6"	190¾16"
8 Panel, 3 T-Post	LRTLRTLRTLR	75¾"	243¾"	777/16"	245%16"	77¾"	247"	79¾"	249¾"
4 Panel, 2 Bi-Fold, 2 T-Post	LRTLLRRTLR	7315/16"	217¹5⁄₁₀"	75¾"	219¾"	7515/16"	219¹5⁄₁ሬ"	78%16"	222%16"
4 Bi-Fold, 2 T-Post	LLTLLRRTLL	7315/16"	19315/16"	75¾"	195¾"	7515/16"	19515/16"	78%16"	197%16"

9

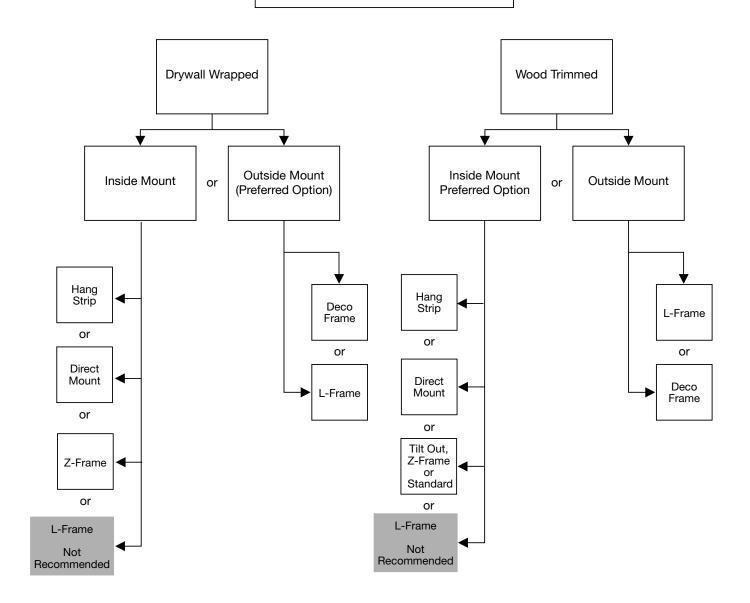
# Size Considerations

MINIMUM AN	D MAXIMUM ORDER	SIZES B	y pane	L CON	IFIGUR.	ATION:	4½" LO	UVERS	
	SHUTTER CONFIGURATIONS	HANG AND TI	MOUNT, S STRIP ILT-OUT AME	SIGN	OARD & ATURE AMES	L-Ff	RAME	DECO	FRAME
PANEL	WITH COMBINATIONS OF	W-O	Size	W-C	Size	F-F	Size	F-F	Size
CONFIGURATION	PANELS AND T-POSTS	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1 Panel	L, R	93/16"	263/16"	11"	271/8"	11¾6"	281/4"	141/4"	301/4"
2 Panel	LR	181/16"	52"	19¾"	5311/16"	201/16"	541/16"	241/16"	561/16"
2 Panel, 1 T-Post	LTR, LTL, RTR, RTL	19¾"	53%"	21¾6"	5511/16"	21¾"	557/16"	25¾6"	571/16"
1 Bi-Fold	LL, RR	181⁄16"	48"	19%"	4911/16"	201/16"	501/16"	241/16"	521/16"
1 Panel, 1 Bi-Fold	LLR, LRR	27¾16"	74¾16"	291/16"	76"	291/4"	761/4"	241/16"	781/16"
1 Panel, 1 Bi-Fold, 1 T-Post	LLTR, LTRR	281/4"	75¾16"	301/16"	76%"	301/4"	771/4"	351/4"	791/4"
3 Panel, 1 T-Post	LTLR, LRTR	281/4"	79¾16"	301/16"	74%"	301/4"	81¼"	351/4"	831/4"
3 Panel, 2 T-Post	LTLTR, LTRTR	29%16"	80%16"	31%"	821/4"	31%16"	825/8"	36%"	845/8"
2 Bi-Fold	LLRR	365/16"	95%"	381/4"	975/16"	385/16"	9711/16"	4311/16"	9911/16"
2 Bi-Fold, 1 T-Post	LLTRR	371/8"	97"	3815/16"	9811/16"	391/8"	991/16"	451/16"	1011/16"
4 Panel, 1 T-Post	LRTLR	371/8"	105"	3815/16"	10611/16"	391/8"	1071/16"	451/16"	1091/16"
4 Panel, 2 T-Post	LTLRTR	387/16"	106%"	401/4"	1081/16"	407/16"	1087/16"	467/16"	1107/16"
4 Panel, 3 T-Post	LTRTLTR, LTLTRTR	39¾"	107¾"	41%6"	1097/16"	41¾"	109¹³⁄₁ሬ"	4713/16"	11113/16"
3 Panel, 1 Bi-Fold, 2 T-Post	LTLRRTR, LTLLRTR	475/8"	1281/16"	51¼"	13115/16"	51%"	14211/16"	6011/16"	14611/16"
5 Panel, 2 T-Post	LRTLTLR, LRTRTLR	475/16"	1325/16"	5015/16"	13515/16"	51¾16"	139¾16"	5413/16"	14413/16"
5 Panel, 4 T-Post	LTLTRTRTR, LTLTLTRTR	501/16"	14215/16"	51%"	1445%"	521/16"	145"	60"	14711/16"
2 Panel, 2 Bi-Fold, 2 T-Post	LTLLRRTR	5611/16"	150%16"	58½"	152%"	5811/16"	152%16"	66%16"	154%16"
2 Panel, 2 Bi-Fold, 2 T-Post	LLTLRTRR	56¾16"	150%"	58"	1521/16"	58¾16"	1527/16"	667/16"	1547/16"
6 Panel, 2 T-Post	LRTLRTLR	56¾6"	158"	58"	15911/16"	58¾16"	1601/16"	667/16"	1621/16"
2 Panel, 2 Bi-Fold, 3 T-Post	LTLLTRRTR, LLTLTRTRR	57½"	151%"	595/16"	1531/16"	59½"	1537/16"	677/16"	1557/16"
6 Panel, 5 T-Post	LTRTLTRTLTR	601/4"	1621/8"	621/16"	16313/16"	621/4"	164¾16"	70¾6"	166¾6"
8 Panel, 3 T-Post	LRTLRTLR	75¾"	211¾"	777/16"	2131/16"	77¾"	215"	79¾"	217"
4 Panel, 2 Bi-Fold, 2 T-Post	LRTLLRRTLR	7315/16"	20115/16"	75¾"	203¾"	7515/16"	20315/16"	78%16"	206%6"
4 Bi-Fold, 2 T-Post	LLTLLRRTLL	7315/16"	19315/16"	75¾"	195¾"	75 <sup>15</sup> ⁄16"	19515/16"	78%16"	197%16"

GRABER 10

## FRAME TYPE DECISION TREE

Review window and the area around the window. Choose from the options below.

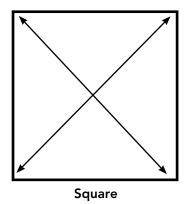


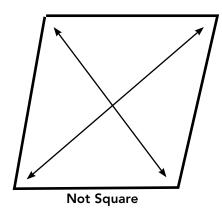
If window has a sill, configuration with a sill bottom is recommended

## MEASURING FOR STANDARD SHUTTERS

#### Confirm that the window is square.

Measure the diagonals. If the difference between the two measurements is greater than  $\frac{1}{2}$ , an outside mount shutter is required.

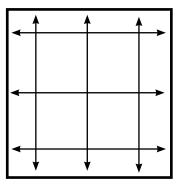




#### Window Opening Measurement Inside Mount with Hang Strips, Direct Mount, Z-Frame, Tilt-Z

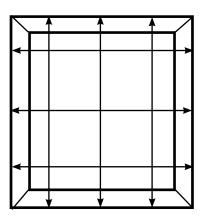
Measure the width at three points and the height at three points.
 Use the smallest width and height measurements.

NOTE: Factory makes no allowances/deductions for Tilt-Z frame.



#### Frame-to-Frame Measurement Required for L-Frame and Deco Frame

- Place a sample of the L-Frame or Deco Frame on the window frame or wall to determine frame-to-frame placement.
- Measure frame-to-frame width at three points and frame-to-frame height at three points.
   Use the largest width and height measurements.



**NOTE:** At least 1¾" flat surface is needed on each side of the window for an L-Frame.

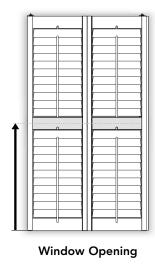
Helpful Hint: If shutters are in the same room and/or side by side, shutters must be ordered at the same height to ensure rail width, divider rail location, louver count and hinge quantity will match.

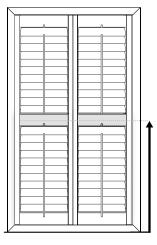
## MEASURING DIVIDER RAIL LOCATION

Always start from the bottom point of measure to center of the desired divider rail location.

To measure frame-to-frame, measure from the bottom of the shutter frame up to the center of the desired rail location.

To measure window opening, measure from the sill or bottom of the window opening to the center of the desired rail location.





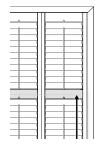
Frame-to-Frame

#### **DIVIDER RAIL REQUIREMENTS**

- 1. Divider rails are required over 72" height for added strength.
- 2. Divider rail can be requested (when not required) for design purposes.
- 3. A 3" divider rail is used with 2½" and 3½" louvers.
- 4. A 4" divider rail is used with 4½" louvers.
- 5. Divider rails for 2½" and 3½" louvers will be as specified on order.
- 6. Factory may shift rail up or down, (+ or 2") to achieve uniform louver spacing in 41/2" louvers only.
- 7. Minimum louver set is 2 louvers in each section.

**HELPFUL HINT:** If shutters are in the same room and/or side by side, shutters must be ordered at the same height to ensure divider rail location will match.

Exact divider rail location available August 15, 2013



#### MEASURING T-POST LOCATIONS

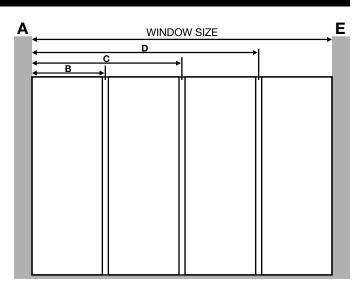
Always start from the left point of measure type to the center of the desired T-Post location.

To measure frame-to-frame, measure from the left of the shutter frame to the center of the desired T-Post location.

To measure window opening, measure from the left inside of the window opening to the center of the desired T-Post location.

If there is more than one T-Post, measure from the left of measure type to the center of first T-Post location, then measure from the left of measure type over to the center of the second T-post location etc. Example A-B, A-C, A-D

ALWAYS measure from the same point the frame was measured. EXAMPLE: If measuring for L-Frame, frame-to-frame measure type, A is the outside edge of the L-Frame.



## FRAME PRODUCT DETAIL

#### **Direct Mount**

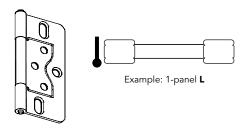
- Inside mount only
- Window opening measure only
- Panel is pre-hinged
- Four light blocks included
- Factory automatically makes deductions: Width 3/16", Height 1/4"

#### Hang Strip

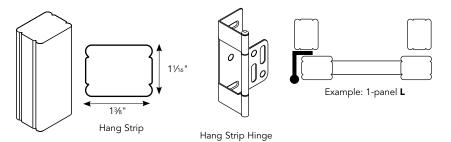
- Inside mount only
- Window opening measure
- Includes adjustable wrap-around hinge for easy installation
- Panel and hang strip are pre-hinged
- Hang strip is pre-drilled
- Top and bottom light blocks included
- Factory automatically makes deductions: Width  $\frac{3}{16}$ ", Height  $\frac{1}{4}$ "

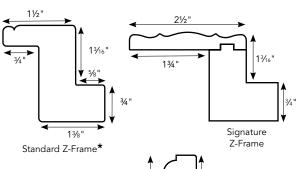
#### **Z-Frames**

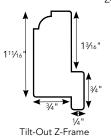
- Inside mount only
- Window opening measure only
- Panel and frame are pre-hinged
- Frame is not pre-drilled
- Standard, Signature, factory automatically makes deductions: Width 5/16", for Height, see chart
- No deduction taken on Tilt Z Frame



Frame Hinge

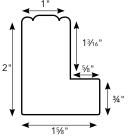






#### L-Frame

- Recommended outside mount only
- Frame-to-frame measure only
- Panel and frame are pre-hinged
- Frame is not pre-drilled
- No factory deduction made

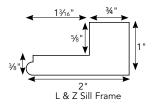


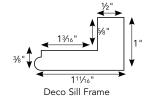
Standard L-Frame

## FRAME PRODUCT DETAIL

#### Sill Frame

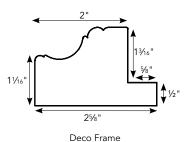
- Offered with L & Z-Frames and Deco Frame
- Not available with buildouts





#### **Deco Frame**

- Outside mount only
- Frame-to-frame measure only
- Panel and frame are pre-hinged
- Frame is not pre-drilled
- No factory deduction made



#### **Light Block**

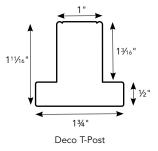
• Included with hang strip, direct mount, 2-sided, and 2-sided frame types

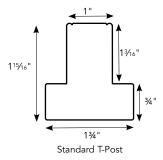


Light Block

#### T-Post

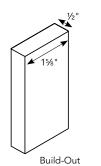
- Vertical post that divides the shutter into multiple sections
- T-Post pre-drilled by factory



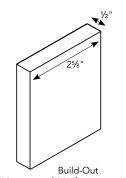


#### **Buildout**

- Used with L-Frames and Deco Frames
- Available only in 1/2"
- Maximum 2" (4 pieces) per shutter
- Not available with sill configurations



Build-Out (Maximum of 2", (four pieces) per shutter;  $\frac{1}{2}$ " increments)



(Maximum of 2", (four pieces) per shutter; ½" increments)

# **Specifications**

## **DEDUCTIONS FOR FRAME ALLOWANCES**

#### **Direct Mount**

• Automatically taken at factory

• Width deduction; 3/16"

• Height deduction; 1/4"

#### **Hang Strip**

Automatically taken at factory

• Width deduction; 3/16"

• Height deduction" 1/4"

#### **Z-Frame (Standard and Signature)**

• Automatically taken at factory

Z-Frame Configuration	Frame Width Deduction	Frame Height Deduction
2-Sided	- 5/16"	No deduction*
3-Sided or 3-Sided Inverted	- 5/16"	- 5/32"*
3-Sided Sill Top or Bottom	- 5/16"	- 1/16"*
4-Sided	- 5/16"	- 5/16"
4-Sided Sill Top or Bottom	- 5/16"	- 5/32"
4-Sided Sill Top and Bottom	- 5/16"	- 1/16"

The information above does not apply to Tilt Z-frame. No deduction taken on Tilt Z. \*Using this deduction, panel clearance on open ends of frame will automatically be  $\frac{1}{2}$ ".

#### L-Frame

- No deductions taken at factory
- If using for inside mount or in a tight spot, installer must make own deduction for proper fit

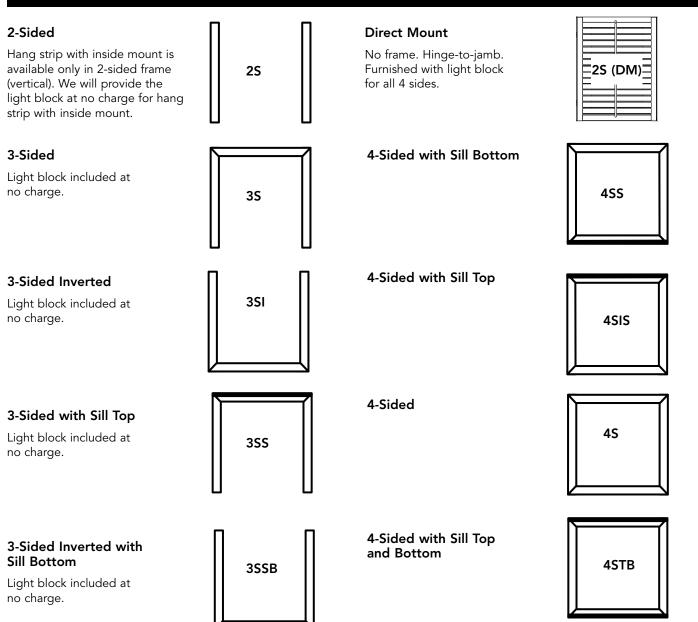
#### **Deco Frame**

- No deduction taken at factory
- If using in a tight spot, installer must make own deduction for proper fit

△GRABER 16

## General Information

## FRAME CONFIGURATIONS



# **Specifications**

## INSTALLATION HARDWARE

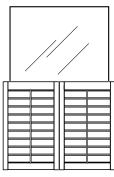
#### Included with order

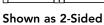
- Hinge pins
- Installation screws (hinge, mounting, etc.)
- Hoffman keys

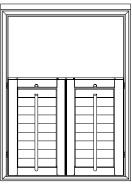
#### Available upon request - contact Customer Service

- Hinge shims
- Louver pins
- Screws
- Screw caps (cover exposed screw heads)

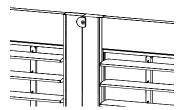
## CAFÉ SHUTTERS







Shown as 4-Sided



Rear view of Café Panel Optional: Café Aligning Catch

- Tops of composite panels are NOT finished and are not recommended
- Café shutter panels cover the lower portion of the window
- Pricing is width x café panel height
- Optional Café Aligning Catch
- Frame can be ordered to stop at panel height or can be ordered to fully frame the window

## SUNBURST ARCH WITHOUT FRAME

#### Specialty Shape Without Frame: Panel Only

- Sunburst pattern no horizontal louvers
- Rabbeted louvers for maximum light control
- Louver sizes will vary based on height and width of arch
- The arch has no tilt bar; the louvers open individually and are spring loaded at the bottom pin
- Buildouts not available
- Panel is 11/16" thick and may not match projection of other outside mount standard shutters
- Order arch as frame-to-frame

• Allow sufficient wall space to mount. Panel-only arches that are:

WOOD Frameless Arch Base Width	Top Rail Size	Bottom Rail Size
24" to less than 45"	2"	1"
45" to less than 72"	3"	2"
45" to less than 80"	3"	3"

**NOTE:** If mounting arch inside, take own deduction and order frame-to-frame. Template recommended.

Specialty Shape Without Frame: Minimum and Maximum Sizes					
Frameless - Panel Only		idth	Height		
Trameless - Faller Only	Minimum	Maximum	Minimum	Maximum	
Half-round Sunburst Arch Height = 50% of width No templates required	20"	72"	10"	36"	
Eyebrow Sunburst  Height Minimum = no less than 33% of width  Height Maximum = no greater than 66% of width  Template required if height exceeds 54% of width	20"	72"	7"	36"	
Elongated Sunburst  Height Minimum = no less than 33% of width  Height Maximum = no greater than 66% of width  Template required if ordered height minus ordered leg height exceeds 54% of width	20"	72"	10"	47½"	
Elliptical Sunburst All elliptical arches need a template	20"	72"	10"	47½"	

△GRABER 20

## SUNBURST ARCH WITH FRAME

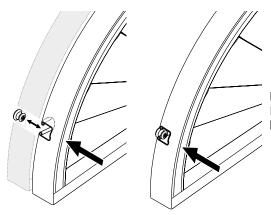
Frame Options	Z-Frames*	L-Frames	Deco Frame
Mount	Inside Mount Only	Outside Mount Only	Outside Mount Only
Order Size	Window Opening	Frame-to-Frame	Frame-to-Frame
Projection	3/8"	2"	111/16"

**NOTE:** All frame types are available with sill bottom Buildouts are available on L-Frame and Deco Frame arches. \*Framed arches not available with Tilt-Z frame.

Framed Arch		W	idth	Hei	Height	
<b>Z-Frames</b>		Min.	Max.	Min.	Max.	
	Half Round	21 <sup>13</sup> /16"	7313/16"	11 <sup>13</sup> / <sub>16</sub> "	3713/16"	
	Eyebrow	21 <sup>13</sup> / <sub>16</sub> "	7313/16"	813/16"	3713/16"	
	Elongated	2113/16"	7313/16"	11 <sup>13</sup> / <sub>16</sub> "	497/16"	
	Elliptical	2113/16"	7313/16"	813/16"	497/16"	
Framed Arch		W	idth	Hei	ght	
L-Frames		Min.	Max.	Min.	Max.	
	Half Round	221/8"	741/8"	121/8"	381/8"	
	Eyebrow	221/8"	741/8"	91/8"	381/8"	
	Elongated	221/8"	741/8"	121/8"	495%"	
	Elliptical	221/8"	741/8"	91/8"	495/8"	
Framed Arch		W	idth	Hei	ght	
3" Deco Frames		Min.	Max.	Min.	Max.	
	Half Round	241/4"	761/4"	141/4"	401/4"	
	Eyebrow	241/4"	761/4"	11¼"	401/4"	
	Elongated	24¾"	761/4"	141/4"	51%"	
	Elliptical	24¾"	761/4""	111/4"	51%"	

## SUNBURST ARCH: INSTALLATION METHOD

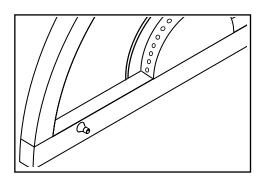
Arches arrive with the louvers not installed and packed separately. Louvers are numbered on bottom edge from right to left on the bottom as you look at the interior (room) side.



#### Framed Arch - Installing Panel to Frame

Button catch (imbedded) is standard. Panels are attached to frame via button catch. The frame itself installs as a standard L, Z or Deco frame.

#### FRAMELESS ARCH INSTALLATION OPTION

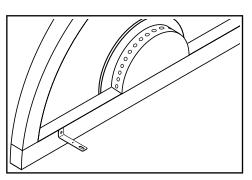


#### **Bulldog Catch**

Bulldog catch works best with window openings that have a square edge. Allows arch panel to be removed for cleaning. Available in White.

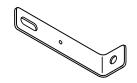


Suggested quantity usage: Less than 36" - 336" to 72" - 5

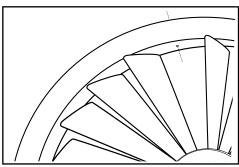


#### L-Bracket

L-bracket works best with windows that have a bull-nosed edge. Long-throw on the L-bracket allows you to reach past the curved window edge to a flat surface. L-bracket is zinc color only.



Suggested quantity usage: Less than 36" - 5 36" to 72" - 7



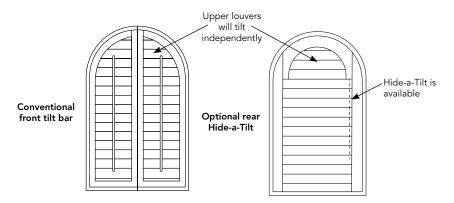
#### **Trim Head Screw**

If using trim head screws to mount, pilot a hole diagonally from underside of curved frame and exit through rear of frame. Place screw hole near louver pin to help hide hole from view.



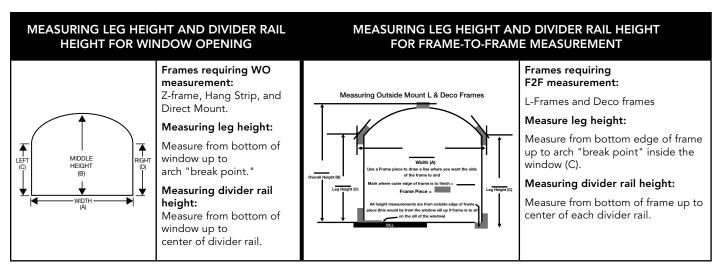
## ARCHED PANEL SHUTTER AND ANGLED TOP PANEL

- 2½", 3½" & 4½" louvers available
- Astragal, Hide-a-Tilt™ and Split Tilt available
- NOTE: Hide-a-Tilt only tilts up
- All frames except Tilt Z available
- All panel configurations in standard shutters available
- Available frame configurations: 3-Sided (3S), 4-Sided (4S) and 4-Sided with Sill Bottom (4SS)



#### Louver Tilt is restricted up to 90 degrees

Louver tilt is restricted up to 90 degrees due to the curvature (or slope) at the top of the panel. A divider rail can be used to separate the upper arch portion from the lower rectangular portion. This will allow for full louver rotation of the louvers below the divider rail.



**NOTE 1:** Divider rail requirements are the same as standard shutters.

# Size Considerations

## ARCHED PANEL SHUTTER MEASURE

	Ordered Height Limitations for Arched and Angle Top Shutters							
	Frame	Г.,, .,, ., ., ., ., ., ., ., ., ., ., .,	Minir	mum	Maximum			
	Configuration	Frame type	2.5/3.5 Louvers	4.5 Louver	2.5/3.5/4.5 Louver			
	2-sided	Hang strip/direct mount	15¼	201/4	1201/4			
Window Opening	3-sided	Z-Frames	161/8	211//8	1211//			
vvindow Opening	4-sided with sill bottom	Z-Frames	161//8	211//8	1211//			
	4-sided	Z-Frames	171/16	221/16	1221/16			
	3-sided	L-Frame	16¼	211/4	1211/4			
	4-sided with sill bottom	L-Frame	16¾	21¾	121¾			
	4-sided	L-Frame	171⁄4	221/4	1221/4			
	3-sided	Deco curve	181/⁄8	231/8	1231/8			
Frame-to-Frame	4-sided with sill bottom	Deco curve	18½	231/2	123½			
	4-sided	Deco curve	21	26	126			
	3-sided	Traditional deco	17%16	221/16	122%6			
	4-sided with sill bottom	Traditional deco	<b>17</b> <sup>15</sup> ⁄16	22 <sup>15</sup> / <sub>16</sub>	12215/16			
	4-sided	Traditional deco	19¾	247/8	1241//8			

■GRABER 24

#### FRENCH DOOR OPTIONS

- 2½" and 3½" louvers
- Hide-a-Tilt™, Split Tilt and Double Mouse Hole available
- Single panels hinged on the same side as the door
- L-Frames Standard L frame only
- Order frame-to-frame
- Outside mount only
- Divider rails are not available

- Button catches plus magnets are standard to provide for a secure closure
- Factory will automatically add build outs based on your louver size. See chart below

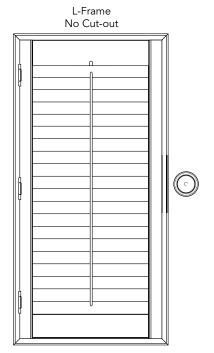
NOTE: All French Door shutters for cut-out and no cut-out should be ordered at the same time.

Projection Based on Louver Size	Frame	Buildout
2½"	2" L-Frame	0
3½"	2" L-Frame	1/2"

Manufacturing will automatically add buildouts to your order according to the louver size. An additional ½" or 1" can also be requested if needed for louver clearance on larger trims. Factory will also make all adjustments to back plate elevation based on trim projection and extra buildout requested.

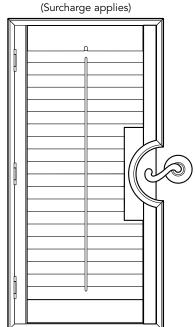
## FRENCH DOOR OPTIONS

## **CUT-OUT OPTIONS**



This should only be ordered when installed next to a French door with cut-out, otherwise order it as a standard shutter.

# Rectangular Cut-out (Surcharge applies)



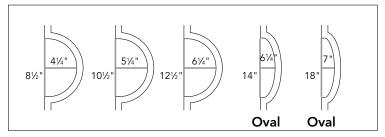
**Curved Cut-out** 

#### Order Rectangular Cut-out when:

- 1. Choose if the base of the door hardware is rectangular.
- 2. Must specify width and height of the cut-out. There are NO set standard sizes to conform to. There are NO templates to use.
- 3. Be sure to make proper allowances for the door handle to pivot easily when determining your cut-out size.

#### Order a Curved Cut-out when:

- 1. Choose a cut-out if the base of the door handle (or knob) is round.
- 2. Five (5) standard cut-out sizes are available: Three (3) half-circles and two (2) half-ovals.
- 3. Other custom sizes of curved cut-outs are NOT available.
- 4. Be sure to make proper allowances for the door handle to pivot easily when determining your cut-out size.



This image is taken from the backside of the French door order form.

△GRABER 26

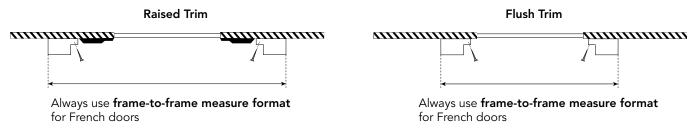
## FRENCH DOOR OPTIONS

## MINIMUM/MAXIMUM FRENCH DOOR SIZES

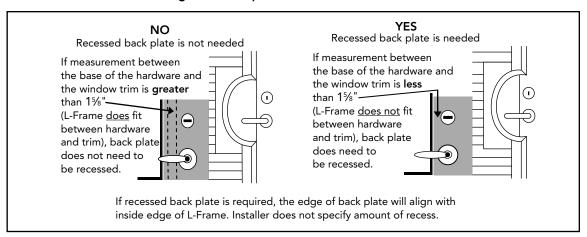
	Minimum	Maximum
Width	14"	29 <sup>13</sup> /16"
Height	341/8"	861/4"

#### Placement of L-Frame

L-Frame always sits outside of the trim, never on the trim. If no raised trim, place the L-Frame far enough beyond the glass to rest totally flat on the door and to avoid risk of breaking the glass when driving the mounting screws in place. Use caution when placing screws, as the glass often extends under the trim and could easily crack.



A "recessed back plate" is required when there is insufficient space between the base of the door hardware and the glass trim to place L-Frame flat on the door surface.



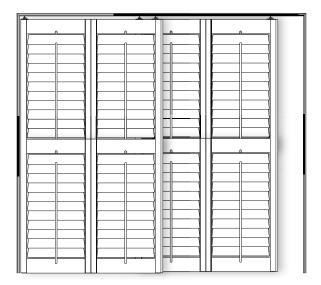
#### Caution:

- 1. When measuring (F-F) width and height, be sure that L-Frame can rest flat on the door surface and not be obstructed by the glass trim.
- 2. If "yes" is selected, the edge of the recessed back plate will be built to align with the inside edge of the L-Frame (as shown by the dotted line in the upper drawing).

## **BYPASS SHUTTERS**

- Ideal solution for large windows and patio doors
- System consists of a double-top track and floor guides
- Wood colors options available
- Available in 2½" and 3½" louver sizes
- Available with Hide-a-Tilt™ and Split Tilt
- Available with Double Mouse Hole
- See the Minimum and maximum order sizes charts (Factory to determine panel size based on width ordered and configuration.)
- Panel made composite headers, box out and valance made of wood and painted to match
- Divider rail required over 72" ordered height

- Tracks wider than 144" will be spliced
- Header and valance could be spliced over 96"
- Configuration Options:
  - Outside mount with Box-out
  - Outside mount without Box-out
  - Outside mount with full Stackback (with or without Box-out) or custom header
  - Inside mount, minimum window depth 5%"
- Outside mount with 3-sided Box-out is recommended



**NOTE:** Louvers must be closed in order for panels to pass each other.

#### **BYPASS SHUTTERS**



#### **Outside Mount Notes**

**Width Measure (with Box-out):** Order window opening size. If no window trim, measure window opening size. If window trim: measure outside edge of trim to outside edge of trim. Regardless of order size, **factory will add 3½" to your overall ordered width**. Note: When measuring, add more for bullnose so that frames mount completely on flat surface.

Width Measure (without Box-out): If no window trim: measure window opening. If window trim: measure outside edge of trim to outside edge of trim. Factory will add 1½" to your overall order width. Note: When measuring, add more to extend beyond window edge for privacy purposes.

Height Measure (with or without Box-out): If no window trim: measure from floor surface to top of the window opening. If window trim: measure to top of window trim. Factory will add 2%" to your overall order height.

Other Measuring Considerations: If there are window moldings, factory can only accommodate up to  $\frac{1}{2}$ " thick molding when using  $3\frac{1}{2}$ " louvers and Hide-a-Tilt".

**Track and Header Board:** Unit includes two tracks installed to header. Header is  $5\frac{1}{2}$ " deep and  $\frac{3}{4}$ " thick.

**Valance and Returns:** Two top treatment styles are available; standard 5" double-bead Valance and the optional  $4\frac{1}{2}$ " Classic Cornice. Valance returns are included and wrap around the outside of the box out (frame). Returns are mitered and are  $5\frac{1}{2}$ " (inside measure).

**Box-out (side frames):** Optional Box-out (side frames) are available for outside mount bypass shutters.

**Stackback:** Optional stack-back is available for outside mount bypass shutters. Custom stack-back widths are available.



#### **Inside Mount Notes**

Width Measure: Order W-O (window opening) and provide net window width. Factory will make a  $\frac{1}{2}$ " deduction off the track for proper fit.

Height Measure: Order W-O (window opening) and provide net window height. Factory will make approximately ½" deduction. Carriers are adjustable.

Other Measuring Considerations: Minimum window depth requirement 5%".

**Track and Header Board:** Header board is furnished. Tracks mount to head board. Header mounts to window head.

**Valance and Returns:** Two top treatment styles are available; standard 5" double-bead Valance and the optional 4½" Classic Cornice. No returns are available. Valance end is not mitered

Box-out (side frames): Box-out (side frames) are not available.

Stackback: Stackback is not available for inside mount bypass shutters.

#### **VALANCE OPTIONS**

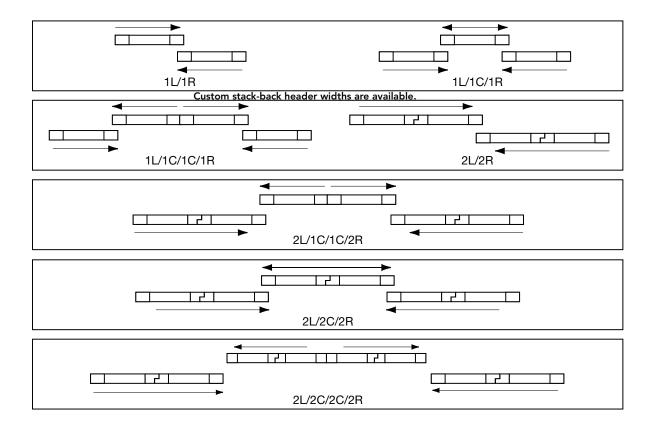
4½" Decorative Valance



5" Standard Valance



## BYPASS TRACK SYSTEM CONFIGURATION OPTIONS – ONLY CONFIGURATIONS AVAILABLE



## BYPASS SHUTTER - MINIMUM/MAXIMUM ORDER SIZES BY PANEL CONFIGURATION

		WOOD		COMP		POSITE			
		Outside Mount*		Inside Mount		Outside Mount*		Inside Mount	
Panel	Example of shutter unit configurations	Order V	V-O Size	Order V	V-O Size	Order V	V-O Size	Order V	V-O Size
Configuration	using various panel combinations	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1L / 1R		18"	70"	20"	71"	18"	58"	20"	59"
1L / 1C / 1R		27½"	104"	28½"	106½"	27½"	86"	28½"	881⁄2"
1L/1C/1C/1R		37"	141"	38"	142"	37"	117"	38"	118"
2L / 2R		37¾"	141¾"	38¾"	142¾"	37¾"	117¾"	38¾"	118¾"
2L / 1C / 1C / 2R		56"	212"	581⁄8"	213"	56"	176"	581⁄8"	177"
2L / 2C / 2R		571⁄8"	2131⁄8"	581⁄8"	213"	571⁄8"	1771⁄8"	581⁄8"	177¼"
2L / 2C / 2C / 2R		76½"	284½"	77½"	285½"	76½"	236½"	77½"	237½"

<sup>\*</sup>Same minimum/maximum sizes apply if ordered with Stackback options and with or without Box-out. **NOTE:** Header, side frame and valance will be wood on Composite Bypass. Panels will be composite.

Composite Bypass Height Minimum and Maximum					
Options Minimum Maximum					
Outside mount	15¾	96¾			
Inside mount	171⁄4	981/4			

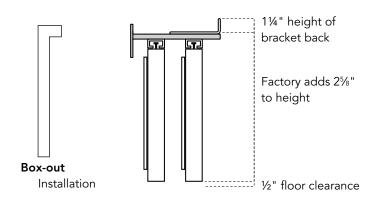
Bypass Height Minimum and Maximum					
Options Minimum Maximum					
Outside mount	15¾	120%			
Inside mount	171⁄4	1221/4			

# SETTING BRACKET HEIGHT (for outside mount without side frames)

For Wall Mount Bypass Shutter System Top of Angle Bracket to Floor:

Top of bracket will be 3% above ordered height. This includes 1% clearance off the floor.

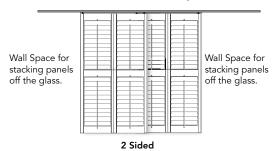
**Note:** With optional Box-out, side frames determine the mounting height. Bottom edge of side frame is meant to touch the floor surface.

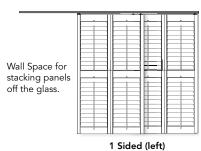


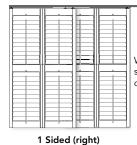
#### BYPASS TRACK SYSTEM

#### Stackback Option

Outside Mount Only







Wall Space for stacking panels off the glass.

The Stackback option allows for the shutter panels to clear the window opening, creating an unobstructed view. Panels made to cover window. Header/track made larger so panels stack off glass.

Measure only the window opening area for outside mount with Stack-back. Factory will calculate the correct Stack-back needed for full Stack-back. Custom header also available.

System consists of a double-top track and floor guides

Calculating Approximate Stackback: Factory will add additional width to ordered size for Stackback. Amounts vary, depending on the number of panels. See chart below for total (approximate) amount that will be added to the window opening size. This determines the approximate overall unit width.

% of Window Opening Size Added for Various Numbers of Panels					
2	3	4	6	8	
50%	66%	50%	66%	50%	

#### Custom Header

If wall space is not available for complete stackback, custom header size may be ordered. Give window opening size and custom header size.

#### **Configuration Options:**

- Outside mount with Box-out
- Outside mount without Box-out
- Outside mount with 3-sided Box-out is standard

## General Information

#### **DEFINITIONS**

Aligning Catch – Concealed magnet and catch plate on back top side of café panels. Used to provide a flush panel alignment.

Astragal – Covers clearance gap between two panels for the purpose of eliminating light gap. Integral to stile.

Bi-fold – Two panels are hinged together to lie flush against the window or wall.

Box-out Frame – Track system frame option that creates an outside mount application consisting of a three-sided frame with or without a decorative valance.

Buildout – Used in conjunction with L-Frames and Deco Frames to move panels away from window, allowing additional clearance for louvers to open.

Bypass Track System – Two or more panels on two overhead track that slide and pass each other.

Café Style Shutters – Shutters cover the lower portion of an opening. They can be made to any height within product specifications. Not recommended for composite as tops are not finished.

Direct Mount – Mounting the shutter panels directly to the window casing.

Divider Rail – A rail that divides the shutter panel into two horizontal sections. It is used to add strength to a tall panel or add a decorative touch.

Double Mouse Hole – Recess on the top and bottom rail allowing for the louvers to be completely closed in either direction.

Guide – Component part used with bypass configurations to lead the panels so that they do not project into the room.

Hang Strip – The mounting frame that is used for inside mount shutter panels.

Inside Mount – A shutter that is mounted on the inside of an opening.

Light Block – Square rail that blocks light between the window sill and the shutter panel, used with direct mount, hang strip, 2-sided frames and 3-sided frames.

Louvers – The movable fins inside the shutter panel.

Mouse Hole – Recess in the top rail of the panel that the lift rod rests in when the louvers are completely closed.

Outside Mount – A shutter that is mounted on the outside of an opening.

Panel – The part of the shutter that consists of a set of louvers, two rails and two stiles.

Rabbet Stile – A special cut on the stiles that allows the panels to overlap. Helps control light penetration between the panels.

Rails – The top and bottom solid portions of a panel that frame the louvers.

Square Window – Diagonal measurements must be within ¼" difference. Windows that are not square will need to have the shutter mounted to the outside of the window opening.

Stackback – Configuration that allows the panels of the bypass or bi-fold track system to completely slide beyond the window opening.

Stile – The vertical portion of the panel frame to which the louvers are anchored.

Tilt Bar – A vertically mounted bar located on the front of the shutter used to open and close the louvers.

T-Post – A vertical post that divides the shutter into two sections (used with wider shutters).

Window Depth – The distance from the surface of the wall to the closest part of the window (examples: latch, crank, frame, etc.).

## General Information

#### WARRANTY

#### LIMITED LIFETIME WARRANTY

Springs Window Fashions warrants your Shutters will be free from original defects in materials or workmanship for as long as the original purchaser owns the product. Under the Limited Lifetime Warranty, the obligations of Springs Window Fashions are limited to the repair or replacement of parts or product found to be defective. Springs Window Fashions is not responsible for shipping costs or labor costs for measuring and taking the product down or reinstalling the product. If repairs are made under this warranty, the repairs will be made with like or similar parts.

This warranty does not cover conditions or damages caused by accidents, alterations, misuse, exterior use, or failure to follow instructions for measurement, installation, cleaning or maintenance. In addition, normal wear and tear are not covered by the Limited Lifetime Warranty.

Some wood materials may warp in high humidity areas. Springs Window Fashions considers these occurrences normal wear and tear and they are not covered by this warranty.

#### LIMITATION OF DAMAGES / DISCLAIMER OF WARRANTIES

THIS LIMITED WARRANTY DOES NOT COVER, AND IS INTENDED TO EXCLUDE, ANY AND ALL LIABILITY OF SPRINGS WINDOW FASHIONS, WHETHER UNDER THIS LIMITED WARRANTY OR UNDER ANY WARRANTY IMPLIED BY LAW, FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES. EXCEPT AS EXPRESSLY PROVIDED IN THIS LIMITED WARRANTY, SPRINGS WINDOW FASHIONS HEREBY DISCLAIMS ALL WARRANTIES TO THE EXTENT PERMITTED BY LAW. ANY IMPLIED WARRANTIES THAT CANNOT BE DISCLAIMED ARE, TO THE EXTENT PERMITTED BY LAW, LIMITED IN DURATION TO FIVE (5) YEARS.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the foregoing limitation or exclusion may not apply to you. This Limited Warranty gives specific legal rights, and you may also have other rights that vary from state to state. No person is authorized to extend or alter this Limited Warranty.

#### WARRANTY SERVICE

Warranty claims must be accompanied by the original sales receipt as well as details regarding the nature of the problem, location of the product, etc. If your product is returned, please retain a copy of the shipping information for your records.

To obtain warranty service contact:

Customer Service Center Springs Window Fashions, LLC 8467 Route 405 Highway South PO Box 500 Montgomery, PA 17752-0500

You may also email windowfashions@springswindowfashions.com or call 1-877-675-0089

#### CARE INSTRUCTIONS

Occasional light vacuuming with a brush attachment should keep shutters clean. More severe soiling can be removed by using a soft cloth and a mild detergent and water solution. If the Composite Shutter comes into contact with certain metals, a black mark may result. These black marks can easily be removed with denatured alcohol.

# Pricing

# COMPOSITE SHUTTER PRICING

#### **Composite Pricing:**

Reynosa Manufacturing (10 working days to ship)	Whites
All Frame Types Hang Strip, Z-Frame, Direct Mount, Tilt-Z (Window Opening) L-Frame. Deco frame Bypass Track System	\$45.50 per sq ft
Asian Manufacturing (42 days to deliver) All Frame Types	Whites
Hang Strip, Z-Frame, Direct Mount, Tilt-Z (Window Opening)	\$40.00 per sq ft

#### **Additional Surcharges**

Composite Shutter Arches.	\$112 per sa ft
Composite Arched & Raked Panel Shutters	\$96 per sa ft
Hide-a-Tilt™ Bar	10%
Bi-fold/Bypass Box Out*	
Bi-fold/Bypass Stackback*	5%
French Door Cut-out**	

<sup>\*</sup> Calculate overall square feet of Bypass. Use overall square foot price to calculate surcharge for Box-out and Stackback.

#### **Composite Characteristics**

- Perfect for high-humidity areas
- Color will not fade
- Easy cleaning with soap and water

#### **Panel Size Limitations**

	MINIMUM		MAXIMUM		
	2½", 3½"	4½"	2½", 3½"	4½"	
Single Panel Width (Reg.)	9"	9"	30"	26"	
Single Panel Width (Bi-fold)	9"	9"	24"	24"	
Panel Height	15"	15"	96"	96"	

<sup>\*\*</sup> Calculate the overall square footage of the French Door panel using the L-Frame price; then add the surcharge.



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