

**NORMAN**<sup>®</sup>  
SHUTTERS. BLINDS. SHADES.

# Normandy<sup>®</sup> Shutters

Program Reference Guide

2021

2021 Shutter Revision log

Effective Date	Topic	Section	Note
2021/01/08	1.6" sill plate with 3/8" light block, 1.6" sill plate with 5/8" light block	e	For All Deco Frames except 2.5" Mission deco frame & L frames with 1/4" light block: use new 1.6" sill plate with 3/8" light block to replace 1.5" sill plate with 3/8" light block; use new 1.6" sill plate with 5/8" light block to replace 1.5" sill plate with 5/8" light block.
2021/01/13	Quarter Round	e	Change the name of Quarter Round Scribe Trim to Quarter Round.
2021/01/22	M shape bottom track	j1	Add the drawing of M shape bottom track with dimensions.
2021/02/20	81mm Bottom Pivot L Bracket	j1	Update the drawing of 81mm Bottom Pivot L Bracket.
2021/03/01	Increase Transparent and Black Colors for Hoffman Keys	i	Increase transparent and black colors for hoffman keys, add hoffman key colors coordination chart.
2021/03/24	Double hung; Raised Panel;	k	<p>1. Double hung Shutters: add content For Double Hung shutter, whenever an upper or lower panel is larger than 78", we will add one more extra hinge for it, we will also attempt to create larger top/bottom rails for additional strength by reducing the number of louvers by one as long as the rail sizes remain within spec.</p> <p>2. Raised Panel: add content Raised panel only (without louvers): The maximum panel width will be 36" for single panel (such as L / R / LR / LTR etc.). The maximum panel width will be same as the normal shutter spec for Bifold &amp; Multiple fold panel configurations.</p> <p>Raised panel with louver combination: The maximum panel width will be 36" for single panel with 3.5" &amp; 4.5" louvers; The maximum panel width will be same as the normal shutter spec for single panel with other louver sizes except 3.5" &amp; 4.5"louvers. The maximum panel width will be same as the normal shutter spec for Bifold &amp; Multiple fold panel configurations.</p>

2021 Shutter Revision log

<p>2021/03/24</p>	<p>General Product Specifications; Divider Rails;</p>	<p>f,h</p>	<p><b>f :</b> Delete the sentence of * For frame and stile exceeding 108", there will be a visible finger joint line in the middle.</p> <p>Add content: Occasional finger joint line may be visible in the frames and stiles.</p> <p>Divider rail is required for panel heights over 78". 84" panel height limit without divider rail is for shutter types below:</p> <ul style="list-style-type: none"> <li>➤ Normandy French Door with OR without Cut-out (including type E&amp;F), which should be installed on existing door, solid glass or sidelights instead of window opening.</li> <li>➤ Normandy Bypass and bi-fold track shutters.</li> </ul> <p>Standard divider rail size is 3", Custom Size (3"~7.875") Divider Rail is available with surcharge. Please note the standard top/bottom rail size should be within 2.75"~6.5". For regular shutters, the step for the rail size is 1/8".</p> <p><b>h</b> Divider Rails: change Standard width: 3" to Standard size: 3".</p>
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# *Normandy® Shutters*

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# *Normandy® Shutters*

## Features and Benefits

- Brings a touch of country elegance to your home. The textured finish of Normandy stained hardwood shutters blends the tranquility of nature with distinctive luxury.
- Normandy is treated with our exclusive Prescription Wood Conditioning™ technique according to the moisture content of the final installation location to reduce post-installation shrinking and swelling.
- A wide range of frames with inserts that keep installation screws out of sight for a clean and decorative look to match any style and preference.
- Reinforced engineered stiles -- Multiple layers of wood bonded together to reinforce durability to the core of the stile, which results in a robust support system for the shutter panel.
- Multiple stile options available in various sizes to accommodate different window configurations. Astragal (solid color shutters only) or Rabbet stiles provide a natural light block between panels.
- Employs mortise and tenon joinery that resists shear and racking forces endured by shutters and ensures prolonged stability and durability.
- Quick and easy on-site installation with the pre-installed magnets and hinges, as well as pre-mitered frames and slotted keyholes.
- Labor-intensive hand finishing process involves multiple sequences of sanding and coating with fine layers of stain or paint for a brilliant, lustrous finish.
- Personalize shutters with special options. Choose from hidden or offset tilt rods, double-hung panels, café shutters, track systems, specialty shapes and many more.
- Special panel and frame designs are finely crafted to accommodate unique window configurations. Create unity or attract attention with Normandy's exclusive decorative elements.
- Available in classic paint, radiant stain, and stimulating designer colors that harmonize into the style of any home.
- A guarantee of Norman Shutters' exemplary quality with a lifetime limited warranty on materials and workmanship.

Colors & Louver Sizes/Louver Clearance

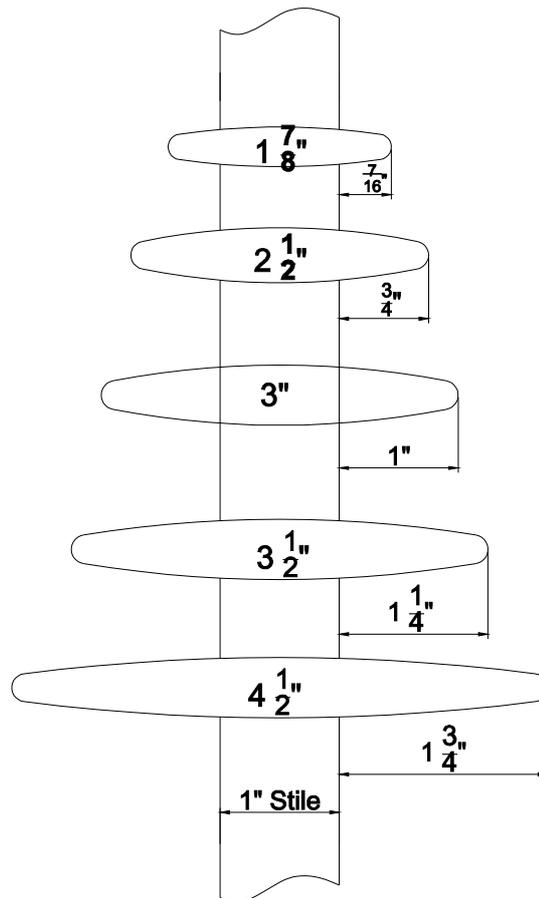
	<b>Color ID</b>	<b>Color Name</b>
<b>Paint (27 colors)</b>	001	Pure White
	002	Extra White
	003	Silk White
	004	Bright White
	006	Pearl
	007	Ivory Lace
	009	Creamy
	012	Crisp Linen
	016	Butter
	019	String
	030	Moondust
	032	Sea Mist
	042	Hall Gray
	046	Ice
	048	Chai
	049	Stone Gray
	051	Brown Gray
	053	Clay
	063	Decorators White
	066	Winchester White 2010
	073	Sky Gray
	074	Element Gray
	075	Storm Gray
	077	Dawn
	078	Cloud Blue
	080	Taupe Gray
	836	Classic Black
<b>Stain (24 colors)</b>	108	Rustic Gray
	109	Weathered Teak
	110	Limed White
	111	Pebble
	200	Natural
	202	Golden Oak
	205	Goldenrod
	212	Dark Teak
	215	Cordovan
	220	New Ebony

\*Some surcharges apply

# Normandy® Shutters

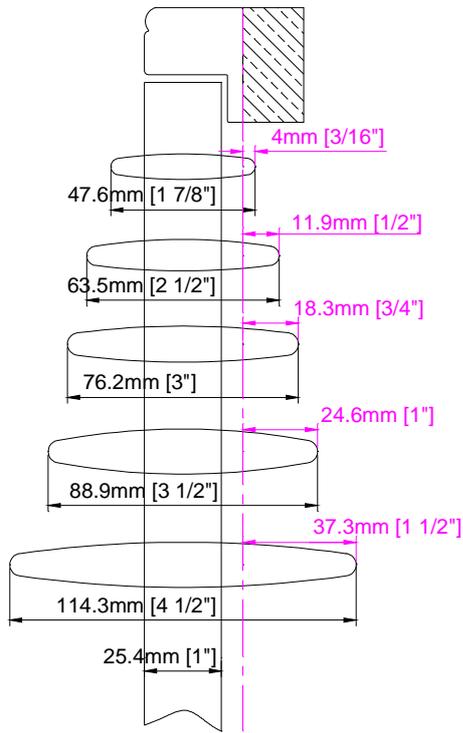
221	Black Walnut
227	Red Oak
229	Rich Walnut
230	Old Teak
237	Wenge
242	Auburn
246	Matte Black
248	Pretzel
250	Sumatra
252	Toffee
254	Driftwood
255	Silver Gray
256	Mist
862	French Oak

Louvers	
Elliptical	1 7/8"
	2 1/2"
	3"
	3 1/2"
	4 1/2"

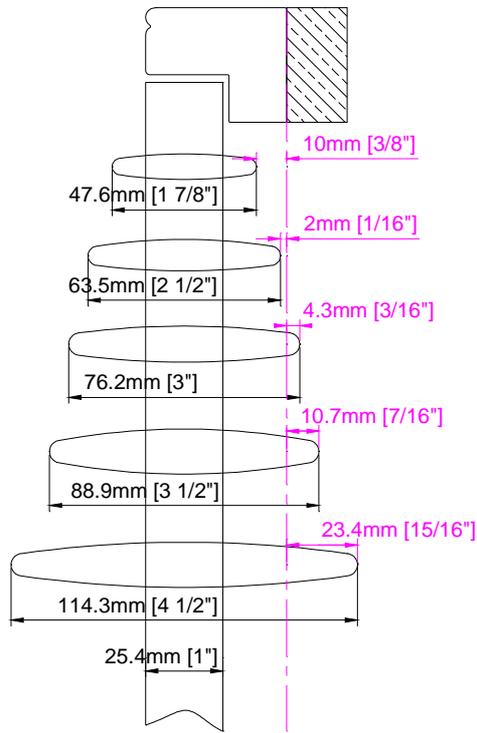


\*Some surcharges apply

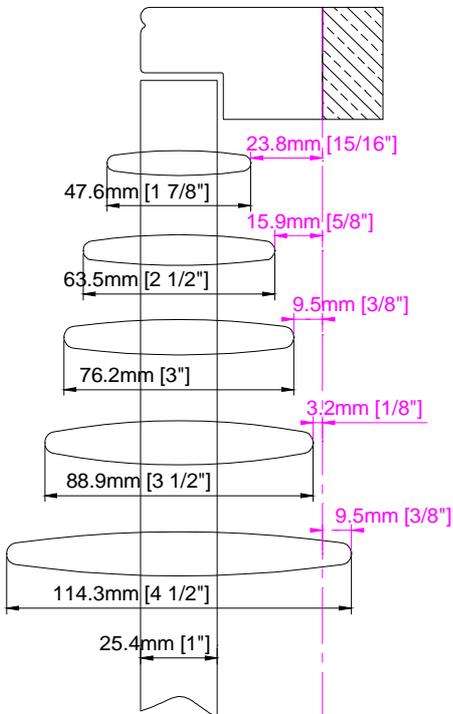
## Louver Depth Clearance For Specific Frames



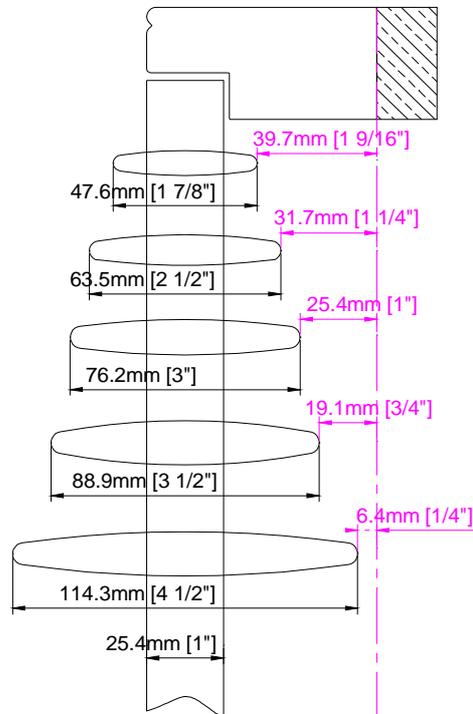
L Frame with 1/4" light block



L Frame



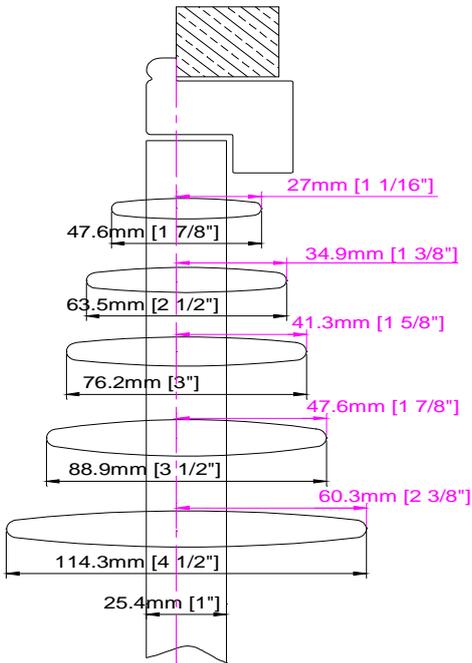
L Frame with 1/2" Buildout



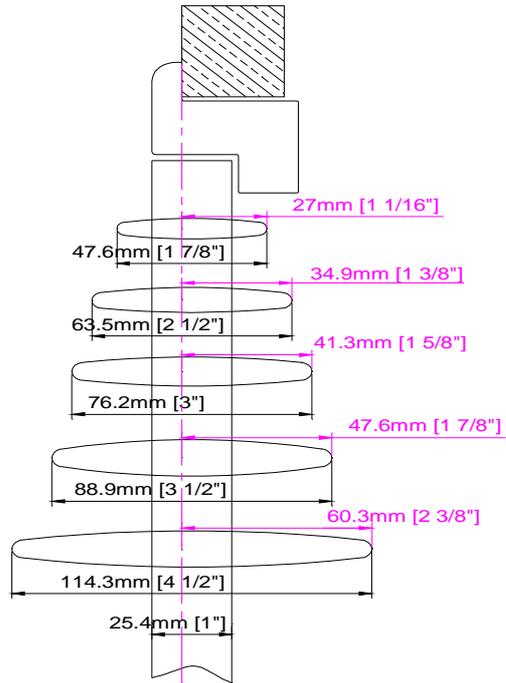
L Frame with 1" Buildout

\*Some surcharges apply

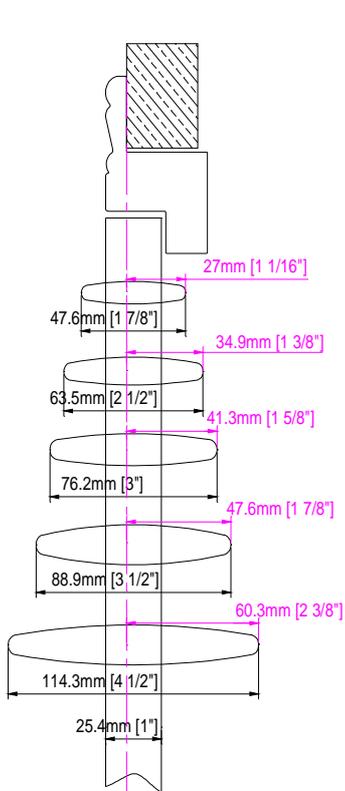
# Normandy® Shutters



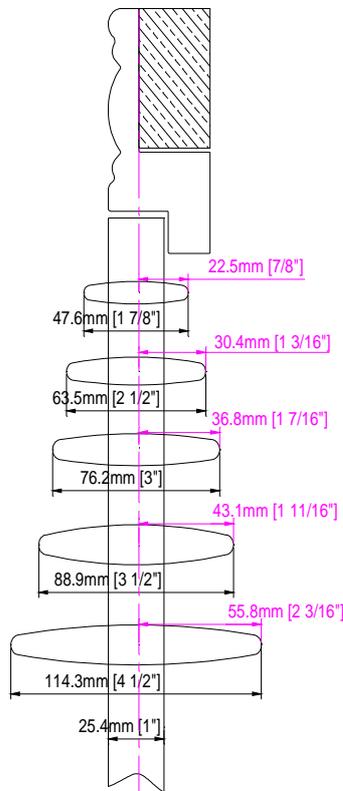
1 1/4" Beaded Z Frame



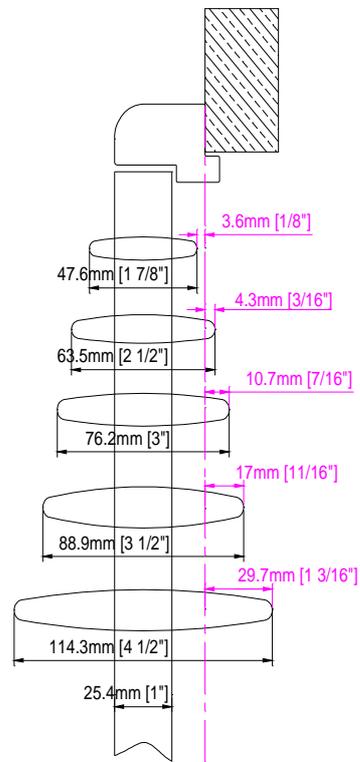
1 1/2" Bullnose Z Frame



2" Bel Air Z Frame



3" Crown Z Frame

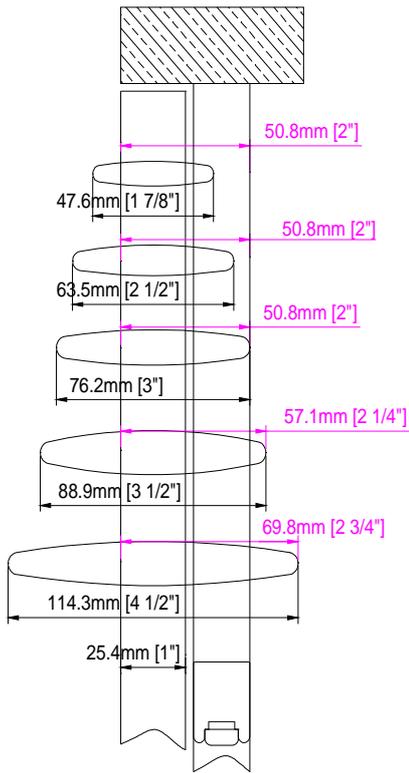


Tilt Out Z Frame

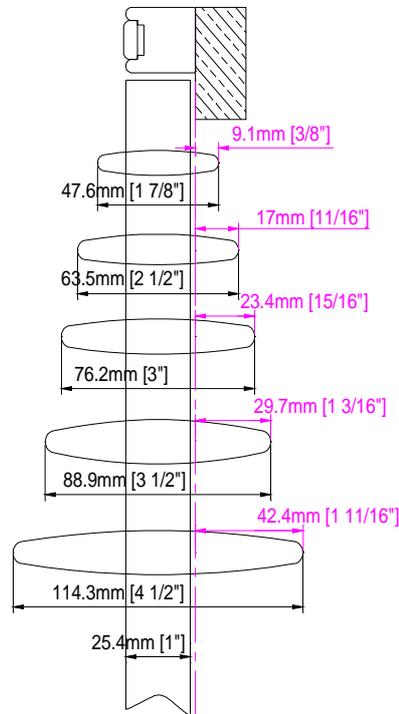
\*Some surcharges apply

ND b- 4 / 5

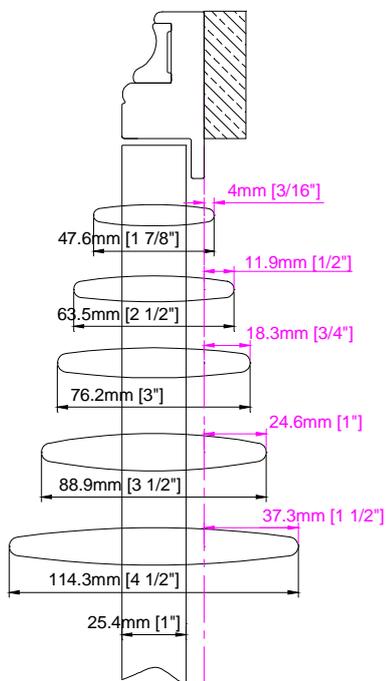
# Normandy Shutters



Hang Strip ( Behind the panel)



Hang Strip ( Beside the panel)



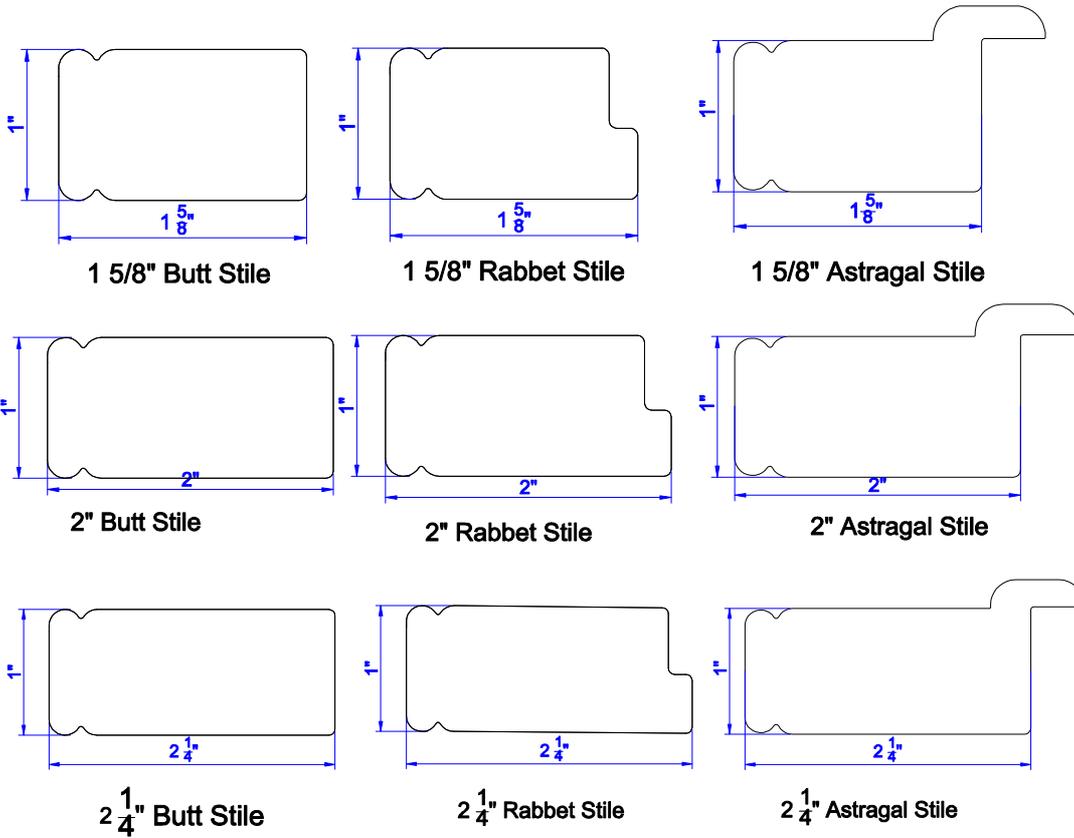
Deco Frame

\*Some surcharges apply

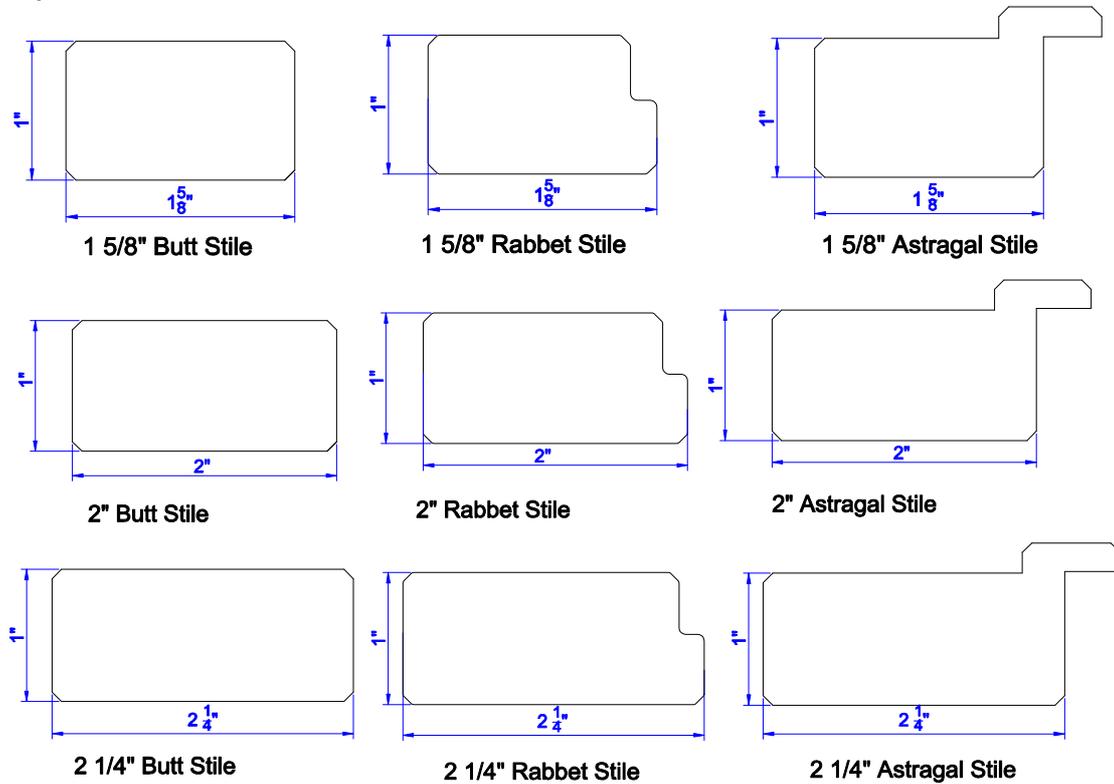
ND b- 5 / 5

**Stiles**

Default: Beaded stile



Optional: Chamfer stile



Stile between panel closure

**Single panel**

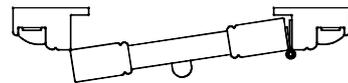
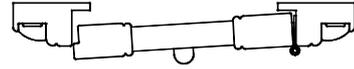
I) Panel width < 9"

Rabbeted stile (Deco frame, L frame, Z frame and Hang strip beside panel)

- 1 5/8"
- 2" (default)

Butt stile only (Hang strip behind panel)

- 1 5/8"
- 2" (default)



II) Panel width ≥ 9"

Butt stile only

- 1 5/8" ( Optional for panel width ≤ 12" )
- 2" (default)

**2 panels or more**

Astragal stile

- 1 5/8" ( Optional for panel width ≤ 12" )
- 2" (default)

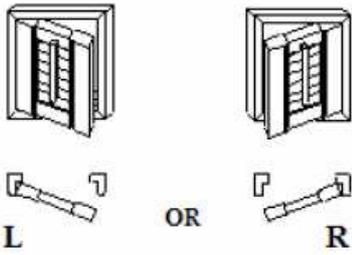
Rabbet stile

- 1 5/8" ( Optional for panel width ≤ 12" )
- 2"

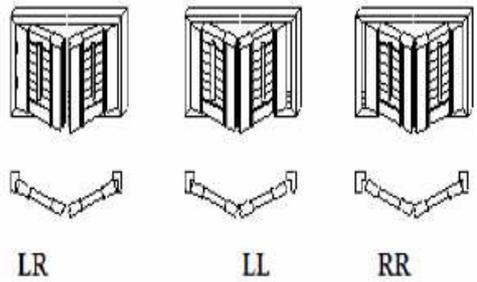
# Normandy® Shutters

## Panel Configurations

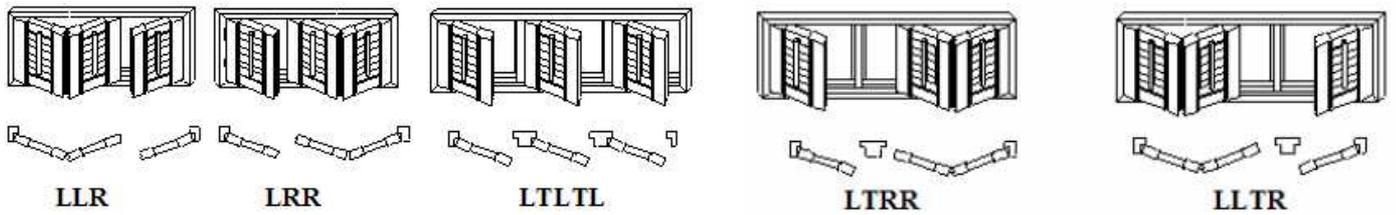
### Single Panel



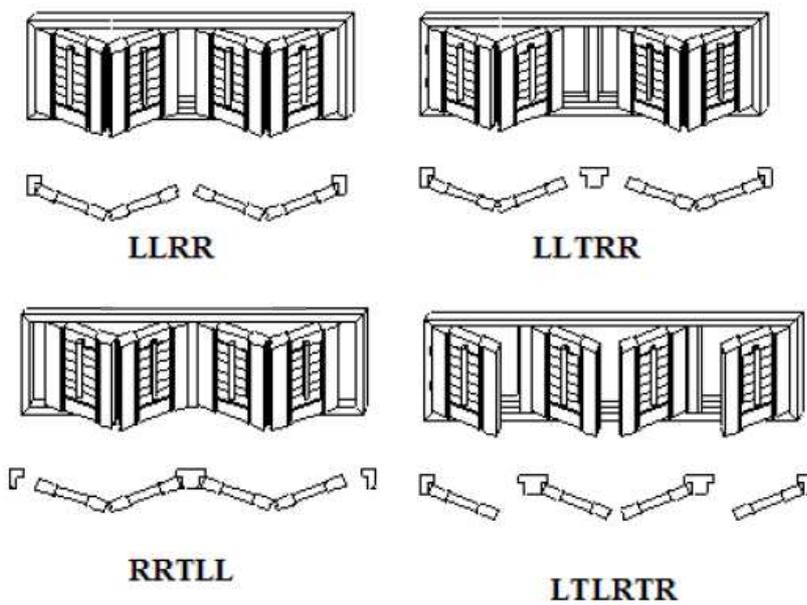
### 2 Panels



### 3 Panels

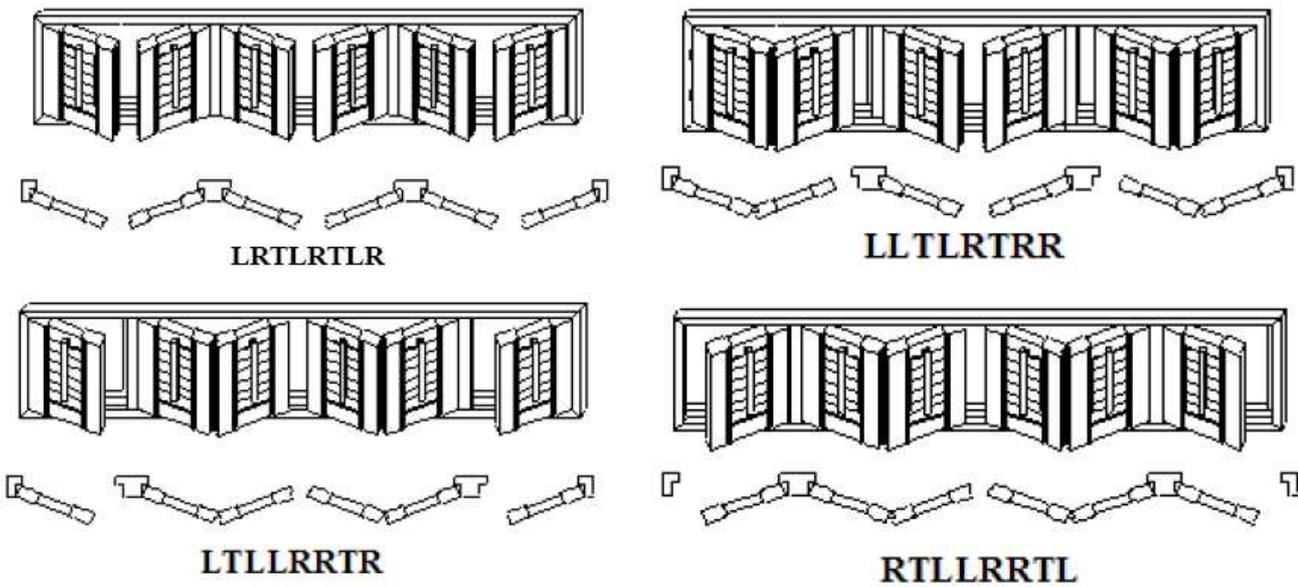


### 4 Panels



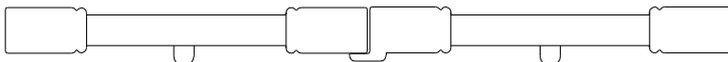
# Normandy® Shutters

## 6 Panels

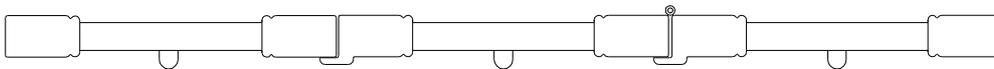


## Panel Configurations – Astragal Stile

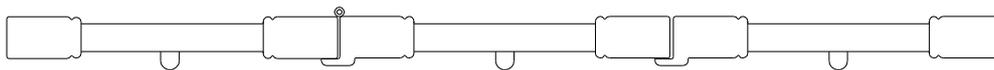
- 2 Panels – LR



- 3 Panels - LRR



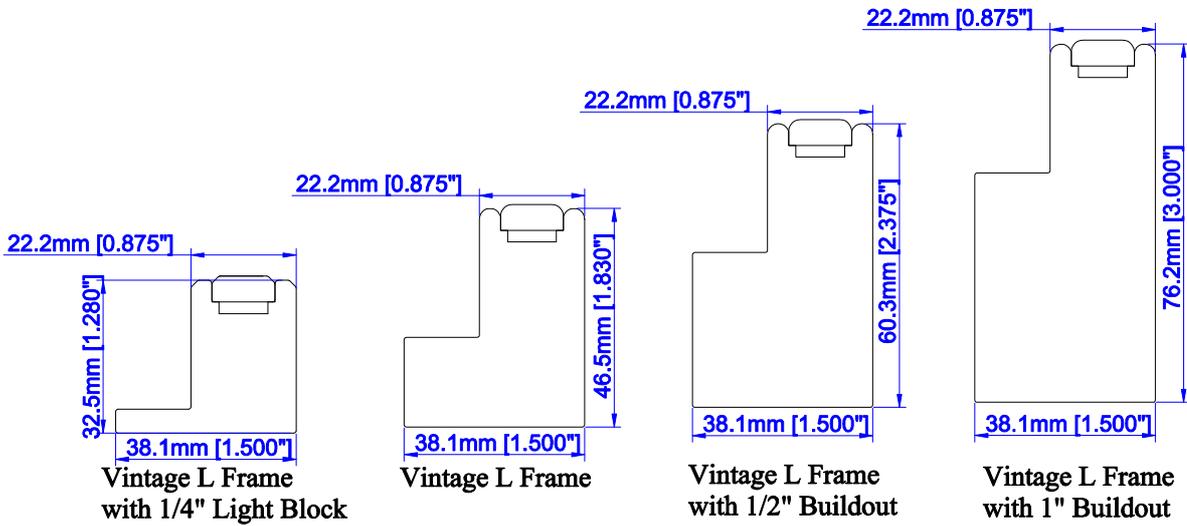
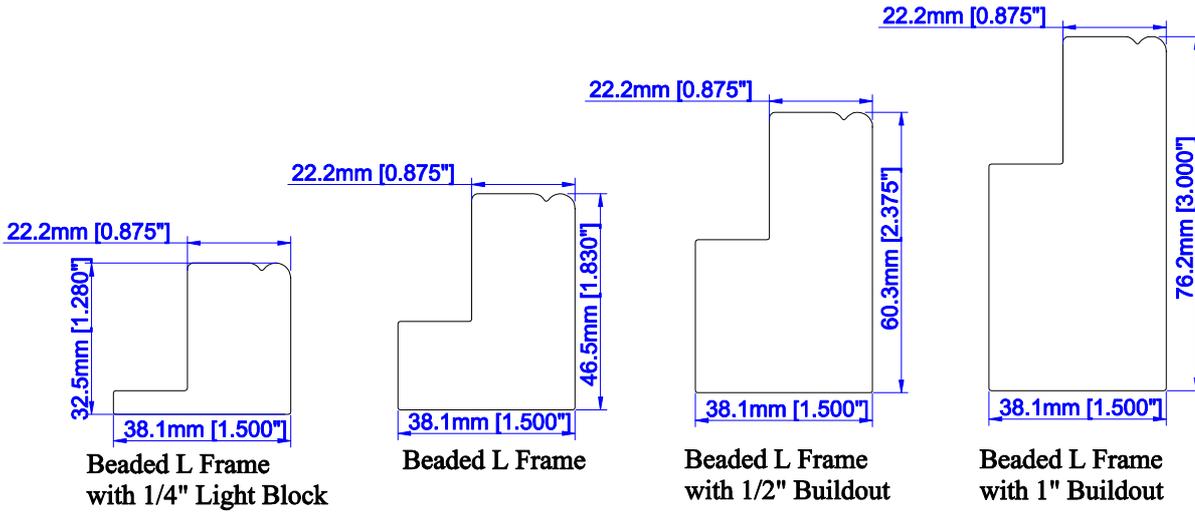
- 3 Panels – LLR



- 4 Panels - LLRR

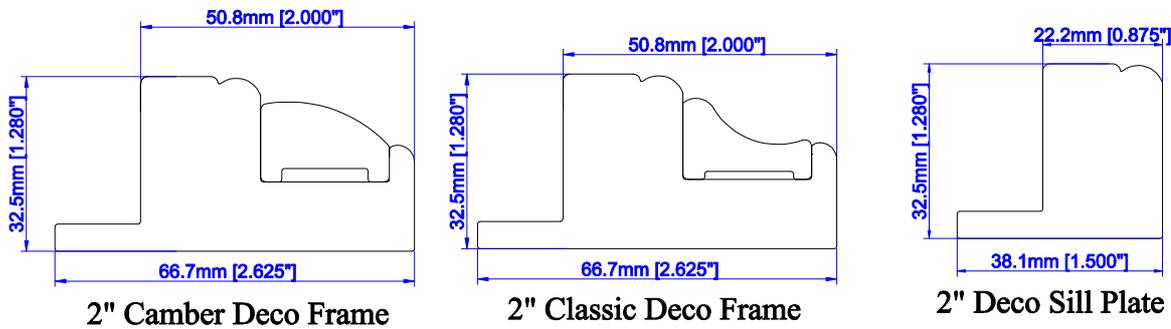


Frame Styles



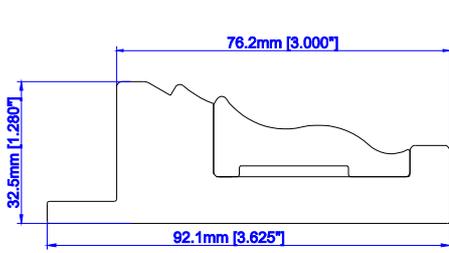
Also available

- Custom extensions\* up to 2" for L frames

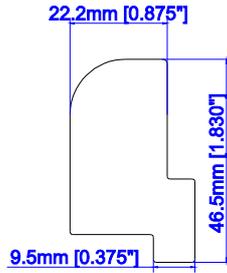


\*Some surcharges apply

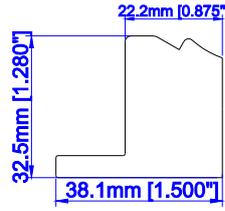
**Frame Styles**



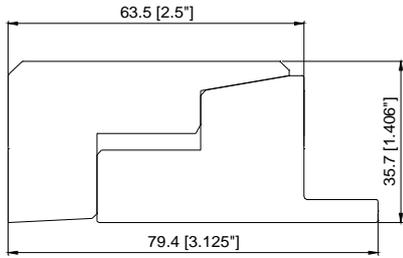
**3" Ridge Deco Frame**



**Tilt Out Z Frame**



**Ridge Deco Sill Plate**



**2.5" Mission Deco Frame**

There are 2 options for the Deco frame installation when Window Size is given (Take Camber Deco frame as an example)

1. Default: light block part install into the window opening;

The window size is the exact size of the window opening;  
 The MFF size is the measurement of the entire shutter, including the frames;  
 The MFF size = Window Size + Face Width

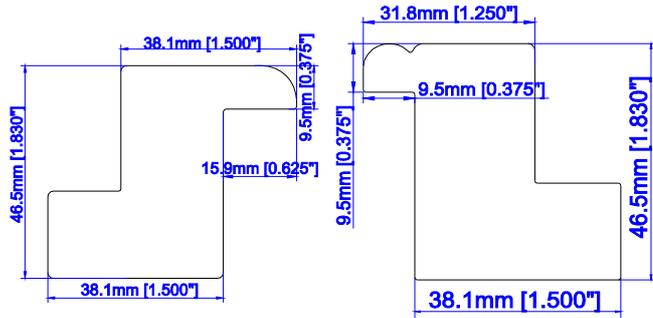


2. Optional: light block part flush with window opening.

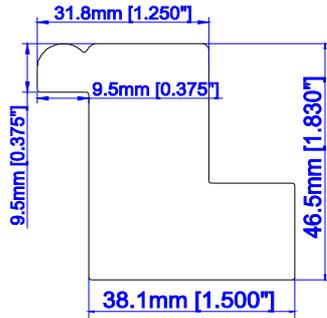
The window size is the exact size of the window opening;  
 The MFF size is the measurement of the entire shutter, including the frames;  
 The MFF size = Window Size + Frame Back Width



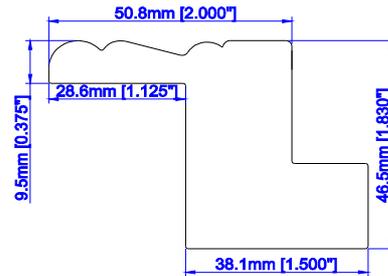
Frame Styles



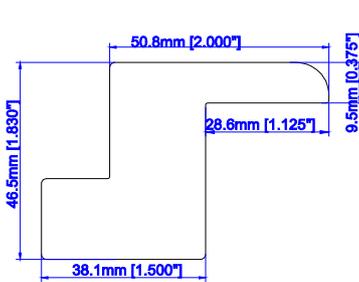
1 1/2" Bullnose Z Frame



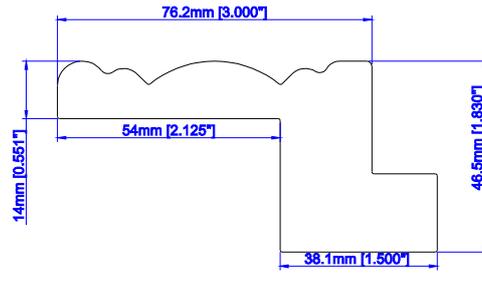
1 1/4" Beaded Z Frame



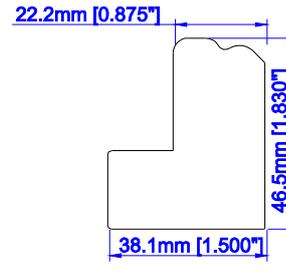
2" Bel Air Z Frame



2" Bullnose Z Frame



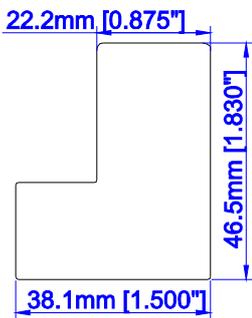
3" Crown Z Frame



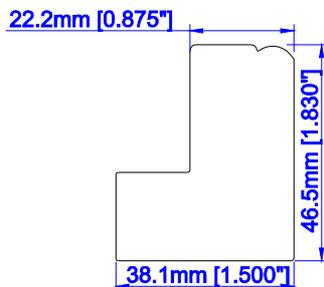
3" Crown Z Sill Plate

Also available

- Custom extensions\* up to 1" for Z frames
- 1/2", 1" and 1 1/2" standard extensions\* and custom extensions\* up to 2" for Deco frames
- Custom extensions\* up to 2" for hang strips (OM)



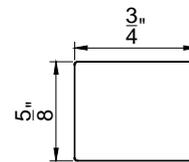
Bullnose Z  
1 1/4" Beaded Z  
Sill Plate



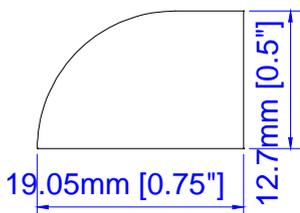
2" Bel Air Z Sill Plate



7/8" Vintage Hang Strip

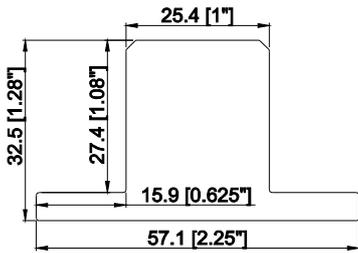


Light Block

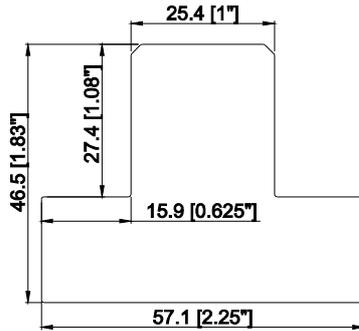


Quarter Round

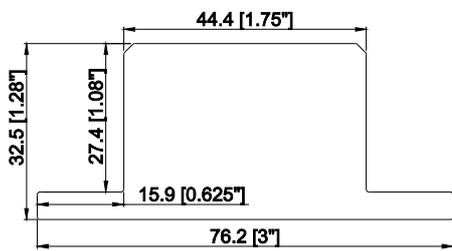
Frame Styles



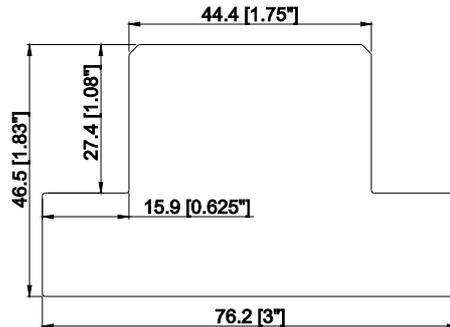
1" Chamfer T Post with 1/4" Light Block (Deco)



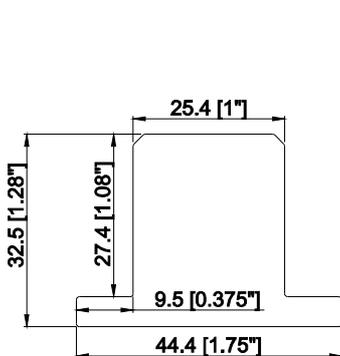
1" Chamfer T Post with 3/4" Light Block (L/Z/HS)



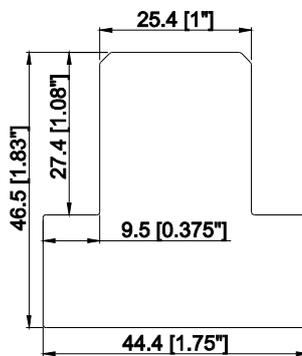
1.75" Chamfer T Post with 1/4" Light Block (Deco)



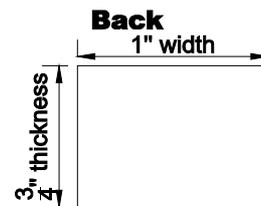
1.75" Chamfer T Post with 3/4" Light Block (L/Z/HS)



1" Chamfer T Post with 1/4" Thick x 3/8" Wide Light Block (Deco)



1" Chamfer T Post with 3/4" Thick x 3/8" Wide Light Block (L/Z/HS)

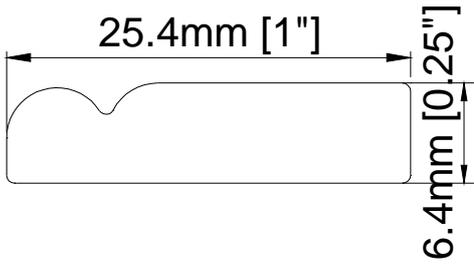


1" \* 3/4" Post (No light block)

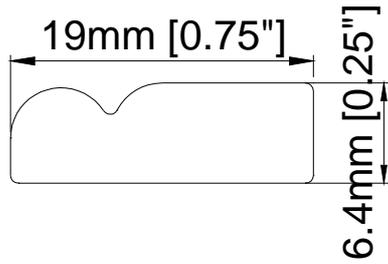
- Custom depth\* up to 2" / width\* up to 7½ for T Posts
  - Size limits (7 1/2")
  - That a surcharge applies and customers should refer to their shutter pricing
  - Any limitations

Note: The 1"x3/4" Post (No Light Block) is only available for Direct Mount. And no hardware will be supplied to install it on the existing window opening.

Frame Styles

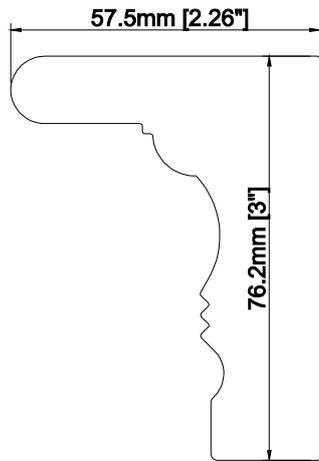


Scribe Trim 1

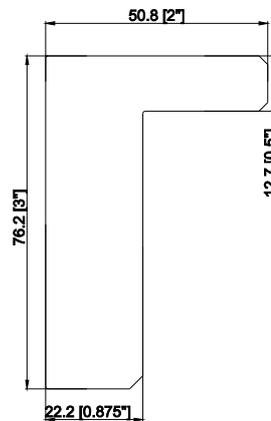


Scribe Trim 2

Sill Frames- For use where there is no existing sill

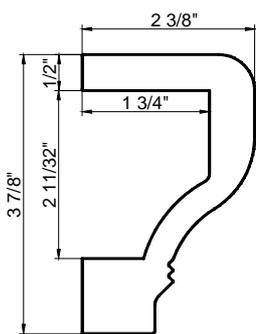


3" Deco Sill Frame

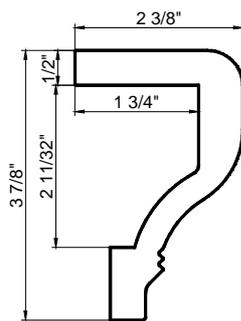


Mission sill Frame

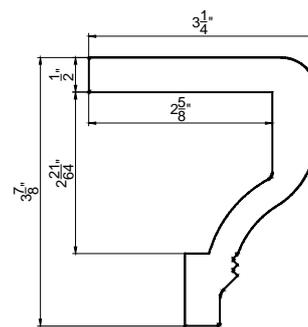
Sill caps-Used to cover existing sills



Designer Sill Cap (L)

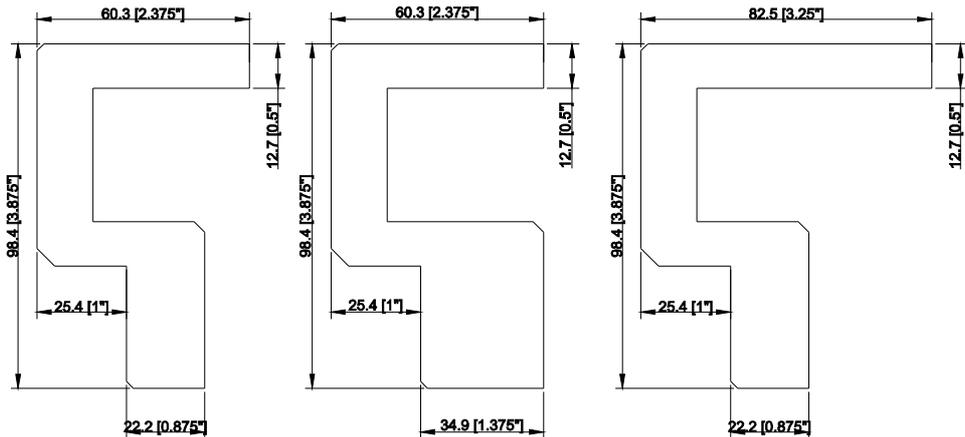


Designer Sill Cap (D/HS)



Designer Sill Cap (Z)

Frame Styles



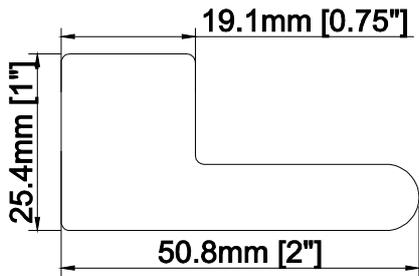
Mission Sill Cap (D/HS)

Mission Sill Cap (L)

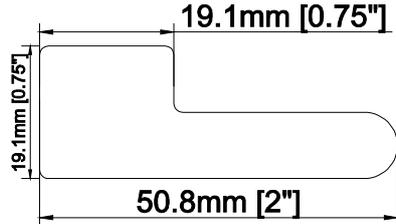
Mission Sill Cap (Z)

Note: For Mission Sill Cap, the extended size at each side needs to be 1" at least.

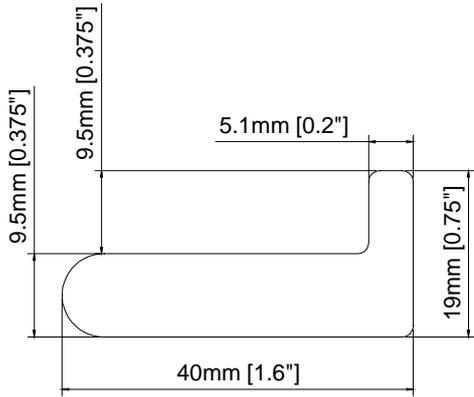
Sill Plates- Used with existing sills



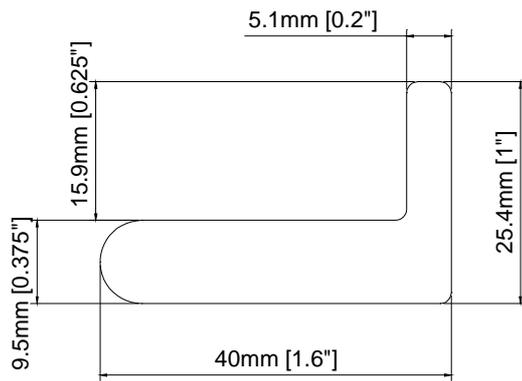
2" Sill Plate with 5/8" Light Block (L/Z)



2" Sill Plate with 3/8" Light Block (L/Z)



1.6" Sill Plate with 3/8" Light Block



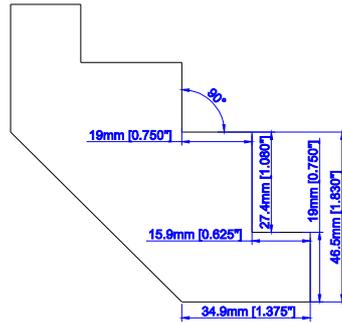
1.6" Sill Plate with 5/8" Light Block

(All Deco & L frames with 1/4" light block)

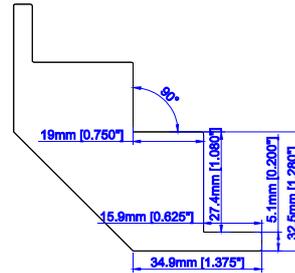
(All Deco & L frames with 1/4" light block)

Frame Styles

Standard Corner & Bay Posts

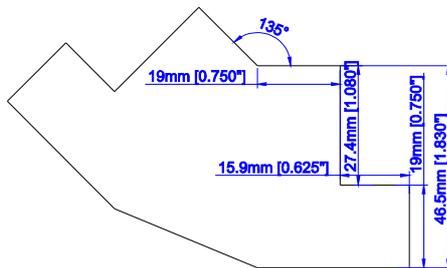


Corner Post with 3/4" Light Block (L/Z/HS)

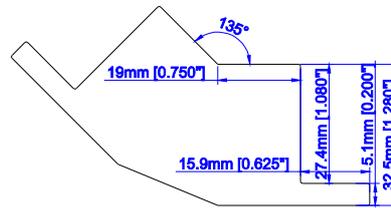


Corner Post with 1/4" Light Block (Deco)

\*Notch out corner post required if ordering Z Frame with solid drywall corner.



Bay Post with 3/4" Light Block (L/Z/HS)



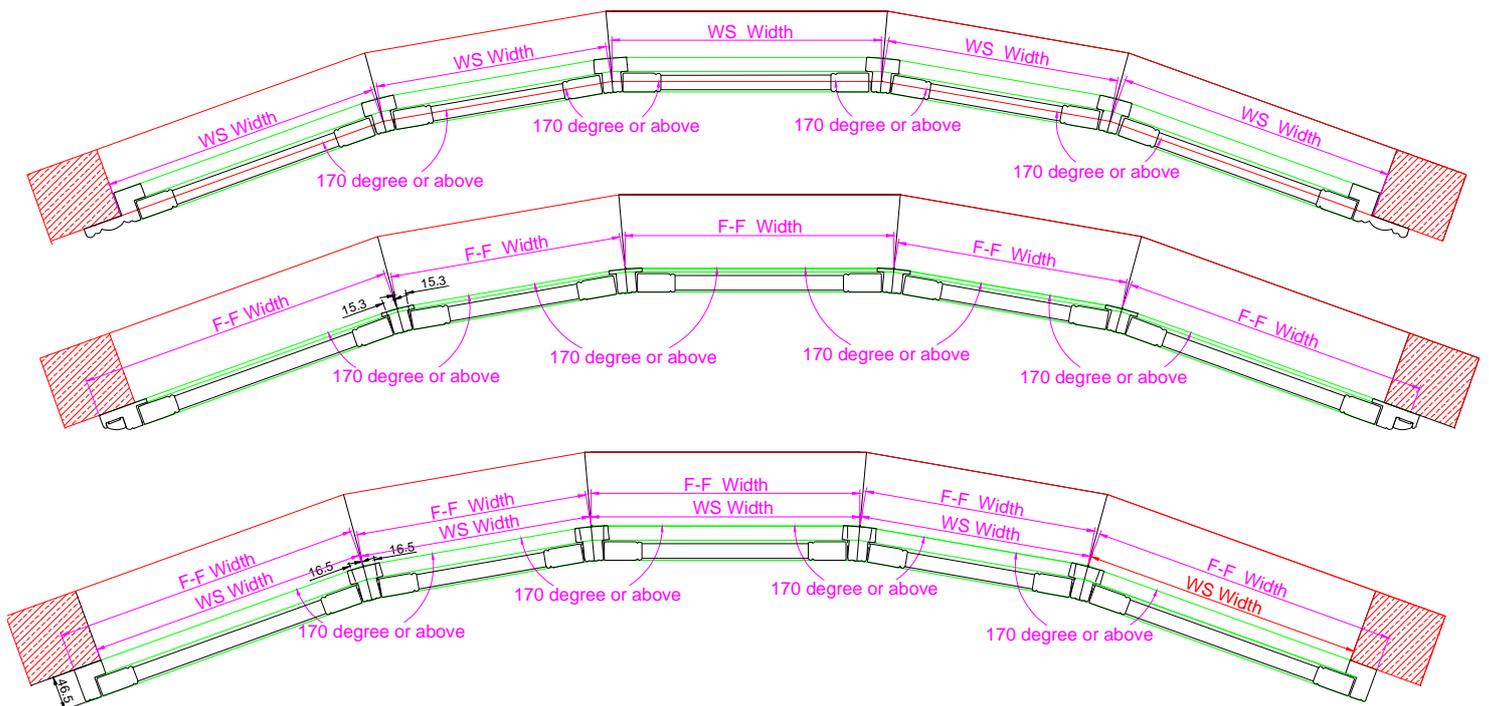
Bay Post with 1/4" Light Block (Deco)

Also available

- o Custom angle bay posts \*

For bay window at 170 degree or above,

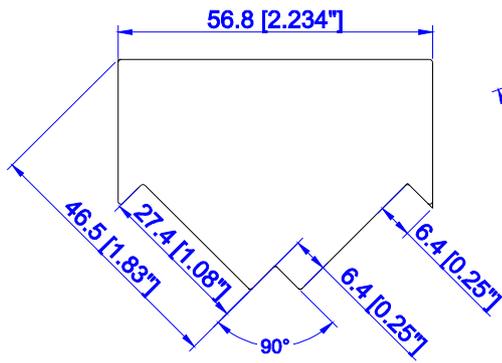
- 1" T Post with 3/8" light block will be used as Bay post;
- For Hang Strip (Behind Panel), bay post will be used.



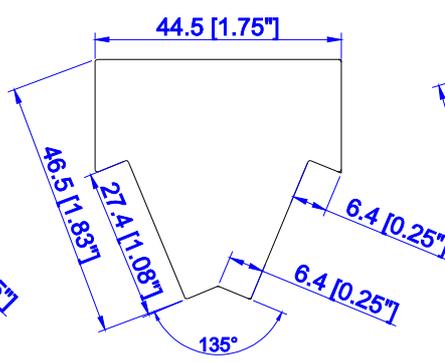
\*Some surcharges apply

Frame Styles

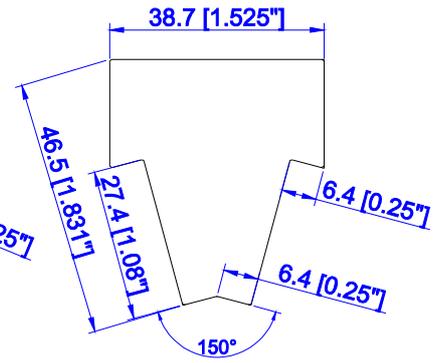
Slim Fit Corner & Bay Posts



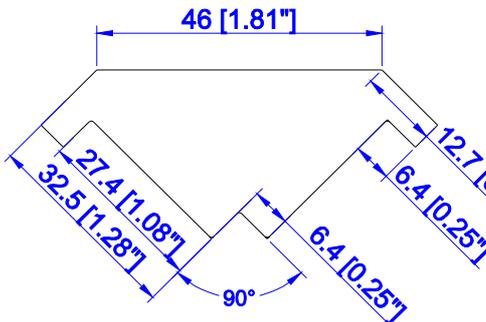
Slim Fit Corner Post for 90 Degree (L/Z/HS)



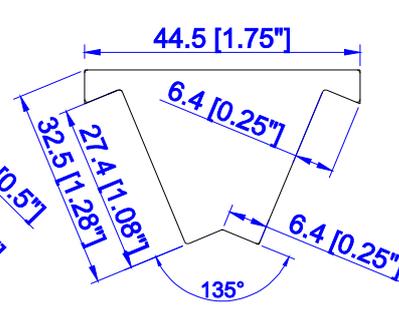
Slim Fit Bay Post for 135 Degree (L/Z/HS)



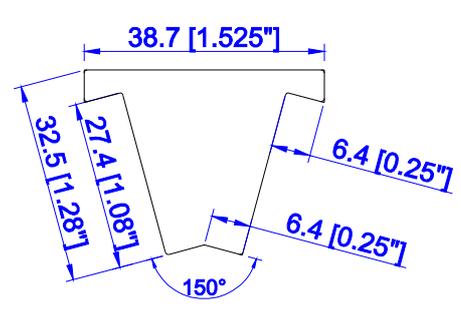
Slim Fit Bay Post for 150 Degree (L/Z/HS)



Slim Fit Corner Post for 90 Degree (D)



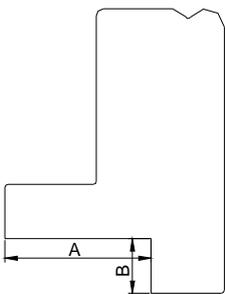
Slim Fit Bay Post for 135 Degree (D)



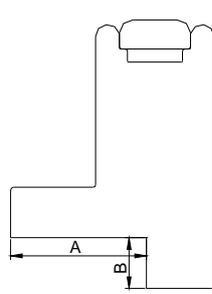
Slim Fit Bay Post for 150 Degree (D)

Note: Due to size and weight limitations, Slim Fit Posts may only be hinged on one side and with a single panel (no bi-folded panels). Please consider this when determining panel configuration.

- Slim Fit Posts are available in 90, 135 and 150 Degrees only.

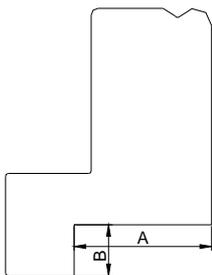


Notch Out  
Beaded L Frame (A) \*

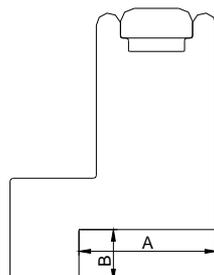


Notch Out  
Vintage L Frame (A) \*

Limitation for the Notch Out Size:  
A ≤ 1"; B ≤ 1/2"



Notch Out  
Beaded L Frame (B) \*

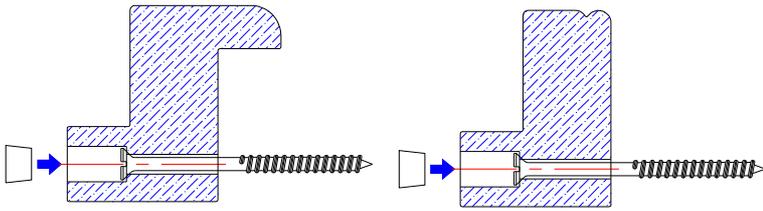


Notch Out  
Vintage L Frame (B)

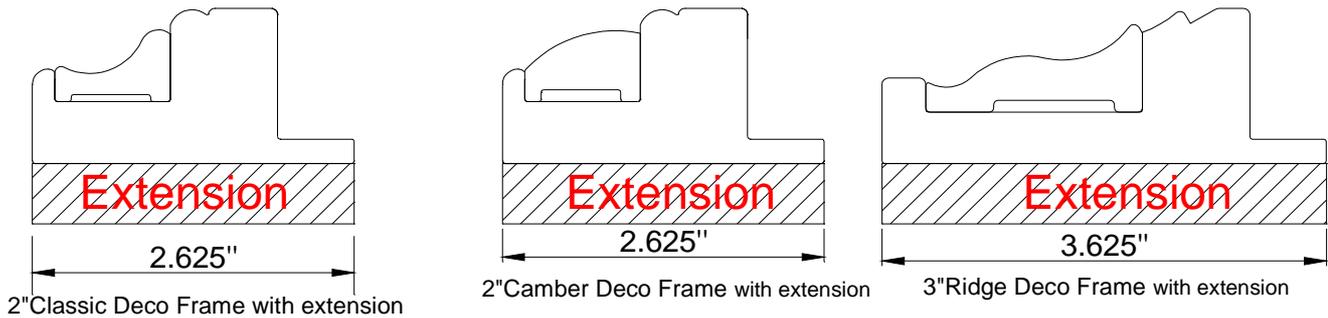
\*Some surcharges apply

## Frame Styles

Pre-drill L Frames (Inside Mount Only) or Z frames:



Extension for Deco Frame\* (Default to have full extension):



Note: When the extension thickness of the frame & T post is more than 2", the extension will not be attached with the frame and T post.

Default principle:

Regarding shutter with horizontal T-post type issue: Horizontal T-Post type will always be the Chamfer T post unless otherwise specified.

## General Product Specifications

<u>Description</u>	<u>Minimum</u>	<u>Maximum</u>
Single Panel Width (Regular)	6"	30" for 1.875" louver, 36" for 2.5" & 3" louver, 42" for 3.5" & 4.5" louvers
Single Panel Width (Bifold)	6"	26"
Single Panel Height	10"	132"
Shutter Width (Without T Post)	N/A	4x single panel width (bifold) + frame
Shutter Width (With T Post)	N/A	Unlimited <b>(For orders shipped by sea, frames longer than 142" will be spliced in the middle. For orders shipped by air, frames longer than 120" will be spliced in the middle.)</b>
Shutter Height	N/A	132" + frame

~~\* For frame and stile exceeding 108", there will be a visible finger joint line in the middle.~~  
Occasional finger joint line may be visible in the frames and stiles.

Divider rail is required for panel heights over 78".

84" panel height limit without divider rail is for shutter types below:

- Normandy French Door with OR without Cut-out (including type E&F), which should be installed on existing door, solid glass or sidelights instead of window opening.
- Normandy Bypass and bi-fold track shutters.

Standard divider rail size is 3", Custom Size (3"~7.875") Divider Rail is available with surcharge. Please note the standard top/bottom rail size should be within 2.75"~6.5". For regular shutters, the step for the rail size is 1/8".

**Material:** Solid Colour: Made in Hardwood; Stain Colour: Made in Phoenix wood

### Shutters without bottom supports

Shutters without bottom supports may sag and deform, including situations below:

1. Shutters with bottom gap over 0.1";
2. Shutters with no frame or no existing sill at the bottom to support the panel (or shutter has bottom frame/existing sill, but the panel is frequently left in the open position without bottom support).

Normandy shutters will be covered by our warranty for this application, subject to our standard specification limitations and the guidelines listed below:

**All Normandy panel configurations:**

You must inform Norman Shutters of situations where shutters will not have bottom support when placing the initial order, or warranty will be considered void.

Informing Norman Shutters when placing such orders ensures that the factory will add extra hinges to support the panel. This will reduce the probability of the panels sagging and increase shutter integrity.

If you fail to notify Norman Shutters that the shutter will be used without a bottom support or used as doors, this will constitute a misapplication of the shutter. Consequently, you will be responsible for the cost of any RGA Reorder that is submitted.

If you want a bifold shutter, a track must be ordered to support the panels.

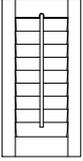
**Side by Side / Match Line Number:**

When **Side by Side** is selected, it is solely to match top or bottom rails and the number of hinges will also be matched when the panel heights are within +/- 2". When selected, the option to match with another line number or previous work order is solely for matching the top or bottom rails. Neither option will be used to match any other specifications.

## Tilt Rods

### Standard Tilt Rod

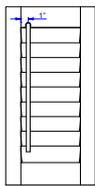
**Default Location:** In the middle of the panel on front side (default).



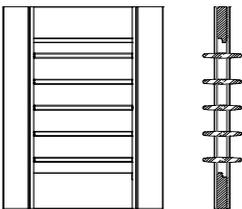
### Offset Tilt Rod\*

**Default Location:** On the front side of the panel and at 1" from the louver ends on the hinged side.

**Optional location:** per your request



### InvisibleTilt™ \*



Louver tilting system embedded within panel stile. It is not available for 1<sup>7</sup>/<sub>8</sub>" louver. The tilting system is split when the number of louvers exceeds the limits as listed below:

Louver Size	Maximum Possible Louvers	Panel Height Range
2½"	24	54 ¾" – 57 ¼"
3"	19	54 ¼" – 57"
3½"	16	54 ¾" – 58"
4½"	12	54 ¾" – 60"

For even numbers of louvers, the number of louvers operated by the top and the bottom tilting system will be the same;

For odd numbers of louvers, the number of louvers operated by the bottom tilting system will be one more than the number of louvers operated by the top tilting system;

To ensure split tilt is included, always specify on the order.

## Split Tilt

When selected, the louvers are split evenly by default unless a custom location is requested.

When the customer selects a custom location, the measurement will be as follows (please note that the louvers are in the closed position when measured):

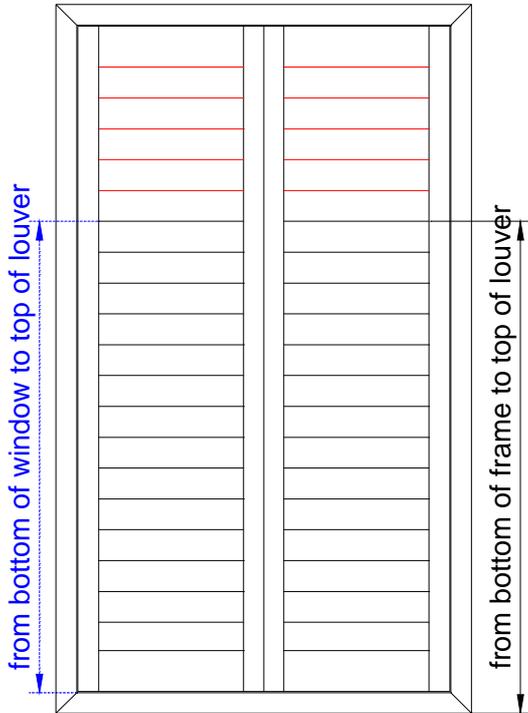
\*Some surcharges apply

**Window size:**

- Measure from the bottom of the window to the top of the louver

**Max frame-to-frame:**

- Measure from the bottom of the frame (or panel if there is no bottom frame, sill or sill cap) to the top of the louver.



**Split tilt allowable deviations**

Louver Size	Allowable $\pm$ Deviation
1 7/8"	3/4"
2 1/2"	1"
3"	1 1/4"
3 1/2"	1 1/2"
4 1/2"	2"

**Split Location:**

— Per the customer's specification. However, the location of the top louver of the bottom split section may be adjusted to achieve more balanced top and bottom rails when **allow deviations** is selected during order entry. If necessary the location will be moved up from the desired height to ensure any obstruction is covered. The amount of the deviation from the desired height will depend on the size of the louver selected.

If the exact location of the split is critical, customer may select **exact location** in the order entry system when placing the order. This may result in significantly different top and bottom rails. When exact location is selected, a popup will reveal the resulting top and bottom rails measurements from which the customer may either:

1. Accept the listed top and bottom rail sizes
2. Modify the split location (sometimes a slight adjustment in the exact split location may achieve desired top and bottom rail sizes)
3. Change to **allow deviations** so the system will calculate the split location

**Note:** Top and bottom rail sizes may change if the current line item is being matched with another line item. Carefully review all top and bottom rail sizes and split locations to ensure a desirable look is achieved

## Divider Rails

A divider rail is an extra rail in the middle of the panel.  
Creates two sections in the panel so louvers can be operated independently.  
Strengthens the panel and enhances structural integrity.  
Divider rail is required for panel heights over 78".

Custom Size(3"~7.875") Divider Rail is available with surcharge.

84" panel height limit without divider rail is for shutter types below:

- Normandy French Door with OR without Cut-out (including type E&F), which should be installed on existing door, solid glass or sidelights instead of window opening.
- Normandy Bypass and bi-fold track shutters

### Specifications

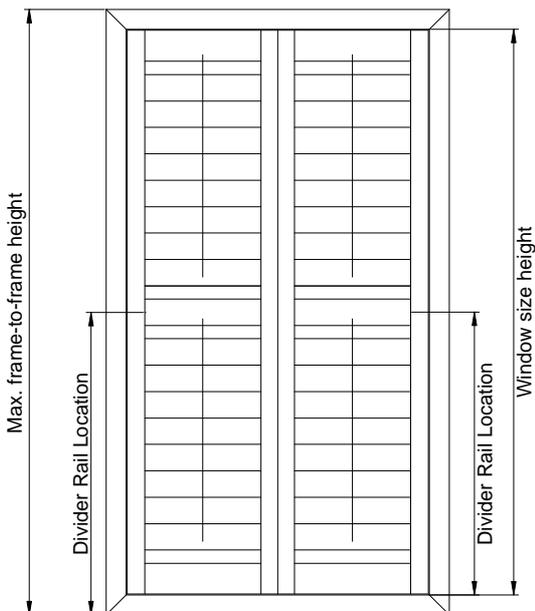
Standard size: 3"

Default location: center of the panel unless specified otherwise

### Measurements:

- Window size:
  - Measure from the bottom of the window to the center of the divider rail.
- Max frame-to-frame:
  - Measure from the bottom of the frame to the center of the divider rail.
- Position:
  - Per customer's specification. However, the divider rail may be adjusted to a lower or higher position, within our allowable deviation, to ensure reinforcement and aesthetics of the shutter.

When placing the order, please clearly specify if the divider rail position needs to line up with that of other shutter divider rails in the same room. Please also refer to the table below for the allowable deviation details.



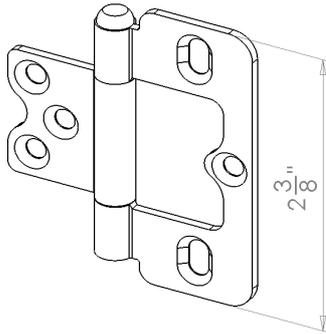
### Divider rail allowable deviations

Louver Size	Allowable $\pm$ Deviation
1 7/8"	3/4"
2 1/2"	1"
3"	1 1/4"
3 1/2"	1 1/2"
4 1/2"	2"

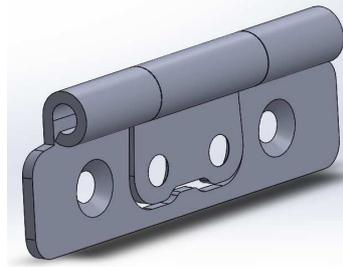
## Hardware

### Hinges

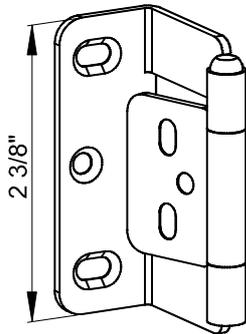
#### Self-Mortise Hinge



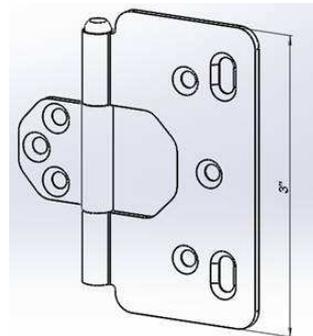
#### Bi-fold Hinge



#### L Hinge



#### Direct Mount 3" Hinge



Hinges are available in:

Pure White, Silk White, Bisque, Pearl, Bright Brass, Antique Brass, Black, Nickel plated, Brushed Nickel, Stainless Steel\* Crisp Linen, String, Sea Mist, Stone Gray, Brown Gray, Taupe Gray

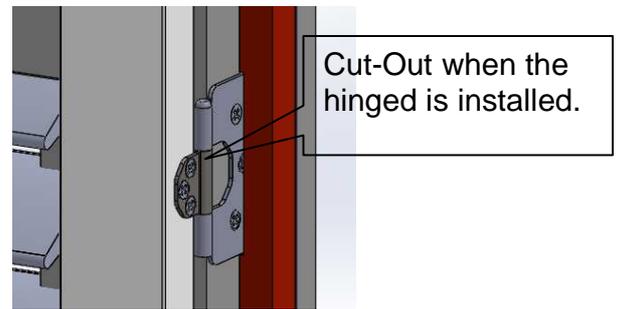
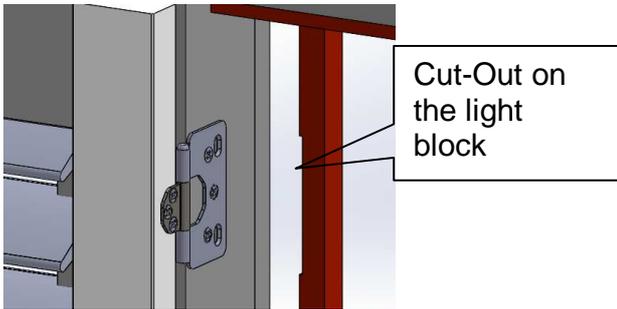
While hinge colors of Crisp Linen, String, Sea Mist, Stone Gray, Brown Gray, Taupe Gray are not available for Direct mount 3" Hinges.

#### Direct Mount 3" Hinge:

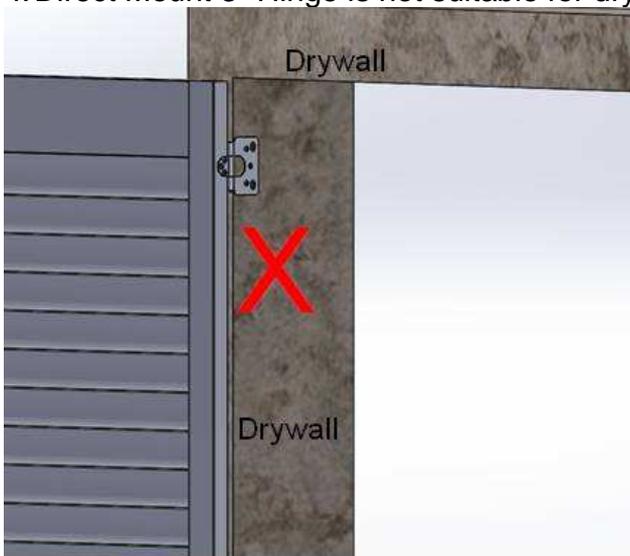
1. The hinge position of the direct mount 3" hinge will be different from that of the 2.375" ones. For shutters used both the 2.375" and the direct mount 3" hinge, the hinge position of the 2.375" ones will match that of the direct mount 3" hinge;
2. The hinge is only to install between the panel and the existing window. For other situation, 2.375" hinges will be used;

\*Some surcharges apply

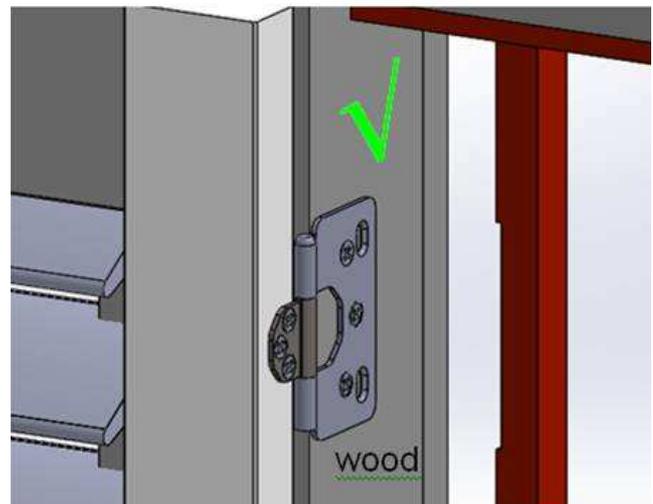
3. To avoid conflict, there will be cut-out for the light block of the hinged side. Please refer to the drawing below.



4. Direct Mount 3" Hinge is not suitable for drywall installations.



Direct Mount 3" hinge is not suitable for drywall installations.  
It's not recommended.

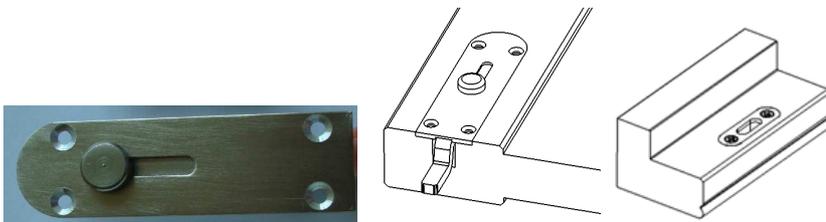


It's acceptable.

Panel Lock: (not available for 1.625" Stile)

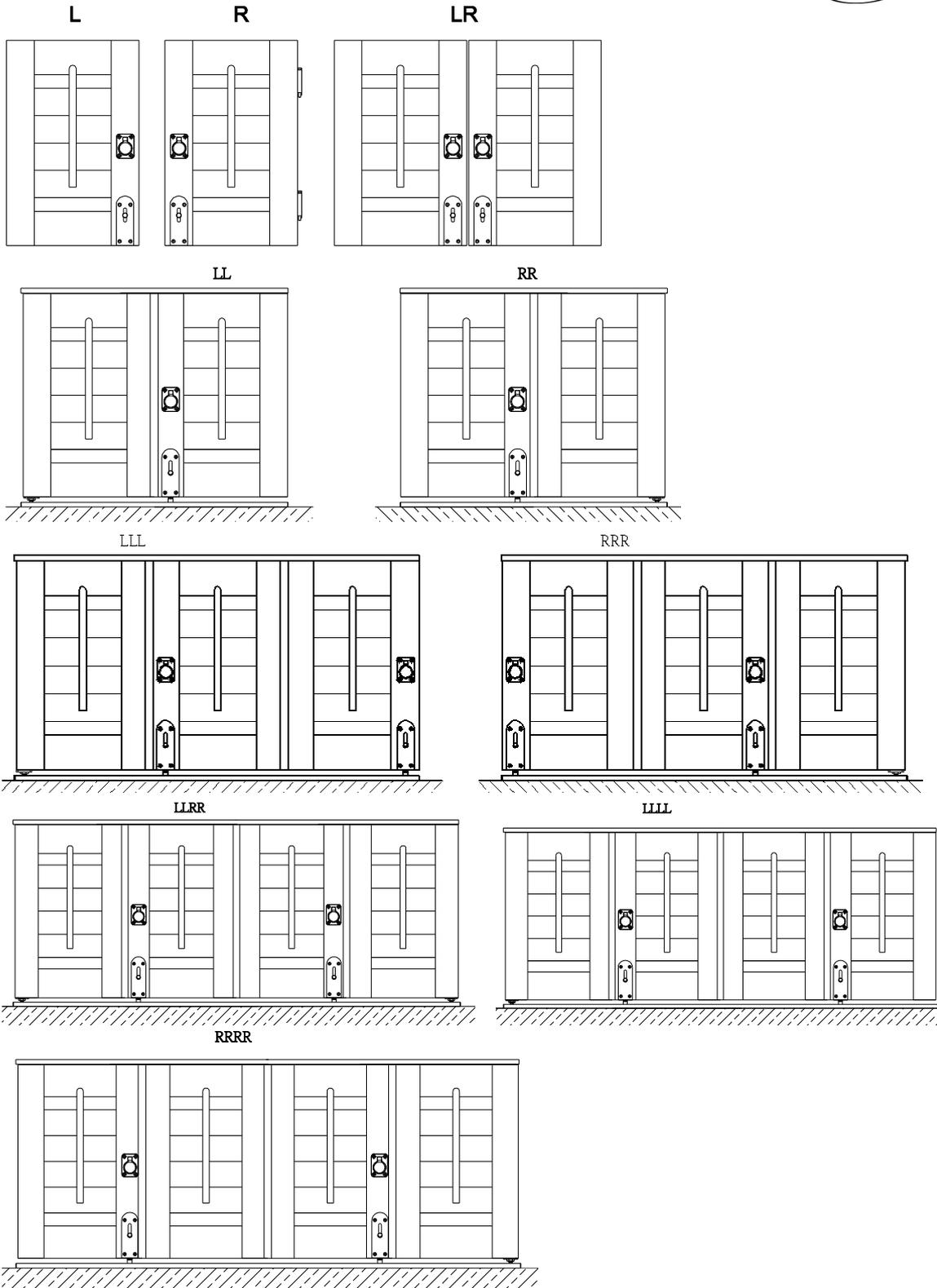
Available Material: All

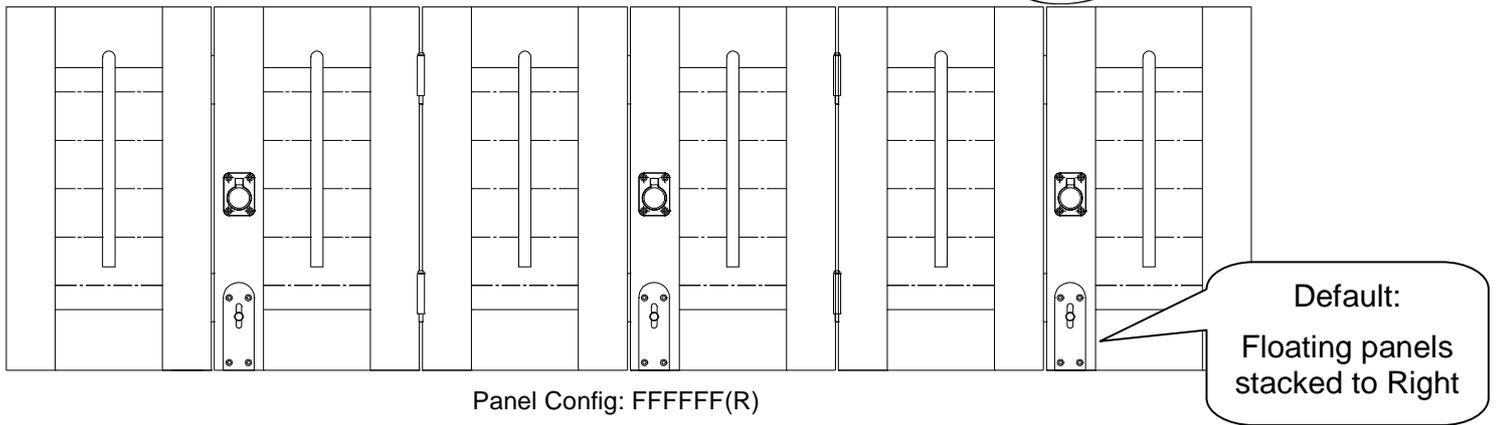
Color: Brush Nickel Plated



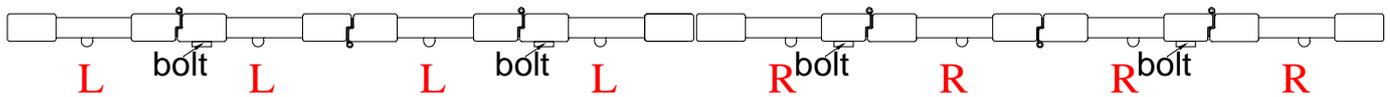
Position: (Only available on Bottom for Track Shutters with Bottom Track; For Regular, available on Top/Bottom/both Top and Bottom)

\*Some surcharges apply



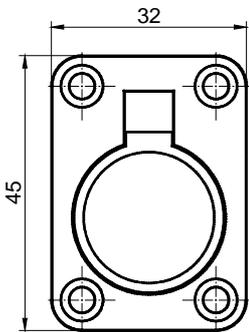


The Panel Lock location for both track system shutters and regular shutters would be the same. The general principle is that the Panel Lock position will avoid the stile which will install the spring-loaded guide at bottom (same stile as the Wheel carrier).



Ring pull: for easy opening and closing. (Not available for 1.625" Stile)

Available in all shutter programs.



**Ring pull location principle for Floating Panels:**

1. When floating panel config is in pairs, it will be split into halves, the left will be for LL and the right will be for RR. So the ring pull location for FF/FF, FF/FF/FF/FF will be same as that of panel config as LL/RR, LL/LL/RR/RR.
2. When floating panel config is FF, the ring pull location will be same as that of panel config LL.
3. When floating panel config is FFFF/FF, the ring pull location will be same as that of panel config LLLL/RR.
4. When floating panel config is singular, it will be split into 3 sections, the left and mid sections are for LL and the right section is for RR. So the ring pull location for FF/FF/FF, FF/FF/FF/FF/FF will be same as that of LL/LL/RR, LL/LL/LL/RR/RR.

# *Normandy Shutters*

Please note the ring pull color will match with the hinge color.

When shutter order with Invisible hinge, the ring pull color will match with the normal hinge color.

Please see the matching chart below:

Hinge color	Pure White	Silk White	Bisque	Pearl	Black	Nickel Plated	Brushed Nickel	Antique Brass	Bright Brass	Stainless Steel
Ring Pull color	White	White	Bisque	Pearl	Black	Brushed Nickel	Brushed Nickel	Antique Brass	Bright Brass	Brushed Nickel

Hinge color	Crisp Linen	String	Sea Mist	Stone Gray	Brown Gray	Taupe Gray
Ring Pull color	Bisque	Bisque	Brushed Nickel	Brushed Nickel	Brushed Nickel	Brushed Nickel

Color ID	Color Name	2.375" Hinge color (Default)	Direct Mount 3" Hinge color (Default)	T post connector color	Ring pull color	Invisible hinge color	New Top & Bottom Tracks color (Default)	Hoffman Key Color (Default)
001	Pure White	Pure White	Pure White	Pure White	White	Pearl Chrome Plated	Bright White	White
002	Extra White	Silk White	Silk White	Silk White	White		Bright White	White
003	Silk White	Silk White	Silk White	Silk White	White		Bright White	White
004	Bright White	Silk White	Silk White	Silk White	White		Bright White	White
006	Pearl	Pearl	Pearl	Pearl	Pearl		Bright White	White
007	Ivory Lace	Bisque	Bisque	Bisque	Bisque		Metallic Gray	White
009	Creamy	Pearl	Pearl	Pearl	Pearl		Bright White	White
012	Crisp Linen	Crisp Linen	Bisque	Bisque	Bisque		Metallic Gray	White
016	Butter	Crisp Linen	Bisque	Bisque	Bisque		Metallic Gray	White
019	String	String	Bisque	Bisque	Bisque		Bronze	White
030	Moondust	Sea Mist	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	Transparent
032	Sea Mist	Sea Mist	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	White
042	Hall Gray	Sea Mist	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	White
046	Ice	Silk White	Silk White	Silk White	White		Bright White	White

\*Some surcharges apply

# *Normandy Shutters*

048	Chai	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel		Bronze	Transparent
049	Stone Gray	Stone Gray	Nickel Plated	Nickel Plated	Brushed Nickel		Bronze	Transparent
051	Brown Gray	Brown Gray	Nickel Plated	Nickel Plated	Brushed Nickel		Bronze	Transparent
053	Clay	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel		Bronze	Transparent
063	Decorators White	Silk White	Silk White	Silk White	White		Bright White	White
066	Winchester White 2010	Pearl	Pearl	Pearl	Pearl		Metallic Gray	White
073	Sky Gray	Silk White	Silk White	Silk White	White		Bright White	White
074	Element Gray	Sea Mist	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	White
075	Storm Gray	Sea Mist	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	Transparent
077	Dawn	Silk White	Silk White	Silk White	White		Metallic Gray	White
078	Cloud Blue	Silk White	Silk White	Silk White	White		Metallic Gray	White
080	Taupe Gray	Taupe Gray	Nickel Plated	Nickel Plated	Brushed Nickel		Metallic Gray	White
836	Classic Black	Black	Black	Black	Black		Bronze	Black

Color ID	Color Name	2.375" Hinge color (Default)	Direct Mount 3" Hinge color (Default)	T post Connect or color (Default)	Ring Pull color	Invisible hinge color	New Top & Bottom Tracks color (Default)	Hoffman Key Color (Default)
108	Rustic Gray	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel	Pearl Chrome Plated	Bronze	Transparent
109	Weathered Teak	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel		Bronze	Transparent
110	Limed White	Silk White	Silk White	Silk White	White		Bronze	White
111	Pebble	Silk White	Silk White	Silk White	White		Metallic Gray	White
200	Natural	Antique Brass	Antique Brass	Nickel Plated	Antique Brass		Bronze	Coffee
202	Golden Oak	Antique Brass	Antique Brass	Nickel Plated	Antique Brass		Bronze	Coffee

\*Some surcharges apply

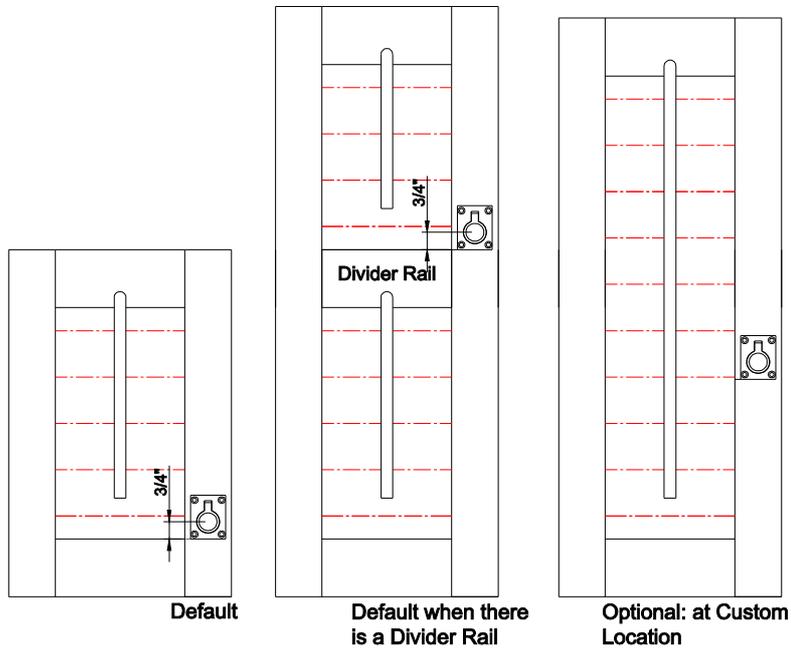
# *Normandy Shutters*

205	Goldenrod	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
212	Dark Teak	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
215	Cordovan	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
220	New Ebony	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Transparent
221	Black Walnut	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Black
227	Red Oak	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
229	Rich Walnut	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
230	Old Teak	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
237	Wenge	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Black
242	Auburn	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
246	Matte Black	Black	Black	Black	Black	Bronze	Black
248	Pretzel	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
250	Sumatra	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee
252	Toffee	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Black
254	Driftwood	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel	Metallic Gray	White
255	Silver Gray	Nickel Plated	Nickel Plated	Nickel Plated	Brushed Nickel	Metallic Gray	Transparent
256	Mist	Silk White	Silk White	Silk White	White	Metallic Gray	White
862	French Oak	Antique Brass	Antique Brass	Nickel Plated	Antique Brass	Bronze	Coffee

- Please note that the color options for Pin / Tension gear are White and Coffee; For orders with Custom Paint or Custom Stain colors, please select the desired Pin/ Tension gear color when placing an order.
- When the bottom track colors are bright white and metallic gray, the default spring loaded guide color will be white; When the bottom track color is bronze, the default spring loaded guide color will be coffee.

\*Some surcharges apply

Position: For different panel configuration, please refer to the location of Panel Lock to show on which stile the pull will be fixed.

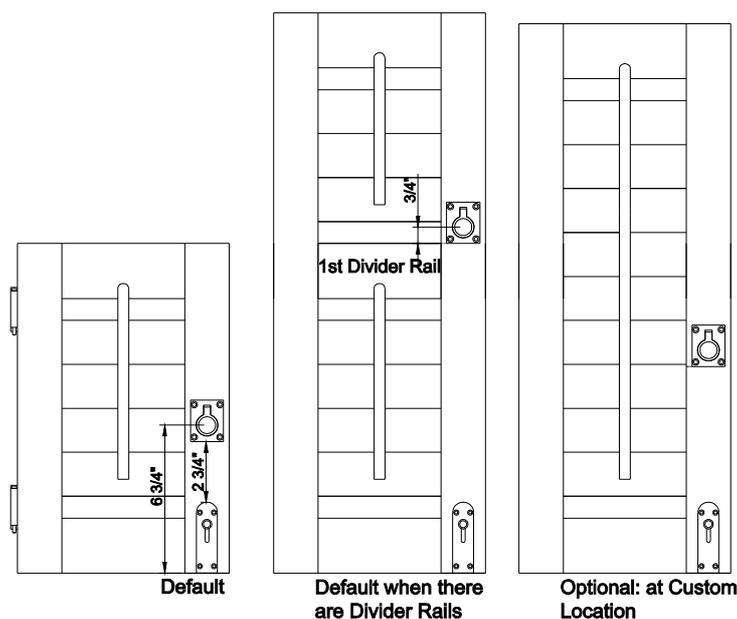


Position:

- A. Above Bottom Rail (Default)
- B. Above 1<sup>st</sup> Divider Rail (Default when there are Divider Rails)
- C. Custom Location

If both Panel Lock & ring pull are specified, the distance between them is 2 3/4", and the ring pull location is 6 3/4" from the bottom of panel.

When there is no mid rail, ring pull will be just on the top of Panel Lock (2 3/4" above Panel Lock) as default location; if there are mid rails, bottom of ring pull lines up with top of the 1<sup>st</sup> mid rail as default location.



**Position:**

- A. 2 3/4" Above Panel Lock (Default when both Ring Pull and Panel Lock are specified)
- B. Above 1<sup>st</sup> Divider Rail (Default when there are Divider Rails)
- C. Custom Location

**Measurements:**

- Window size:
  - Measure from the bottom of the window to the center of the ring pull.
- Max frame-to-frame:
  - Measure from the bottom of the frame to the center of the ring pull.

**Invisible Hinge\*:**



1. Invisible hinge is not available for Multifold panels.
2. Invisible hinge can only be between the panel & frame/T post, connections from panel to panel will use a regular hinge.
3. Color Option: Only available for Pearl Chrome Plated.

Frame Options	Hinge	Notes
2" Camber Deco Frame	Y	/
2" Classic Deco Frame	Y	/
2.5" Mission Deco Frame	N	/
3" Ridge Deco Frame	N	/
Vintage L Frame W / 1/4" Light Block	N	/
Vintage L	N	/
Vintage L Frame w/ 1/2" Buildout	N	/
Vintage L Frame w/ 1" Buildout	N	/
Beaded L w 1/4"light block	Y	/
Beaded L	Y	/
Beaded L Frame w/ 1/2" Buildout	Y	/
Beaded L Frame w/ 1" Buildout	Y	/
Tilt out Z Frame	N	/
1.25" Beaded Z Frame	Y	/

\*Some surcharges apply

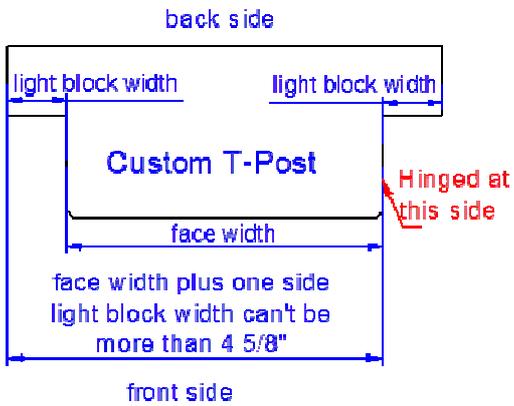
1.5" Bullnose Z Frame	Y	/
2" Bullnose Z Frame	Y	/
2" Bel Air Z Frame	Y	/
3" Crown Z Frame	N	/
7/8" Vintage Hang Strip	N	/
1" Chamfer T-Post w/ 1/4" Light Block(for Deco)	Y	Only available with hinge on one side, for example, LTL is available, but RTL is not.
1" Chamfer T-Post w/3/4" Light Block(for L/Z/HS)	Y	
1" Chamfer T-Post w/ 1/4" thick 3/8" wide Light Block(for Deco)	Y	
1" Chamfer T-Post w/3/4" thick 3/8" wide Light Block(for L/Z/HS)	Y	
1 3/4" Chamfer T-Post w/1/4" Light Block(for Deco)	Y	Available with hinge on BOTH sides, for example, RTL.
1 3/4" Chamfer T-Post w/3/4" Light Block(for L/Z/HS)	Y	
Corner Post w/1/4" Light Block(for Deco)	Y	/
Corner Post w/3/4" Light Block(for L/Z/HS)	Y	/
Bay Post w/1/4" Light Block(for Deco)	Y	/
Bay Post w/3/4" Light Block(for L/Z/HS)	Y	/

<b>Invisible Hinge Qty</b>	
Panel Height (H)	Hinge Qty
H<=48"	2
48"<H<=78"	3
78"<H<=96"	4
96"<H<=120"	5
H>120"	6

**Preinstallation:**

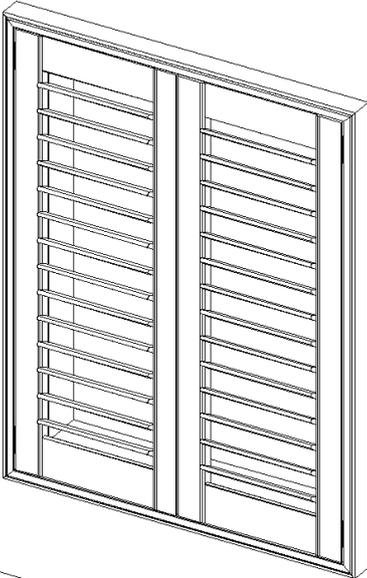
Panels and frames will be packaged individually, and the hinge is preinstalled onto the frame/post, with the screws for the other half part on the panels in the hardware box.

Note: If Custom T-posts need to install Invisible Hinge, the size of Custom T-post face width plus one side light block width can't be more than 4 5/8"; Please see drawing for reference.



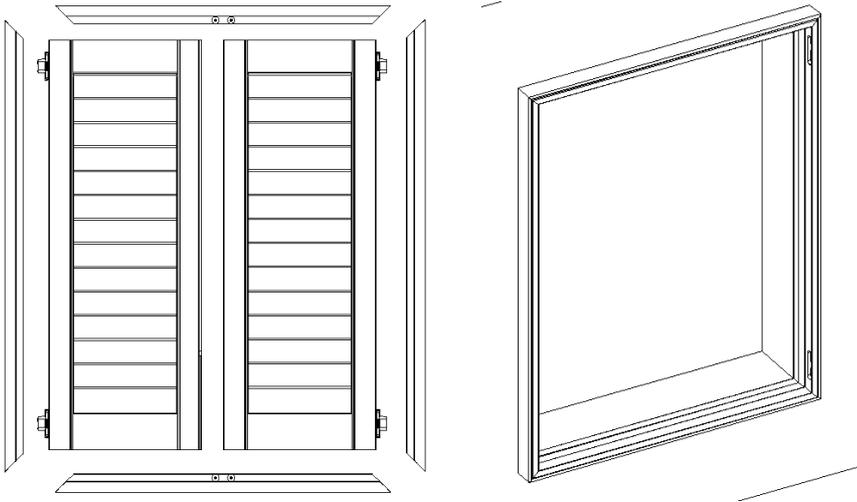
### Installation Instructions for the Invisible hinges

Take L Frame as an example:

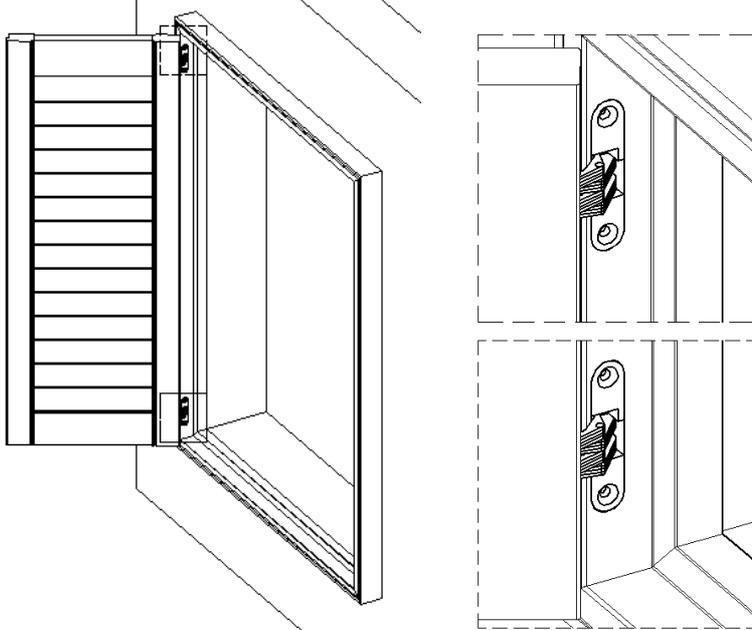


1). Remove the corresponding panels and frames from their packaging and match the panels with the correct frames.

Install the frames on the corresponding windows and make sure they are square (diagonals are equal)



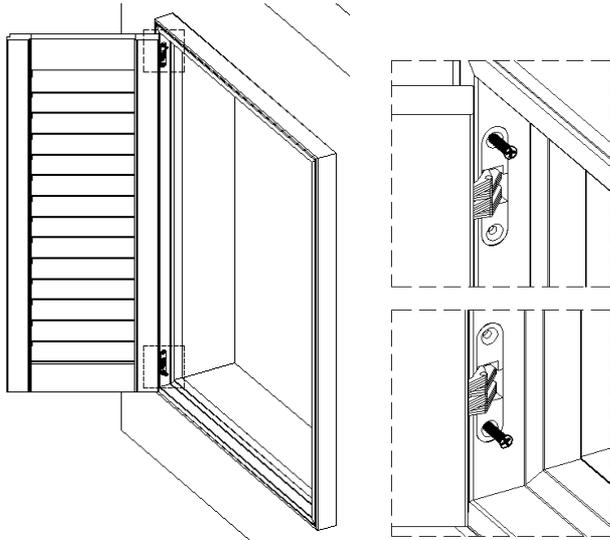
2). Please insert **ALL** of the Invisible hinges on the panel into the hinge holes on the corresponding frames prior to trying to secure any single hinge. This may require the assistance of a second person to hold the panel to prevent the hinges from sliding out of their slots while the screws are secured (Do not let the panels hang from just one hinge).



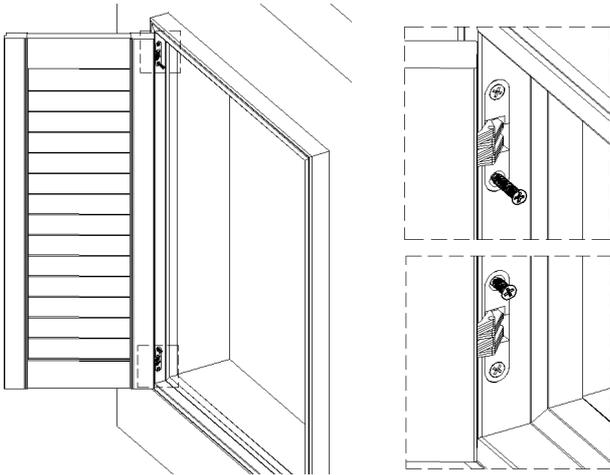
3). To properly secure the panels, first please tighten the upper screw of the uppermost top hinge and the lower screw of the lowest hinge. Close the panel to check whether the shutter closure is normal and the gap is uniform.

**Note:**

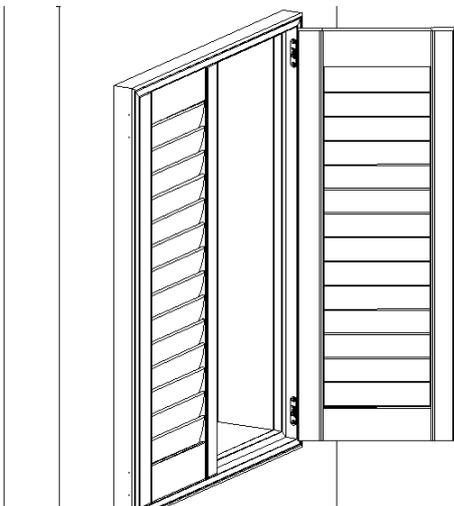
- a) When locking the screw, again it is important to prevent the invisible hinges from sliding out of their slots.
- b) Only the screws provided in the hardware box may be used and they cannot be replaced by other screws.



4). When the closure gap is uniform, secure the remaining screws.

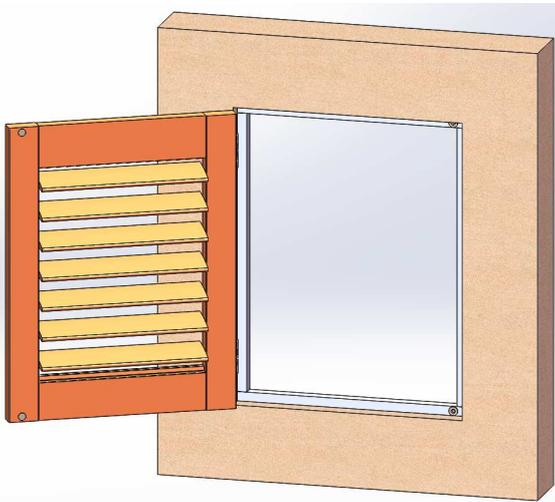


5). Install the remaining panels in the same manner.

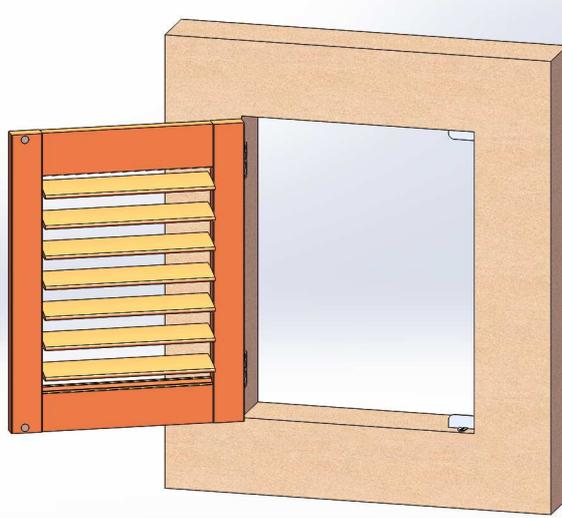


Mount Options for Direct Mount:

Light block



L magnet catch



12.5mm Magnet with screw hole (recessed into panels)



Round Magnet Catch (installed on light blocks)

L Magnet Catch (sill magnet catch): used for catching the magnets when ordering panels without light blocks.



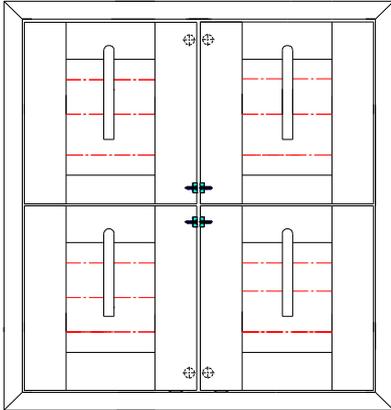
Side Magnet: Available for Butt, rabbet and Astragal stile



Side Magnets will be applied in following situation:

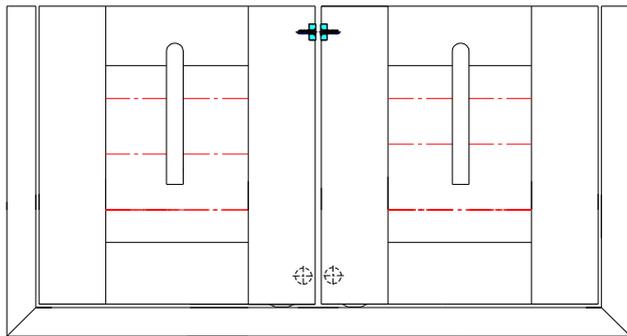
1. Double Hung shutter but without horizontal T post:

Side magnets will be applied to the meeting stiles of the L and R panel. (Default)



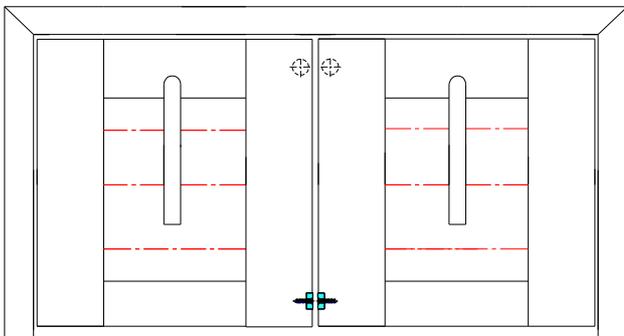
2. Café Shutter

Side magnets will be applied to the meeting stiles of the L and R panel. (Default)



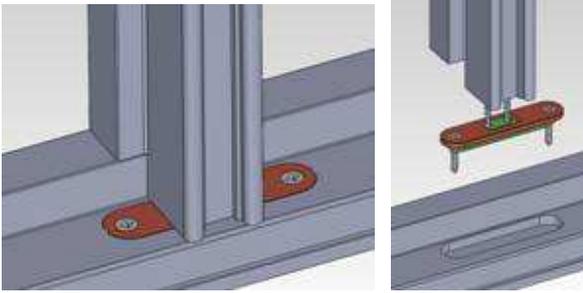
3. No frame or light block or L-shape striker plate on either top or bottom, or if larger than standard top or bottom gap is requested.

Side magnets will be applied to the meeting stiles of the L and R panel. (Optional)



4. Note: if panels only with side magnets and there is no standard magnet on the back of panels, panels may open for external factors.

T-Post Connector



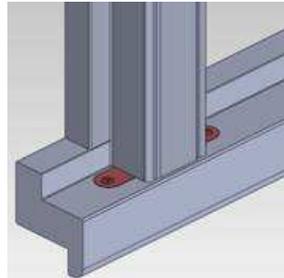
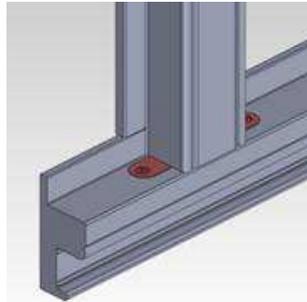
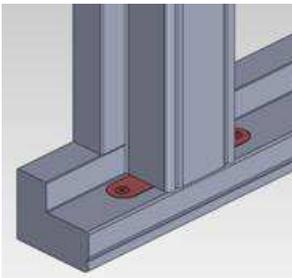
Available colors: Pure White; Silk White; Pearl; Bisque; Black; Nickel-Plated.  
Available for all types of T Posts (custom-width T posts excluded).

**T Post Connector can be used with the following Frames.**

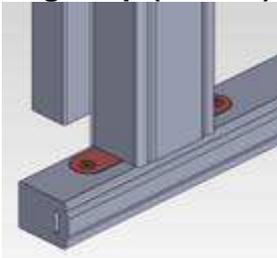
**L Frame:**

**Deco Frame:**

**Z Frame:**



**Hang Strip (Beside)**

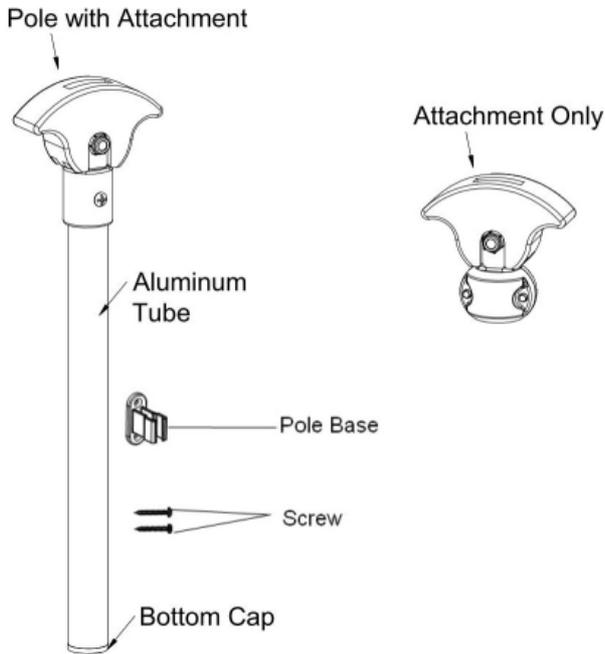


Note:

1. For Horizontal T Post, Hang Strip (Behind) and shutter with 1.5"/2" Sill, T Post connector is not available and T Post will be installed by screws instead;
2. If there is a panel lock which may interfere with the T-Post connector, all the T-Posts for the entire shutter will be installed with screws and the frames to be pre-drilled, even in cases where the panel lock may only interfere with one T-Post;
3. The screw color is nickel-plated regardless of the color of the T Post connector;
4. T post connectors can only be installed on a straight piece, and screws will be used instead for T Post installed on a curved or raked piece.

Optional Poles:

**1. Terminology**



**Component**

NO.	Name	Note
1	Pole with Attachment	Aluminum Tube, Pole Base and Bottom Cap included *Surcharge applies.
2	Attachment only	<ul style="list-style-type: none"> <li>• Compatible with extension poles found in most home improvement stores.</li> <li>• Screw thread (3/4") and thread pitch (1/5")</li> </ul> *Surcharge applies.

**2. Available Pole Length**

Two lengths available:

- 36"
- 60"

## Bi-fold 180™

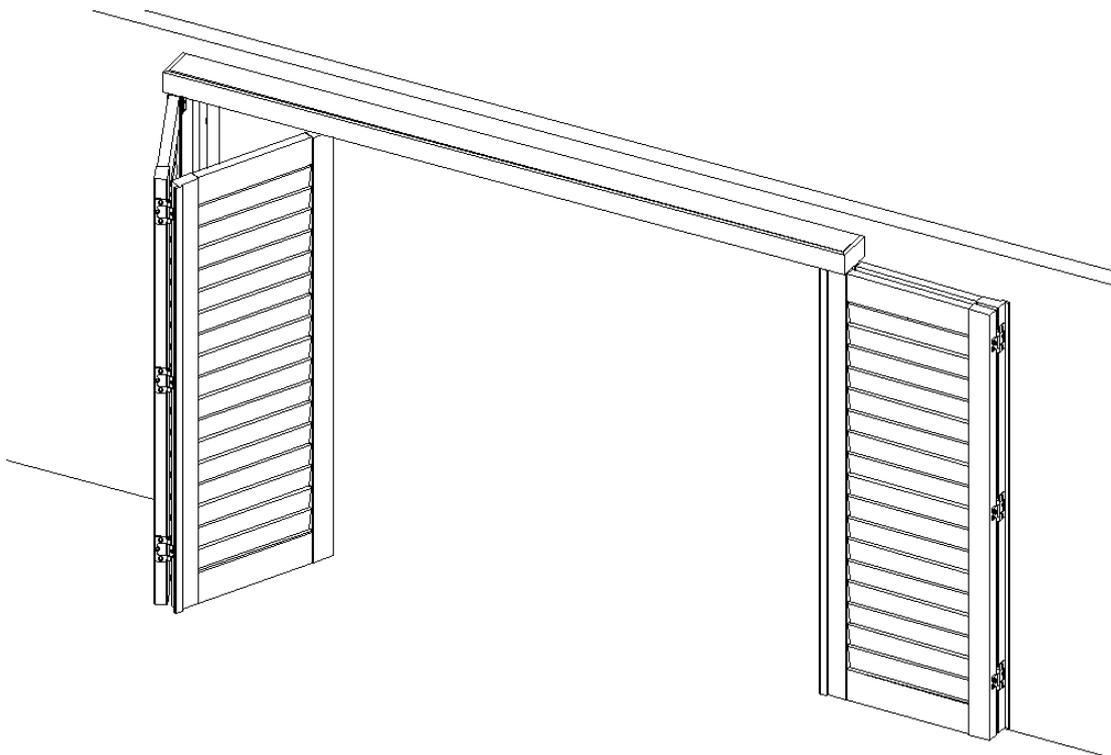
### Guidelines and Specs:

<u>Description</u>	<u>Minimum</u>	<u>Maximum</u>
Single-Panel Width (Bi-fold Track)	6"	26"
Single-Panel Width (LLL/RRR)	6"	20"
Single-Panel Height	10"	132"

### Outside Mount

Max frame-to-frame width: window width + 3 1/2"

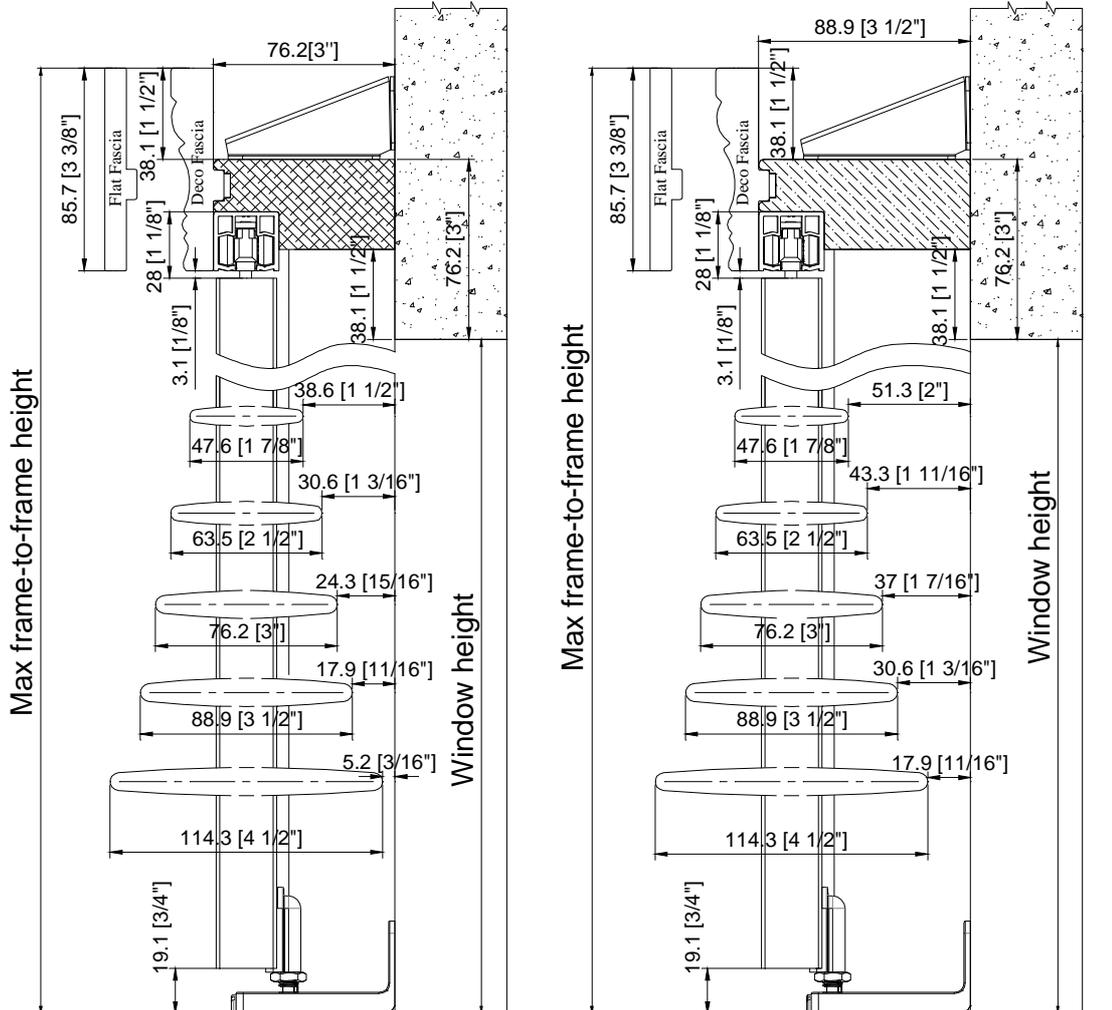
Max frame-to-frame height: window height + 4 1/2"



Track is pre-installed on the header; standard 1 track only.

Mounting Options: Outside Mount only

Side View

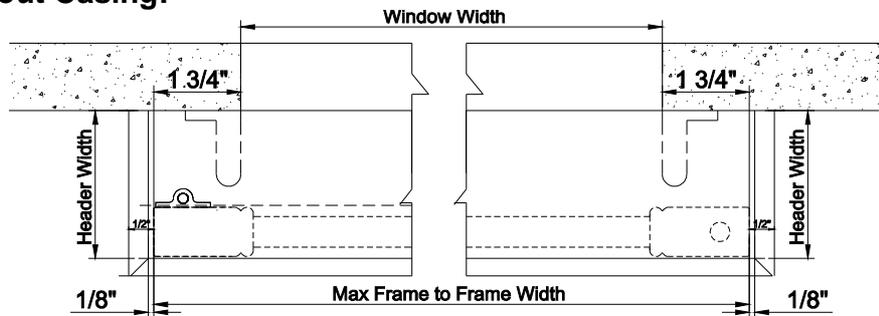


Top View

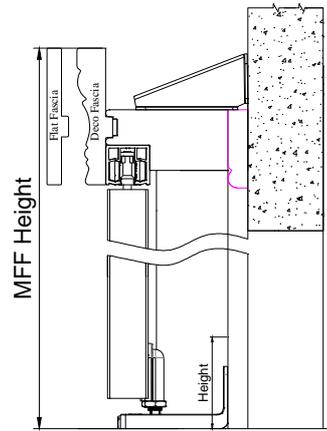
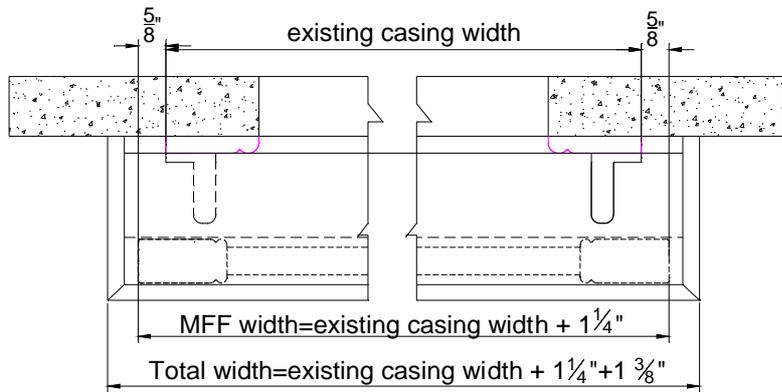
Without Casing:

Note:

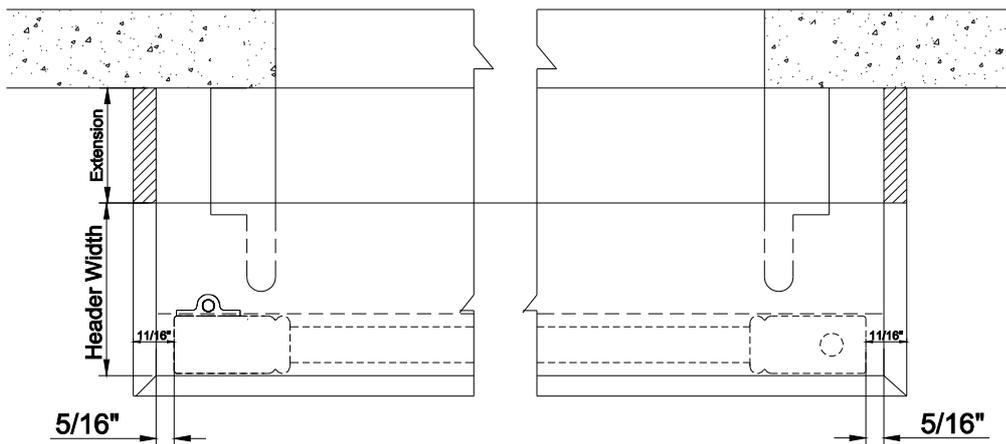
- ◇ Fascia return will protrude the panel about 1/2" for each side.
- ◇ The header will protrude the panel about 1/8" for each side.
- ◇ Header, light blocks, and bottom pivot bracket(s) must be installed on a flat surface.



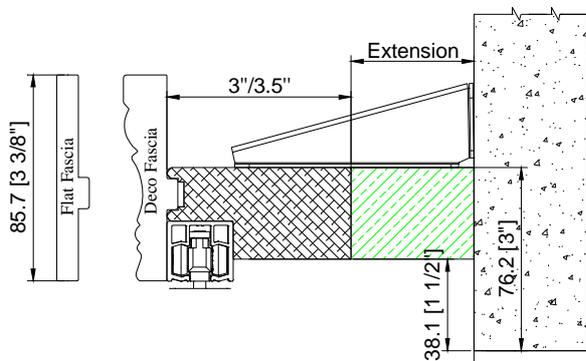
**With Existing Casing:**



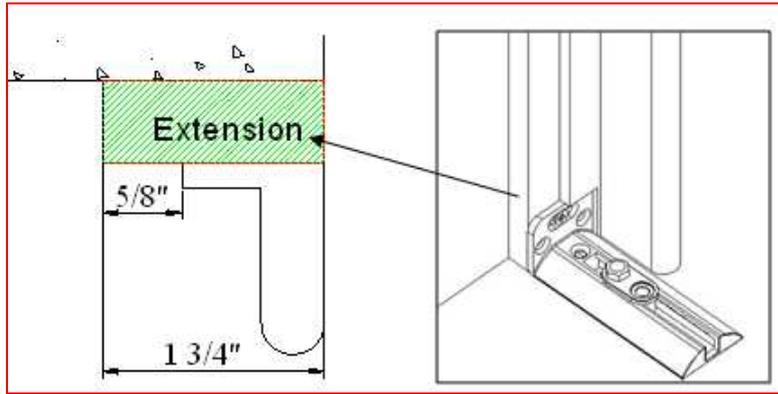
- ✧ Header Extension: Optional
- ✧ Custom extension up to 2" for Header
- ✧ When extension is needed, the header will protrude the panel 5/16" for each side and the fascia return will protrude the panel 11/16" for each side.



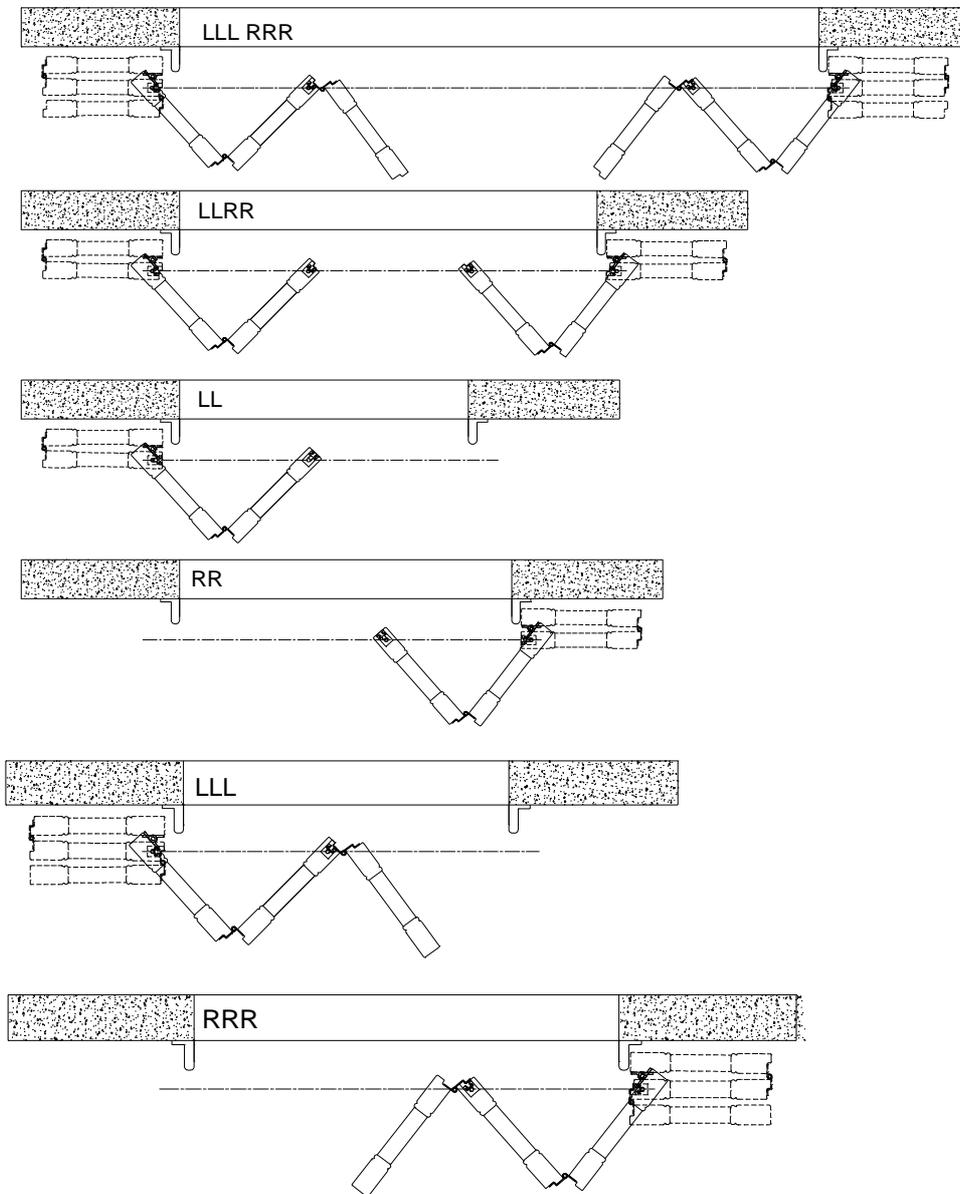
- ✧ The extension will be pre-attached.

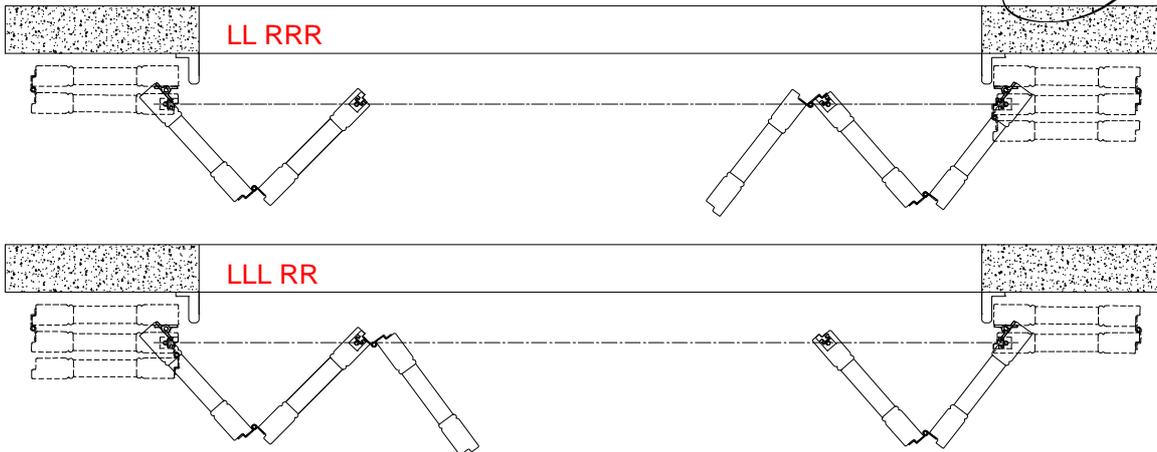


For 180 Bi-fold, if Bottom Pivot L Bracket is required, the extension for the L shape light block will be 1 3/4" in width. Please see picture below:



**Panel Configuration : Only 2", 2 1/4" rabbet and butt stiles are available. Center stile is not available.**





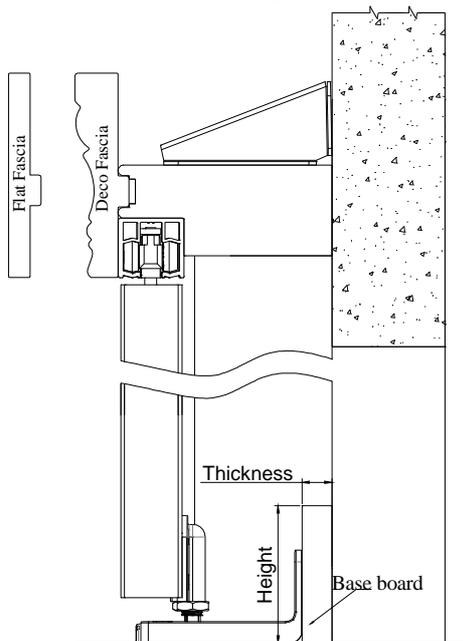
**Notes:**

If there is no baseboard to the wall, 3" header can be used.

If there is baseboard to the wall, then it should be as below:

1. If base board thickness is less or equal to 5/8", 3 1/2" header can be used.
2. If base board thickness is over 5/8", it is suggest using the 3" header with build out. And the build out thickness=base board thickness-1/8".

Please see the drawing below:



**180° Bi-fold Track Shutters Framing Materials**

Type	Header Dimension	Top Fascia Dimension	L Shape Light Block Strip Dimension
Header & Top Fascia & Light Block Strip	3"	3 3/8"	1 9/16"
	3 1/2"		2 1/16"

180° Bi-fold Track Shutters Hardware Box

<b>Parts</b>
Wrench
Hinge Pin
Triangle Bracket (based on the length of header)
2" screws for Triangle Bracket
¾ " screws for Triangle Bracket
Bottom Pivot Bracket
1 ½ " screws for bottom pivot bracket
2 ½ " screws for Frame with pre-drilled screw holes

Bi-fold 90

Guidelines and Specs:

<u><b>Description</b></u>	<u><b>Minimum</b></u>	<u><b>Maximum</b></u>
Single-Panel Width (Bi-fold Track)	6"	26"
Single-Panel Width (Multifold track up to 4 panels)	6"	20"
Single-Panel Height	10"	132"

Outside Mount

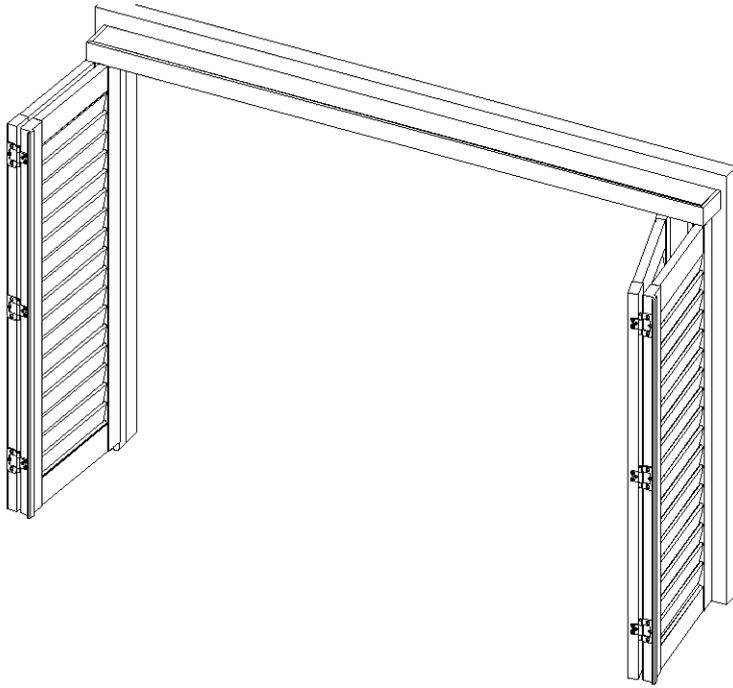
Max frame-to-frame width: window width + 3 1/2"  
 Max frame-to-frame height: window height + 4 1/2"

Semi-Inside Mount

Max frame-to-frame width: window width - 1/8"  
 Max frame-to-frame height: window height + 1 3/8"

Inside Mount

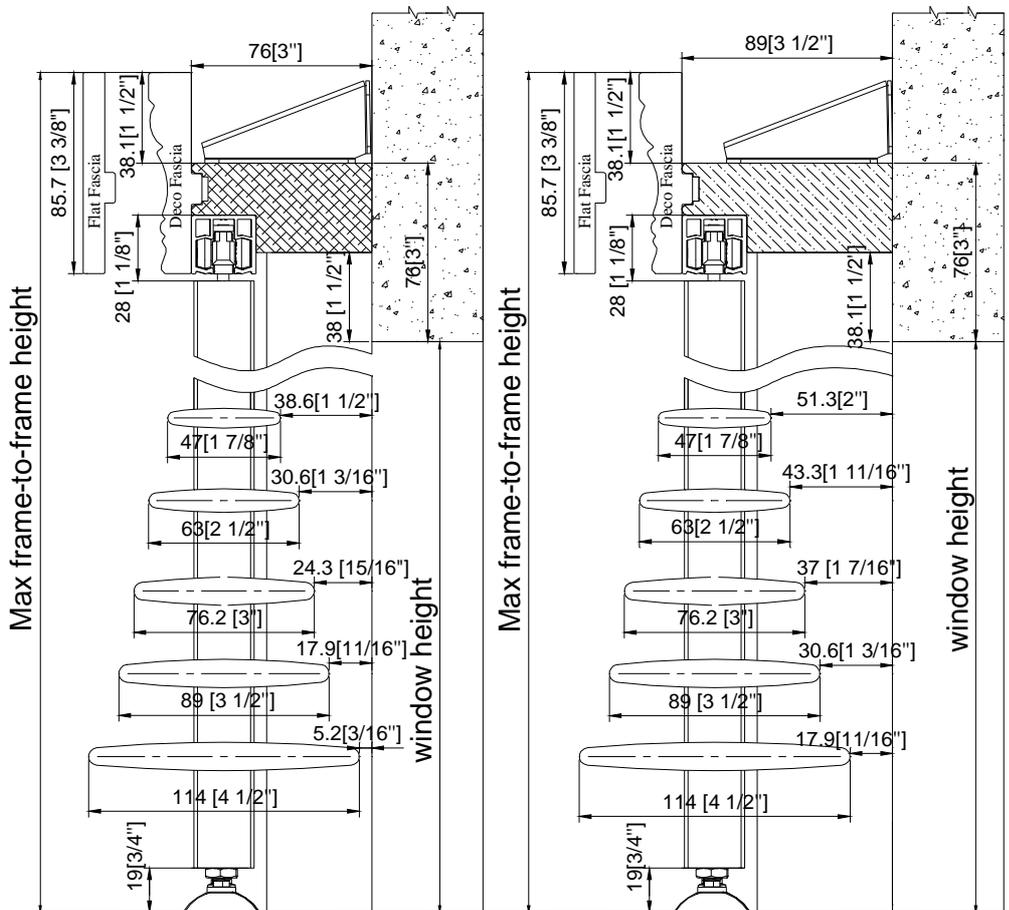
Max frame-to-frame width: window width - 1/8"  
 Max frame-to-frame height: window height - 1/8"



Track is pre-installed on the header; standard 1 track only.

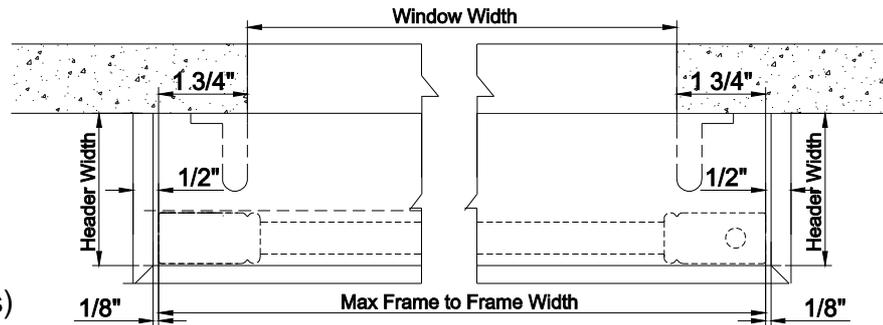
Mounting Options: Outside Mount

Side View



## Top View

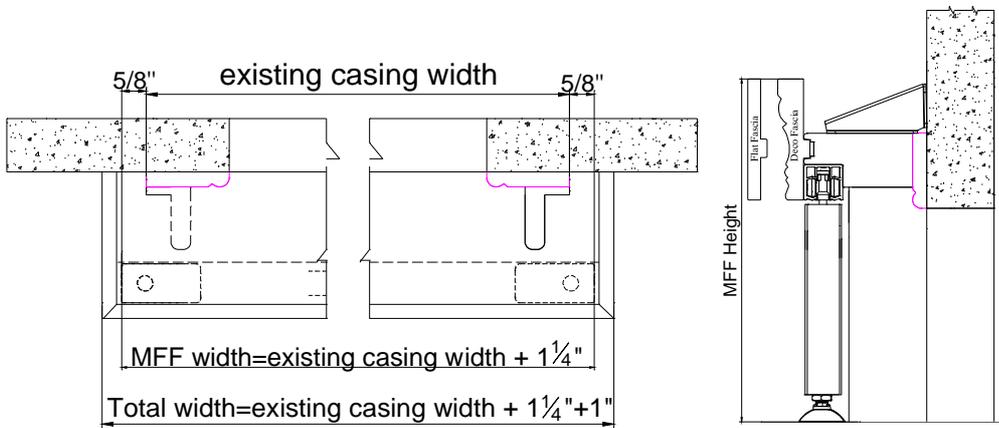
### Without Casing:



### Note:

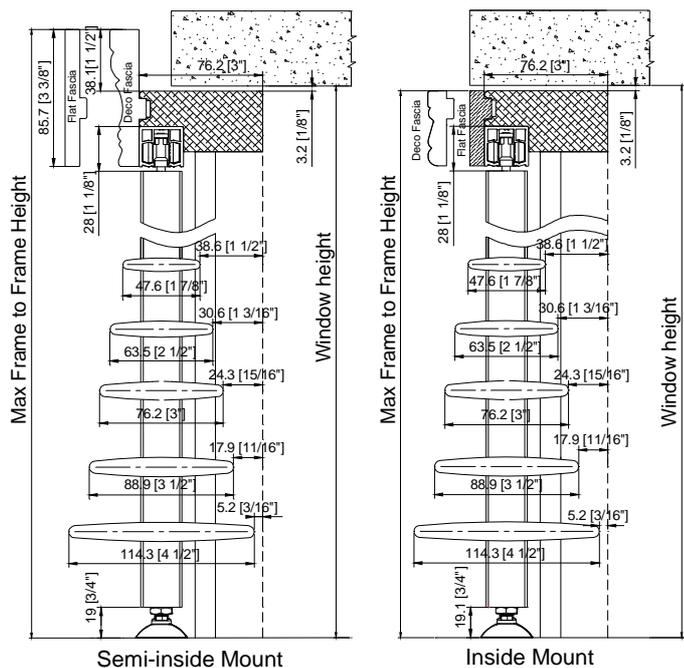
- ◇ Fascia return will protrude the panel about 1/2" for each side.
- ◇ The header will protrude the panel about 1/8" for each side.
- ◇ Header, light blocks, and bottom pivot bracket(s) must be installed on a flat surface.

### With Existing Casing:

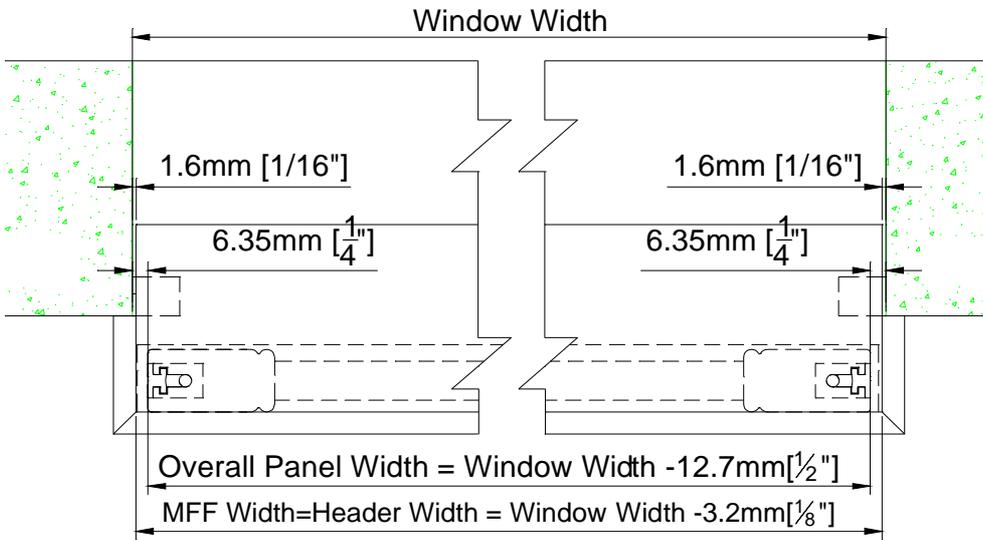


### Semi-Inside/Inside Mount

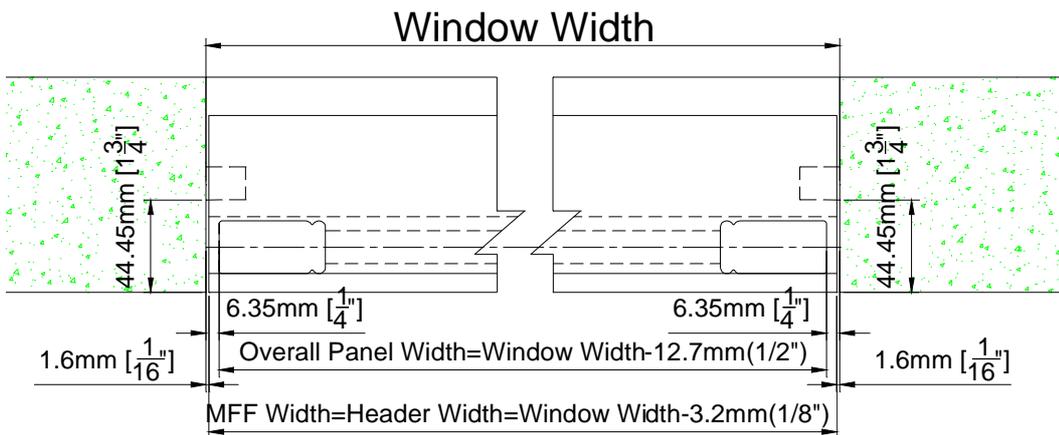
### Side View



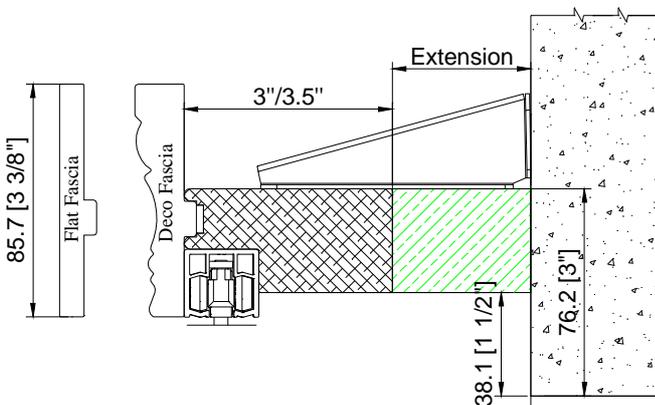
Semi-Inside Mount Top View



Inside Mount Top View

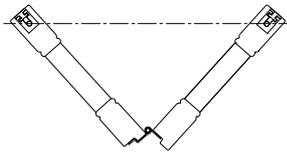


- ◇ Header Extension: Optional.
- ◇ Custom extension up to 2" for Header
- ◇ The extension will be pre-attached.



**Panel Configuration: Only 2", 2 1/4" rabbet and butt stiles are available.  
Center stile is not available.**

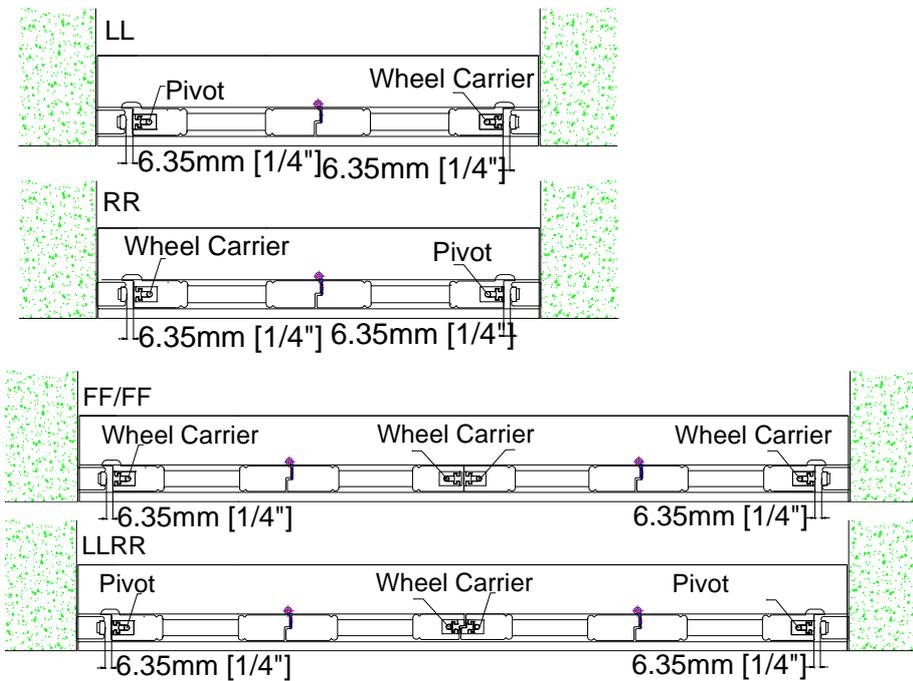
LL or RR



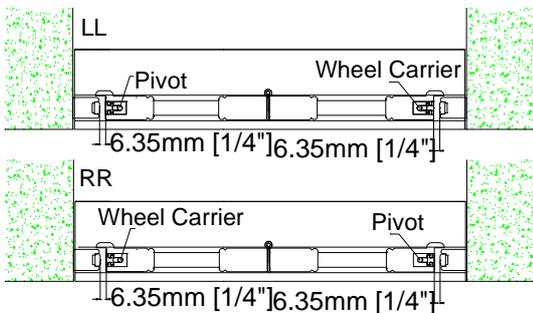
LLRR

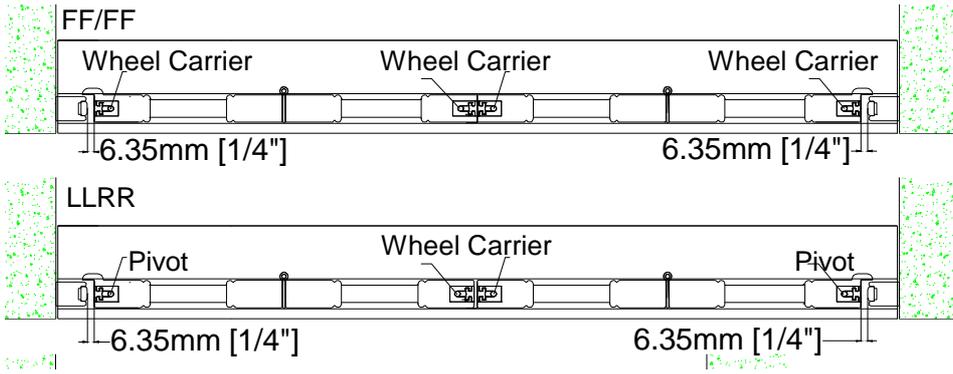


**Optional (Hang Strip for Inside Mount Only)**

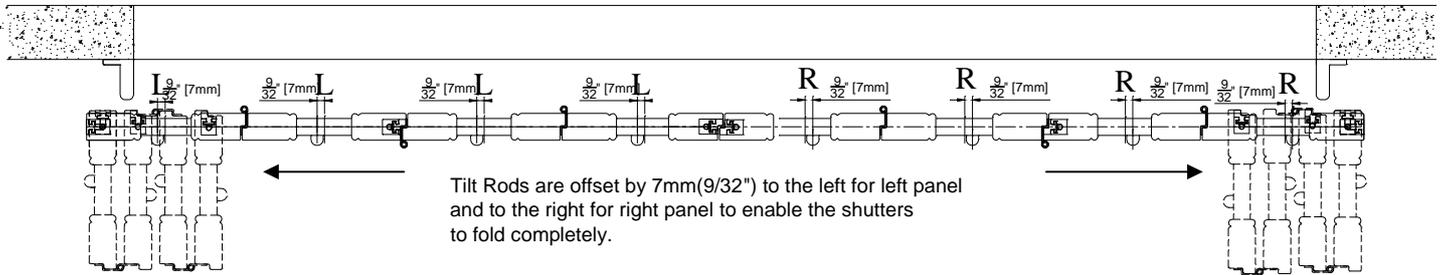


Note: When Butt/rabbet Stile is required, the stile next to the hang strip will be astragal stile.

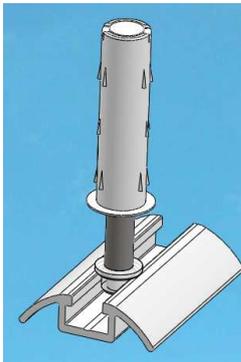
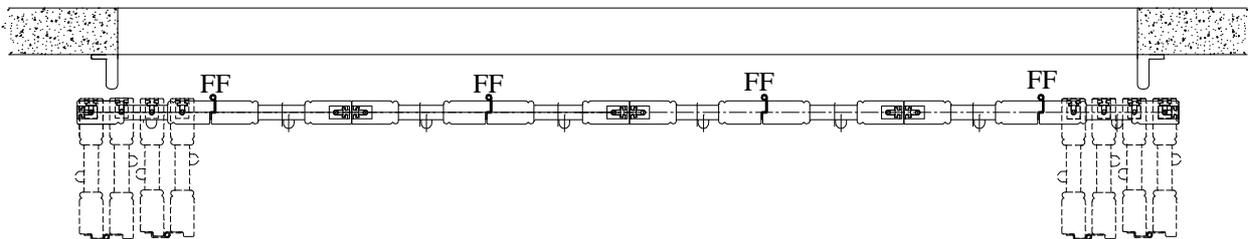




90° Multi-Fold Track Shutters (Wood only)  
Maximum single panel width for multi-fold is 20"  
Panel Configuration: LLLL, RRRR, or LLLLRRRR



### 90° Floating Panels



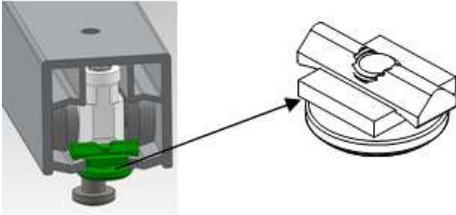
- Two or four panels can be hinged together, fold and slide to either direction
- Application comes with wheel carrier, spring loaded guide and floor track
- Can be used on large window

**Note:**

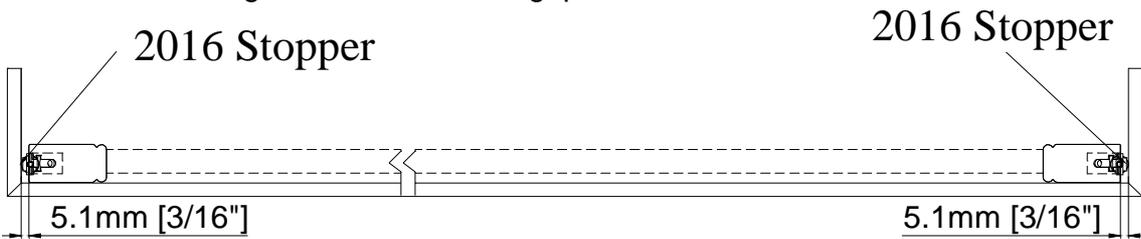
1. For 90° Floating Panels outside mount/semi-inside mount without side boards, the 2016 Stopper will be supplied by default. The gap between the fascia return / end of top track and the panel is 5mm each side.

The 2016 stopper can also be used in the center or any position of the top track as an option.

2016 Stopper



Please see drawing below to show the gap.



2. When rabbet stile required, the meeting stile of unhinged stile will be butt stile by default.

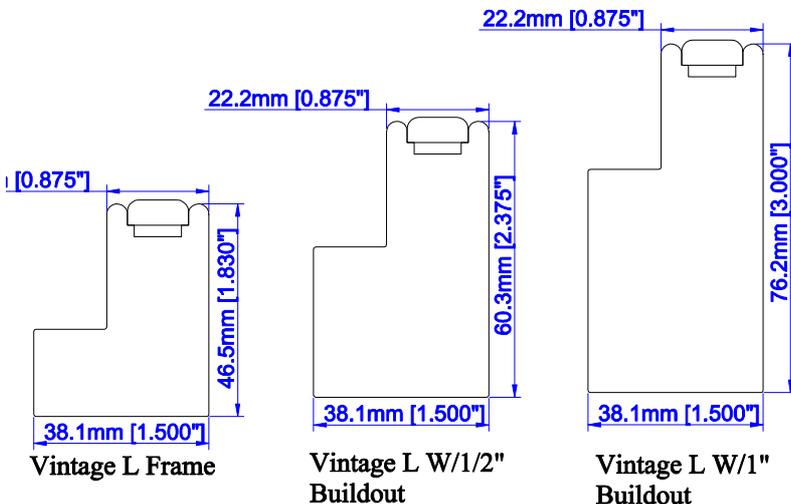
90 Degree Bi Fold Track Shutters Framing Materials

Type		Header Dimension	Top Fascia Dimension	Light Block Strip Dimension	Hang Strip Dimension
Header & Top Fascia & Light Block Strip	OM	3"	3 3/8"	1 9/16"	
		3 1/2"		2 1/16"	
	Semi-IM	3"	5/8"x3/4"	1.08"x0.875"	
	IM	3"	5/8"x3/4"		

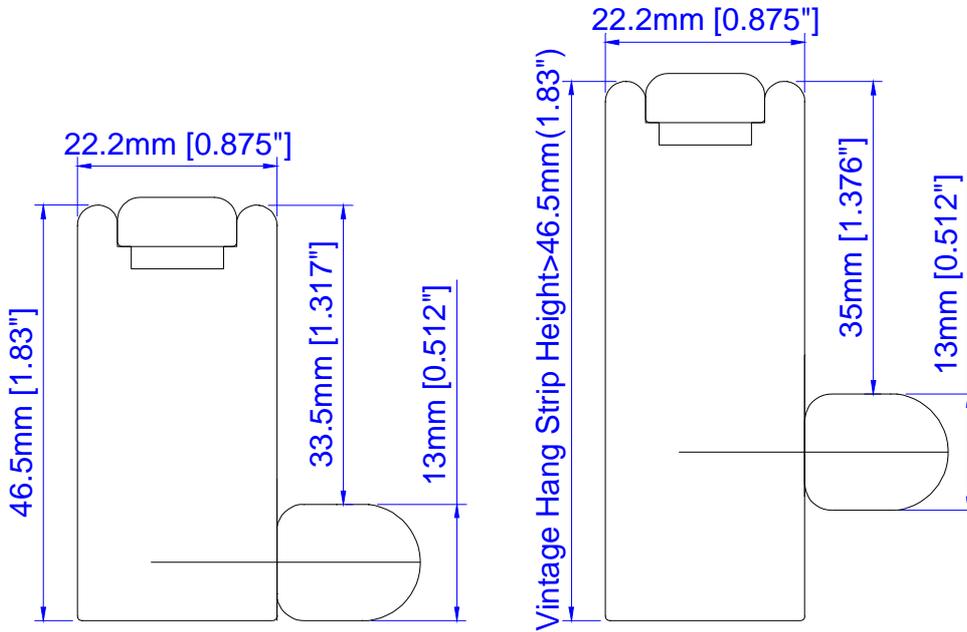
Note: It will be L shape light block strip for outside mount.

Frame Hinged Bifold

Available Stile: Rabbet Stile Only  
Available Frame type

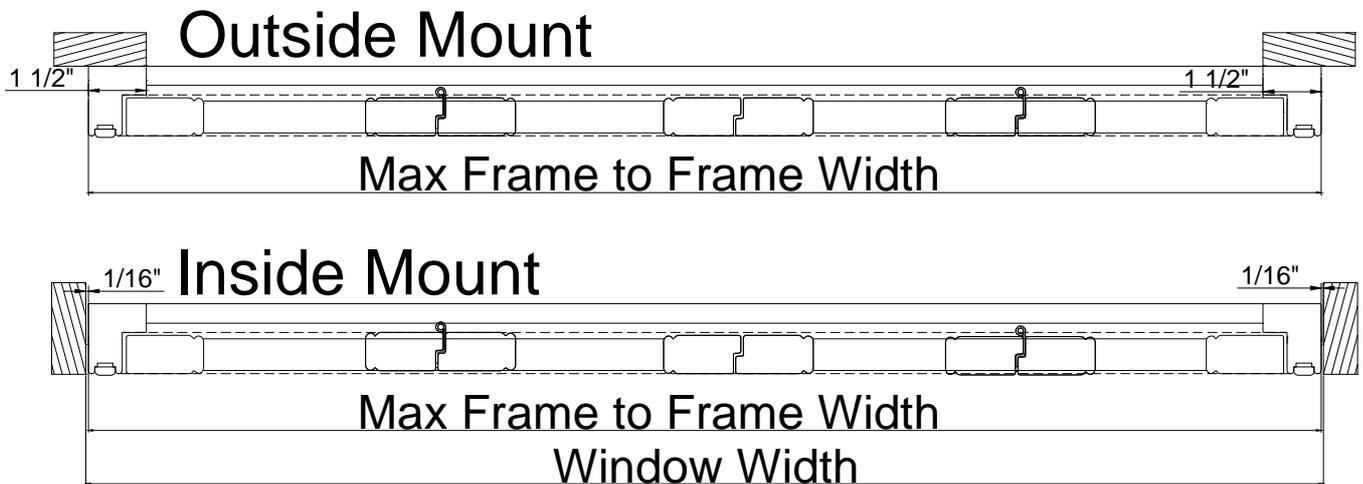


**Vintage Hang Strip with 13mm light block:** For single direction shutter with even panel qty, the frame on the unhinged side will be Vintage Hang Strip with 13mm [0.512"] light block, the height of the Vintage Hang Strip will match with that of the hinged side frame.



**Top View**

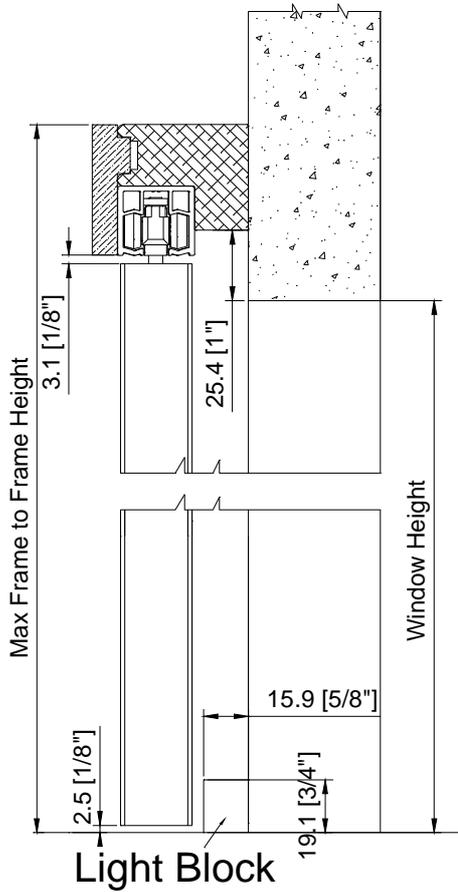
Hinged at Left or Right with wheel assembly at top;



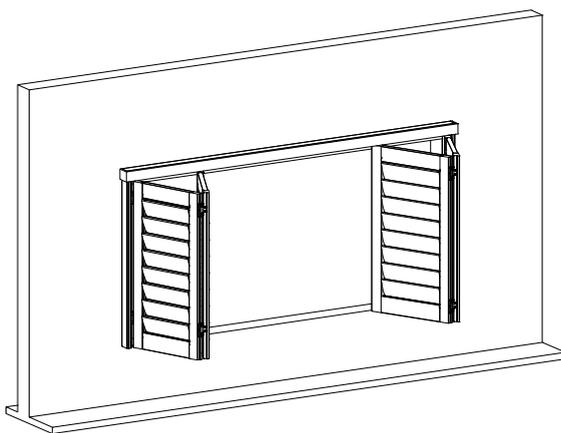
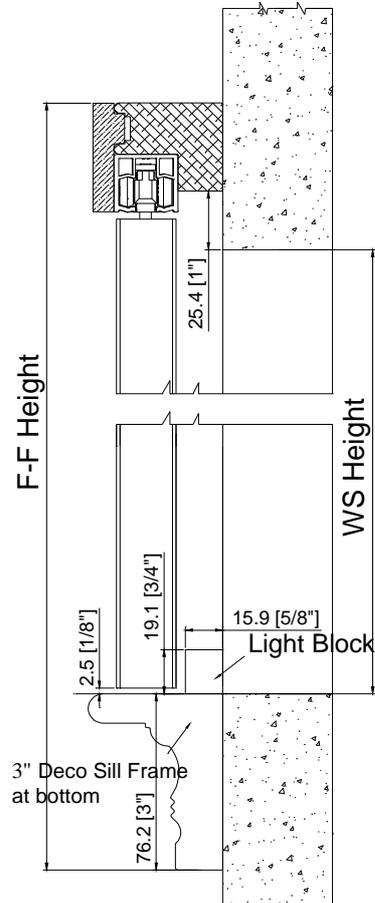
**Side View**

Outside Mount

3-Sides + bottom light block

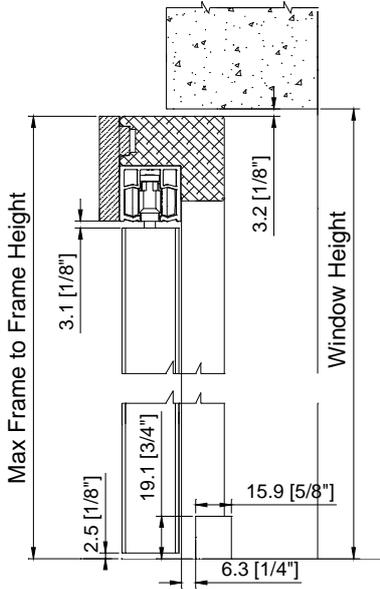


3-Sides + 3" Deco Sill Frame

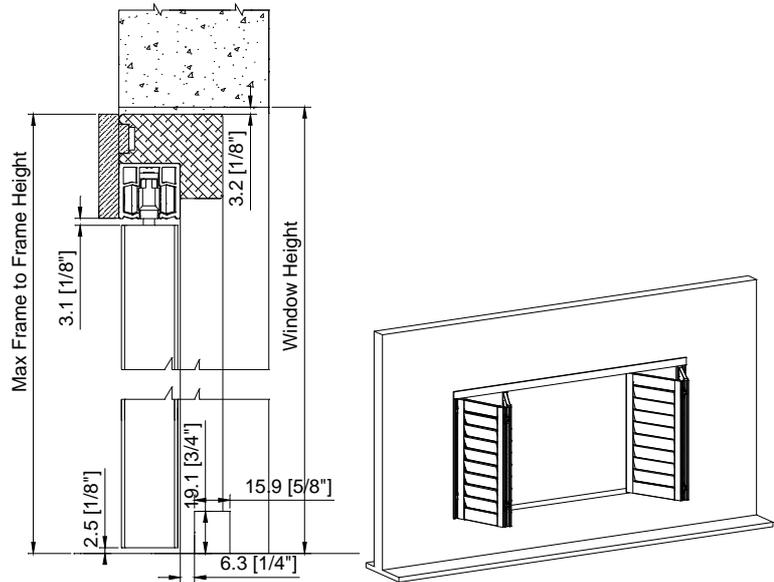


Note: For OM Frame Hinged Bifold shutter not to use as a door, if there is no existing sill at the bottom of the window opening, it is recommended to have the 3" Deco Sill Frame at the bottom.

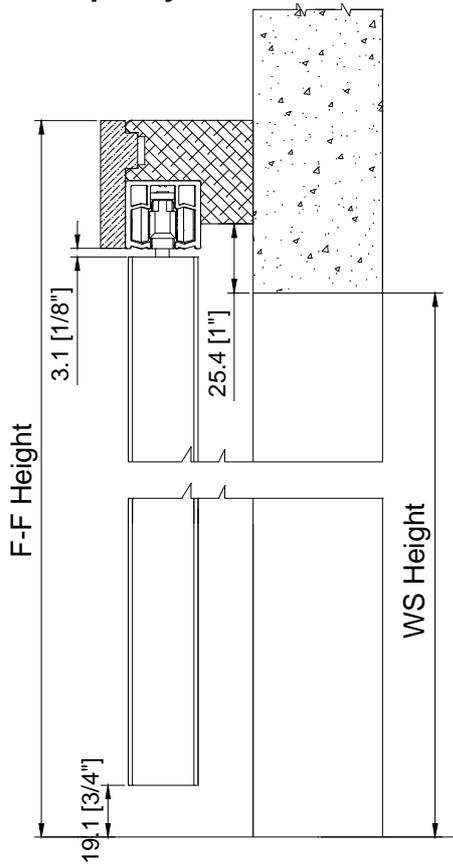
Semi-Inside



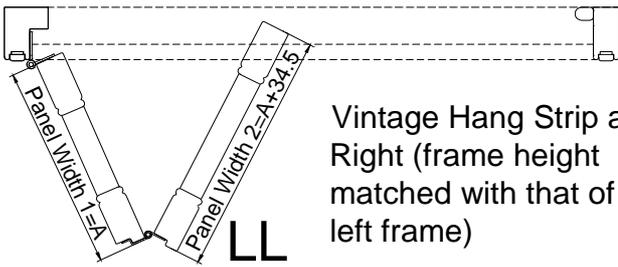
Inside Mount



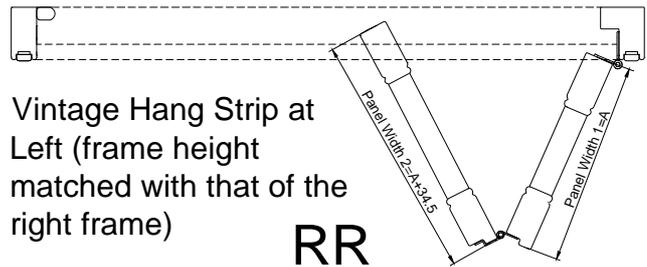
**For frame hinged bifold track shutter used as door, the bottom gap will be 19mm by default. Please specify "Used As Door" on the order form.**



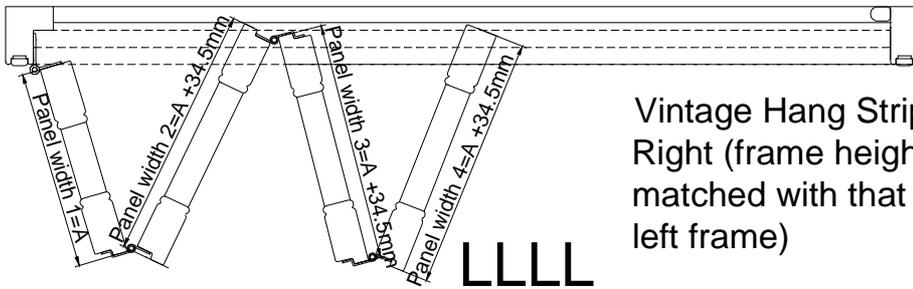
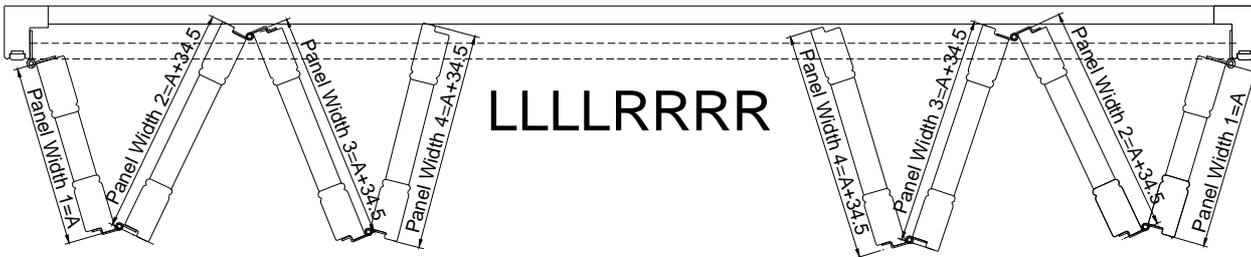
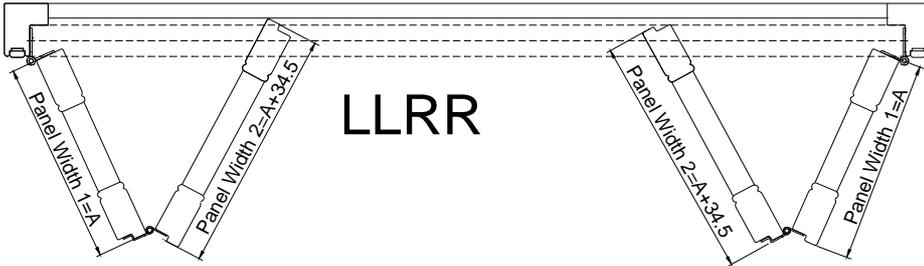
Panel Configuration (uneven panel width)



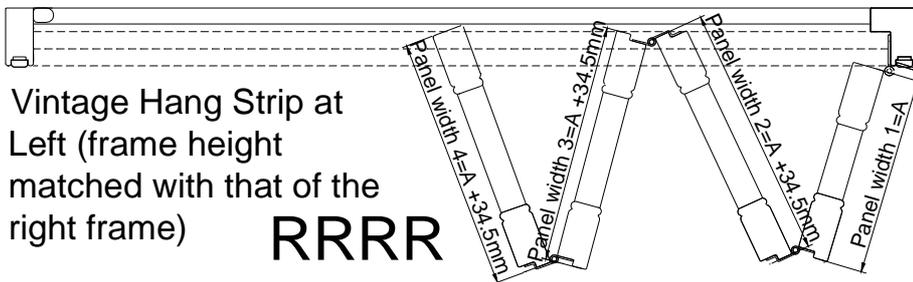
Vintage Hang Strip at Right (frame height matched with that of the left frame)



Vintage Hang Strip at Left (frame height matched with that of the right frame)



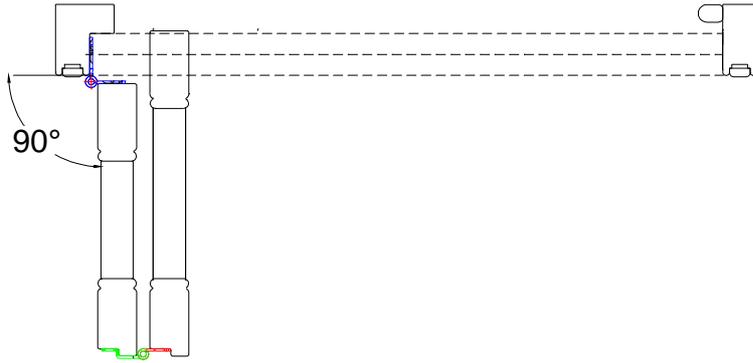
Vintage Hang Strip at Right (frame height matched with that of the left frame)



Vintage Hang Strip at Left (frame height matched with that of the right frame)

Notes:

1. Only available for 3-Sides + bottom light block or 3-Sides + 3" Deco Sill Frame (4-sides is not available); Panels can be folded and open at 90 degree;

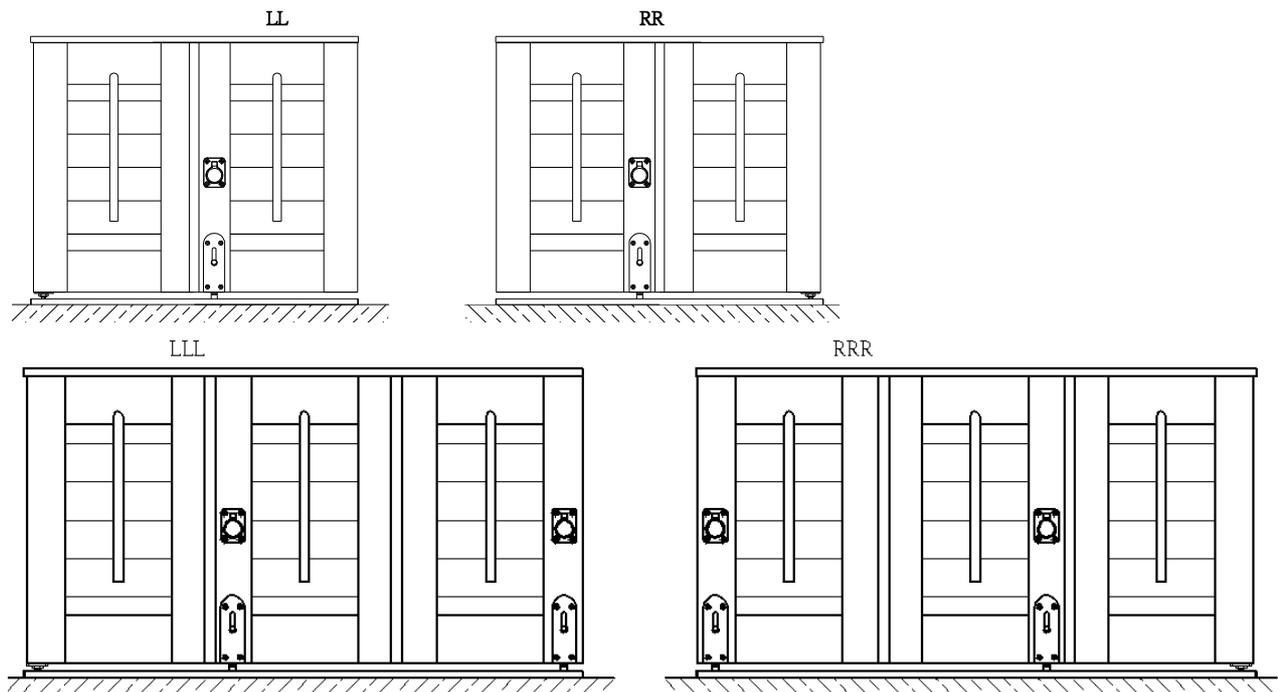


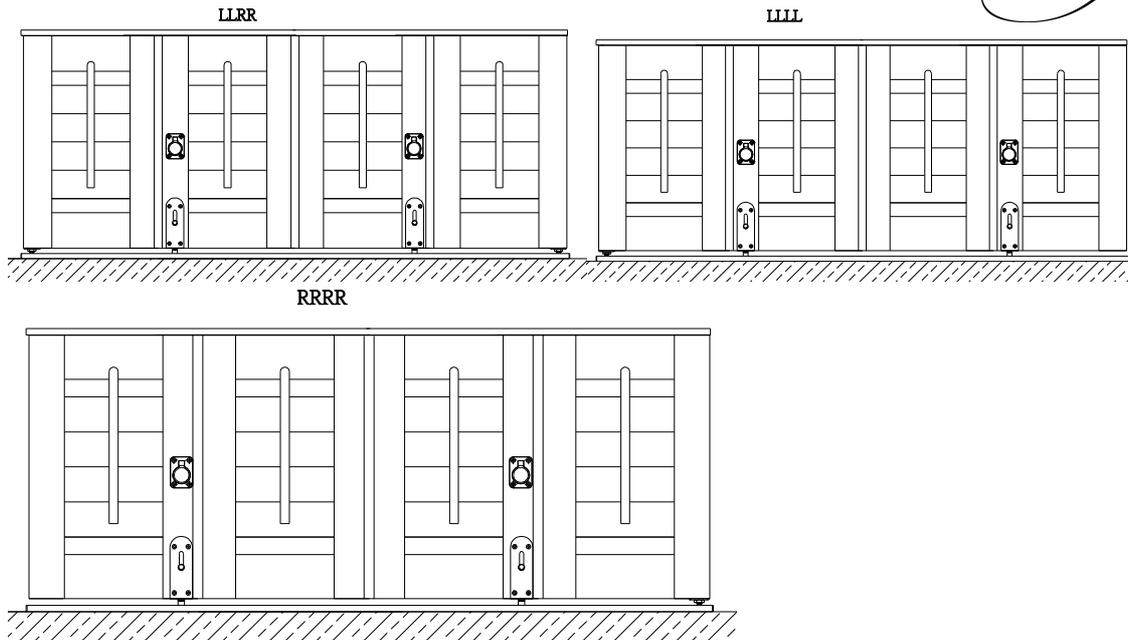
2. Frames available: Only Vintage L Frame

- 1) For top frame, the insert will be replaced by top fascia;
- 2) Top track will be pre-attached to the top frame;
- 3) Frame will be pre-drilled with screw holes same as regular shutters.

**Ring Pull:** The ring pull will be provided as an option; and for frame hinged bi-fold, the ring pull will be supplied as default; Customer need specify ring pull location on the order form. Ring pull location is measured from the floor to center of the ring pull in height direction. Ring pull color will match the hinge color.

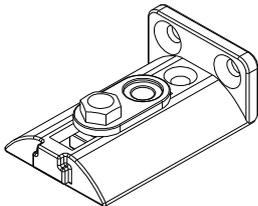
Please refer to below drawing of ring pull position for all shutter types:



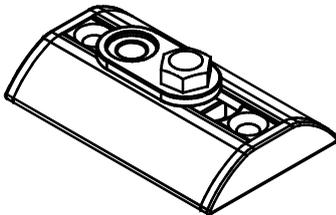


**Bottom Pivot Bracket for 90 degree bifold:**

For 90° Bifold Track Shutter, there will be 2 types of Bottom Pivot Brackets available.

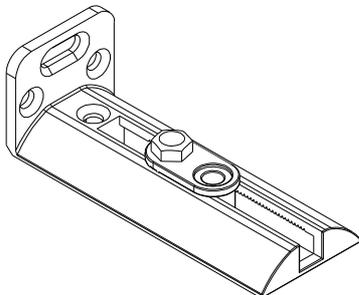


For Inside Mount, Bottom Pivot L Bracket will be supplied as default;



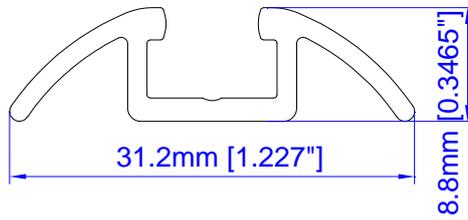
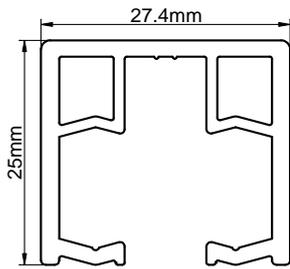
For Semi-Inside or Outside Mount, bottom pivot bracket will be supplied as default.

For 180° Bifold Track Shutter, 81mm Bottom Pivot L Bracket will be supplied as default.



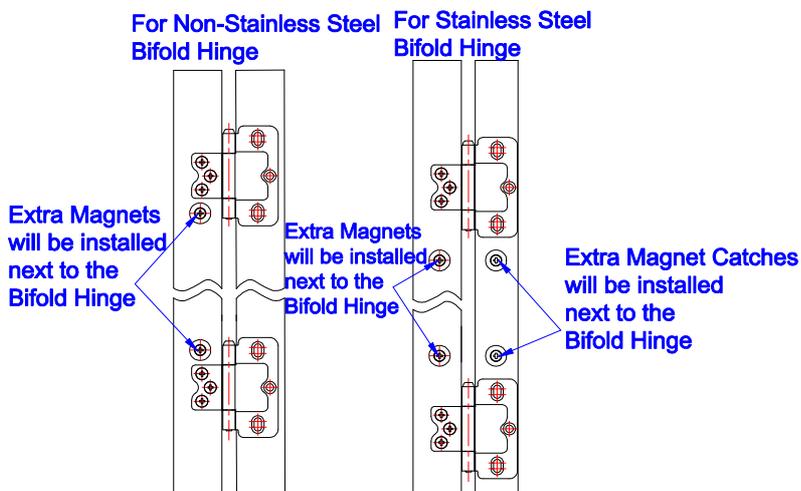
**Track Dimension:**

Top Track

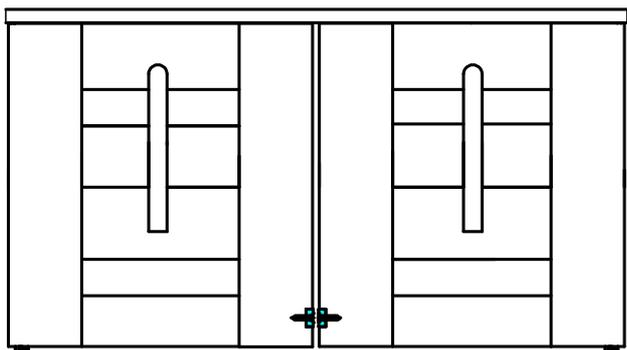


M Shape Bottom Track

**Extra Magnets will be supplied for Bifold hinges: (only for the most top and bottom hinges)**



**Side Magnet: applied to the meeting stiles of LR panels**



**Extra magnet and Side Magnet**

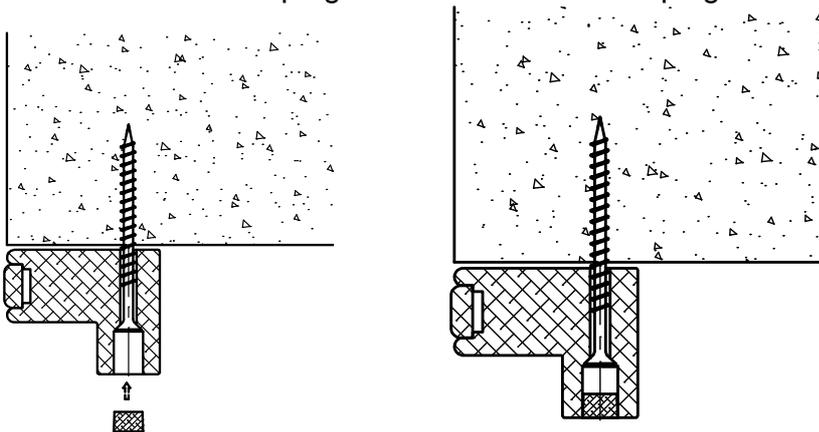


90° Bi Fold Track Shutters Hardware Box

Parts
Wrench
Hinge Pin
Triangle Bracket (based on the length of header)
2" screws for Triangle Bracket
¾ " screws for Triangle Bracket
Bottom Pivot Bracket
38.1mm screws for bottom pivot bracket
63.5mm screws for Frame with pre-drilled screw holes

Notes:

1. for all bifold track shutter Outside Mount, the header will be pre-drilled with screw holes in the insert and screws will be supplied by default;
2. for all bifold track shutter Inside/Semi-Inside Mount, the header will be pre-drilled with holes for screws and wood plug and screws and wood plug will be supplied by default



90 Degree Bifold Track & Floating Panels Hanger Location:  
LL/RR/LLRR



LLL/RRR/LLLRRR

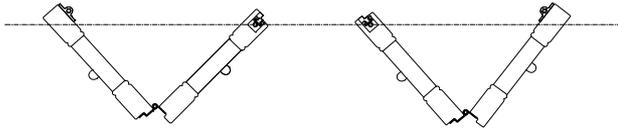


**LLLL/RRRR/LLLLRRRR**

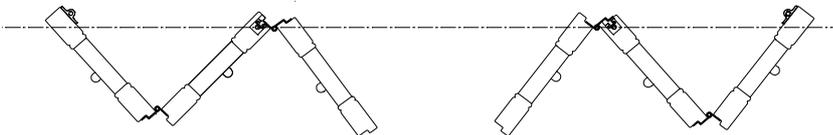


**180 Degree Bifold Track Panel Hanger Location:**

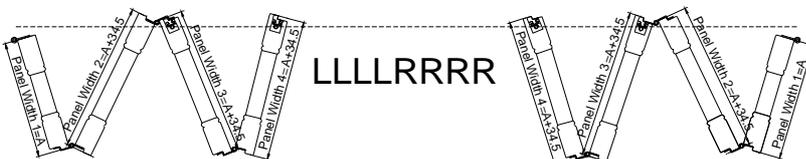
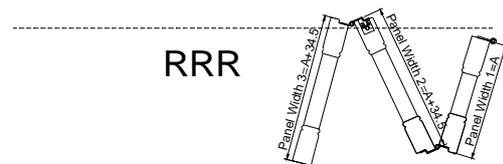
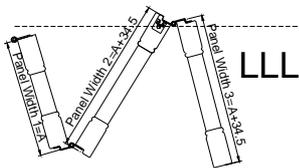
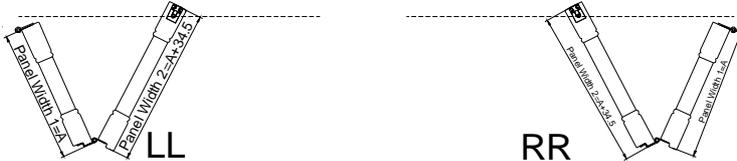
**LL/RR/LLRR**

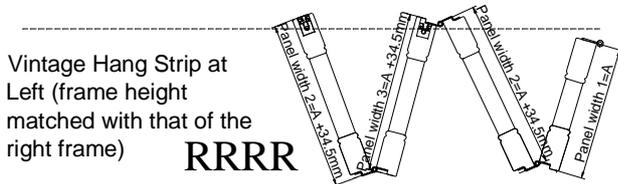
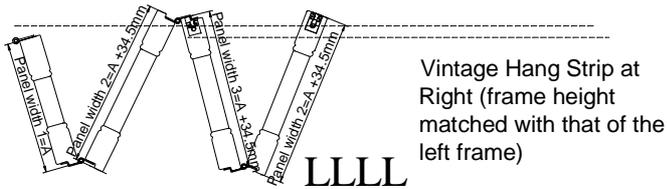


**LLL/RRR/LLLRRR**



**Frame Hinged Bifold Track Panel Hanger Location:**



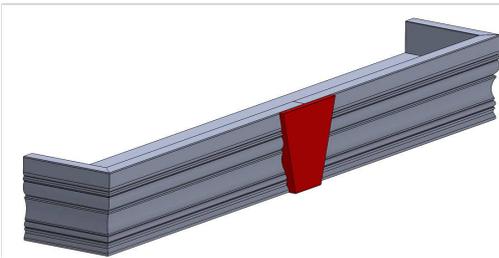


### Keystone for Fascia of the Track Shutter

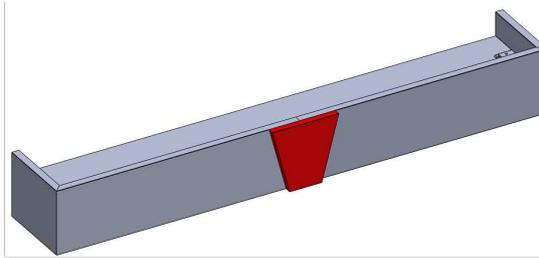
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

For fascia length within the split limitation, keystone can also be supplied as an option with surcharge.

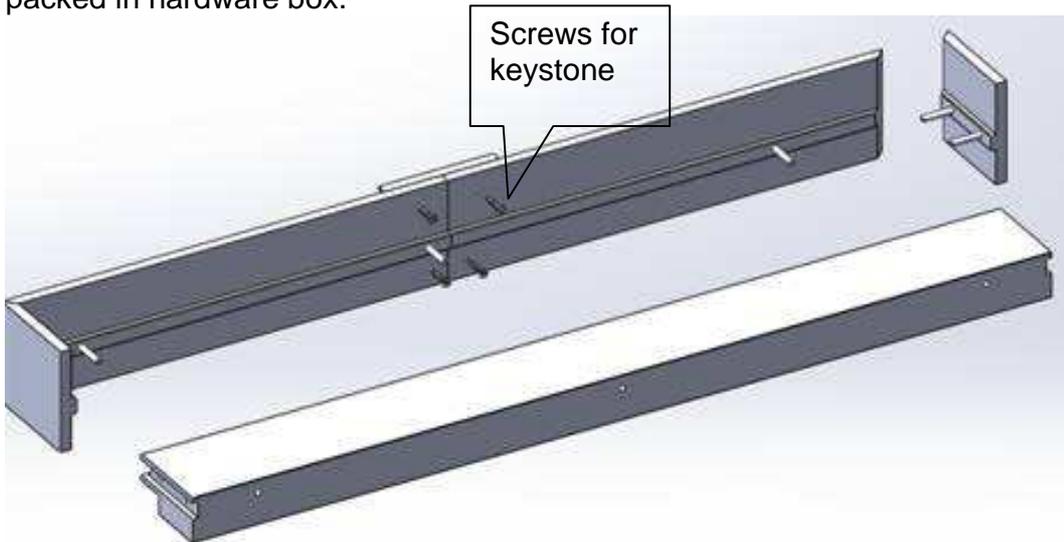
For Deco Fascia:



For Flat Fascia:



The keystone will be installed by screws. We will pre-drill the screw holes and the screws will be packed in hardware box.



Track Shutters—2020 Bypass

Guidelines and Specs:

<u>Description</u>	<u>Minimum</u>	<u>Maximum</u>		
		1 <sup>7</sup> / <sub>8</sub> "	2 <sup>1</sup> / <sub>2</sub> " ; 3"	3 <sup>1</sup> / <sub>2</sub> " ; 4 <sup>1</sup> / <sub>2</sub> "
Single-Panel Width (Wood)	6"	30"	36"	42"
Single-Panel Height	10"	132"	132"	132"

Outside Mount

Max frame-to-frame width: window width + 3"

Max frame-to-frame height: window height + 4<sup>1</sup>/<sub>2</sub>"

Semi-Inside Mount

Max frame-to-frame width: window width - 1<sup>1</sup>/<sub>8</sub>"

Max frame-to-frame height: window height + 1 1<sup>1</sup>/<sub>8</sub>"

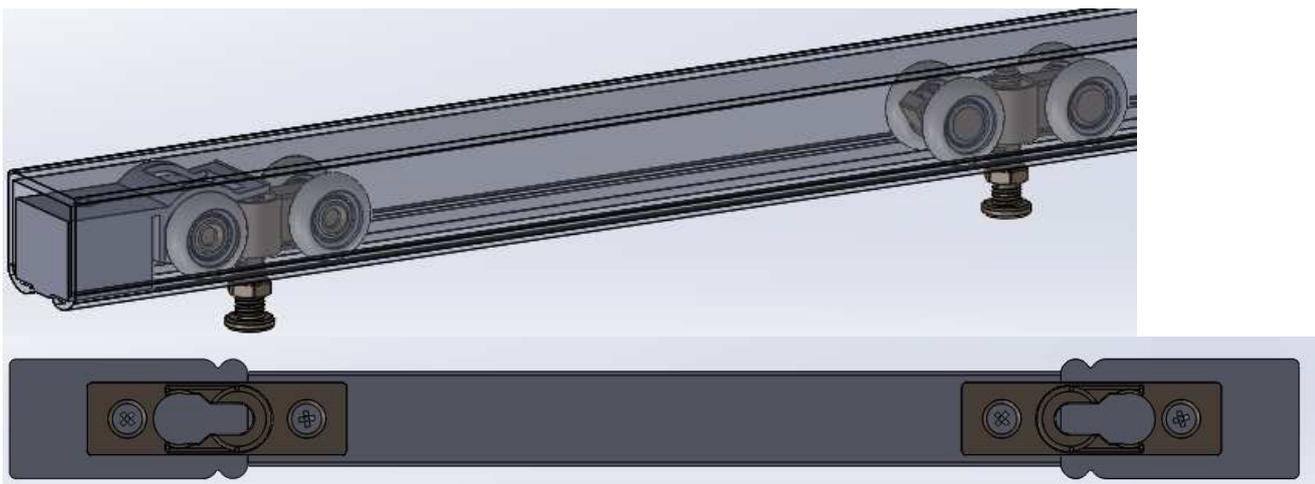
Inside Mount

Max frame-to-frame width: window width - 1<sup>1</sup>/<sub>8</sub>"

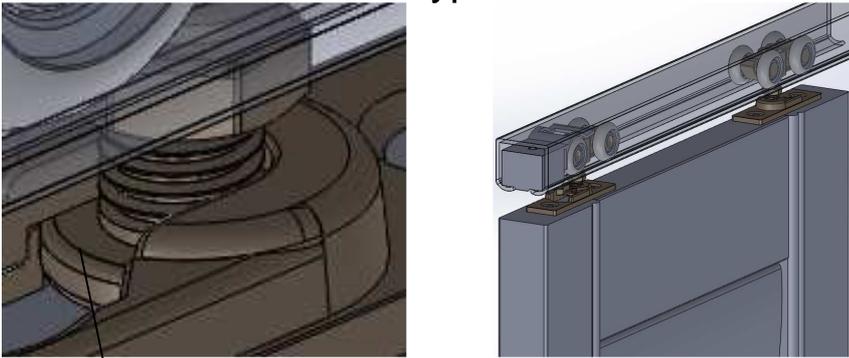
Max frame-to-frame height: window height - 1<sup>1</sup>/<sub>8</sub>"

**Wheel Carriers are in the Track / Wheel Carrier Brackets are on the top of Panel:**

Adjustments to panel alignment are made by turning the wheel carrier bolt with the wrench included in the Hardware Box



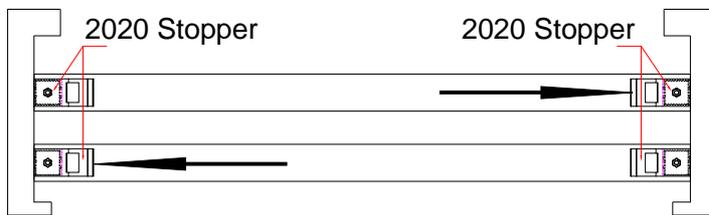
Track Shutters—2020 Bypass



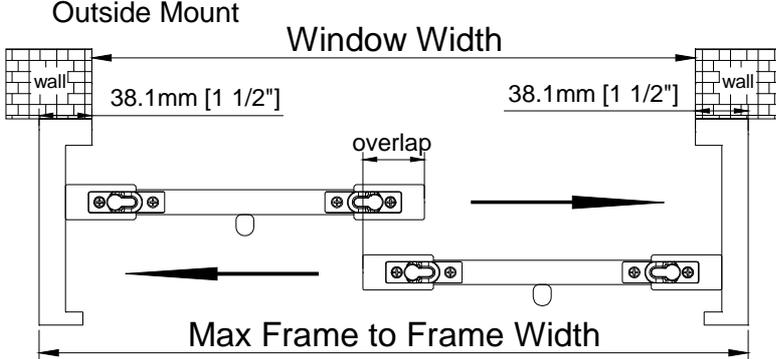
Push wheel carrier into the wheel carrier bracket to seat

Note: 2020 Stopper will be supplied at both ends of top track by default.

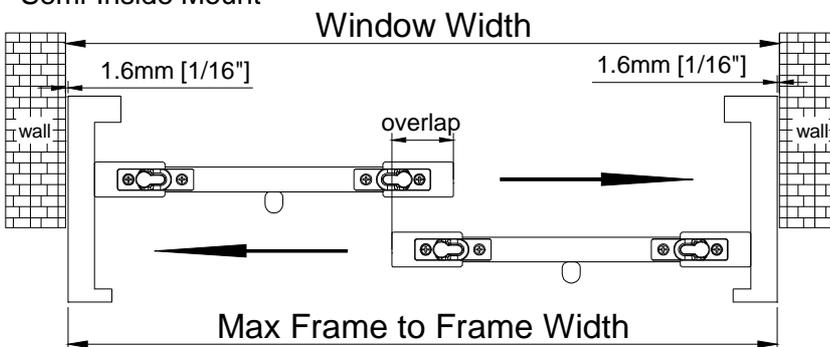
**Top View**



**Outside Mount**

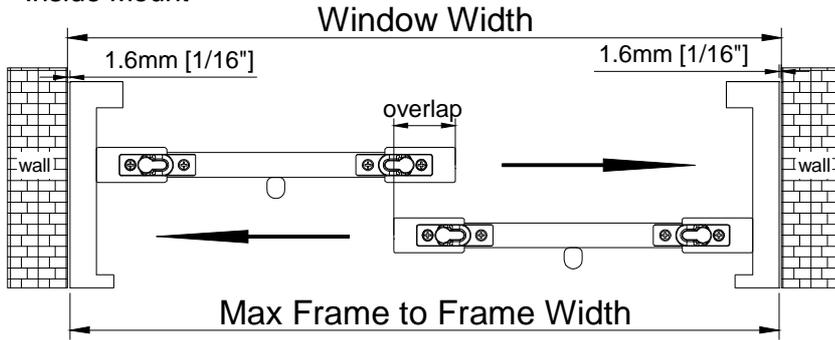


**Semi-Inside Mount**



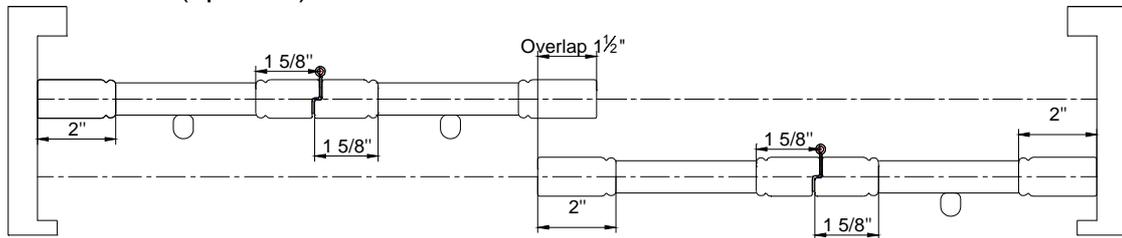
**Track Shutters—2020 Bypass**

Inside Mount



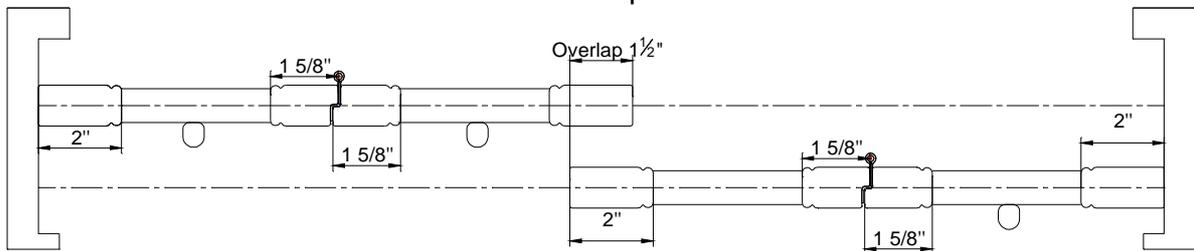
**Top View**

Combi - joined Panels (optional)

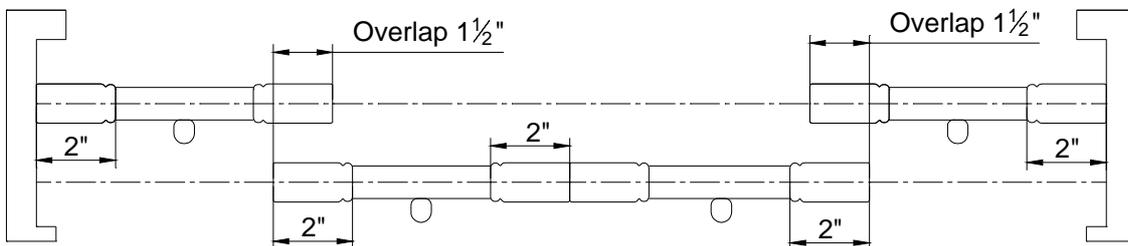


For shutters with 4 or more panels, please select "side open" or "center open"

**Side Open**

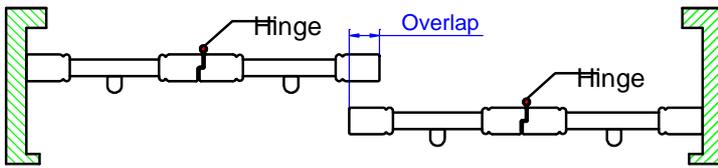


**Center Open**

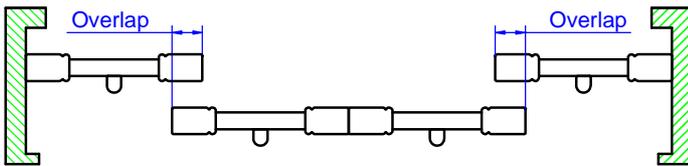


## Track Shutters—2020 Bypass

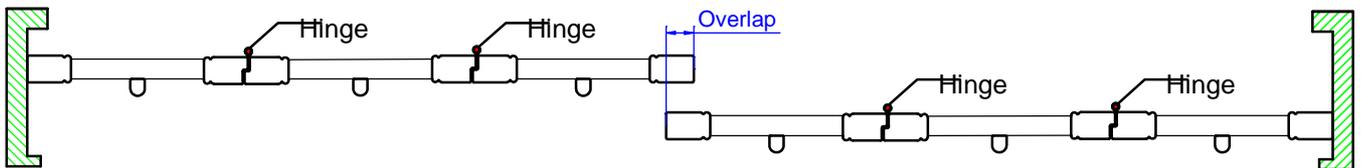
### 4 panels side open w/Rabbit stile



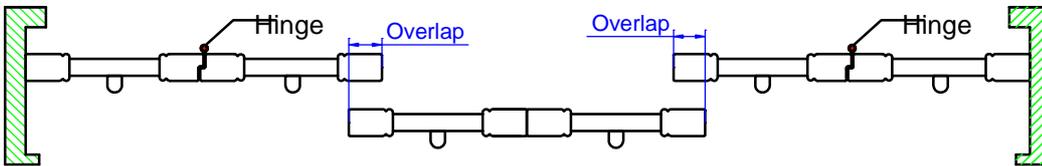
### 4 panels center open w/Rabbit stile



### 6 panels side open w/Rabbit stile



### 6 panels center open w/Rabbit stile

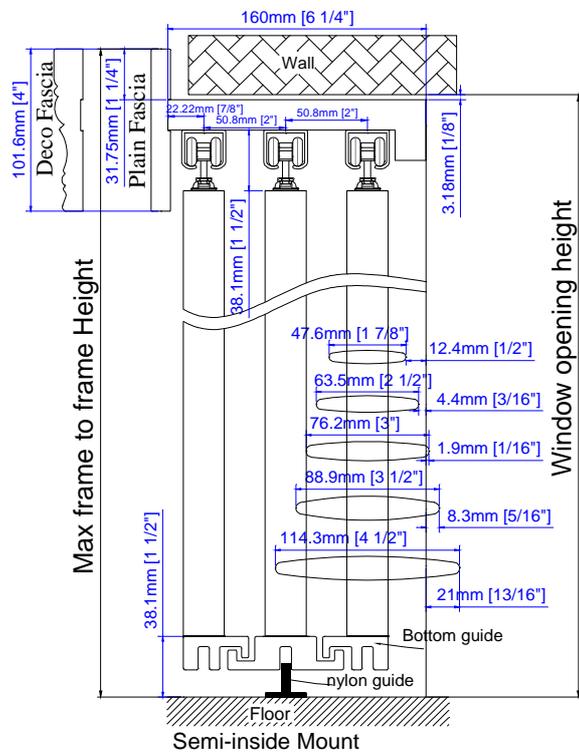
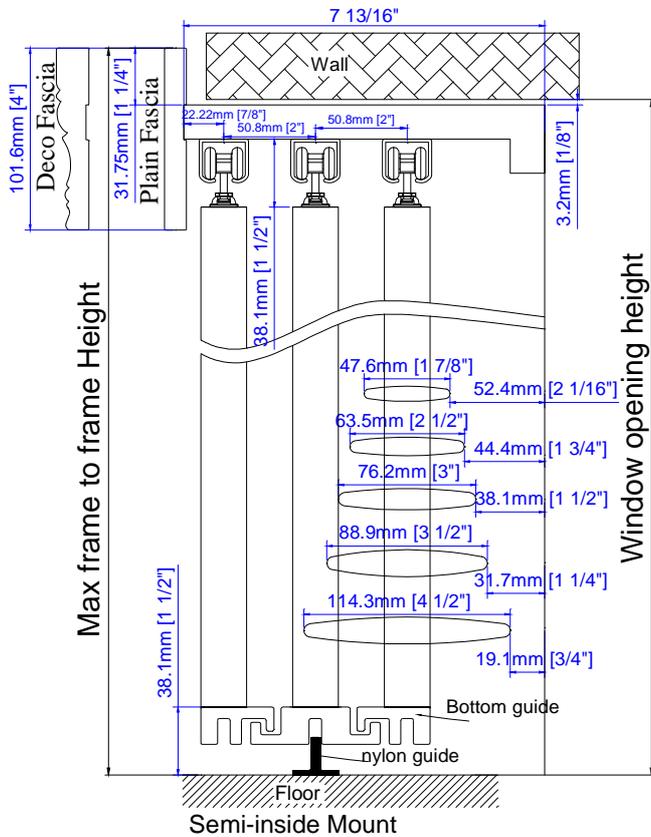
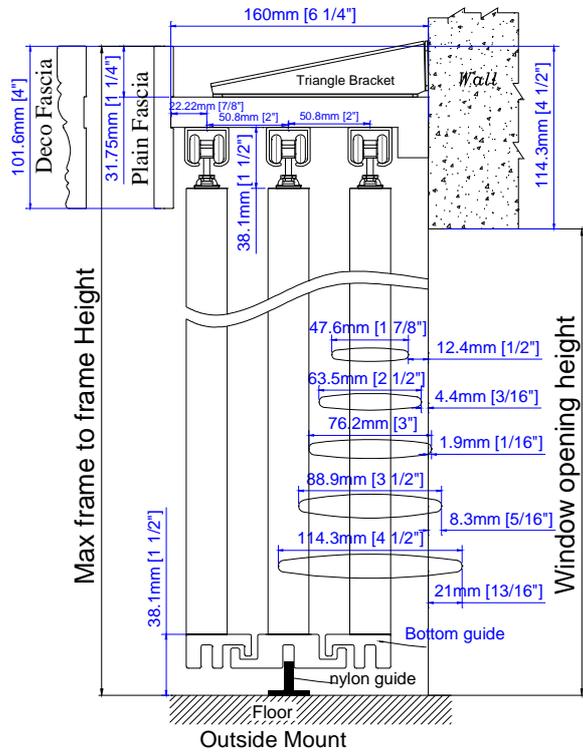
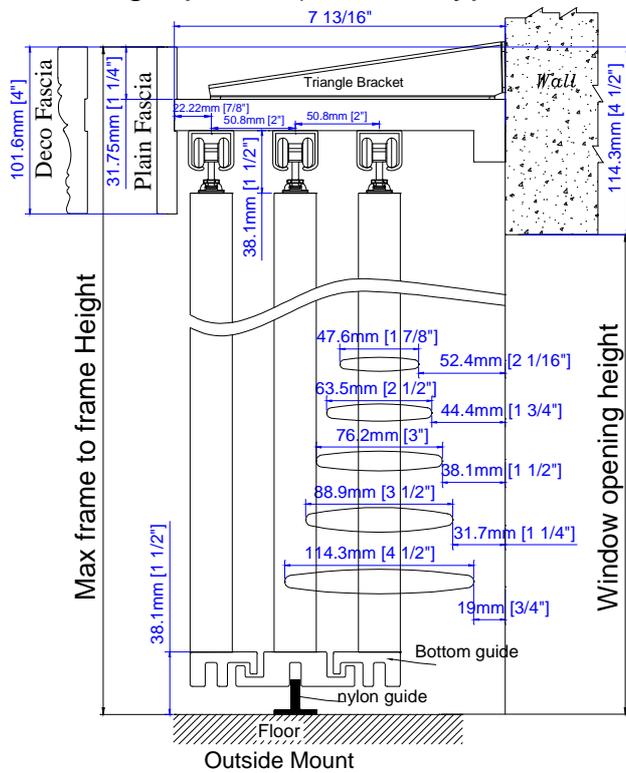


**Stile:** Only 2", 2 1/4" butt and rabbit stiles are available,  
1 5/8" rabbit stile only used for combi-joined panels.  
Center stile is not available.



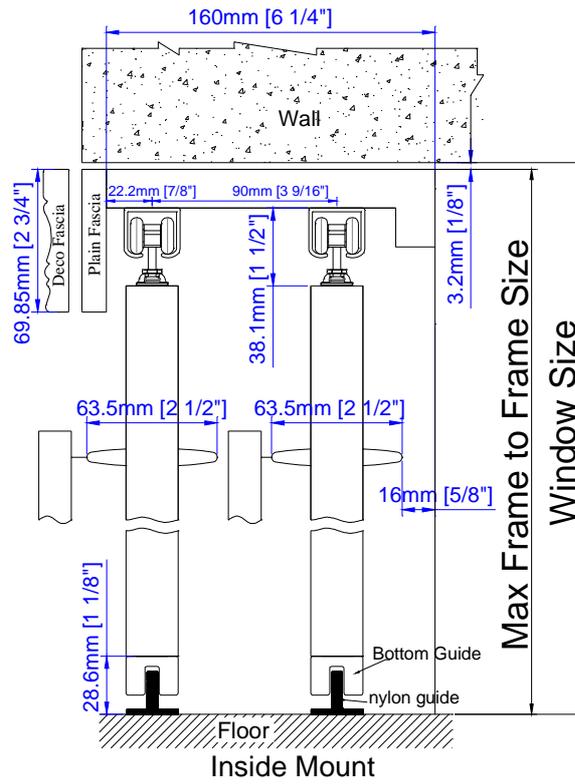
# Track Shutters—2020 Bypass

## Mounting Options (Closed Bypass with 3 Tracks):

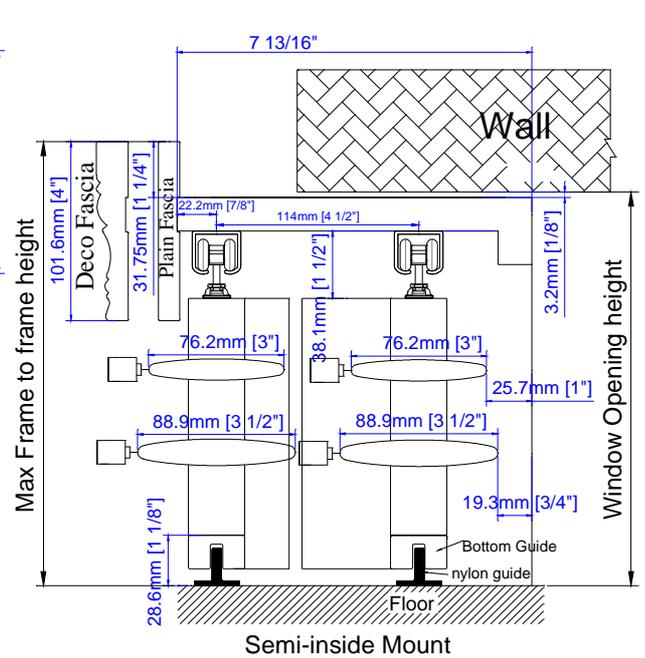
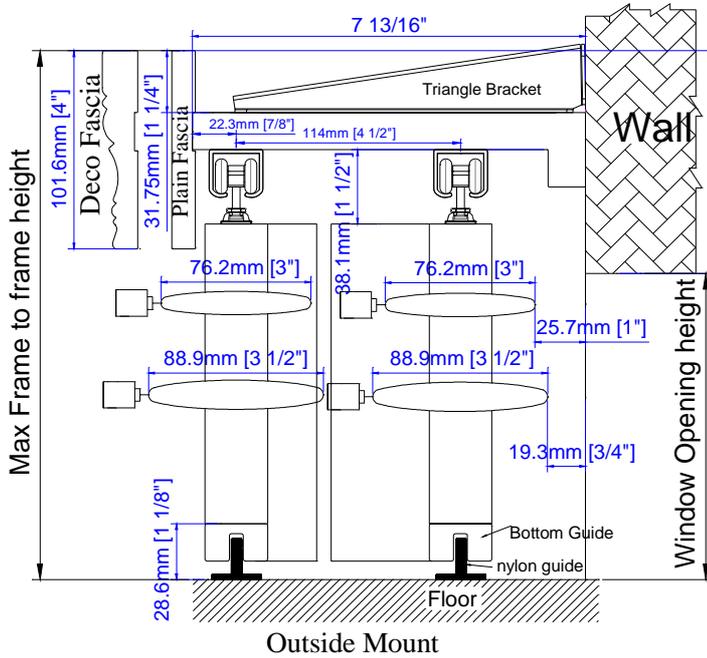




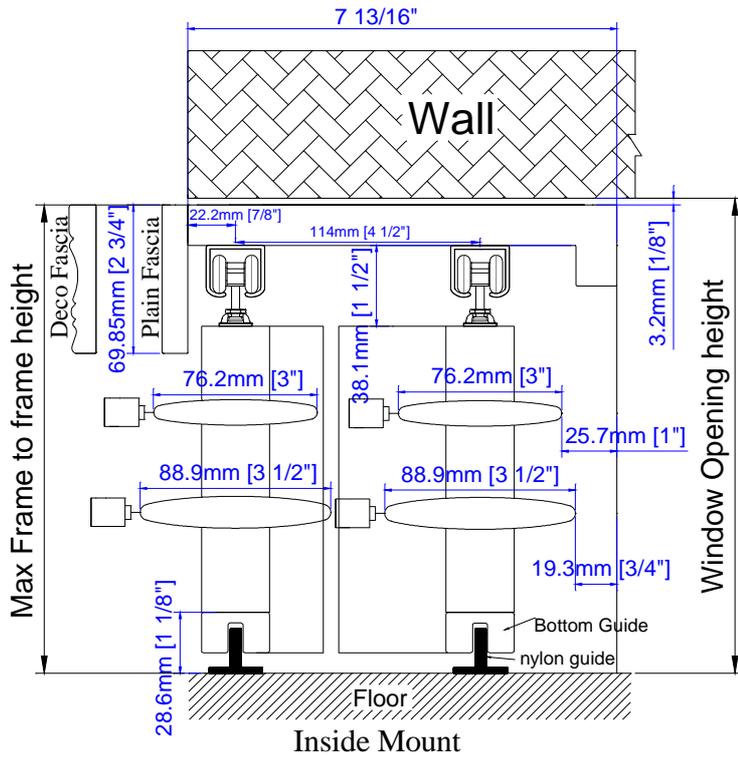
Track Shutters—2020 Bypass



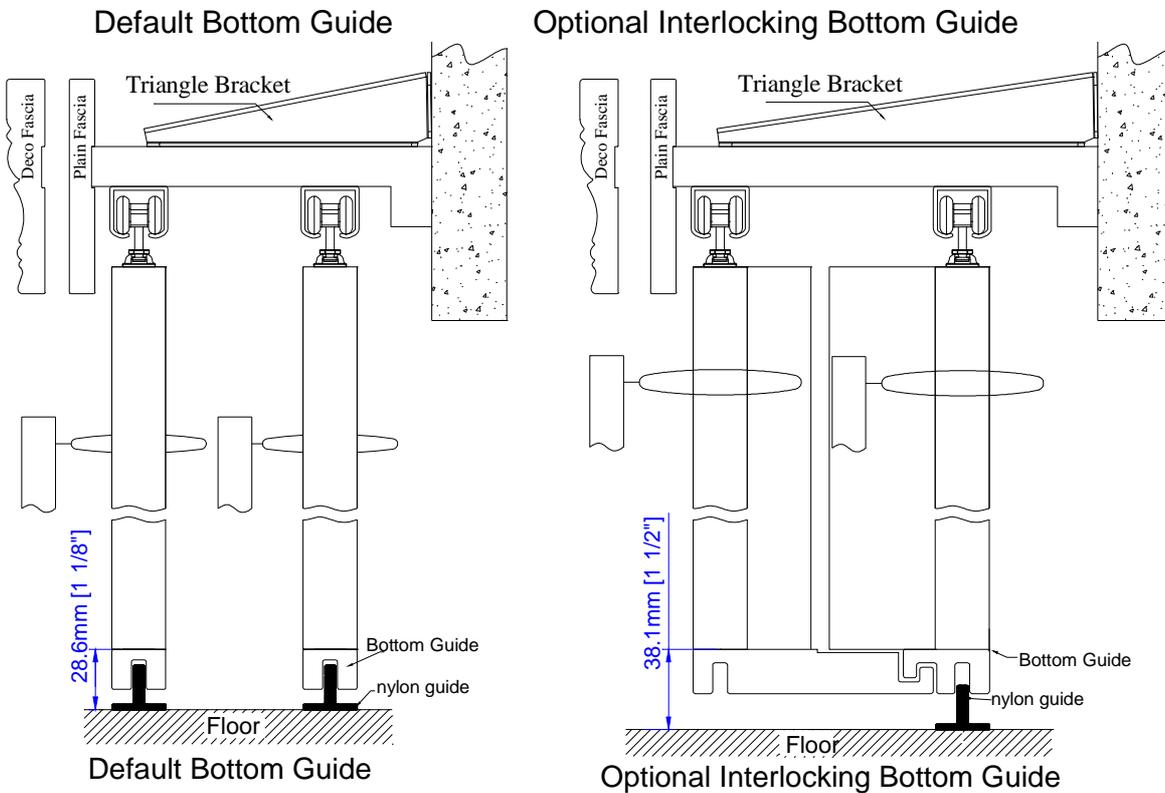
3" / 3 1/2" Louver



Track Shutters—2020 Bypass



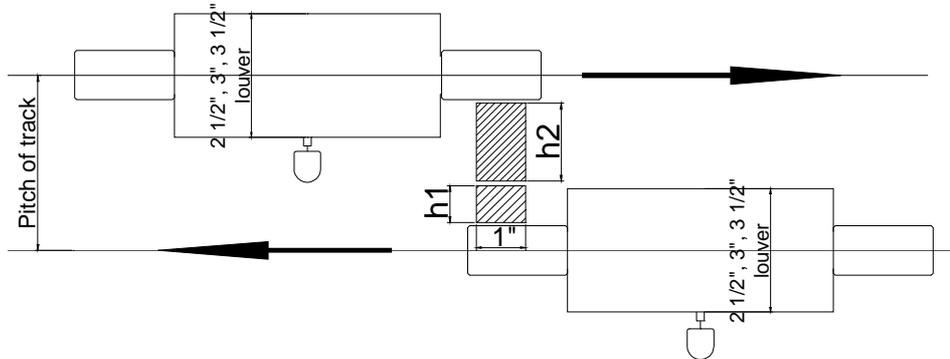
Bottom guide for Open ByPass:



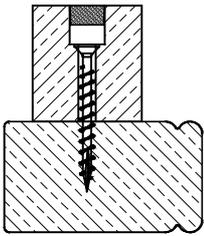
Track Shutters—2020 Bypass

Opened Bypass

Top View



Note: The light block for open bypass will be changed to use screws with wood plugs instead of current dowels.



Separation of track

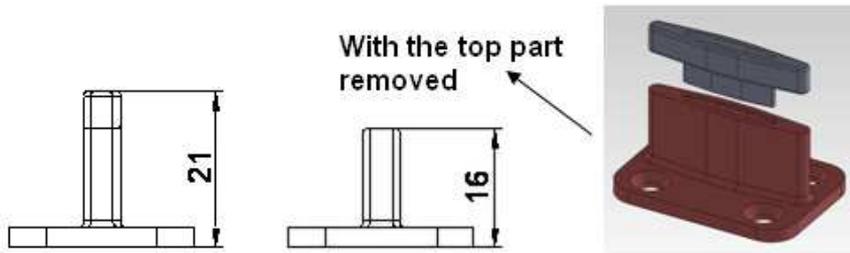
Louver	U shape bottom guide		Interlocking bottom guide	
	Regular Tilt Rod	Invisible tilt	Regular Tilt Rod	Invisible tilt
2.5"	3 9/16"	2 3/4"	3 9/16"	3 9/16"
3" / 3.5"	4 1/2"	3 5/8"	4 1/2"	4 1/2"

Light block thickness for panel

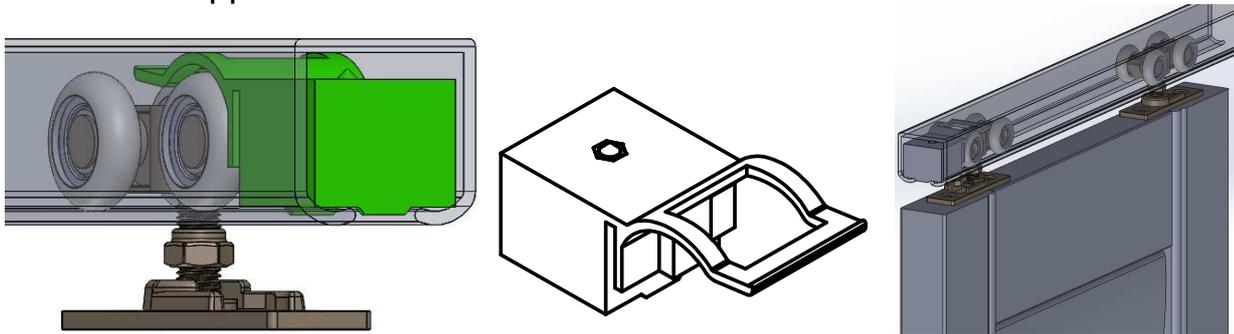
Louver		U shape bottom guide		Interlocking bottom guide	
		Regular Tilt Rod	Invisible tilt	Regular Tilt Rod	Invisible tilt
2.5"	h1	3/4"	3/4"	3/4"	3/4"
	h2	1 9/16"	3/4"	1 9/16"	1 9/16"
3" / 3.5"	h1	1 3/16"	1 3/16"	1 3/16"	1 3/16"
	h2	1 15/16"	1 3/16"	1 15/16"	1 15/16"

Nylon Guide: The nylon guide is composed by 2 parts and will supplied as a whole set by default (bottom part 16mm and top part 5mm), please remove the top part if necessary.

Track Shutters—2020 Bypass

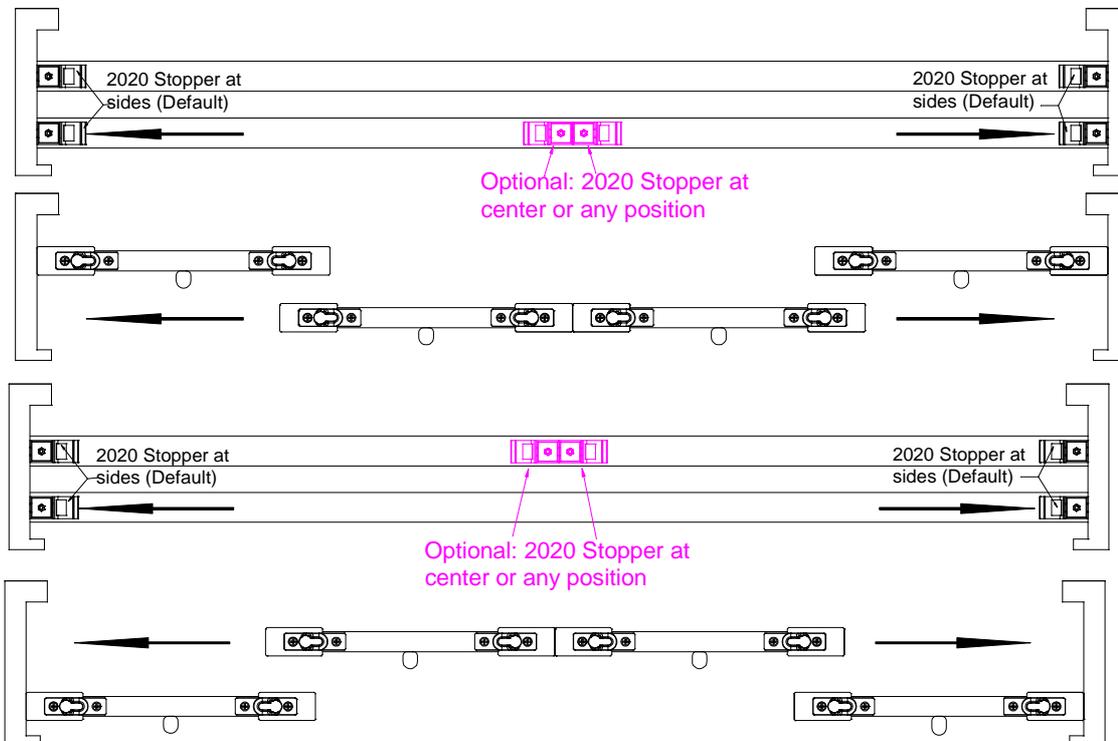


The 2020 Stopper



Note: 2020 Stopper will be supplied at both ends of top track by default.

The 2020 stopper can also be used in the center or any position of the top track as an option. Please specify the actual position when placing an order.



Track Shutters—2020 Bypass

Track Shutters Framing Materials

Framing	Size				Pc(s)
<b>L Shape Header</b>	<b>Header (Closed Bypass)</b>	<b>Header (Opened Bypass)</b>	<b>Supporting Strip</b>		1 pc
<b>(2 in 1)</b>	$\frac{3}{4}$ " x $5\frac{1}{2}$ "* (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	$\frac{3}{4}$ " x $6\frac{1}{4}$ "* ( $2\frac{1}{2}$ " Louver)	$\frac{3}{4}$ " x $\frac{3}{4}$ "		
Header with Supporting Strip	$\frac{3}{4}$ " x $4\frac{1}{2}$ "* (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	$\frac{3}{4}$ " x $7\frac{13}{16}$ "* (3", $3\frac{1}{2}$ " Louver)			
	Custom * $\leq 8$ "	Custom * $\leq 8$ "			
<b>U Shape Side Frame</b>	<b>Side Frame (Closed Bypass)</b>	<b>Side Frame (Opened Bypass)</b>	<b>Supporting Strip</b>	<b>Side Fascia</b>	2 pcs
<b>(3 in 1)</b>	$\frac{3}{4}$ " x $5\frac{7}{8}$ "* (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	$\frac{3}{4}$ " x $6\frac{5}{8}$ "* ( $2\frac{1}{2}$ " Louver)	$\frac{3}{4}$ " x $\frac{3}{4}$ "	$\frac{3}{8}$ " x $1\frac{1}{4}$ " "	
Side Frame with Supporting Strip & Side Fascia	$\frac{3}{4}$ " x $4\frac{7}{8}$ "* (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	$\frac{3}{4}$ " x $8\frac{1}{4}$ "* (3", $3\frac{1}{2}$ " Louver)			
	Custom * $\leq 8$ "	Custom * $\leq 8$ "			
Top Fascia (Plain/Deco)	4" (Semi-inside and Outside Mount)				1 pc
	$\frac{1}{2}$ " x $2\frac{3}{4}$ " (Inside Mount)				
Top Fascia Return	4" (Semi-inside and Outside Mount)				2 pcs
	N/A (Inside Mount)				

Note:

- When the header size is  $4\frac{1}{2}$ "\*,  $5\frac{1}{2}$ "\*,  $6\frac{1}{4}$ "\* or  $7\frac{13}{16}$ "\*, the L Shape header and the U Shape Side Frame will be sent integrally. That is:
  1. The header and the supporting strip will be sent integrally as L Shape Header;
  2. The side frame, supporting strip and the side fascia will be sent integrally as U Shape Side Frame.
- For any custom header sizes other than  $4\frac{1}{2}$ "\*,  $5\frac{1}{2}$ "\*,  $6\frac{1}{4}$ "\* or  $7\frac{13}{16}$ "\*, the L Shape Header and the U Shape Side Frame will be sent separately. That is:
  1. The header and the supporting strip will be sent separately for L Shape Header;
  2. The side frame, supporting strip and the side fascia will be sent separately for U Shape Side Frame.

- Custom Boxout Width is available for both closed and opened bypass shutters.

## Track Shutters—2020 Bypass

### Hardware Box

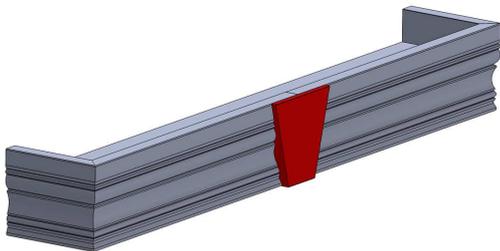
Hardware Box
<b>Part</b>
Wrench
Nylon Guide
3/4 " screws for Nylon Guide
Triangle Bracket (based on the length of header)
2" screws for Triangle bracket
3/4" screws for Triangle bracket

### Keystone for Fascia of the Track Shutter

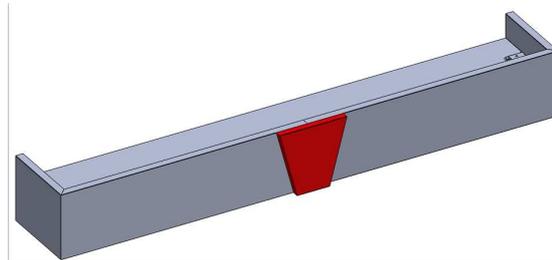
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

For fascia length within the split limitation, keystone can also be supplied as an option with surcharge.

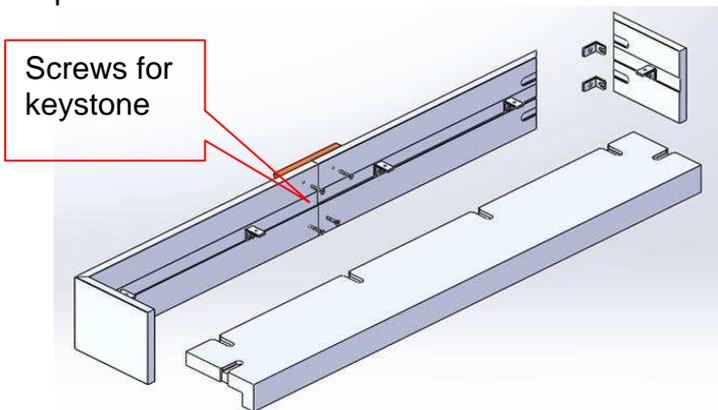
For Deco Fascia:



For Plain Fascia:



The keystone will be installed by screws. We will pre-drill the screw holes and the screws will be packed in hardware box.



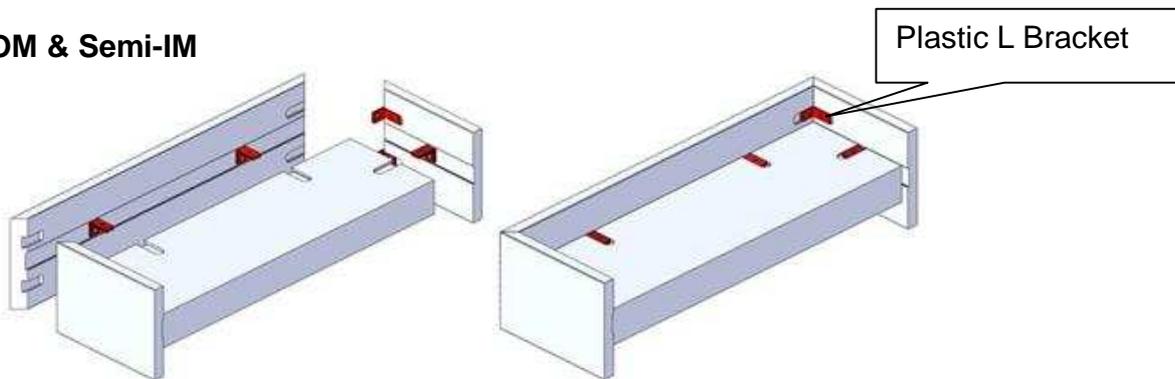
## Track Shutters—2020 Bypass

### Plastic L Bracket to Connect the Header, Fascia & Fascia Returns

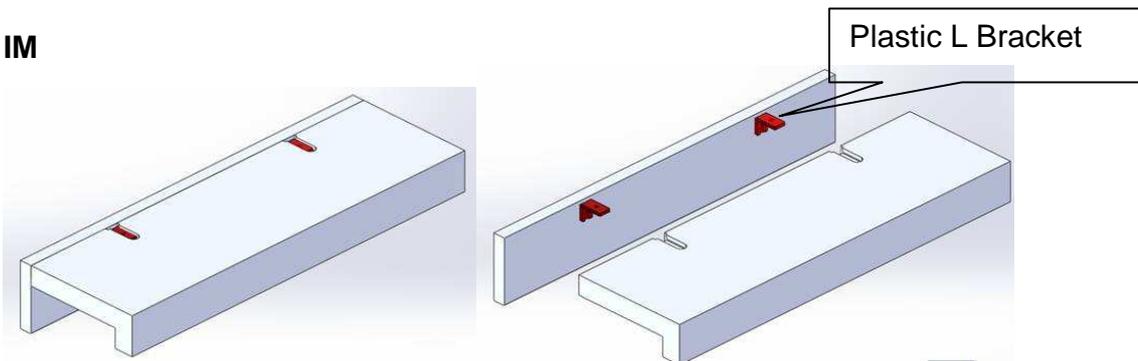


L Bracket will be used to connect the header, fascia and fascia returns for Bypass shutter. This applies for Inside Mount, Semi-Inside Mount & Outside Mount.

#### OM & Semi-IM



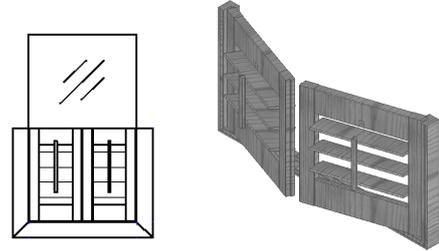
#### IM



## Special Options

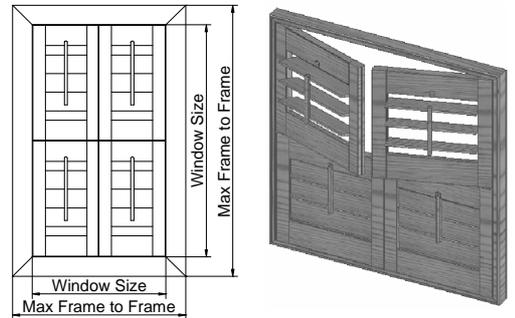
### Café Shutters\*

- The top of the panel requires a special finish. Please indicate “café shutter” when placing orders.
- The shutter does not come with recessed magnet on top.
- When the height of the framing material (including t-posts) exceeds the panel height, by more than 5", a surcharge will apply.

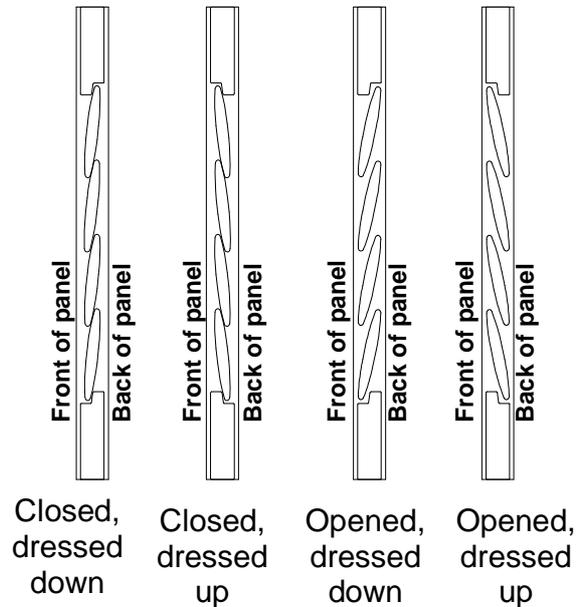
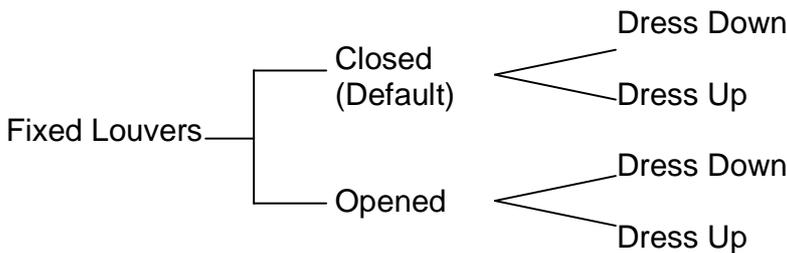


### Double-Hung Shutters\*

- For total number of panels, please include panels in both rows.
- For panel configuration, please provide panel fold for one row.
- The default location for the division point is the center unless specified otherwise.
- Horizontal T Post\* can be added for increased structural integrity.
- Warranty needs to be waived for the horizontal T post length exceeds 48".
- For Double Hung shutter, whenever an upper or lower panel is larger than 78", we will add one more extra hinge for it, we will also attempt to create larger top/bottom rails for additional strength by reducing the number of louvers by one as long as the rail sizes remain within spec.



### Fixed Louvers



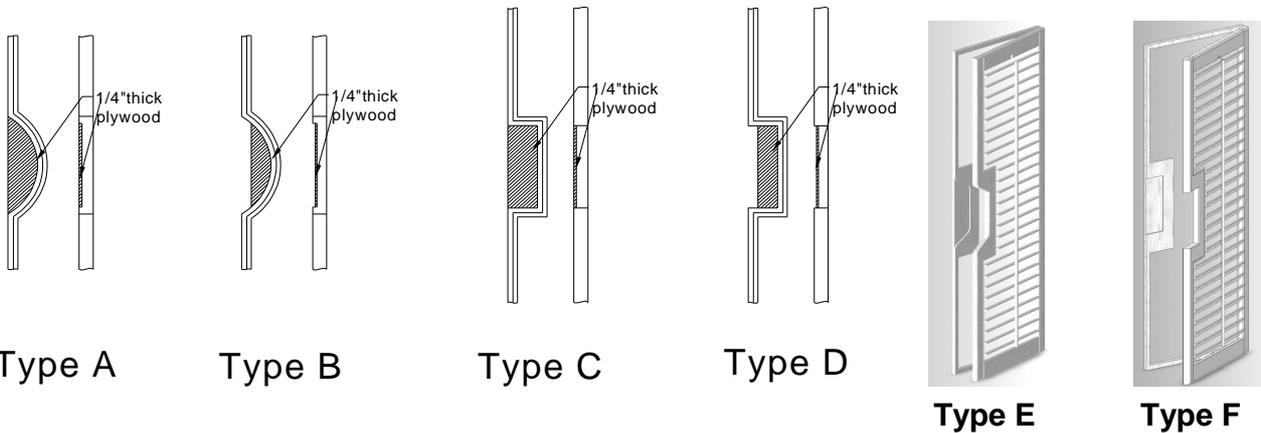
\*Some surcharges apply

**French Door Cut-out Collection\***

Flush and offset cutout options are available in both curved and square French door cutout. Offset cutout is good option for French Door with molding around the glass. All French door cutouts are only available in L frame except Type E and F. The batten is placed behind the Type E/F panel to block light.

Louver size	Batten Width	Batten thickness
1 7/8" & 2 1/2"	3/4"	1"
3" & 3 1/2"	3/4"	1 3/8"
4 1/2"	3/4"	1 7/8"

For measurement details please refer to Form section. French Door cutouts with Arch/Quarter Arch at the top are also available except Type E and F



**Custom Colors\***  
Available in Normandy® shutters.

Option (Color Code)	Sample Size	Confirmation Process
<b>Custom Solid (C01)</b>	At least 4" x 4" on a clean, flat surface such as wood or cardboard (please do not send anything critical as the sample will not be returned)	All orders require customer's confirmation via <b>digital photo OR actual swatch</b> in the mail before production. An additional shipping and Custom handling fee applies.
<b>Custom Stain (C02)</b>		

Note:

\*Some surcharges apply

- 1) All custom colors will be finished with the standard gloss used on all Norman products.
- 2) Please be aware that we will only be able to match the tone and not the texture or finish of the sample you submit.
- 3) Only one color revision will be allowed during the color confirmation process.
- 4) Customer may shorten the production lead-time by opting to waive the color confirmation process or by approving a digital photo. Norman will not be responsible for any color variation on waived confirmations or approved digital photos.

**Disclaimer:**

**Sherwin Williams ColorSnap (MWCS),  
 Sherwin Williams Designer Expressions (MWDE),  
 Benjamin Moore Classic (MBMC) (M2460009TL) &  
 Benjamin Moore Preview (MBMP) (M2440564TL)  
 Benjamin Moore, Off White Collection M2451888TL**

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**Shutters to be installed in Angled or Horizontal Skylight Window Openings**

If shutters are going to be installed in angled or horizontal skylight window openings, please specify on the order form.

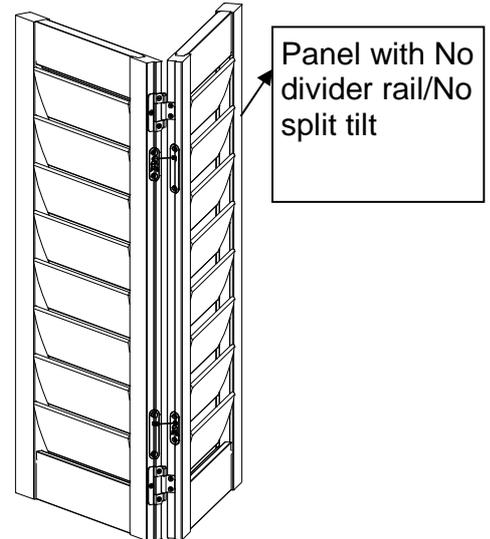
Available Material	Normandy Shutters (Not available for Motorized Shutters)
Available Frame Type	Frame with light block thickness not less than 3/4"
Max Panel Size	26" W x 78"H
Tilt Rod	Invisible Tilt
Panel Configuration	single panel or single panels with T-Posts
Hardware for unhinged side	Panel Lock on top and bottom + 2 Button Catches

**Auto Tilt™ (Patented)\***

Available in Bifold or Multi-fold panel configuration  
 Available with Invisible Tilt Only  
 Available in 2" Butt, Astragal and Rabbet Stile  
 Minimum Louver Qty (Please see below for details)  
 Ring pulls included. For ring pull location, please refer to the ring pull section.

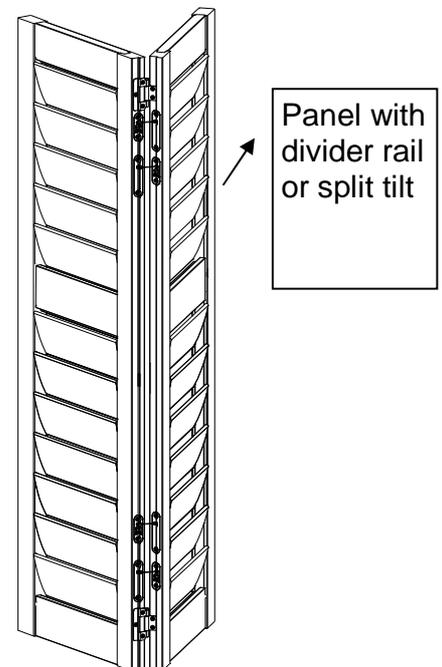
When there is only one louver section (no divider rail/no split tilt)

Louver Size	Rail Size	Minimum Louver qty
2.5"	<4.25"	6
	>=4.25"	4
3"	<3.75"	5
	>=3.75"	4
3.5"	2.75"~6.5"	4
4.5"	2.75"~6.5"	3



When there is more than one louver sections (with divider rail/ split tilt)

Louver Size	Rail Size	Minimum Louver qty
2.5"	<4.25"	5
	>=4.25"	4
3"	2.75" – 6"	4
3.5"	2.75"~6.5"	3
4.5"	2.75"~6.5"	3



\*Some surcharges apply

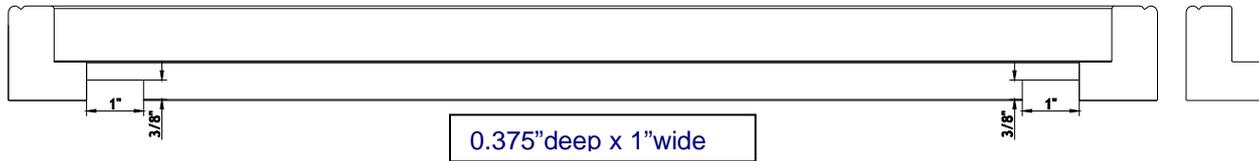
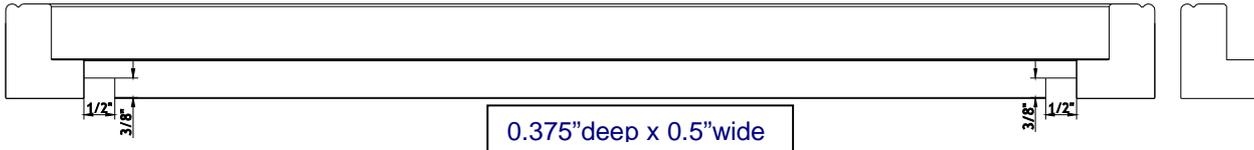
Standard frame cutouts: R cutout, S cutout, L cutout, C cutout. The sizes can vary.

- a. **R cutout**---Ridge cut out: 0.375"deep(0.25" deep for Deco Frames and L Frame with 1/4" Light block) x 0.5"wide and 0.375"deep (0.25" deep for Deco Frames and L Frame with 1/4" Light block) x 1.0" wide (see below).

The cutout can be on the top and the bottom of the frame

Available Frame Types:

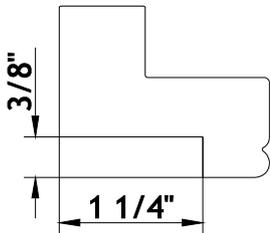
- 1) All types of the L/Deco/Z frames;
- 2) All standard sill plates for Deco/Z Frame.



- b. **S cutout**---Sill cut out: 0.375"deep x 1.25"wide. The cutout is always on bottom of bottom frame.

Available frame type:

- 1) All L-frames except for L frame with 1/4" Light block
- 2) All Z Frame and its standard sill plates.



- c. **L cutout**---Lock cutout. L cutout will be on the left or right frame or T Posts.

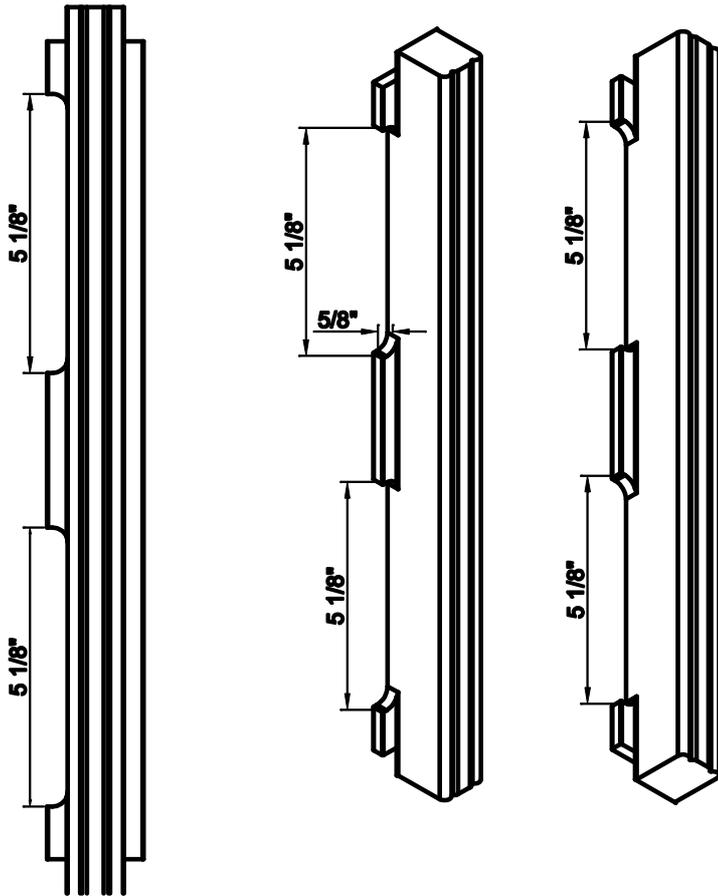
There will be one or two cutouts on the T-posts or frames depending on the height of the window;

- 1) For window around 42-48" height, 1 cutout is available;
- 2) For window around 60" or above, 2 cutouts are available.

Measuring for L cut out: The default size is 5.125". Measurements are from the bottom of frame if size type is max frame to frame size and from bottom of window if it is window size to the center of the cut out (2.5625" down and 2.5625" up).

Available frame type and T Post:

- 1) All types of L/Deco/Z frames except Tilt Out Z;
- 2) All standard sill plates for Deco/Z Frame;
- 3) All T Posts except for T Post with 3/8" wide light block.



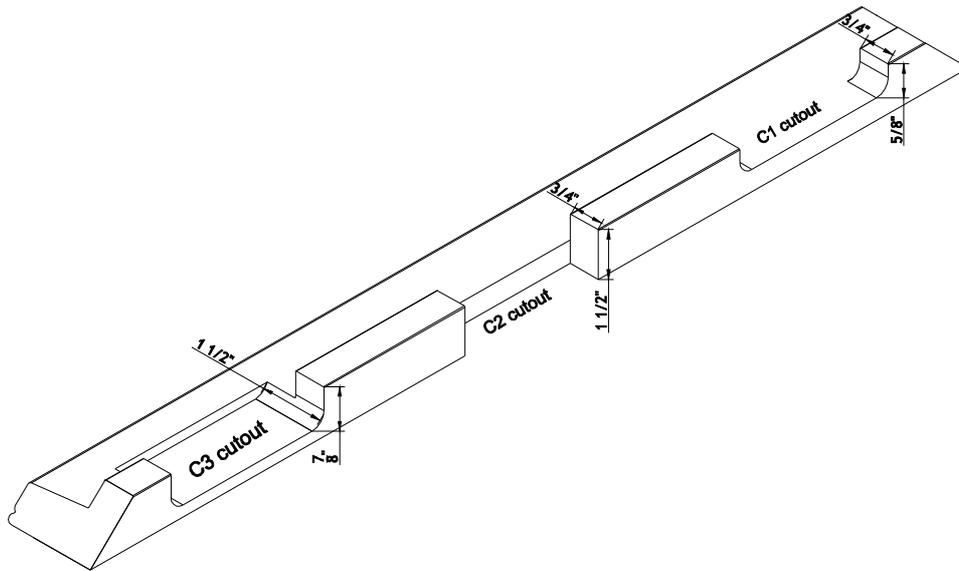
d. **C cutout**---Crank cut outs (C1 cutout, C2 cutout, C3 cutout): Always on bottom of bottom frame.

Available frame type for C1&C2:

- 1) All types of L/Z Frames except Tilt Out Z
- 2) All standard sill plates for Z Frame

Available frame type for C3:

- 1) All types Z-frames except Tilt Out Z
- 2) All standard sill plates for Z Frame
- 3) All type of L Frame except for all Vintage L Frames with different height or Beaded L Frame with 1/4" light block.



For C1 & C2 cutout, the cutout depth of light block is 1/4" for L Frame with 1/4" Light block.

Crank cutout—C1 cutout

Crank cutout—C2 cutout

Crank cutout—C3 cutout

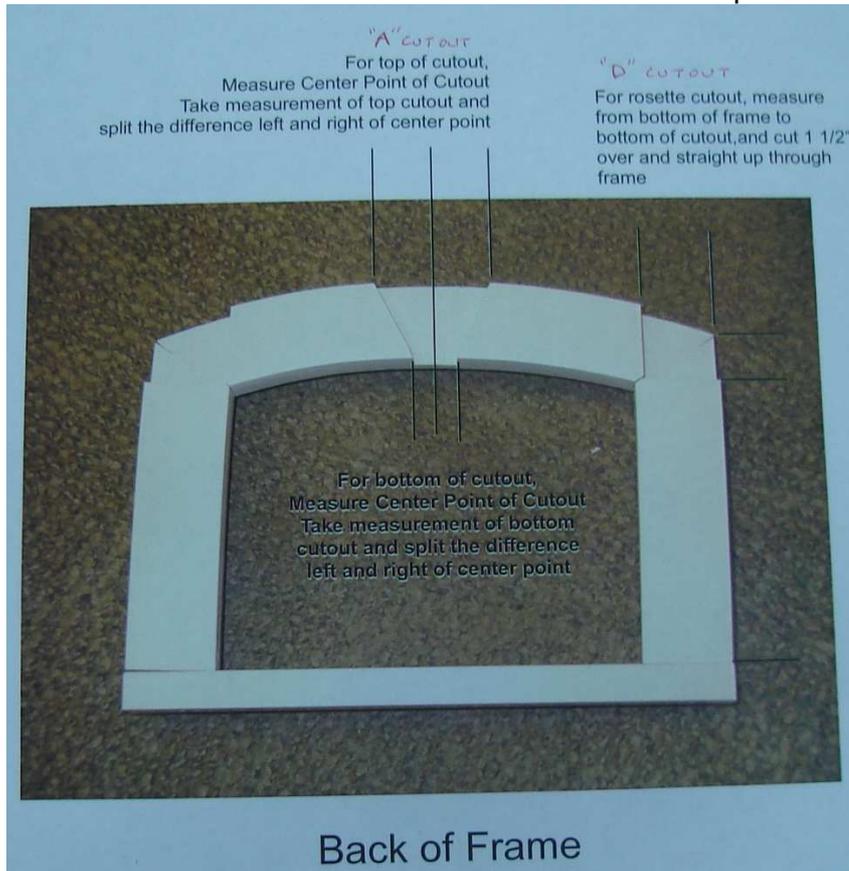
1st cutout - Measure from the left side to beginning of cutout and next measurement to end of cutout, and cut 5/8" deep.

2nd cutout - Measure from the left side to beginning of cutout and next measurement to end of cutout, and cut light block off all the way through

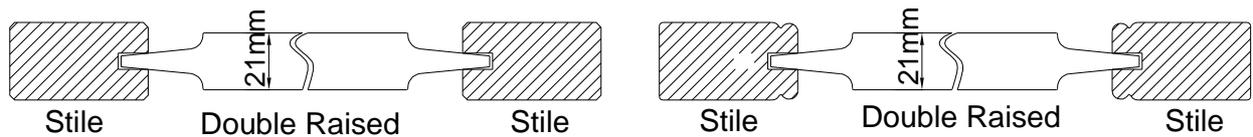
3rd cutout - Measure from the left side to beginning of cutout and next measurement to end of cutout, and cut 7/8" deep from top of light block and 1 1/2" in from back of frame

**C Cutouts  
Crank Cutouts**

- e. **A & D cutouts:** This should be for the outside mount frames, deco frames, L-frames. Normally a build out or an extension is used to build the frame out so the frame can set on top of the “keystone”:



**Raised Panel \***



Available in

- Raised panel with louver combination.
- Raised panel only.

Raised Panel Location(s)

- Top.
- Middle.
- Bottom.
- All

**Specifications**

- 12" ≤ raised panel section height (including rail size) ≤ 48";
- For 1 5/8" Stile, the single panel width can't be less than 6 7/8";
- For 2" Stile, the single panel width can't be less than 7 5/8";
- For 2 1/4" Stile, the single panel width can't be less than 8 1/8";

\*Some surcharges apply

**Raised panel only (without louvers):**

The maximum panel width will be 36" for single panel (such as L / R / LR / LTR etc.).

The maximum panel width will be same as the normal shutter spec for Bifold & Multiple fold panel configurations.

**Raised panel with louver combination:**

The maximum panel width will be 36" for single panel with 3.5" & 4.5" louvers;

The maximum panel width will be same as the normal shutter spec for single panel with other louver sizes except 3.5" & 4.5" louvers.

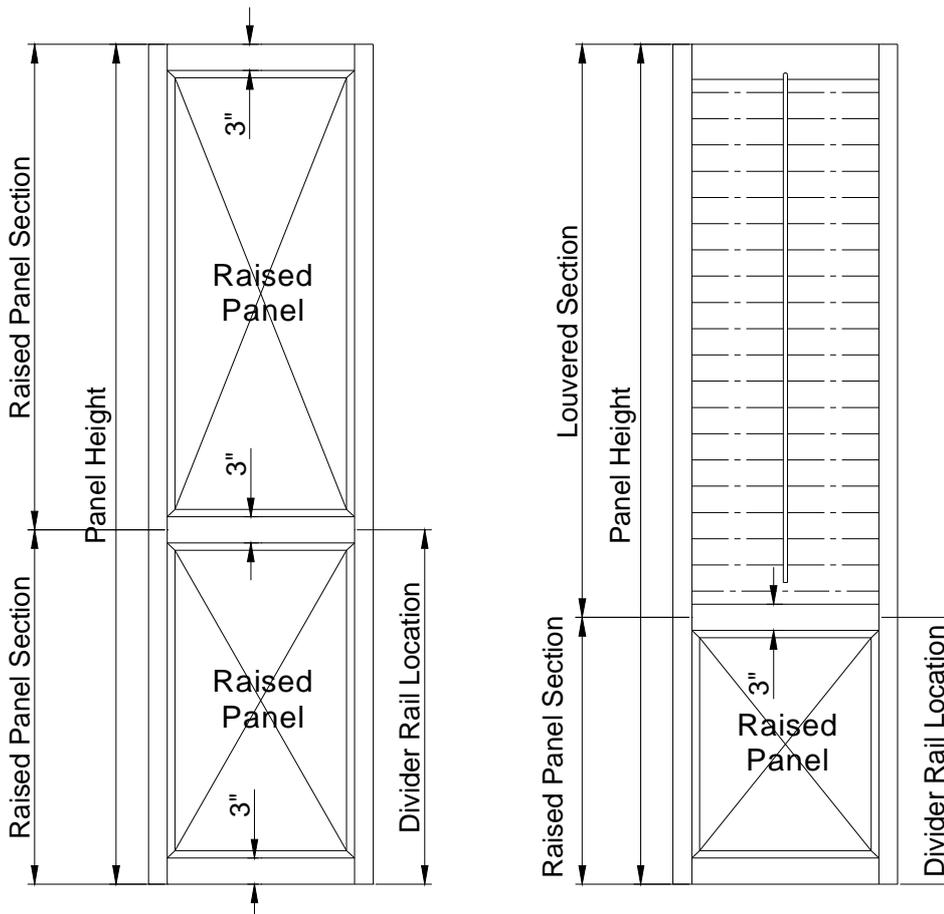
The maximum panel width will be same as the normal shutter spec for Bifold & Multiple fold panel configurations.

**Rails**

For a panel with raised panel section only, 3" is the standard size for top, bottom and divider rails.

The minimum size for top and bottom rails is 3".

If you are matching raised panels to standard shutter panels, the top rail of the standard shutter panel will match the top rail of the raised panel. Please specify clearly when placing order.



### Hand-Carved Rail \*

Available for top and/or bottom rails.

Please note that the proportion of the design is based on the height of the rail, not the width of the panel.



Vine



Wheat



Fleur de Lis



Rosette



Star



Fish



Swan

### Liberty Arch \*

The arch starts and ends 1" from the rail sides when panel width is more than 8";

While the arch starts and ends 1/2" from the rail sides when panel width is less than or equal to 8";

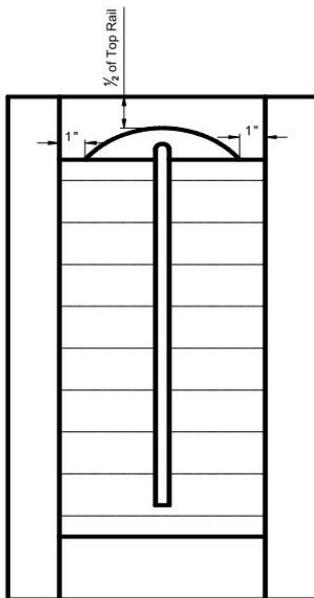
The arch height is half of the top rail size (rounded up to 1/8" increment).

The shape of the Arch is based on 3 points taken from the rail.

1<sup>st</sup> point: 1" (or 1/2") from the left stile

2<sup>nd</sup> point: 1" (or 1/2") from the right stile

3<sup>rd</sup> point: Midpoint of the rail front



## Specialties

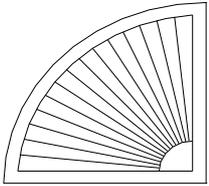
### Specialty Shutters\*

Specialty shutters are made of premium solid wood, finished to match the beauty of all Norman shutters. Templates are required if it is an imperfect specialty. Delivery time is 8 weeks from the order confirmation date for all specialty shutters. Please refer to Specialties and Template Requirement sections for details.

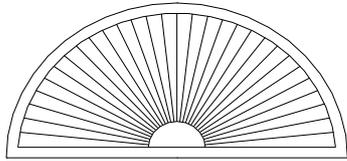
Regarding frame with an insert or solid frame issue:

- 1). For Half Round Sunburst, Quarter Round Sunburst, Eyebrow Sunburst & Elongated Eyebrow Sunburst:
  - All deco frames will be made as solid frames;
  - All Vintage L frames & Vintage hang strip: all top frames (curve shape frame) will be made as a solid frame but the bottom & both sided frames (straight frames) will be made as regular frames with inserts
- 2). For Triangle, Hexagon, Octagon, Peak & Angle top: all frames will be made as regular frames with inserts.
- 3). For Circle, Oval: all frames will be made as solid frames (not with an insert).
- 4). For Sunburst on top with Divider strip: the top frame (curve shape frame) will be made as a solid frame but the bottom & both side frames (straight frames) will be made as regular frames with inserts.
- 5). For Louver Arch with Eyebrow curve shape:
  - All deco frames excluding 2.5" Mission deco frame: all frames will be made as solid frames (not with an insert).
  - All Vintage L frames & Vintage hang strip & 2.5" Mission deco frame: the top frame (curve shape frame) will be made as a solid frame but the bottom & both sided frames (straight frames) will be made as regular frames with inserts;
- 6). For other Specialty Shutters when curve shape is similar as perfect arch (such as Louver Arch except Louver Arch with Eyebrow curve shape in point 5), Horizontal louvers center arch with quarter round side panels(-Standard louvered arch & Continuous arch), Sunburst louvers center arch with quarter round side panels, Arch Top Picture Window with horizontal louvers, Arch Top Picture Window with Sunburst, Standard unit with horizontal arch center etc.):
  - All deco frames will be made as solid frames;
  - All Vintage L frames & Vintage hang strip: all top frames (curve shape frame) will be made as a solid frame but the bottom & both sided frames (straight frames) will be made as regular frames with inserts.

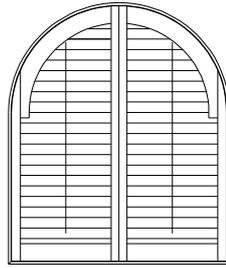
# Normandy® Shutters



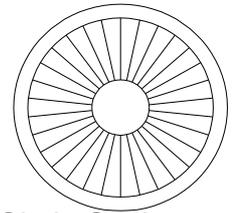
Quarter Round Sunburst



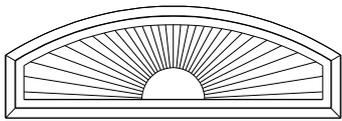
Half Round Sunburst



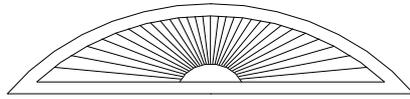
Louvered Arch w/ Center Tilt Rod



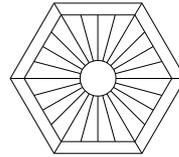
Circle Sunburst



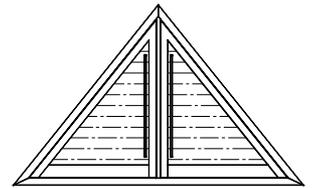
Elongated Eyebrow Sunburst



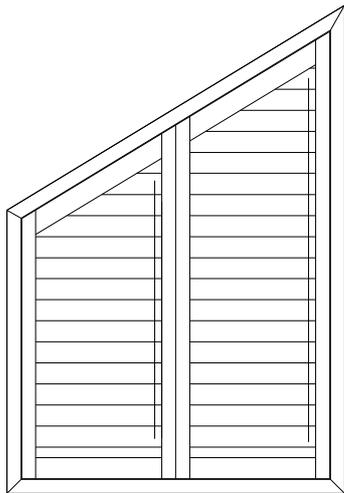
Eyebrow Sunburst



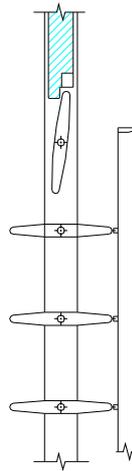
Hexagon Sunburst



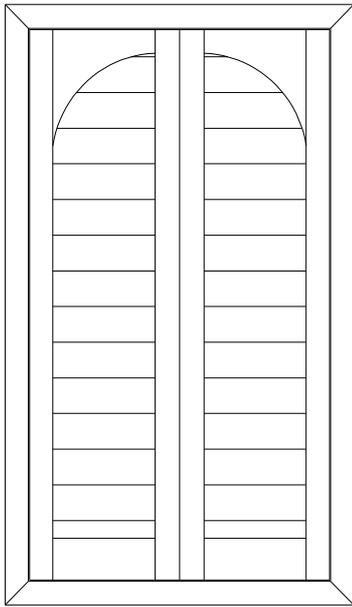
Triangle



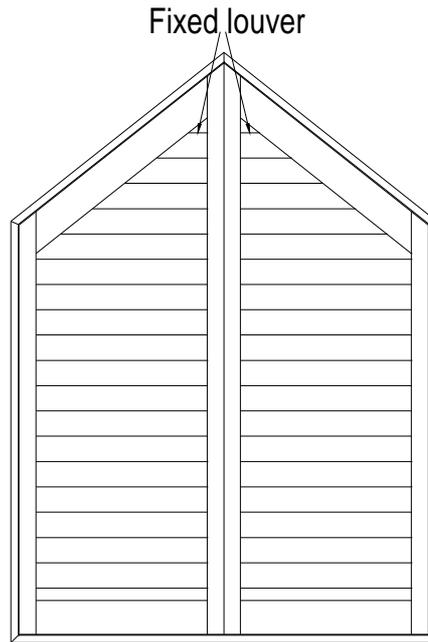
Angle Top



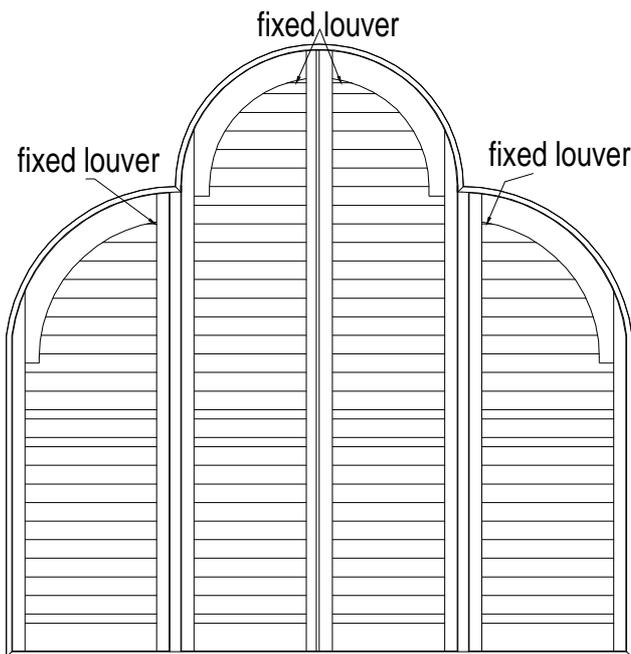
\*Top louver of angle top might be fixed as shown above



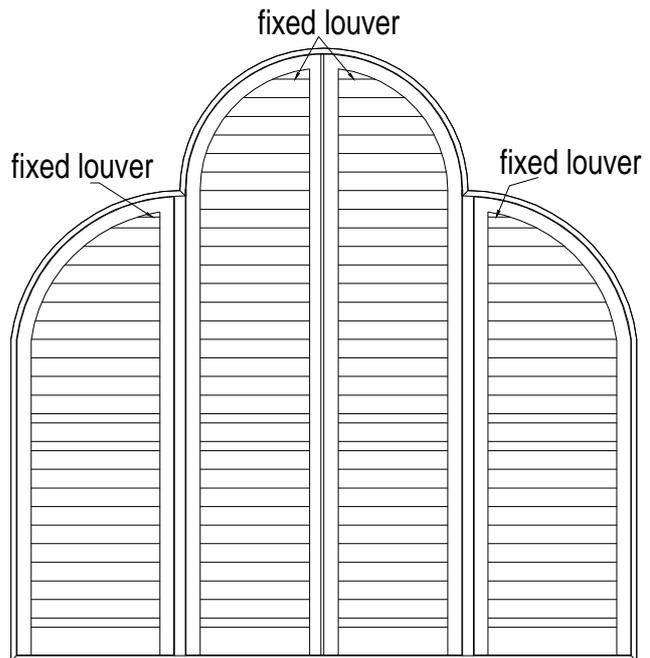
Louver Arch in a Rectangle



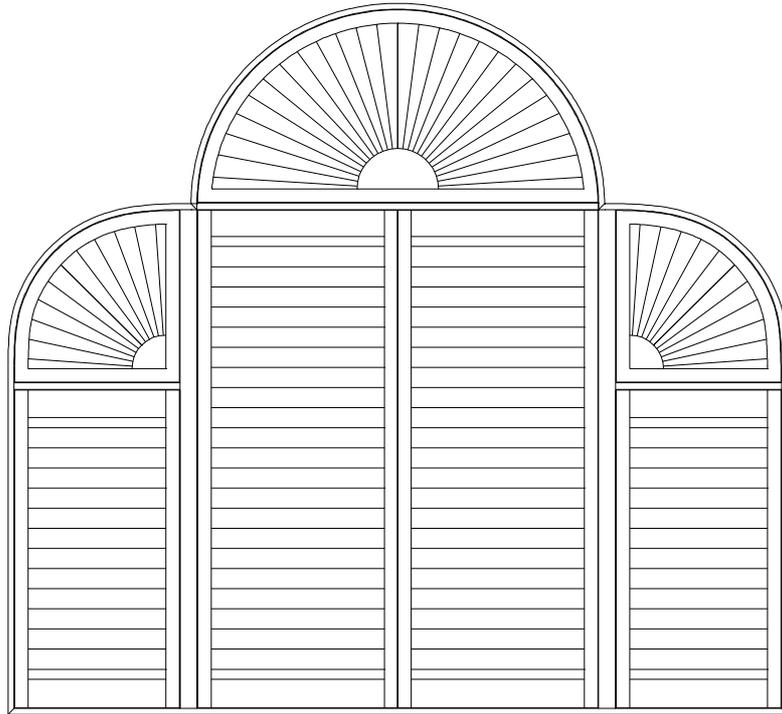
Peak



Horizontal louvers center arch  
with quarter round side panels  
-Standard louvered arch

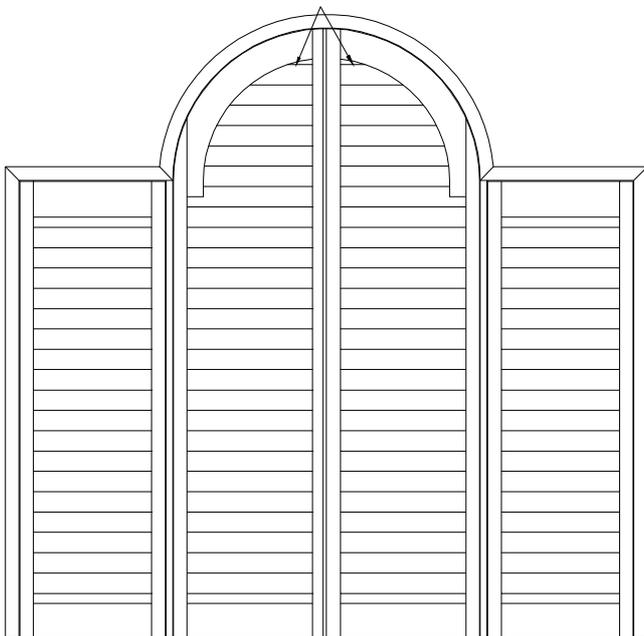


Horizontal louvers center arch  
with quarter round side panels  
-Continuous arch



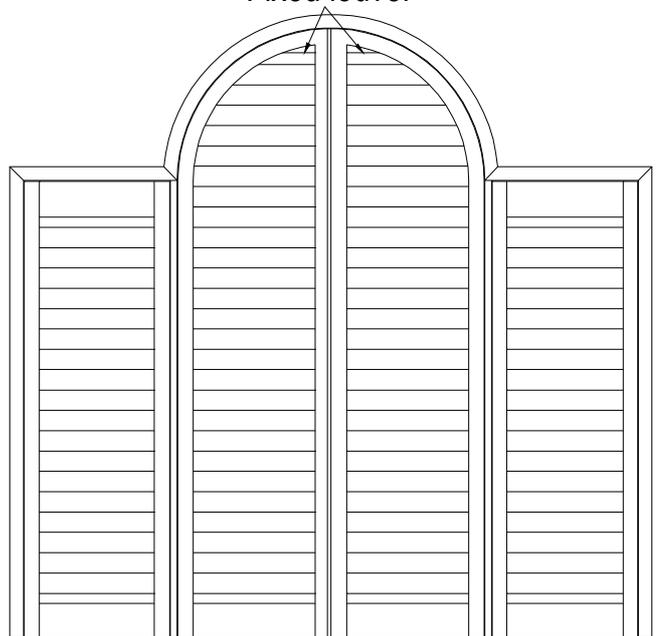
Sunburst louvers center arch with quarter round side panels

Fixed louver

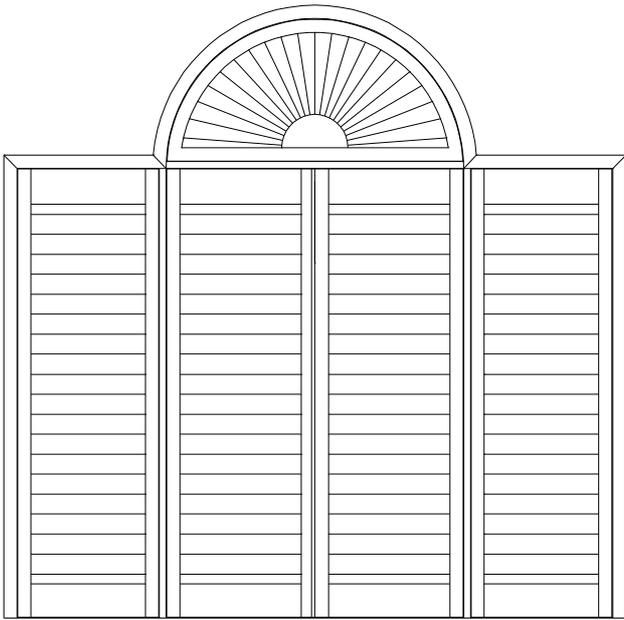


Arch Top Picture Window with horizontal louvers  
-Standard louvered arch

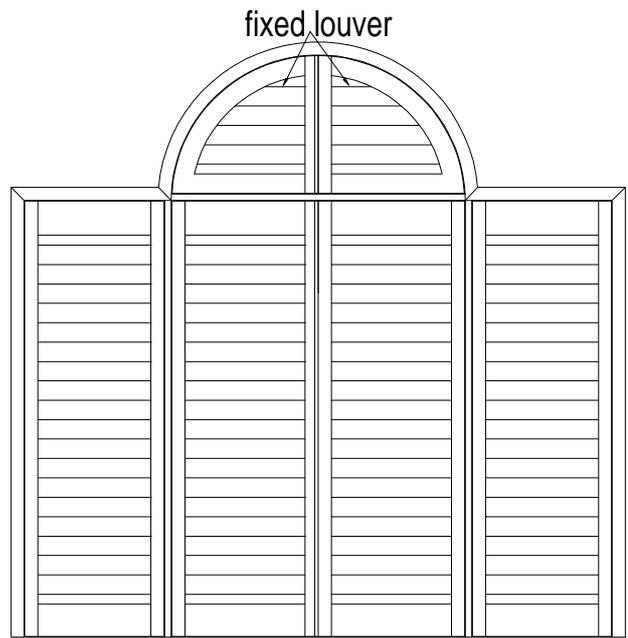
Fixed louver



Arch Top Picture Window with horizontal louvers  
-Continuous arch



Arch Top Picture Window with Sunburst



Standard unit with horizontal arch center

## Pricing

1) By Max Frame-to-Frame Measurement:							
Regular Shutter							
Inside and Outside Mount	Width	x	Height	/ 144	x	\$/sq ft	
Track Shutter**							
Inside	Width	x	Height	/ 144	x	\$/sq ft	
Semi-Inside and Outside Mount	Width	x	(Height-1½")	/ 144	x	\$/sq ft	
2) By Net Panel Measurement:		Width	x	Height	/ 144	x	\$/sq ft
3) By Window Size:							
2" Camber Deco Frame	4-sided	(Width+4")	x	(Height+4")	/ 144	x	\$/sq ft
	3-sided with Sill Plate	(Width+4")	x	(Height+4")	/ 144	x	\$/sq ft
	3-sided	(Width+4")	x	(Height+2")	/ 144	x	\$/sq ft
	2 sided with Sill Plate	(Width+4")	x	(Height+2")	/ 144	x	\$/sq ft
	2-sided	(Width+4")	x	(Height)	/ 144	x	\$/sq ft
3" Ridge Deco Frame	4-sided	(Width+6")	x	(Height+6")	/ 144	x	\$/sq ft
	3-sided with Sill Plate	(Width+6")	x	(Height+6")	/ 144	x	\$/sq ft
	3-sided	(Width+6")	x	(Height+3")	/ 144	x	\$/sq ft
	2-sided with Sill Plate	(Width+6")	x	(Height+3")	/ 144	x	\$/sq ft
	2-sided	(Width+6")	x	(Height)	/ 144	x	\$/sq ft
2.5" Mission deco frame	4-sided	(Width+5")	x	(Height+5")	/ 144	x	\$/sq ft
	3-sided	(Width+5")	x	(Height+2.5")	/ 144	x	\$/sq ft

	2-sided	(Width+5")	x	(Height)	/ 144	x	\$/sq ft
3" Crown Z Frame	4-sided	(Width+4 ½	x	Height+4½")	/ 144	x	\$/sq ft
	3-sided with Sill Plate	(Width+4 ½")	x	Height+4½")	/ 144	x	\$/sq ft
	3-sided	(Width+4 ½)	x	Height+2¼")	/ 144	x	\$/sq ft
	2-sided with Sill Plate	(Width+4 ½)	x	Height+2¼")	/ 144	x	\$/sq ft
	2-sided	(Width+4 ½")	x	(Height)	/ 144	x	\$/sq ft
2" Bel Air Z Frame 2" Bullnose Z Frame	4-sided	(Width+2 ½")	x	Height+2½")	/ 144	x	\$/sq ft
	3-sided with Sill Plate	(Width+2 ½")	x	Height+2½")	/ 144	x	\$/sq ft
	3-sided	(Width+2 ½")	x	Height+1¼")	/ 144	x	\$/sq ft
	2-sided with Sill Plate	(Width+2 ½")	x	Height+1¼")	/ 144	x	\$/sq ft
	2-sided	(Width+2 ½")	x	(Height)	/ 144	x	\$/sq ft
1 ½ " Bullnose Z Frame	4-sided	(Width+2")	x	(Height+2")	/ 144	x	\$/sq ft
	3-sided with Sill Plate	(Width+2")	x	(Height+2")	/ 144	x	\$/sq ft
	3-sided	(Width+2")	x	(Height+1")	/ 144	x	\$/sq ft
	2-sided with Sill Plate	(Width+2")	x	(Height+1")	/ 144	x	\$/sq ft
	2-sided	(Width+2")	x	(Height)	/ 144	x	\$/sq ft
Vintage Hang Strip	Inside	Width	x	Height	/ 144	x	\$/sq ft
	Outside 4-sided	(Width+3")	x	(Height+3")	/ 144	x	\$/sq ft
	Outside 3-sided	(Width+3")	x	( Height+1½")	/ 144	x	\$/sq ft
	Outside 2-sided	(Width+3")	x	(Height)	/ 144	x	\$/sq ft
Beaded	Outside 4-sided	(Width+3")	x	(Height+3")	/ 144	x	\$/sq ft

L frame/  Vintage L  Frame	Outside 3-sided	(Width+3")	x	Height+1½"	/ 144	x	\$/sq ft
	Outside 2-sided	(Width+3")	x	(Height)	/ 144	x	\$/sq ft
Track Shutter**							
Inside and Semi-Inside Mount		Width	x	Height	/144	x	\$/sq ft
Outside Mount		(Width+3")	x	(Height+3")	/144	x	\$/sq ft