

NORMAN®

SHUTTERS. BLINDS. SHADES.



Fabricator of Automated & Custom Window Coverings

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Normandy® Shutters

Program Reference Guide

2019

2018 Log



Effective Date	Topic	Section	Note
2019/01/01	Colors Option Louvers Options Frame Options	All except j&o	2019 updated specification
Middle of January 2019	Motorized	o	2019 updated specification
2019/01/10	Track	j 2	Add 3" louver for Open bypass
2019/02/01	color	e,i,n	Add 6 new hinge colors Change color coordination chart

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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**.

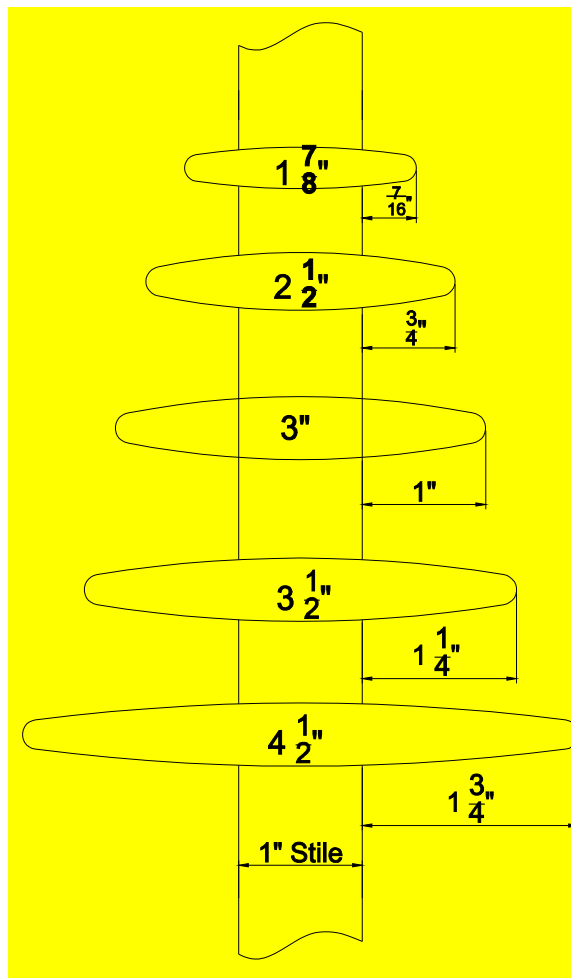
Colors & Louvers

	Color ID	Color Name
Paint (27 colors)	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
Stain (24 colors)	108	Rustic Gray
	109	Weathered Teak
	110	Limed White
	111	Pebble
	200	Natural
	202	Golden Oak
	205	Goldenrod
	212	Dark Teak
	215	Cordovan

- Surcharge applies. Please see Options and Surcharges page for details.

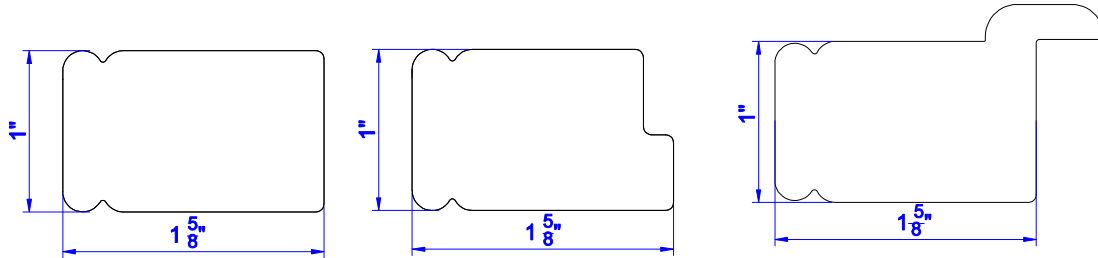
220	New Ebony
221	Black Walnut
227	Red Oak
229	Rich Walnut
230	Old Teak
237	Wenge
242	Auburn
246	Matte Black
248	Pretzel
250	Sumatra
252	Toffee
254	Driftwood
255	Silver Gray
256	Mist
862	French Oak

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



- Surcharge applies. Please see Options and Surcharges page for details.

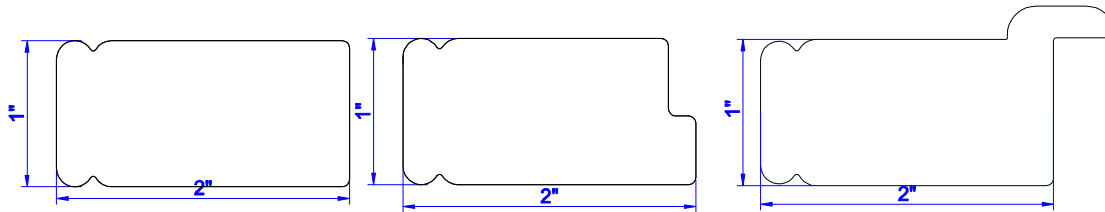
**Stiles
Options**



1 5/8" Butt Stile

1 5/8" Rabbet Stile

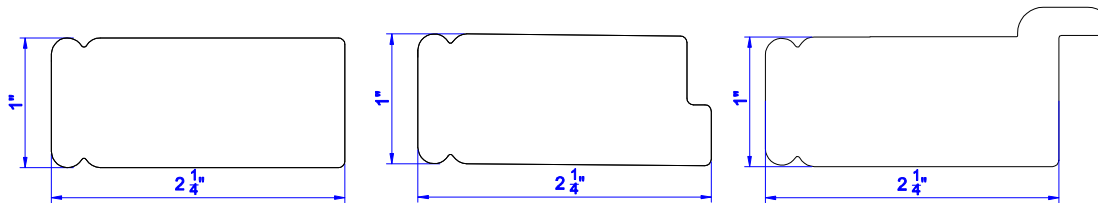
1 5/8" Astragal Stile



2" Butt Stile

2" Rabbet Stile

2" Astragal Stile



2 1/4" Butt Stile

2 1/4" Rabbet Stile

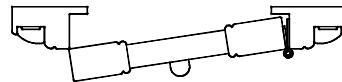
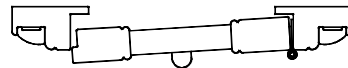
2 1/4" Astragal Stile

Stile between panel closure

Single panel

I) Panel width < 9"

- Rabbeted stile (Deco frame, L frame, Z frame and Hang strip beside panel)
 - 1 $\frac{5}{8}$ "
 - 2" (default)
- Butt stile only (Hang strip behind panel)
 - 1 $\frac{5}{8}$ "
 - 2" (default)



II) Panel width \geq 9"

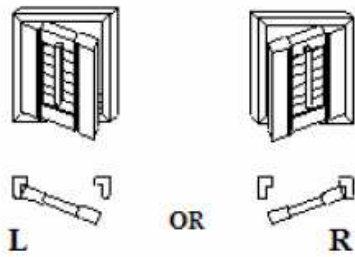
- Butt stile only
 - 1 $\frac{5}{8}$ " (Optional for panel width \leq 12")
 - 2" (default)

2 panels or more

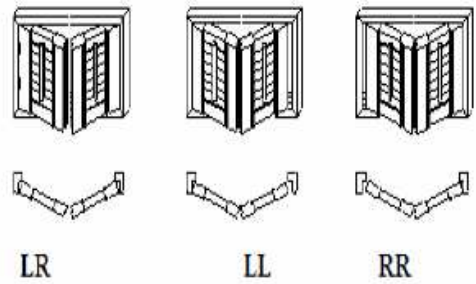
- Astragal stile
 - 1 $\frac{5}{8}$ " (Optional for panel width \leq 12")
 - 2" (default)
- Rabbet stile
 - 1 $\frac{5}{8}$ " (Optional for panel width \leq 12")
 - 2"

Panel Configurations

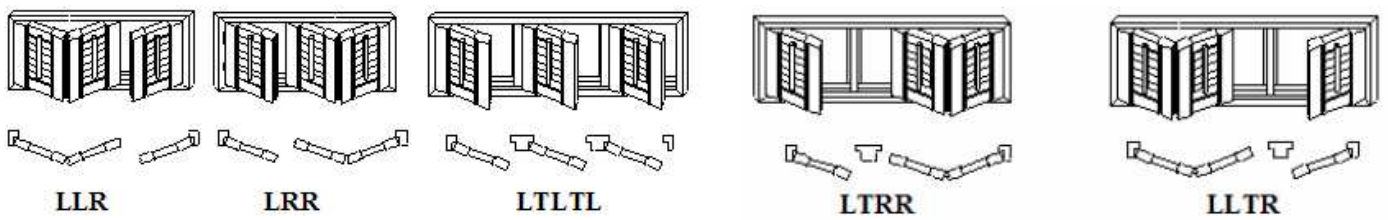
Single Panel



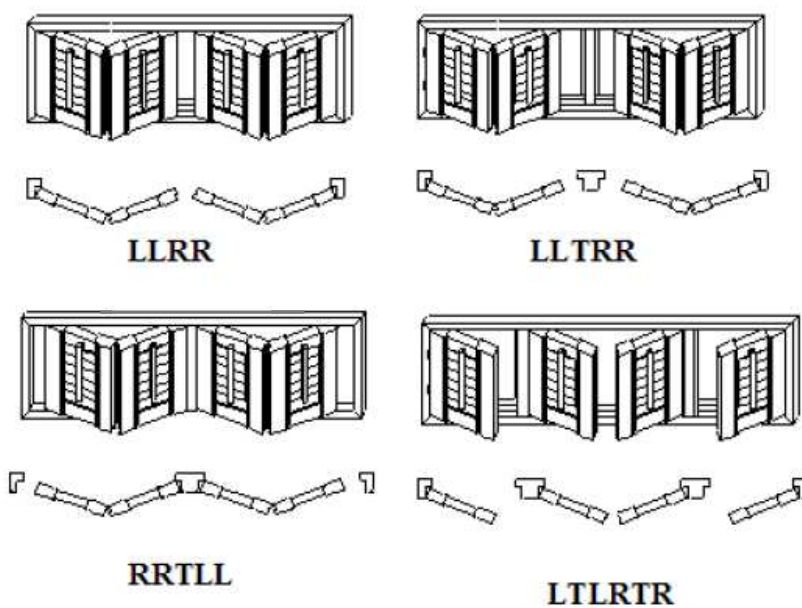
2 Panels



3 Panels



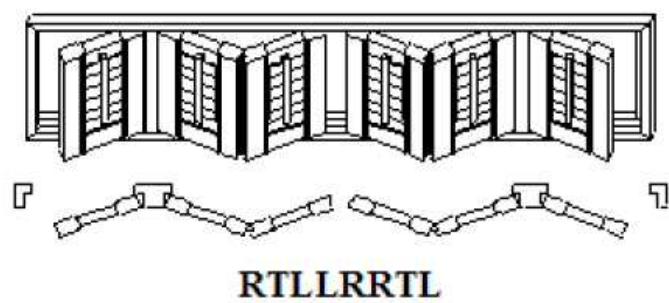
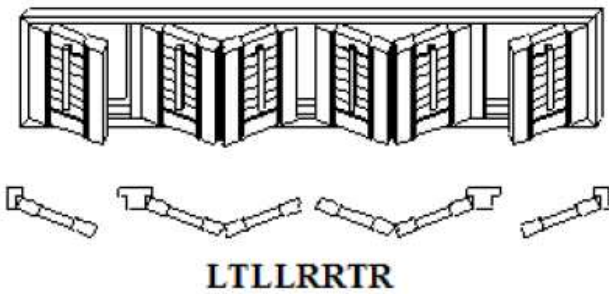
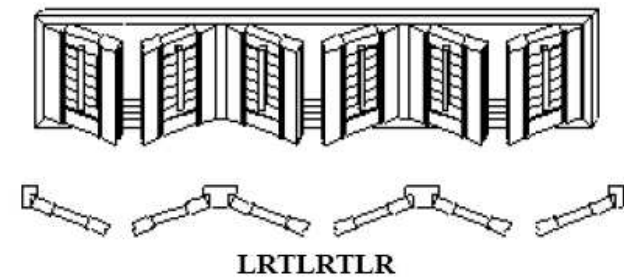
4 Panels



Normandy® Shutters

Panel Configurations (continued)

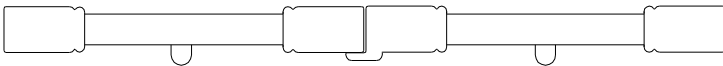
6 Panels



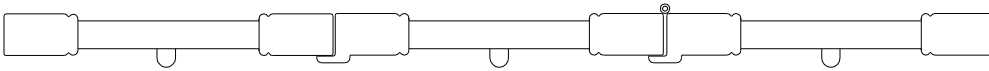
Panel Configurations – Astragal Stile

(Solid color shutters only)

- 2 Panels – LR



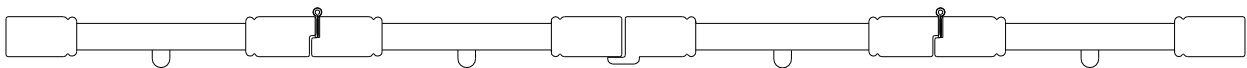
- 3 Panels - LRR



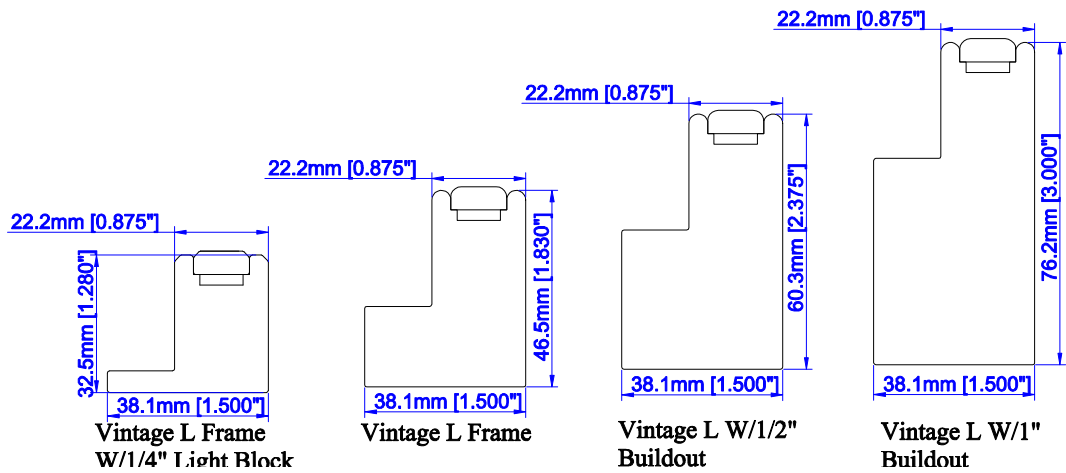
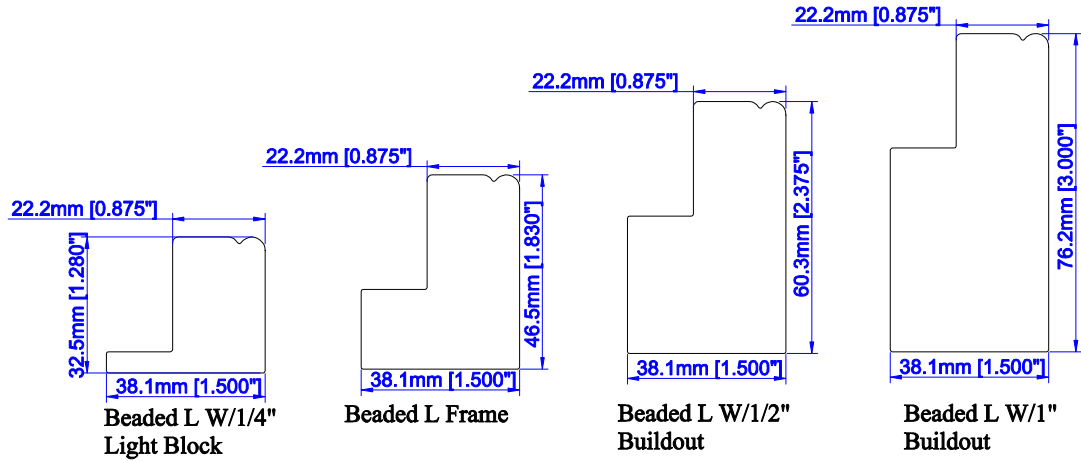
- 3 Panels – LLR



- 4 Panels - LLRR

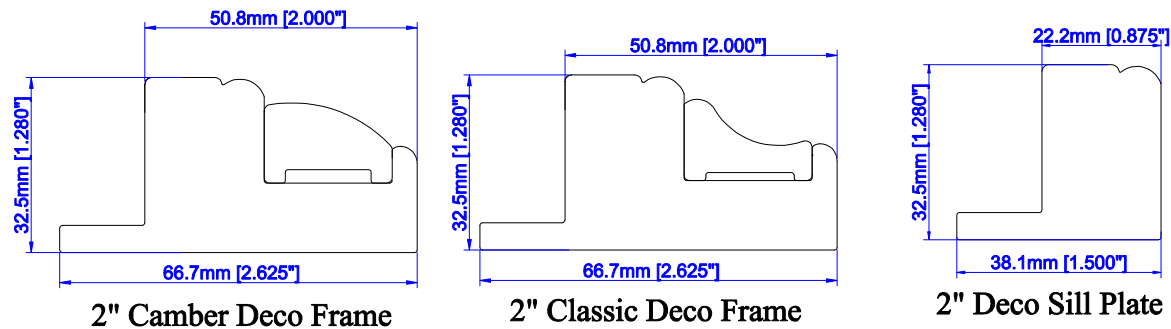


Frame Styles



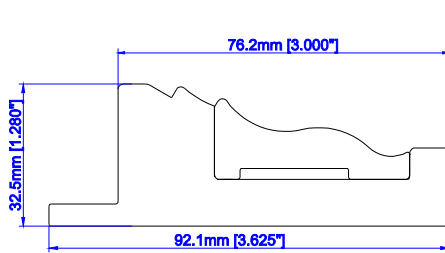
Also available

- Custom extensions* up to 2" for L frames

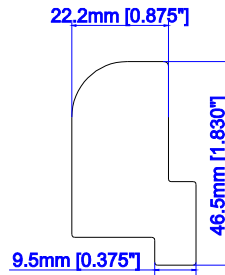


*Surcharge applies. Please see Options and Surcharges page for details.

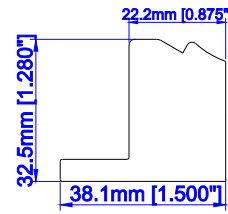
Frame Styles



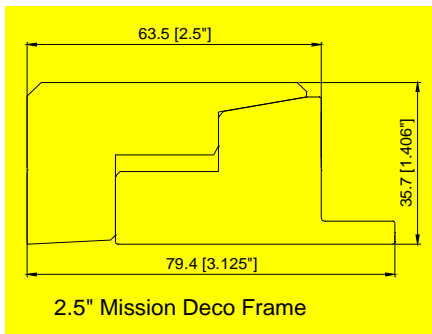
3" Ridge Deco Frame



Tilt Out Z Frame



Ridge Deco Sill Plate



2.5" Mission Deco Frame

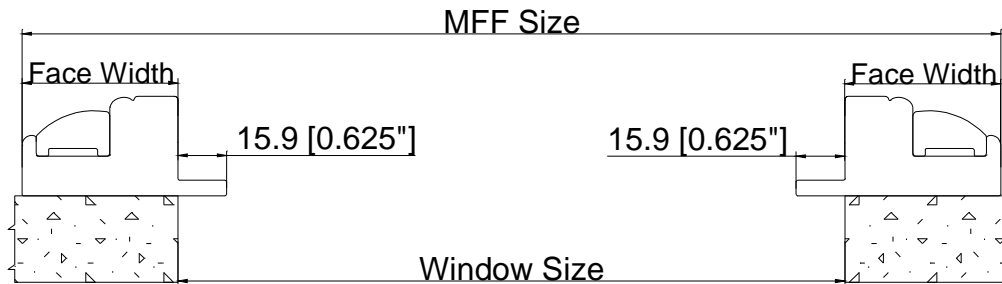
There are 2 options for the Deco frame installation when Window Size is given (Take Camber Deco frame as an example)

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;

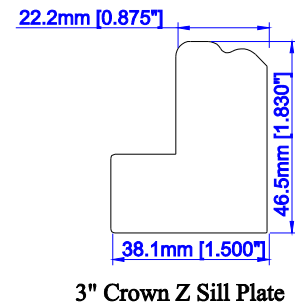
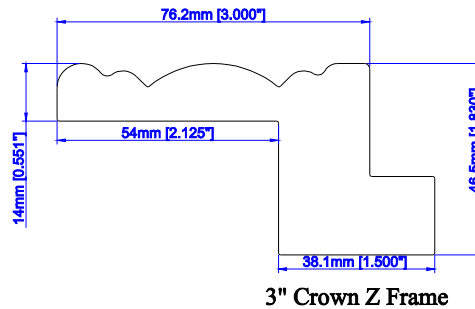
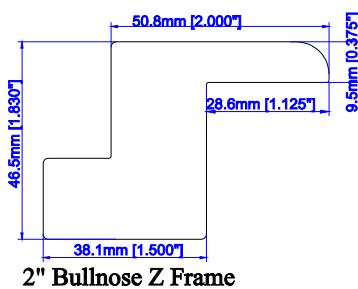
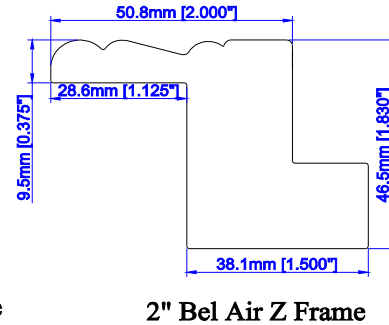
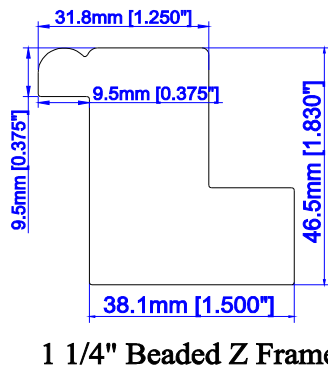
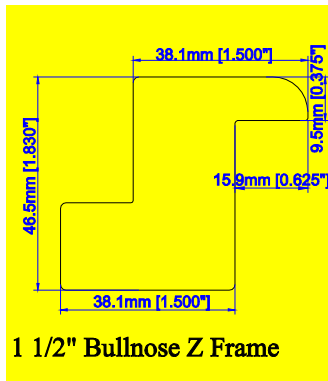
The MFF size is the measurement of the entire shutter, including the frames;

The MFF size = Window Size + Frame Back Width



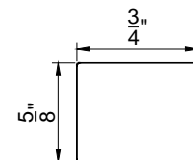
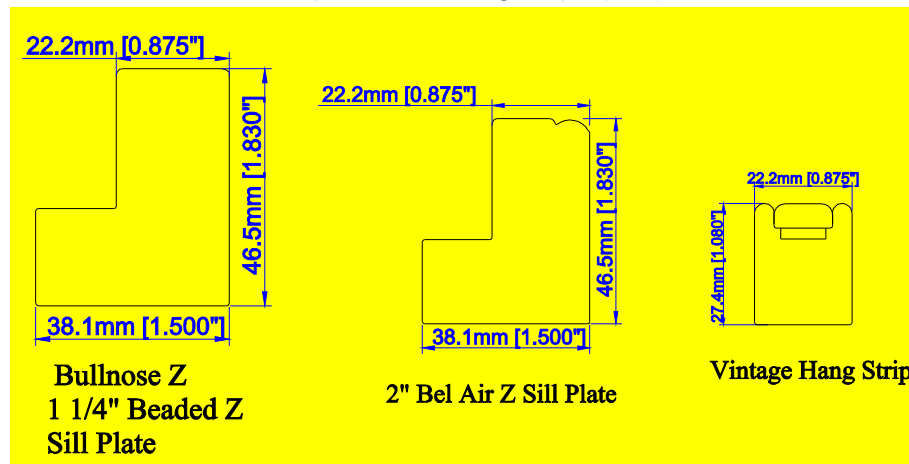
*Surcharge applies. Please see Options and Surcharges page for details.

Frame Styles



Also available

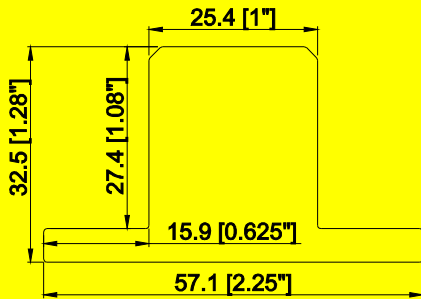
- Custom extensions* up to 1" for Z frames
- 1/2", 1" and 1 1/2" standard extensions* and custom extensions* up to 2" for Deco frames
- Custom extensions* up to 2" for hang strips (OM)



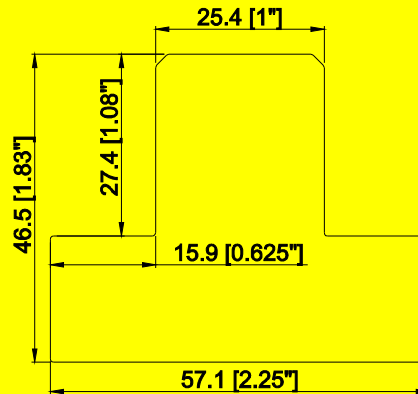
Light Block

*Surcharge applies. Please see Options and Surcharges page for details.

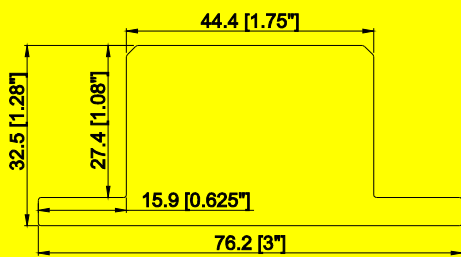
Frame Styles



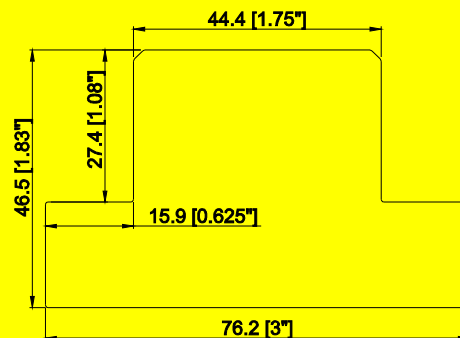
1" Chamfer T Post W/ 1/4" Light Block (Deco)



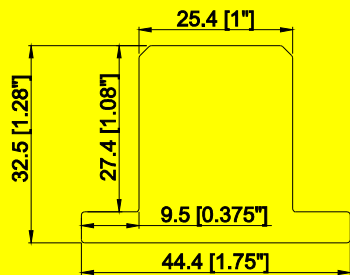
1" Chamfer T Post W/ 3/4" Light Block (L/Z/HS)



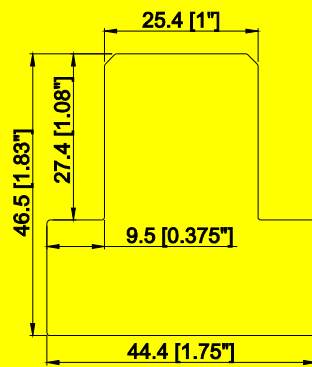
1.75" Chamfer T Post (Deco)



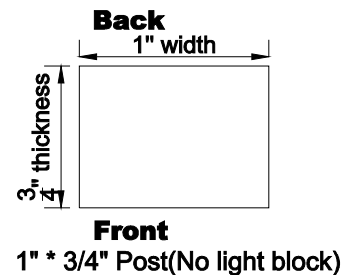
1.75" Chamfer T Post (L/Z/HS)



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



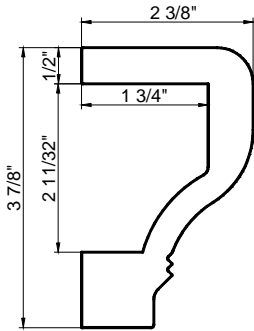
1" Chamfer T Post W/ 3/4" Thick 3/8" Wide Light Block (L/Z/HS)



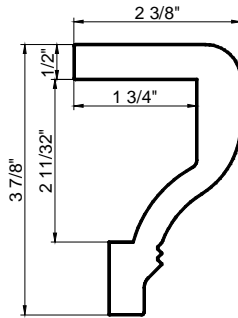
Note: The 1"x3/4" Post (No Light Block) is only available for Direct Mount. And no hardware will be supplied to install it on the existing window opening.

*Surcharge applies. Please see Options and Surcharges page for details.

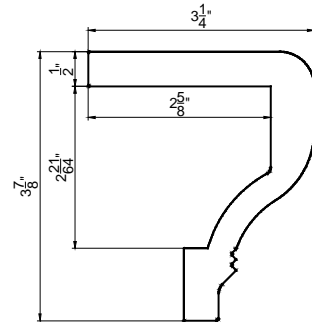
Frame Styles



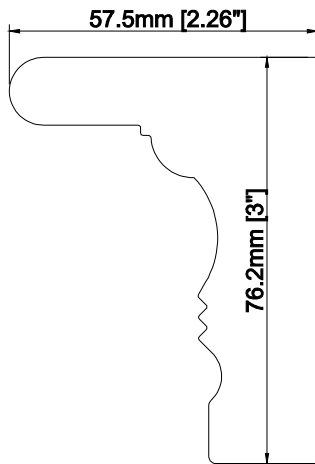
Curved Designer Sill Cap (L)



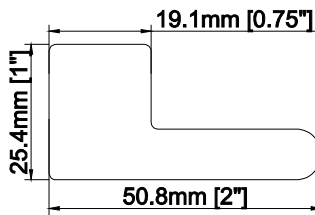
Curved Designer Sill Cap (D/HS)



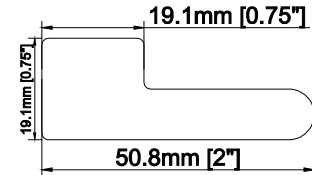
Curved Designer Sill Cap (Z)



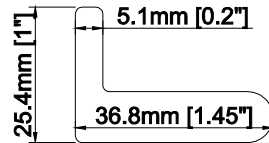
3" Deco Sill Frame



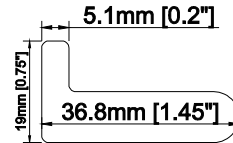
2" Sill Plate with 5/8" Light Block (L/Z)



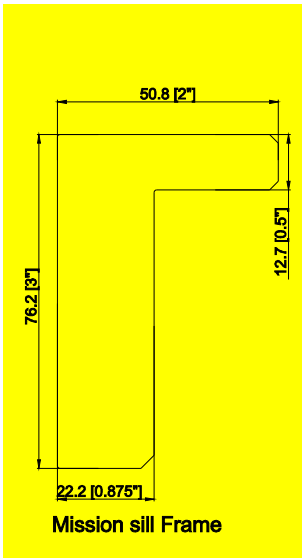
2" Sill Plate with 3/8" Light Block (L/Z)



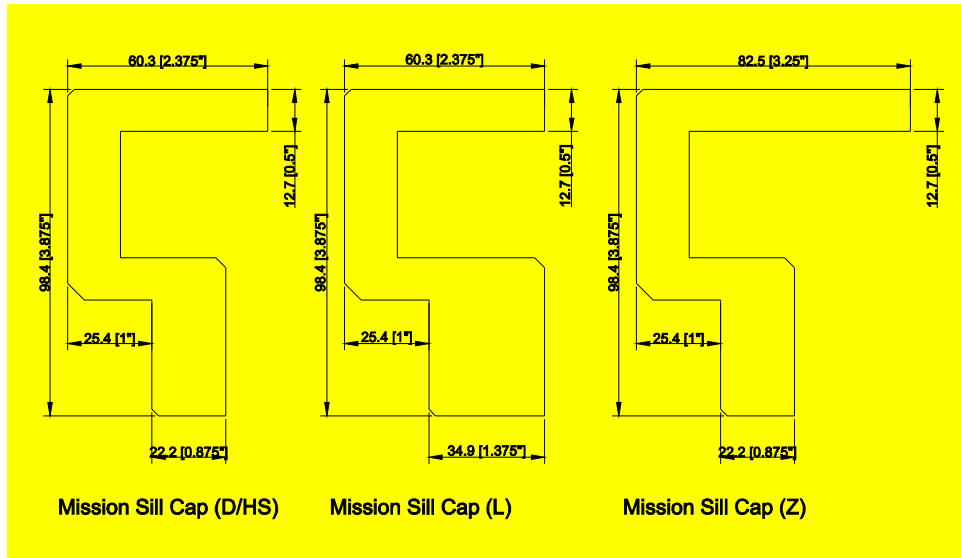
1.5" Sill Plate with 5/8" Light Block (Deco)



1.5" Sill Plate with 3/8" Light Block (Deco)



Mission sill Frame



Mission Sill Cap (D/HS)

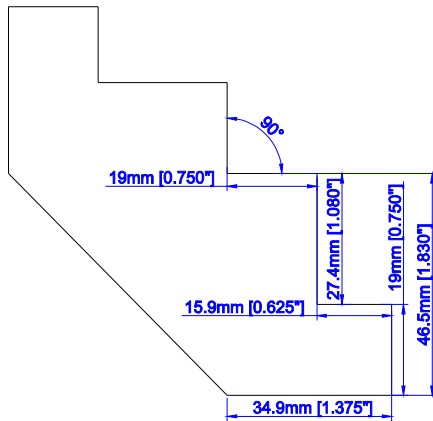
Mission Sill Cap (L)

Mission Sill Cap (Z)

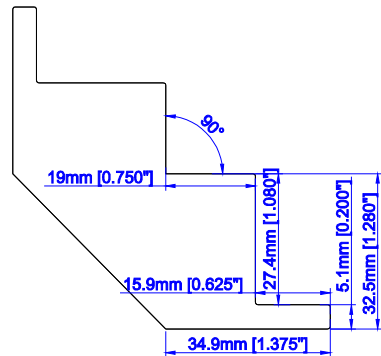
Note: For Mission Sill Cap, the extended size at each side needs to be 1" at least.

*Surcharge applies. Please see Options and Surcharges page for details.

Frame Styles

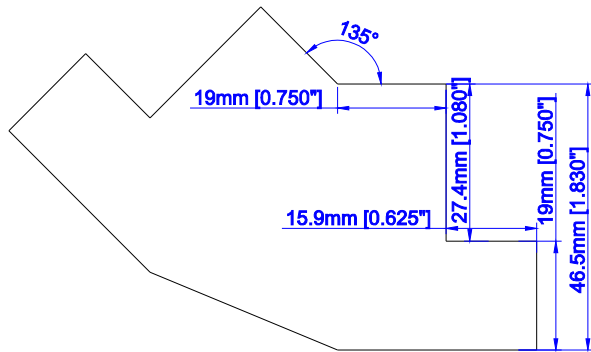


Corner Post W/ 3/4"
Light Block (L/Z/HS)

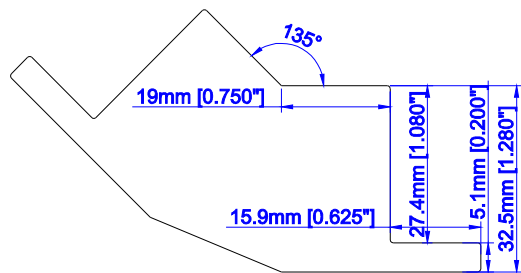


Corner Post W/ 1/4"
Light Block (Deco)

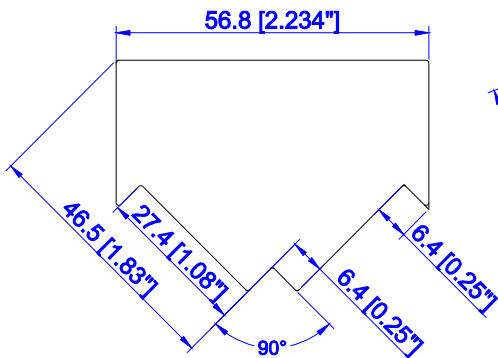
***Notch out corner post required if ordering Z Frame with solid drywall corner.**



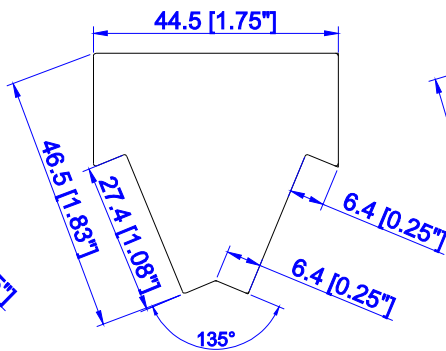
Bay Post W/ 3/4"
Light Block (L/Z/HS)



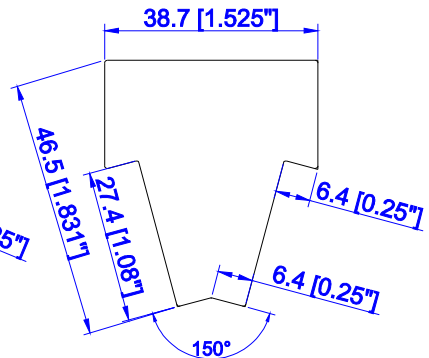
Bay Post W/ 1/4"
Light Block (Deco)



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

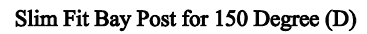


Slim Fit Bay Post for
135 Degree (L/Z/HS)



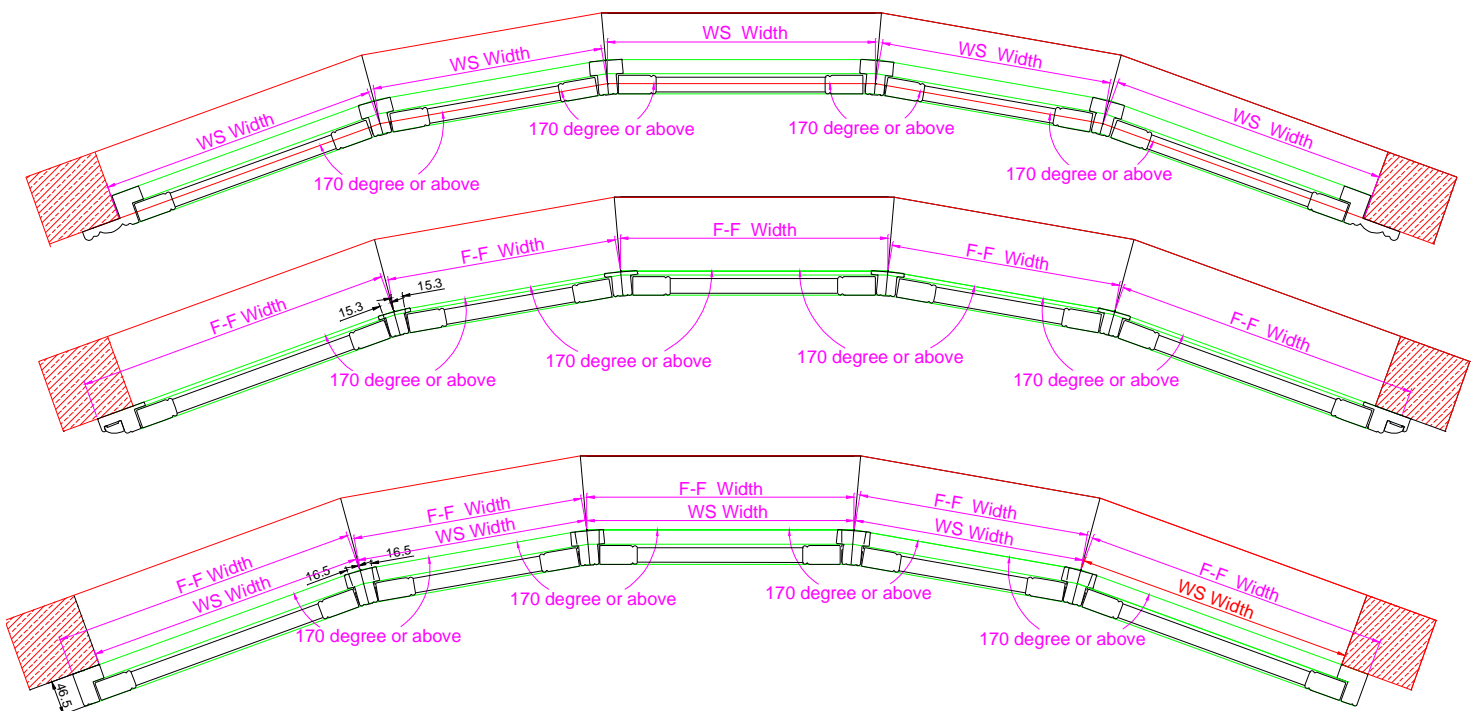
Slim Fit Bay Post for
150 Degree (L/Z/HS)

*Surcharge applies. Please see Options and Surcharges page for details.



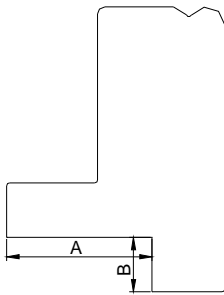
- Custom depth* up to 2" / width* up to 7½ for T Posts
- Custom angle bay posts*

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



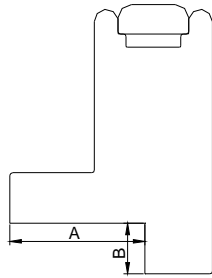
ND e-7

Frame Styles



Notch Out

Beaded L Frame (A) *

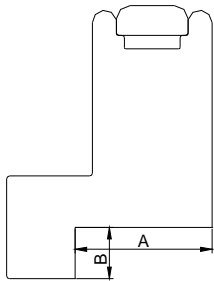


Notch Out

Vintage L Frame (A) *

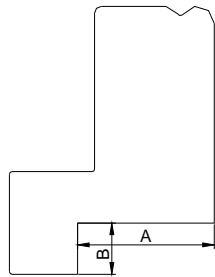
Limitation for the Notch Out Size:

$A \leq 1"$; $B \leq 1/2"$



Notch Out

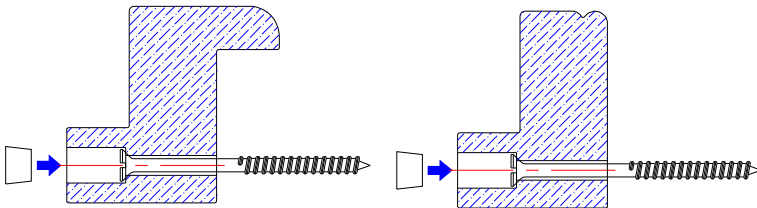
Beaded L Frame (B) *



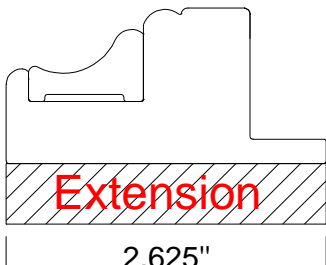
Notch Out

Vintage L Frame (B) *

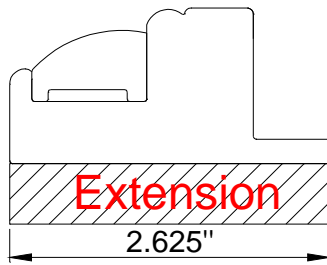
Pre-drill L Frames (Inside Mount Only) or Z frames:



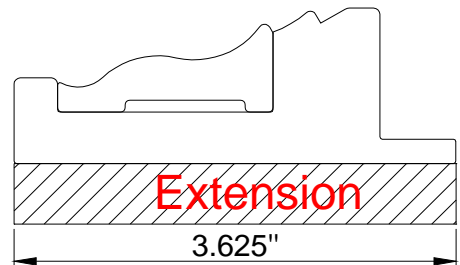
Extension for Deco Frame* (Default to have full extension):



2" Classic Deco Frame with extension



2" Camber Deco Frame with extension



3" Ridge Deco Frame with 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.

*Surcharge applies. Please see Options and Surcharges page for details.



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 (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.)
Shutter Height	N/A	132" + frame

* For frame and stile exceeding 108", there will be a visible finger joint line in the middle.

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

Shutters without bottom supports

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

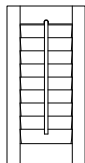
All Normandy panel configurations:

- ◇ 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.

Tilt Rods

Standard Tilt Rod

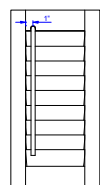
Default Location: In the middle of the panel on front side (default).



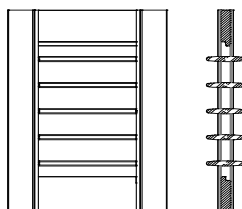
Offset Tilt Rod*

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 1⁷/₈" 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 customer requires the split tilt in custom position, the measurement will be as follows, please note that the louvers are in close position when measured.

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 to the top of the louver.

* Surcharge applies. Please see Options and Surcharges page for details.

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

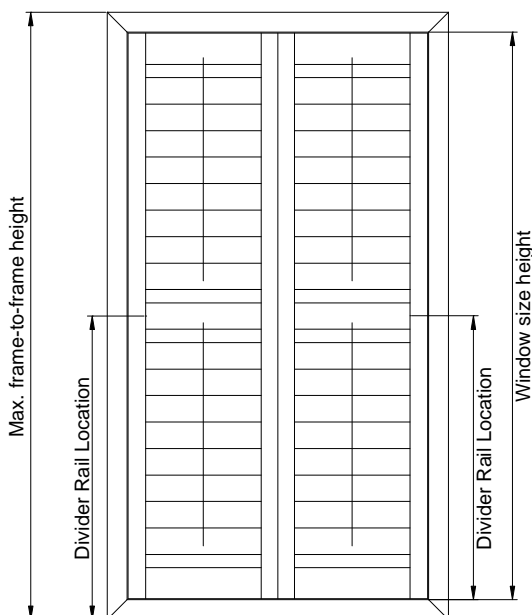
Specifications

- Standard width: 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.



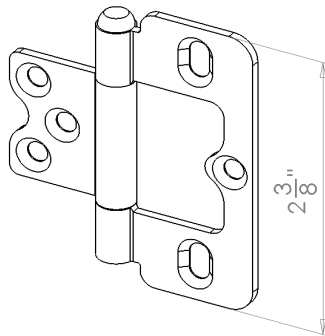
Divider rail allowable deviations

Louver Size	Allowable ± Deviation
1 7/8"	3/4"
2 1/2"	1"
3"	1 1/4"
3 1/2"	1 1/2"
4 1/2"	2"

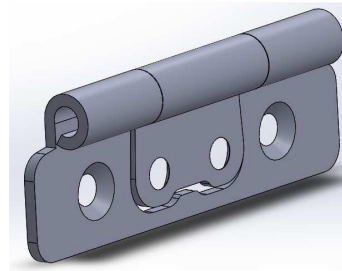
Hardware

Hinges

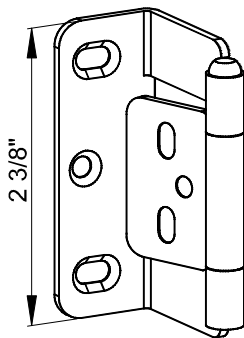
Self-Mortise Hinge



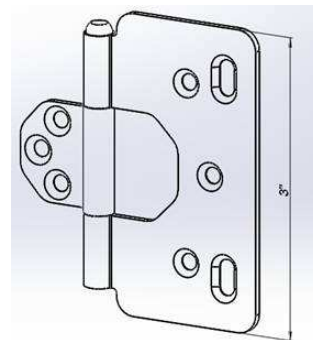
Bi-fold Hinge



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 Plated and Stainless Steel*. Crisp Linen, String, Sea Mist, Stone Gray, Brown Gray, Taupe Gray

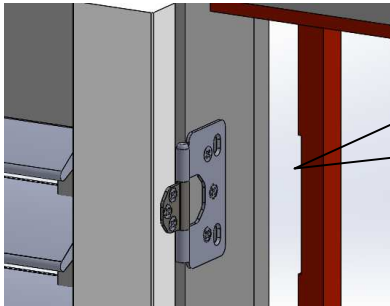
While hinge colors of Crisp Linen, String, Sea Mist, Stone Gray, Brown Gray, Taupe Gray are not available for Direct mount 3" Hinges.

Direct Mount 3" Hinge:

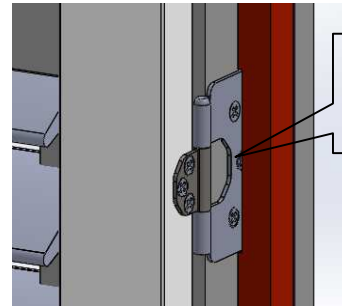
1. The hinge position of the direct mount 3" hinge will be different from that of the 2.375" ones. For shutters used both the 2.375" and the direct mount 3" hinge, the hinge position of the 2.375" ones will match that of the direct mount 3" hinge;

* Surcharge applies. Please see Options and Surcharges page for details.

2. The hinge is only to install between the panel and the existing window. For other situation, 2.375" hinges will be used;
3. To avoid conflict, there will be cut-out for the light block of the hinged side. Please refer to the drawing below.



Cut-Out on
the light
block

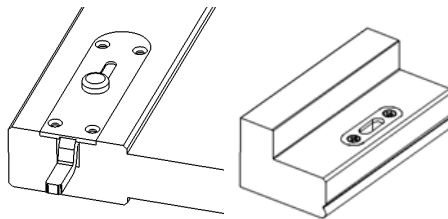


Cut-Out when the
hinged is installed.

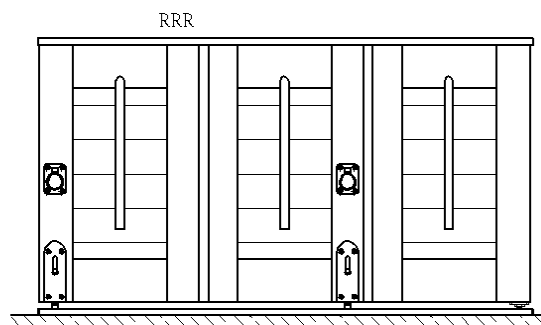
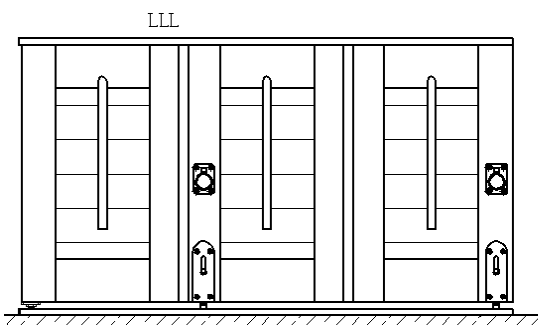
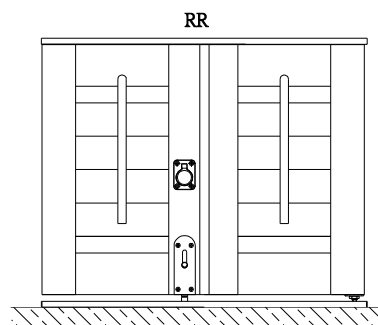
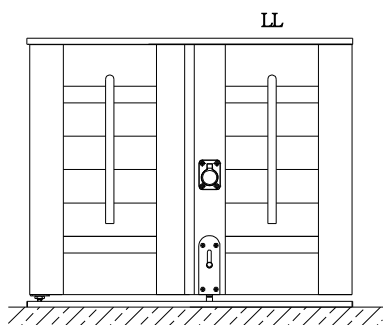
Panel Lock: (not available for 1.625" Stile)

Available Material: All

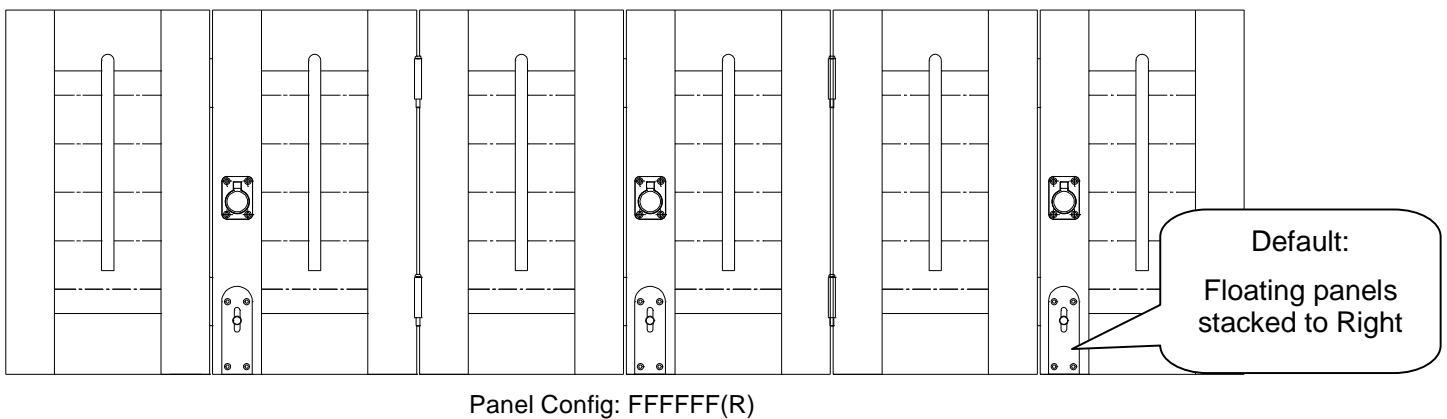
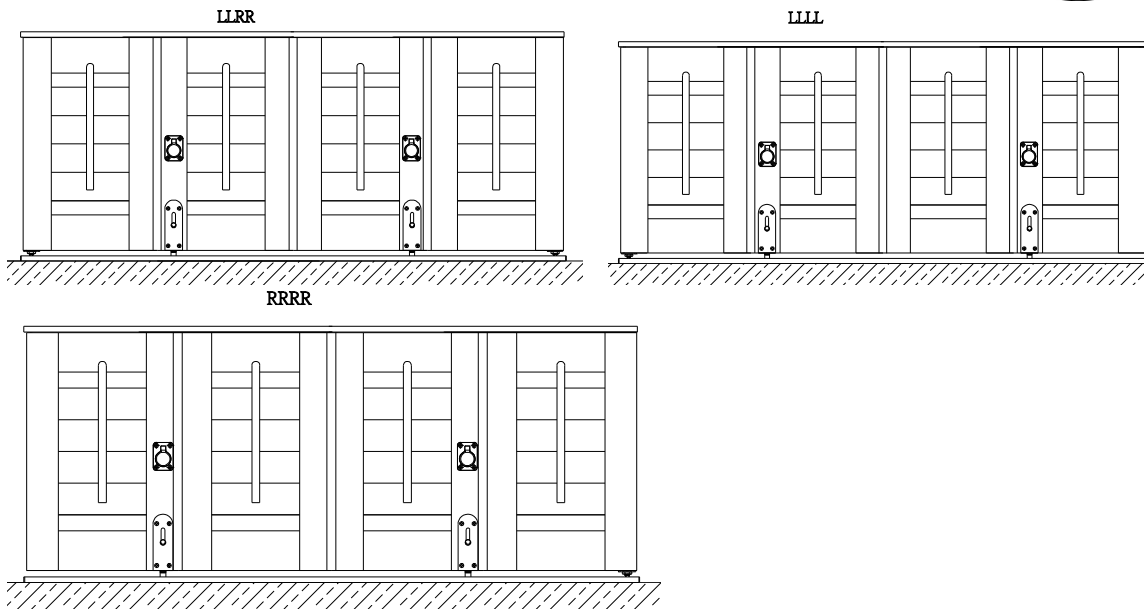
Color: Brush Nickel-Plated



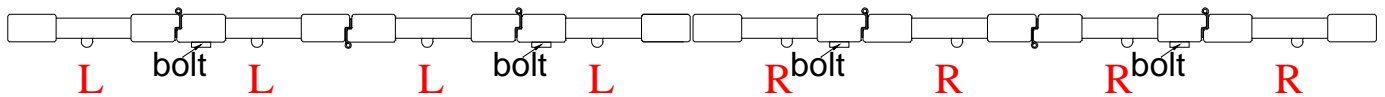
Position: (Only available on Bottom for Track Shutters with Bottom Track; For Regular, available on Top/Bottom/both Top and Bottom)



* Surcharge applies. Please see Options and Surcharges page for details.



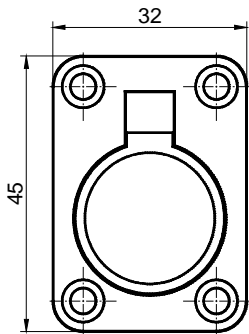
The Panel Lock location for both track system shutters and regular shutters would be the same.
The general principle is that the Panel Lock position will avoid the stile which will install the spring-loaded guide at bottom (same stile as the Wheel carrier).



* Surcharge applies. Please see Options and Surcharges page for details.

Ring pull: for easy opening and closing

(Not available for 1.625" Stile)



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	Brushed Nickel	Oil-Rubbed	Antique Brass	Bright Brass	Stainless Steel
Ring Pull color	White	White	Bisque	Pearl	Black	Brushed Nickel	Brushed Nickel	Black	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	New Hinge color (Default)	New Ring pull color	Invisible Hinge color	Direct Mount 3" Hinge color (Default)
001	Pure White	Pure White	White	Pearl Chrome Plated	Pure White
002	Extra White	Silk White	White		Silk White
003	Silk White	Silk White	White		Silk White
004	Bright White	Silk White	White		Silk White
006	Pearl	Pearl	Pearl		Pearl
007	Ivory Lace	Bisque	Bisque		Bisque
009	Creamy	Pearl	Pearl		Pearl
012	Crisp Linen	Crisp Linen	Bisque		Bisque
016	Butter	Crisp Linen	Bisque		Bisque
019	String	String	Bisque		Bisque
030	Moondust	Sea Mist	Brushed Nickel		Nickel Plated
032	Sea Mist	Sea Mist	Brushed Nickel		Nickel Plated
042	Hall Gray	Sea Mist	Brushed Nickel		Nickel Plated
046	Ice	Silk White	White		Silk White
048	Chai	Nickel Plated	Brushed Nickel		Nickel Plated
049	Stone Gray	Stone Gray	Brushed Nickel		Nickel Plated

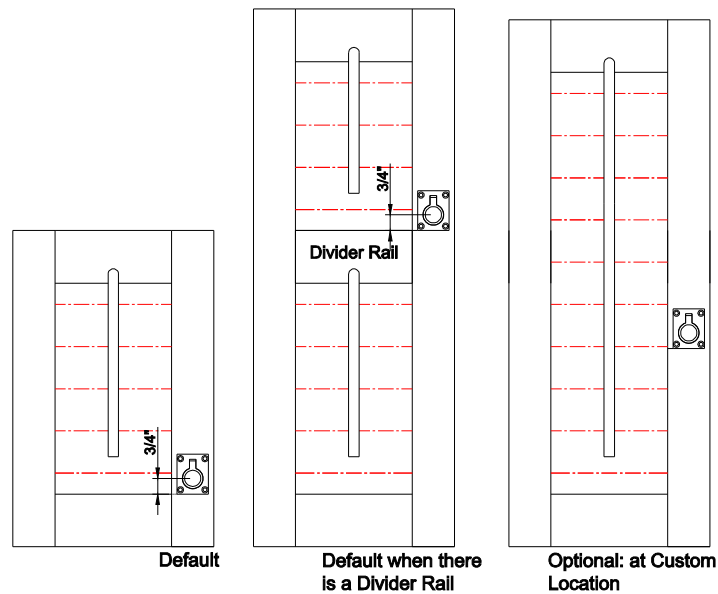
* Surcharge applies. Please see Options and Surcharges page for details.

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

Color ID	Color Name	Hinge color (Default)	Ring Pull color	Invisible Hinge color
108	Rustic Gray	Nickel Plated	Brushed Nickel	Pearl Chrome Plated
109	Weathered Teak	Nickel Plated	Brushed Nickel	
110	Limed White	Silk White	White	
111	Pebble	Silk White	White	
200	Natural	Antique Brass	Antique Brass	
202	Golden Oak	Antique Brass	Antique Brass	
205	Goldenrod	Antique Brass	Antique Brass	
212	Dark Teak	Antique Brass	Antique Brass	
215	Cordovan	Antique Brass	Antique Brass	
220	New Ebony	Antique Brass	Antique Brass	
221	Black Walnut	Antique Brass	Antique Brass	
227	Red Oak	Antique Brass	Antique Brass	
229	Rich Walnut	Antique Brass	Antique Brass	
230	Old Teak	Antique Brass	Antique Brass	
237	Wenge	Antique Brass	Antique Brass	
242	Auburn	Antique Brass	Antique Brass	
246	Matte Black	Black	Black	
248	Pretzel	Antique Brass	Antique Brass	
250	Sumatra	Antique Brass	Antique Brass	
252	Toffee	Antique Brass	Antique Brass	
254	Driftwood	Nickel Plated	Brushed Nickel	
255	Silver Gray	Nickel Plated	Brushed Nickel	
256	Mist	Silk White	White	
862	French Oak	Antique Brass	Antique Brass	

* Surcharge applies. Please see Options and Surcharges page for details.

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

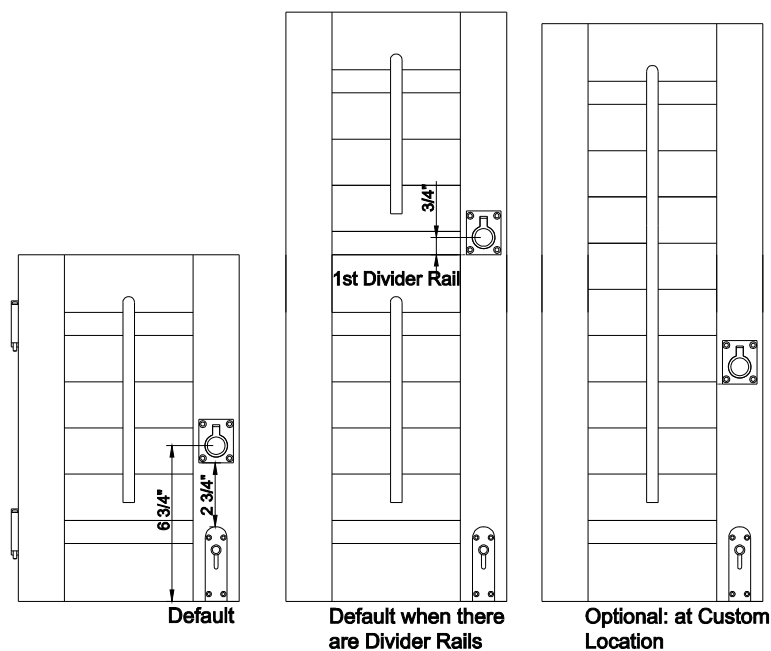


Position:

- A. Above Bottom Rail (Default)
- B. Above 1st 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 1st mid rail as default location.



* Surcharge applies. Please see Options and Surcharges page for details.

Position:

- A. 2 3/4" Above Panel Lock (Default when both Ring Pull and Panel Lock are specified)
- B. Above 1st 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 is only used between the panel & frame / T post, between panel and panel will be used 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	/
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	/

* Surcharge applies. Please see Options and Surcharges page for details.

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	/

Invisible Hinge Qty	
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.

Stile: Available for Butt, rabbet and Astragal stile

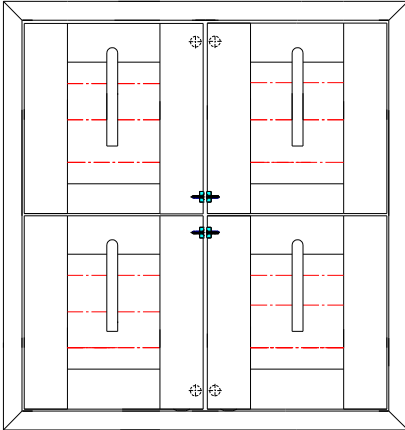


* Surcharge applies. Please see Options and Surcharges page for details.

Side Magnets will be applied in following situation:

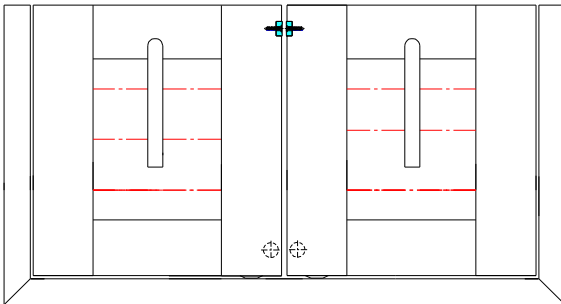
1. Double Hung shutter but without horizontal T post:

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



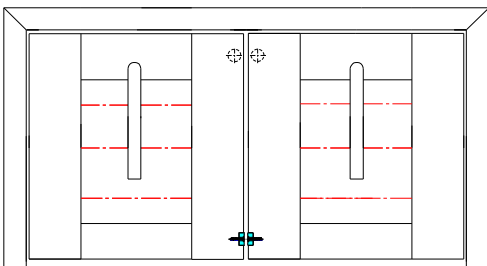
2. Café Shutter

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



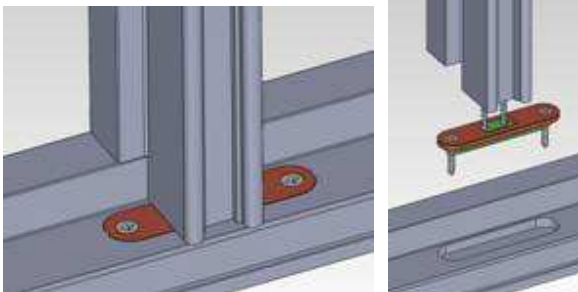
3. No frame or light block or L-shape striker plate on either top or bottom, or if larger than standard top or bottom gap is requested.

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



* Surcharge applies. Please see Options and Surcharges page for details.

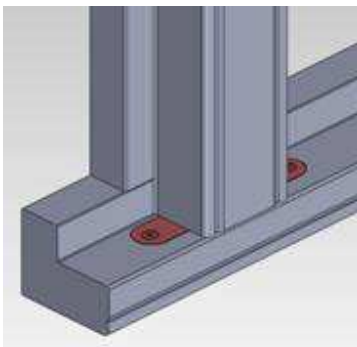
T-Post Connector



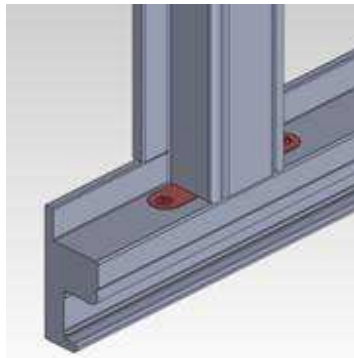
- Available colors: Pure White; White; Pearl; Bisque; Black; Nickel-Plated.
- Available for all types of T Posts (custom-width T posts excluded).

T Post Connector can be used with the following Frames.

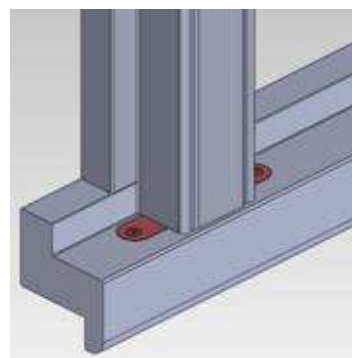
L Frame:



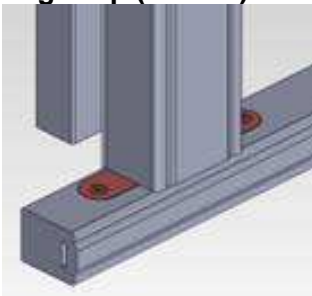
Deco Frame:



Z Frame:



Hang Strip (Beside)



Note:

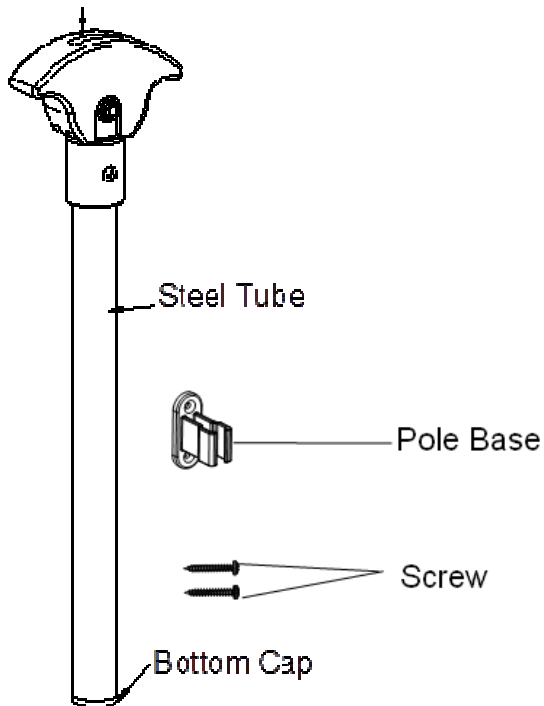
1. For Horizontal T Post, Hang Strip (Behind) and shutter with 1.5"/2" Sill, T Post connector is not available and T Post will be installed by screws instead;
2. If there is a panel lock which may interfere with the T-Post connector, all the T-Posts for the entire shutter will be installed with screws 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.

* Surcharge applies. Please see Options and Surcharges page for details.

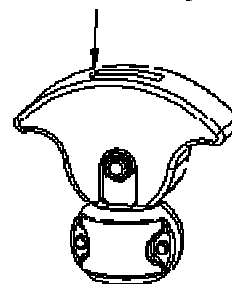
Optional Poles:

1. Terminology

Pole with Attachment



Attachment Only



Component

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

2. Available Pole Length

Two lengths available:

- 32"
- 43"

* Surcharge applies. Please see Options and Surcharges page for details.

Bi-fold 180™

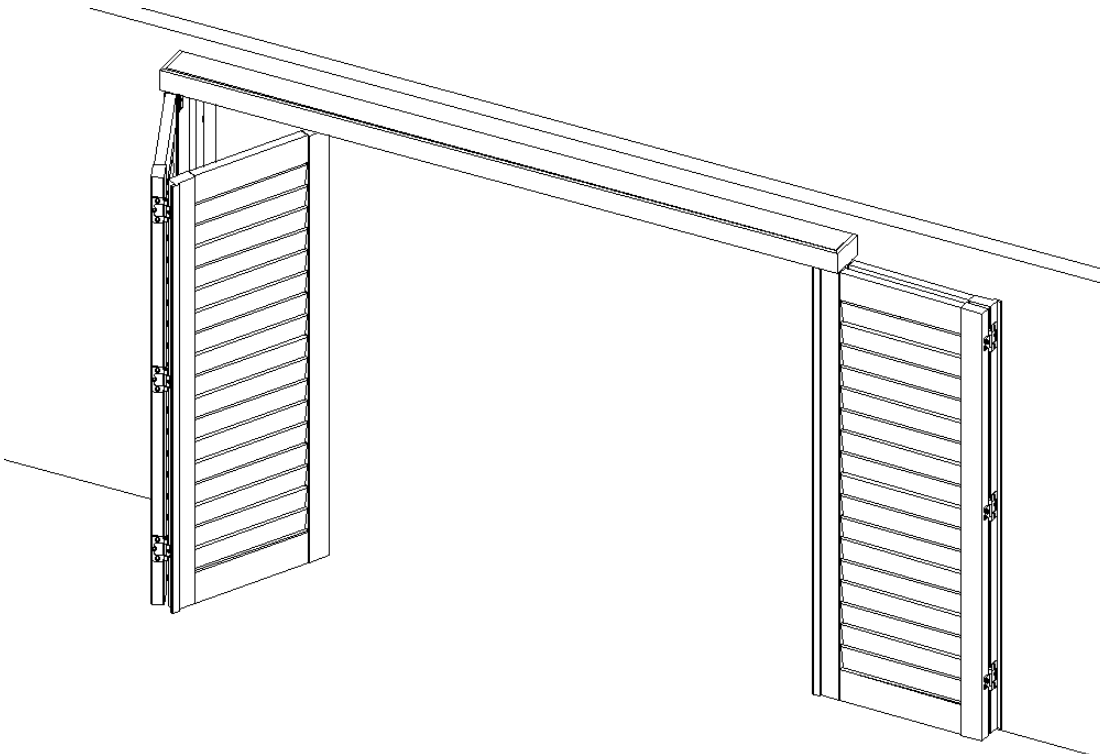
Guidelines and Specs:

<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"

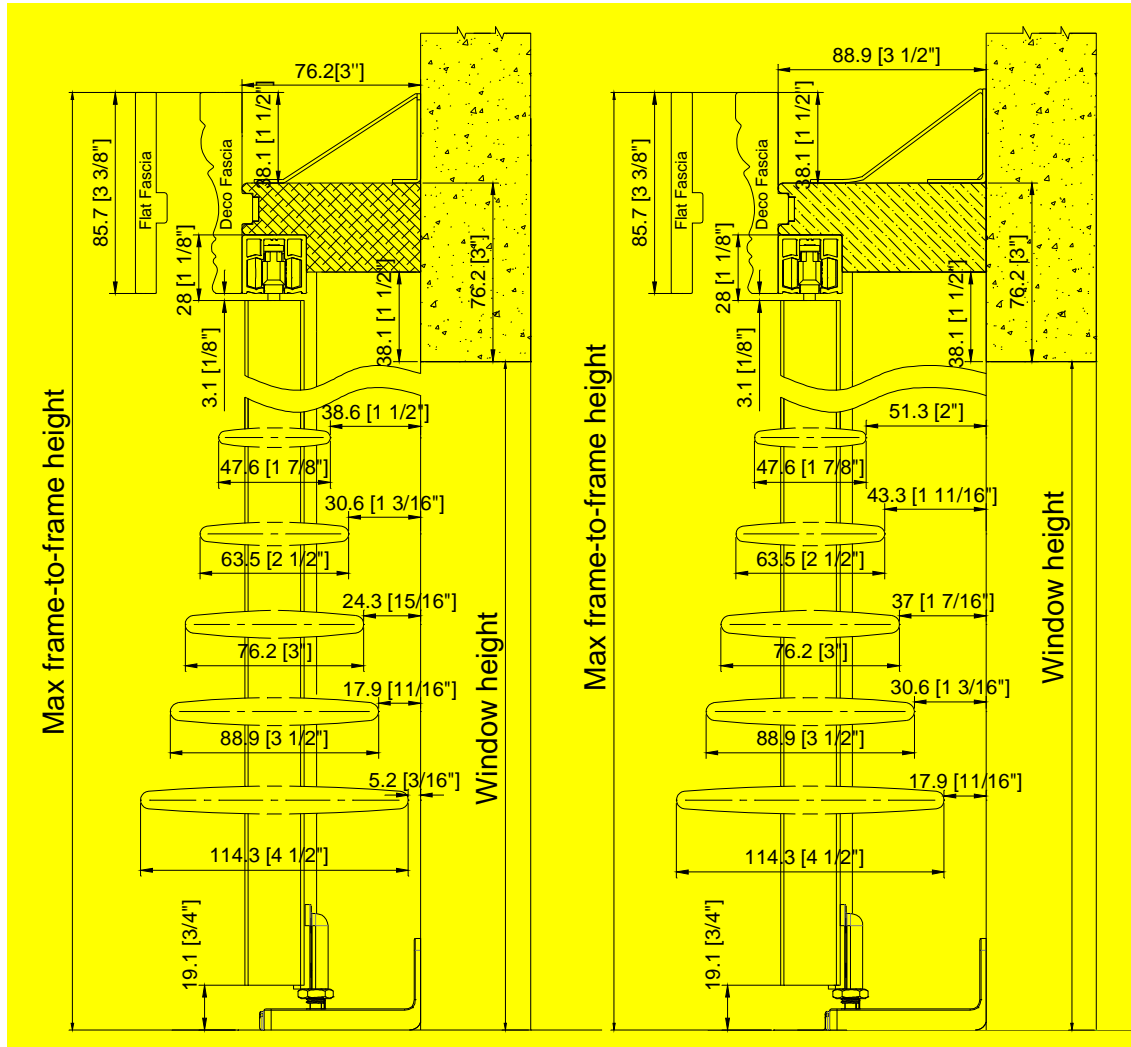
Max frame-to-frame height: window height + 4 1/2"



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

Mounting Options: Outside Mount only

Side View

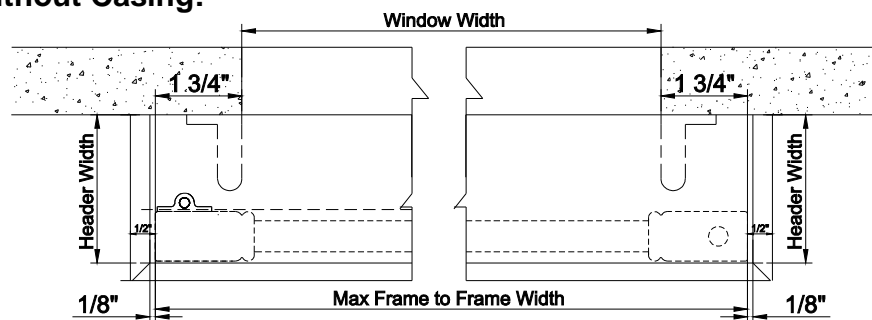


Top View

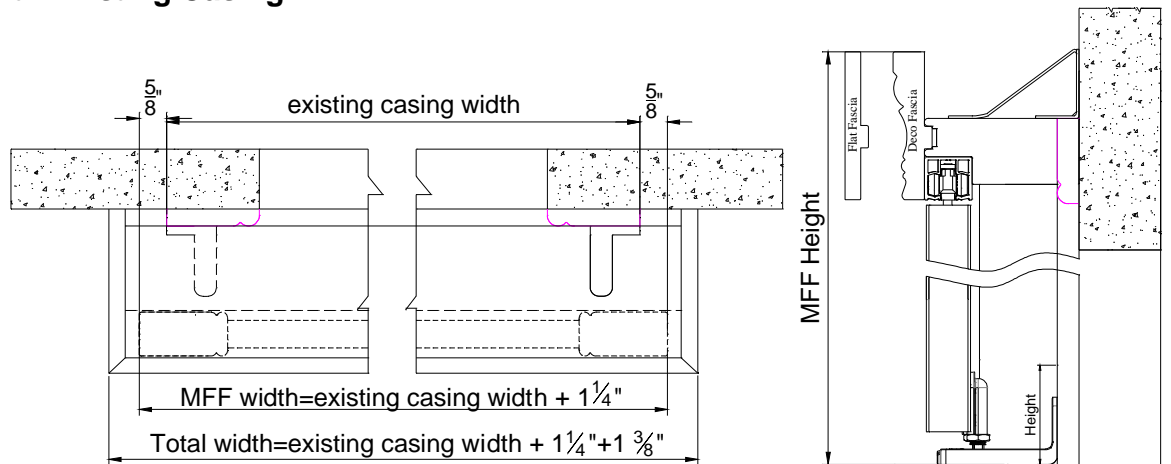
Without Casing:

Note:

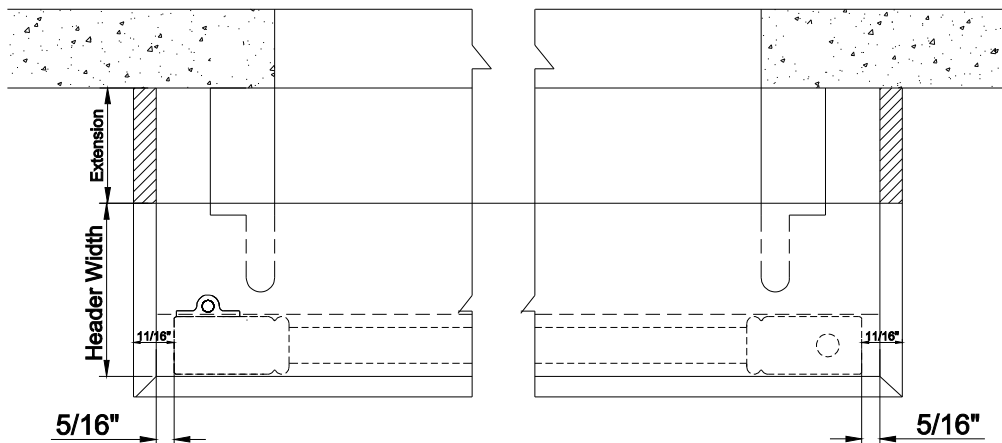
- ◇ Fascia return will protrude the panel about 1/2" for each side.
- ◇ The header will protrude the panel about 1/8" for each side.
- ◇ Header, light blocks, and bottom pivot bracket(s) must be installed on a flat surface.



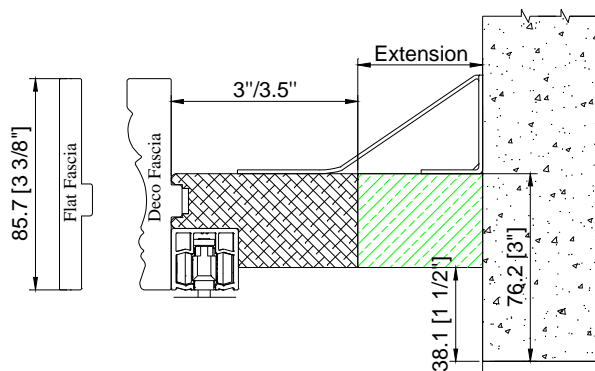
With Existing Casing:



- ✧ 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.

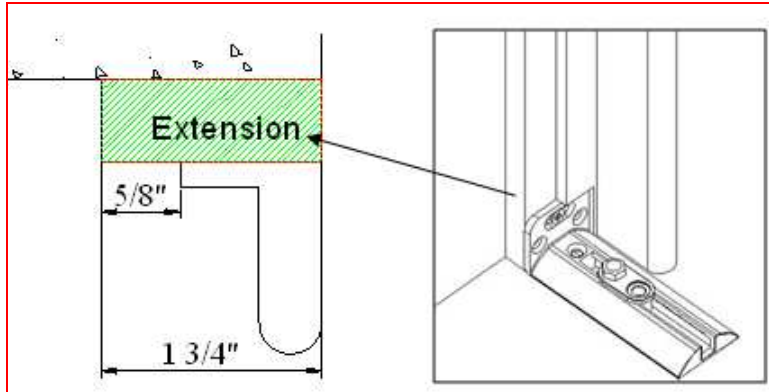


- ✧ The extension will be pre-attached.

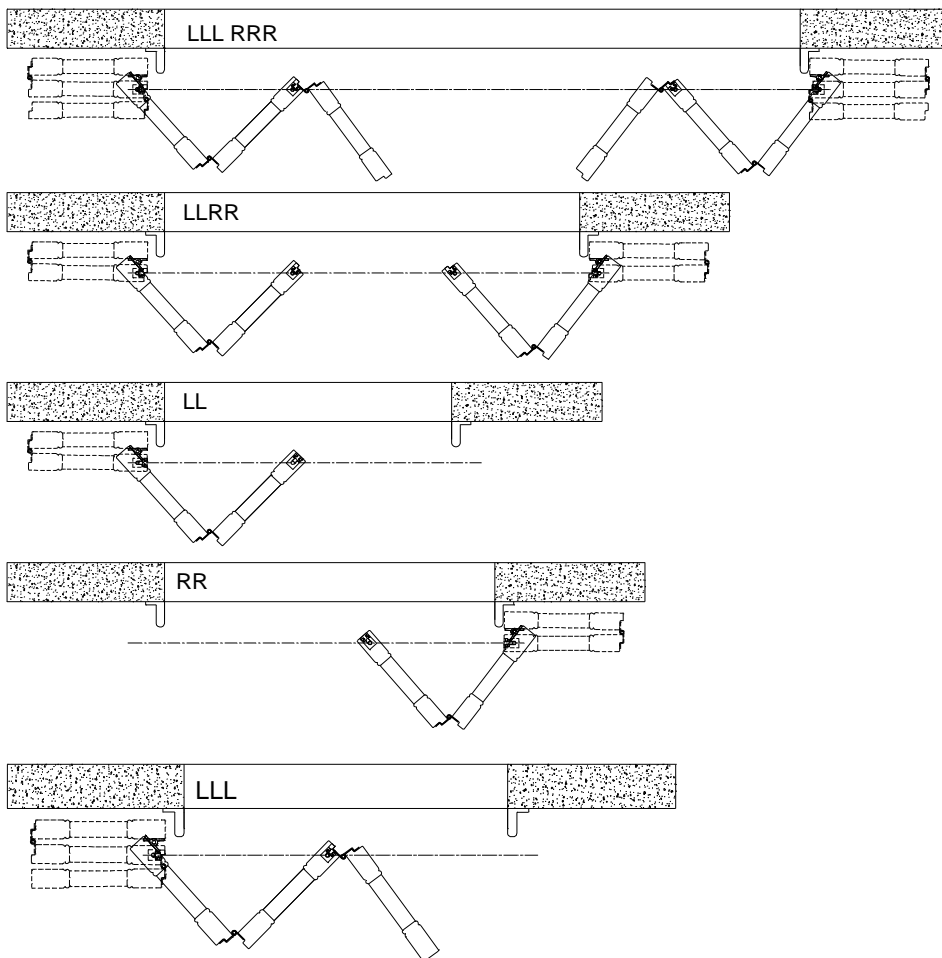


Normandy Shutters

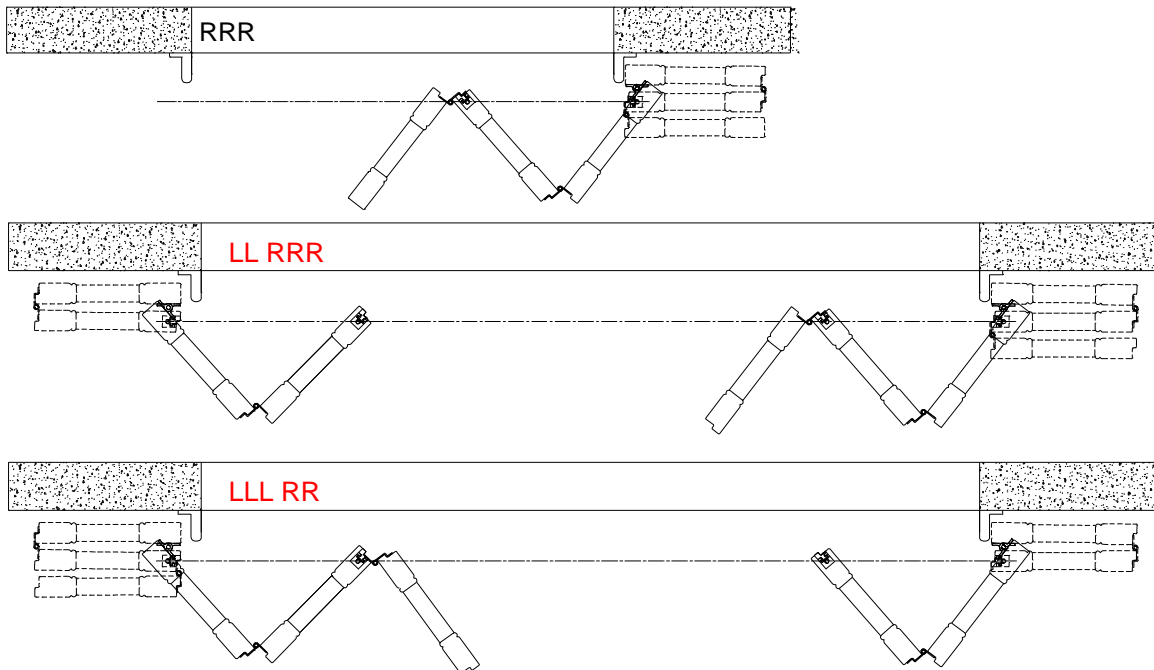
For 180 Bi-fold, if Bottom Pivot L Bracket is required, the extension for the L shape light block will be $1\frac{3}{4}$ " in width. Please see picture below:



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



Normandy Shutters



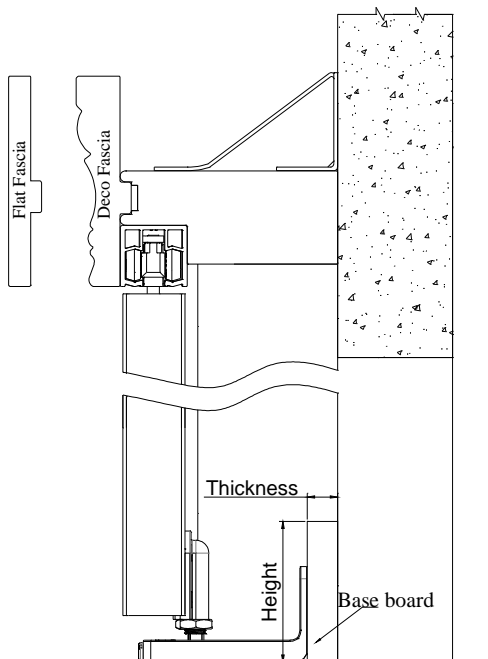
Notes:

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

Parts
Wrench
Hinge Pin
Support L Bracket (based on the length of header)
2 ½ " screws for support L bracket
¾ " screws for support L 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>Description</u>	<u>Minimum</u>	<u>Maximum</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

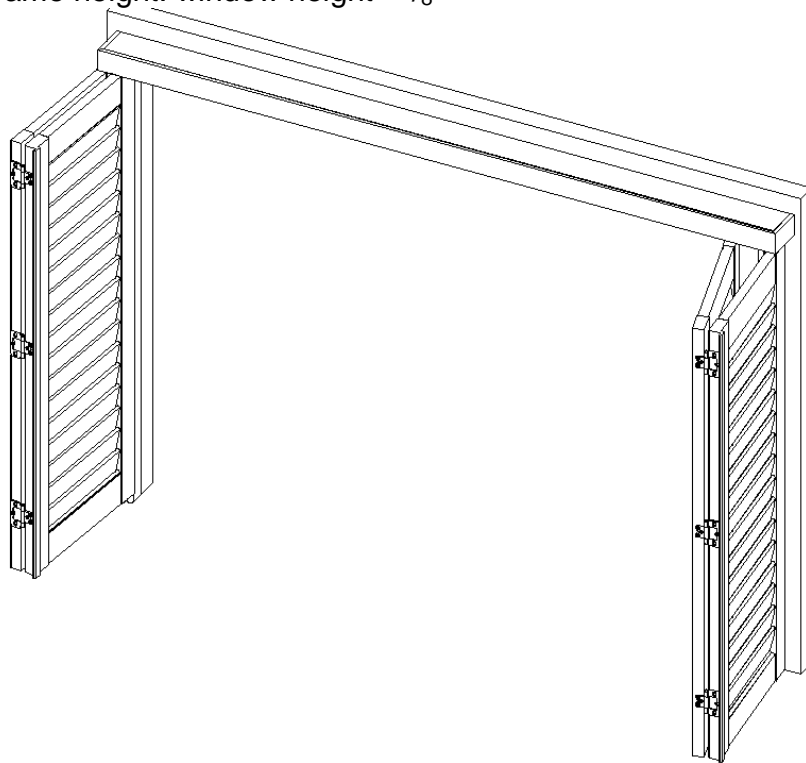
Max frame-to-frame width: window width - 1/8"

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

Inside Mount

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

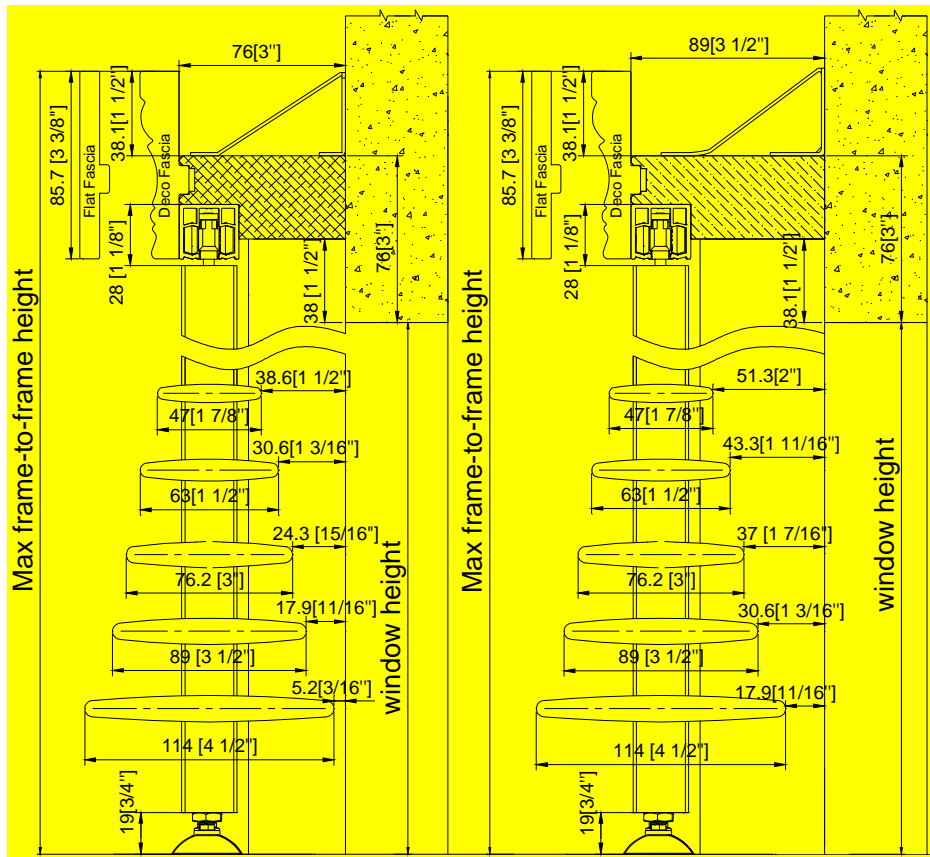
Max frame-to-frame height: window height - 1/8"



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

Mounting Options: Outside Mount

Side View

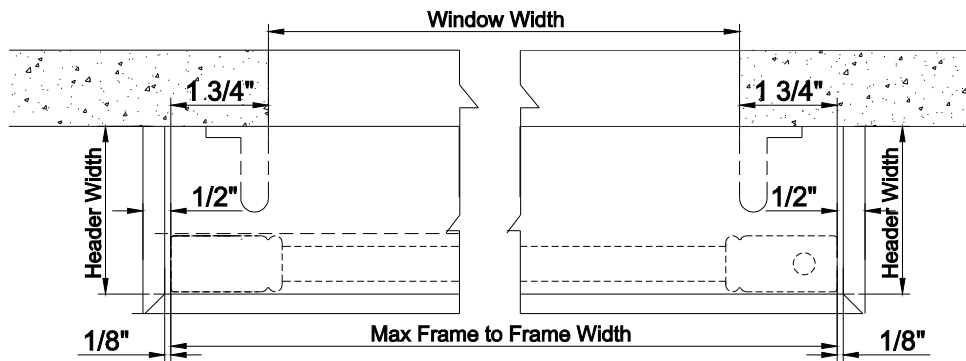


Top View

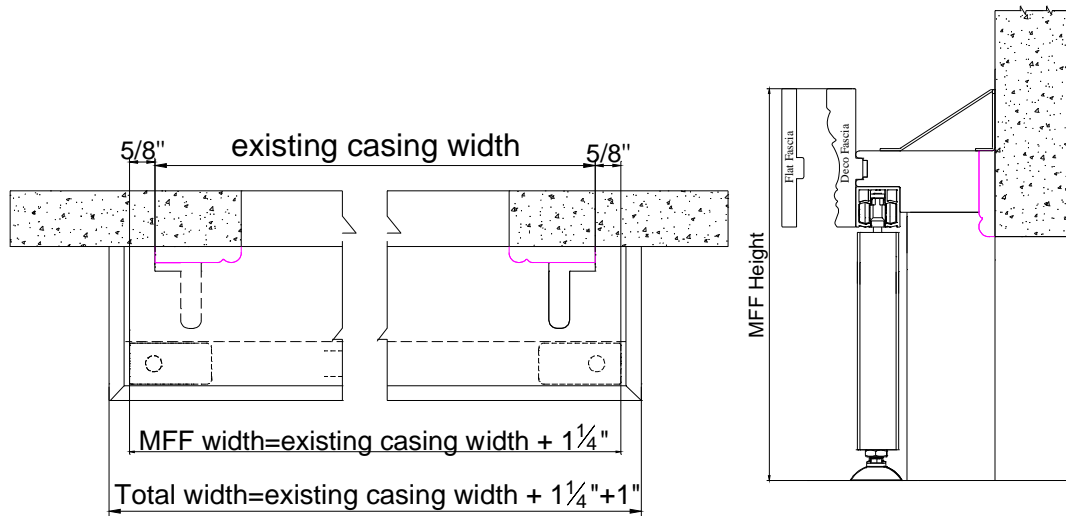
Without Casing:

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.

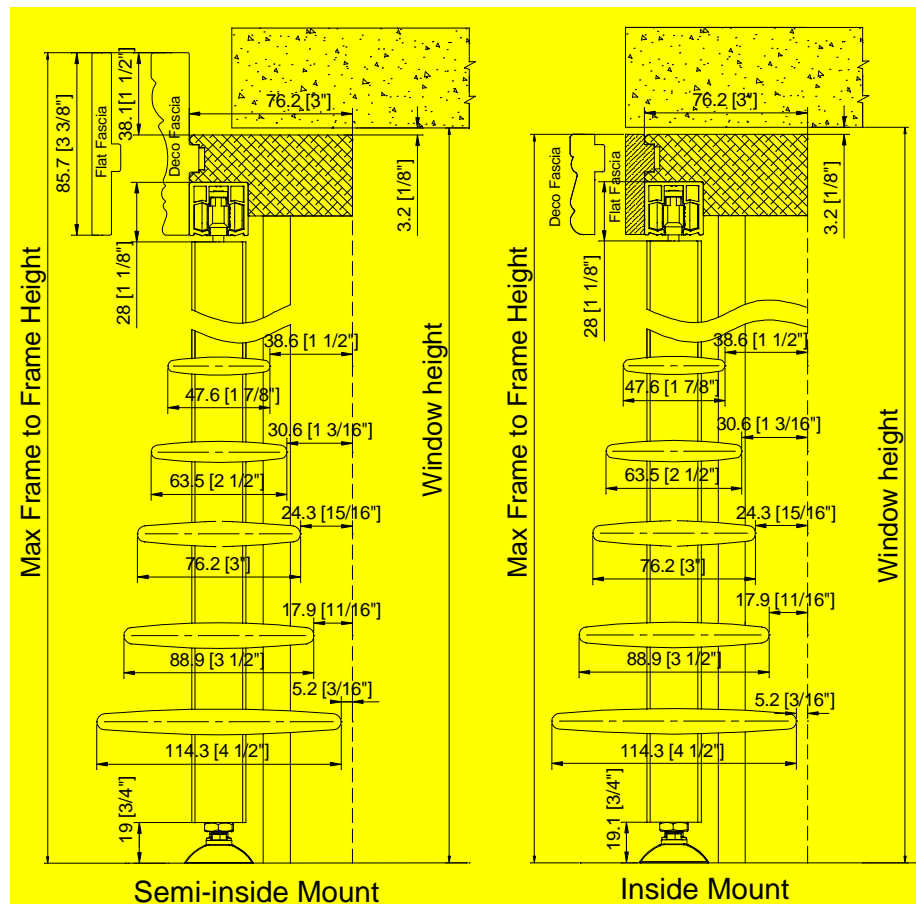


With Existing Casing:

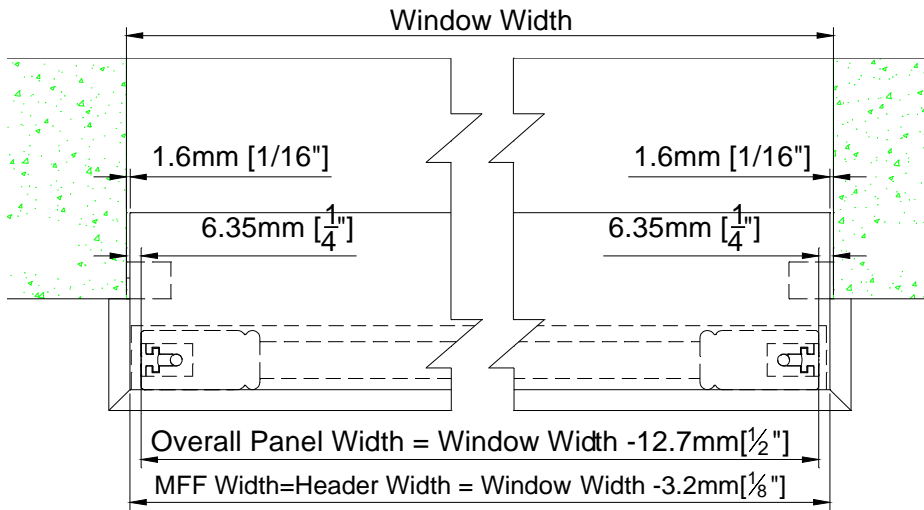


Semi-Inside/Inside Mount

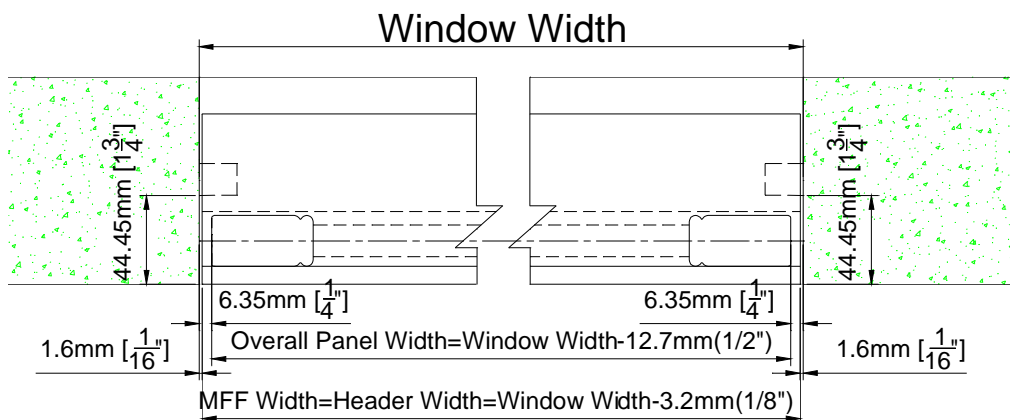
Side View



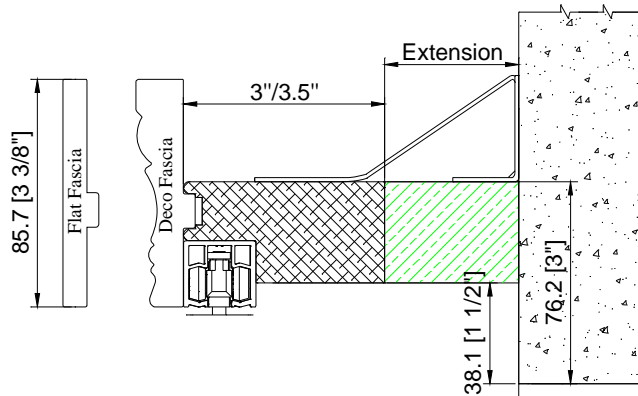
Semi-Inside Mount Top View



Inside Mount Top View

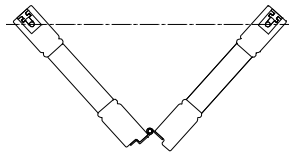


- ✧ Header Extension: Optional.
- ✧ Custom extension up to 2" for Header
- ✧ The extension will be pre-attached.

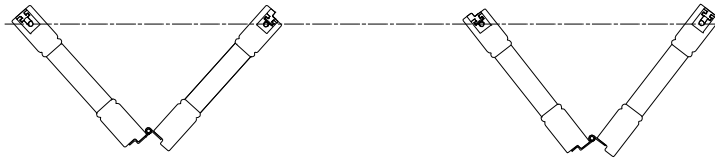


**Panel Configuration: Only 2", 2 1/4" rabbet and butt stiles are available.
Center stile is not available.**

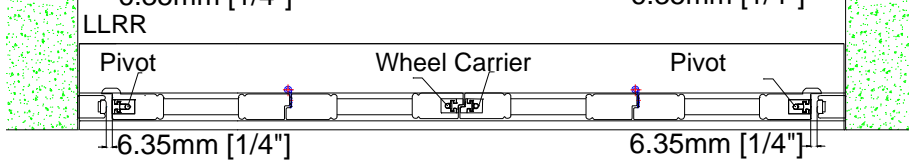
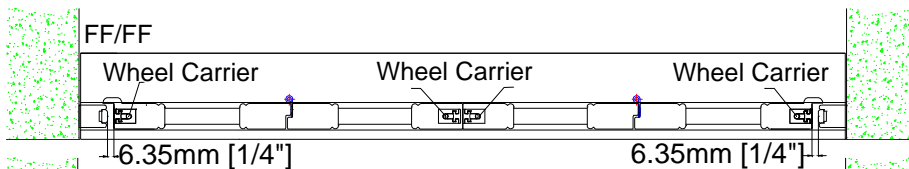
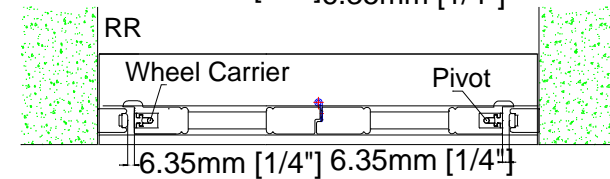
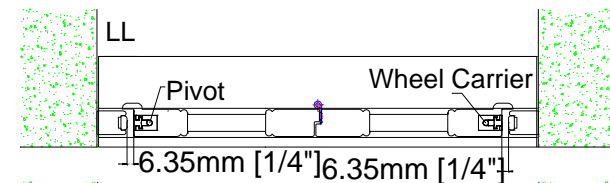
LL or RR



LLRR

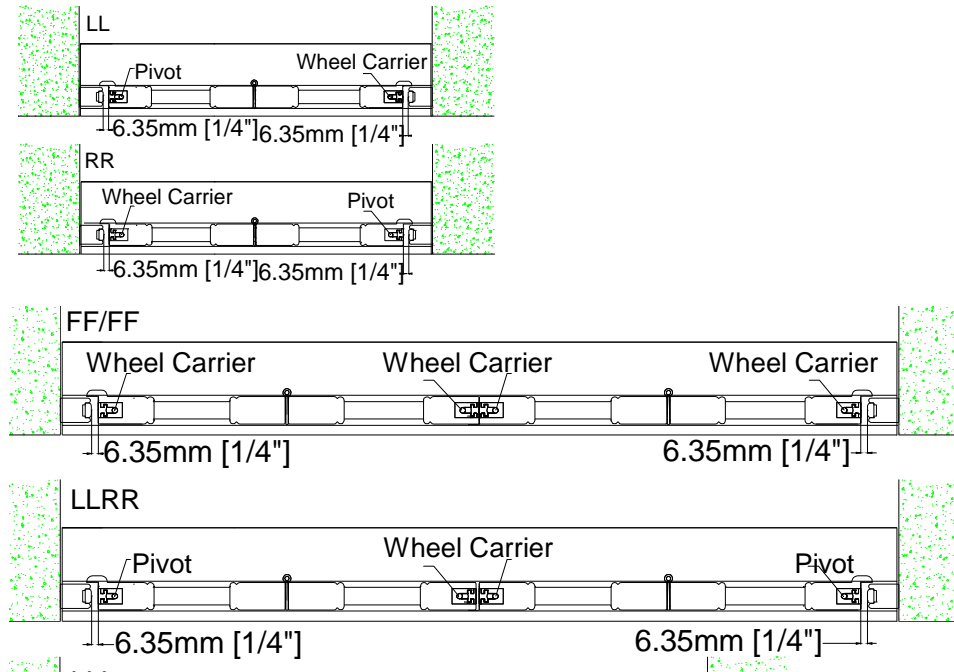


Optional (Hang Strip for Inside Mount Only)



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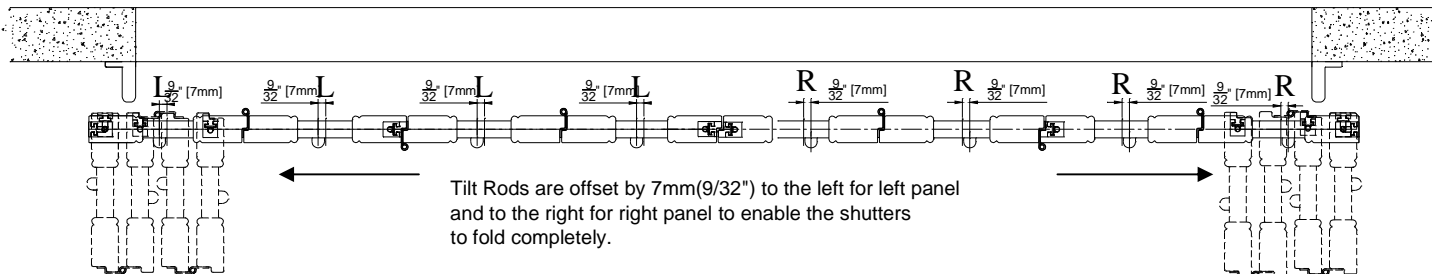
Note: When Butt/rabbit Stile is required, the stile next to the hang strip will be astragal stile.



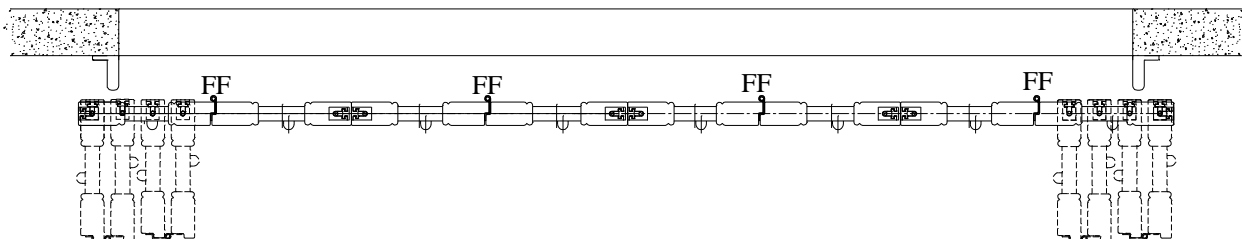
90° Multi-Fold Track Shutters (Wood only)

Maximum single panel width for multi-fold is 20"

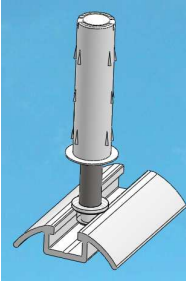
Panel Configuration: LLLL, RRRR, or LLLLRRRR



90° Floating Panels



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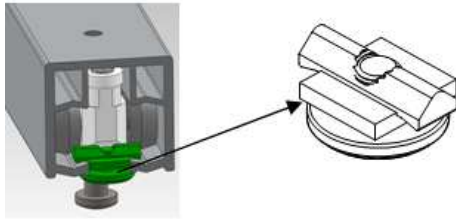
- Two or four panels can be hinged together, fold and slide to either direction
- Application comes with wheel carrier, spring loaded guide and floor track
- Can be used on large window

Note:

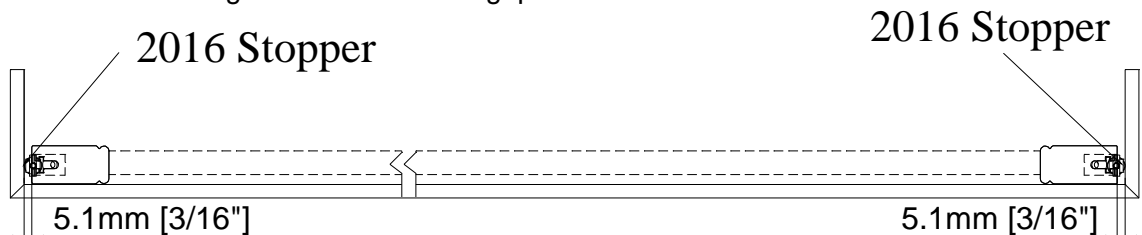
1. For 90° Floating Panels outside mount/semi-inside mount without side boards but with fascia return, the 2016 Stopper will be supplied by default. The gap between the fascia return and the panel is 5mm each side.

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 rabbit stile required, the meeting stile of unhinged stile will be butt stile by default.

90 Degree Bi Fold Track Shutters Framing Materials

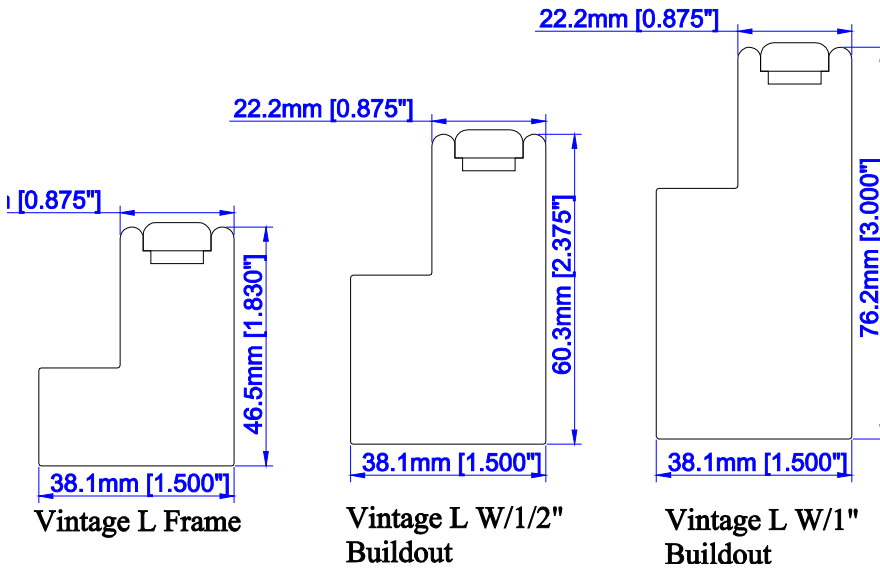
Type		Header Dimension	Top Fascia Dimension	Light Block Strip Dimension	Hang Strip Dimension
Header & Top Fascia & Light Block Strip	OM	3"	3 3/8"	1 9/16"	
		3 1/2"		2 1/16"	
	Semi-IM	3"	1 7/8"	5/8"x3/4"	1.08"x0.875"
	IM	3"		5/8"x3/4"	

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

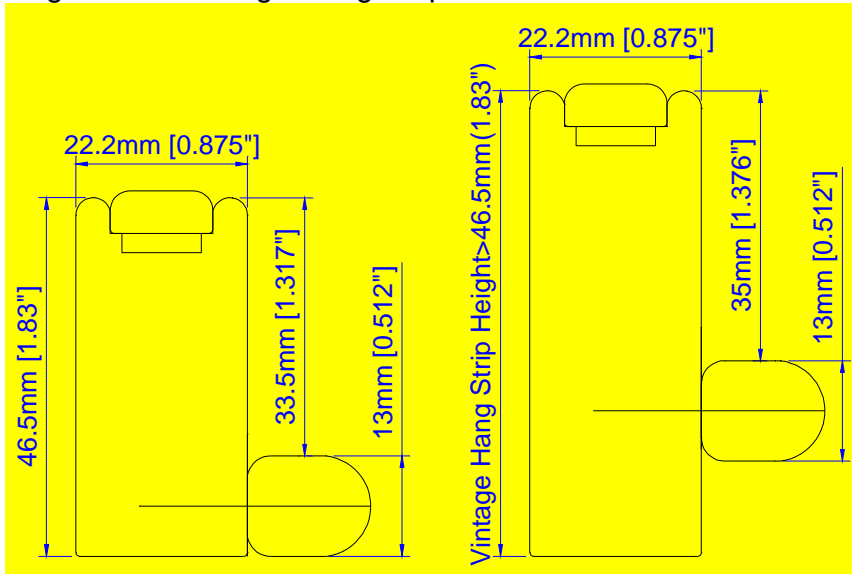
Frame Hinged Bifold

Available Stile: Rabbet Stile Only

Available Frame type



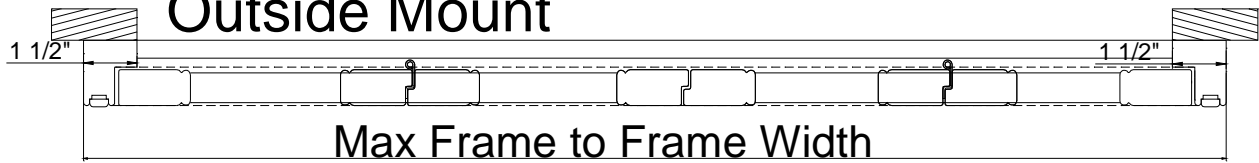
Vintage Hang Strip with 13mm light block: For single direction shutter with even panel qty, the frame on the unhinged side will be Vintage Hang Strip with 13mm [0.512"] light block, the height of the Vintage Hang Strip will match with that of the hinged side frame.



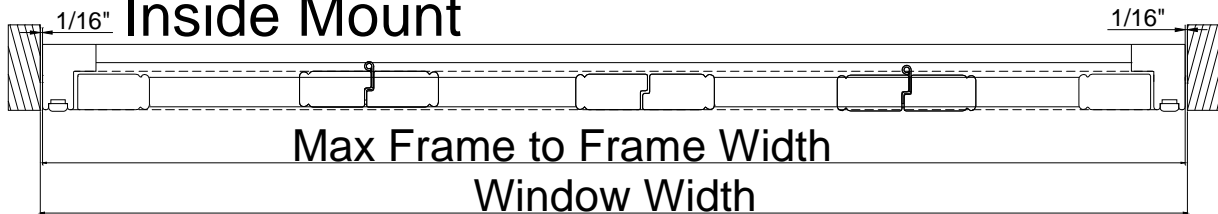
Top View

Hinged at Left or Right with wheel assembly at top;

Outside Mount



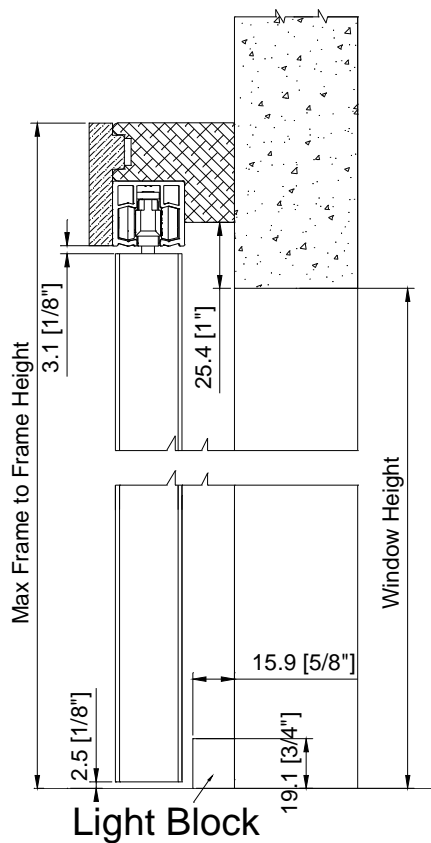
Inside Mount



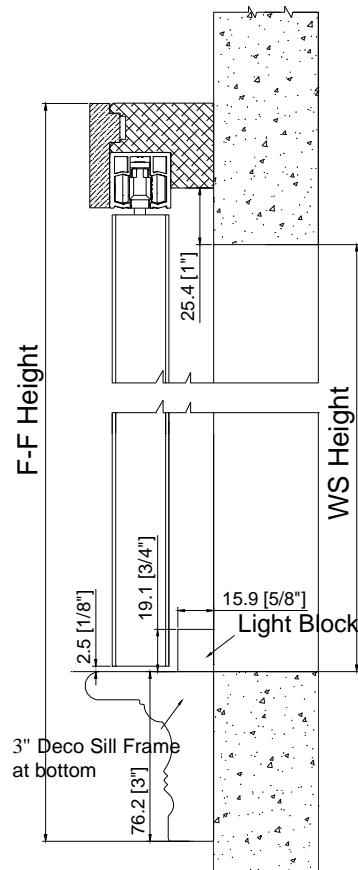
Side View

Outside Mount

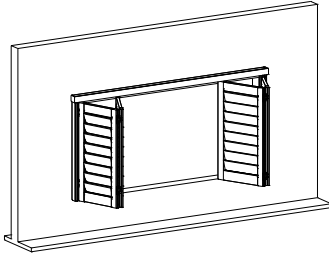
3-Sides + bottom light block



3-Sides + 3" Deco Sill Frame

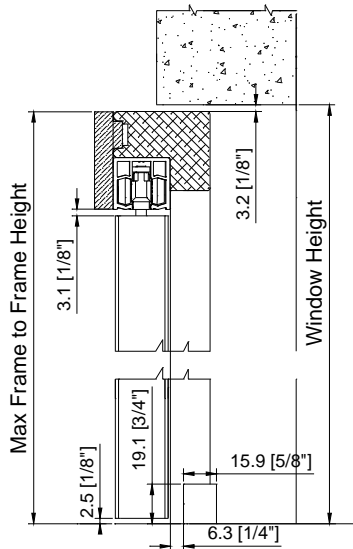


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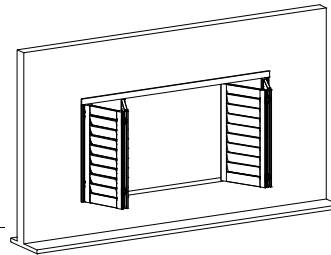
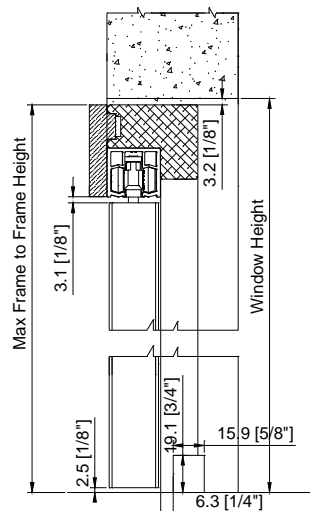


Note: For OM Frame Hinged Bifold shutter not to use as a door, if there is no existing sill at the bottom of the window opening, it is recommended to have the 3" Deco Sill Frame at the bottom.

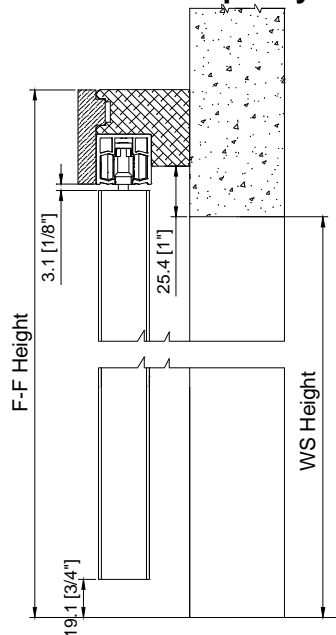
Semi-Inside



Inside Mount

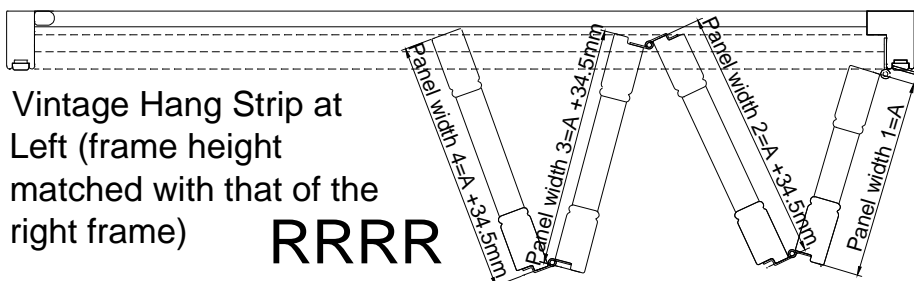
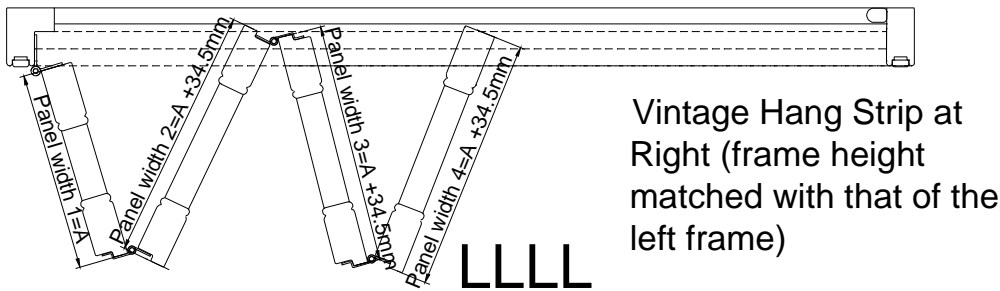
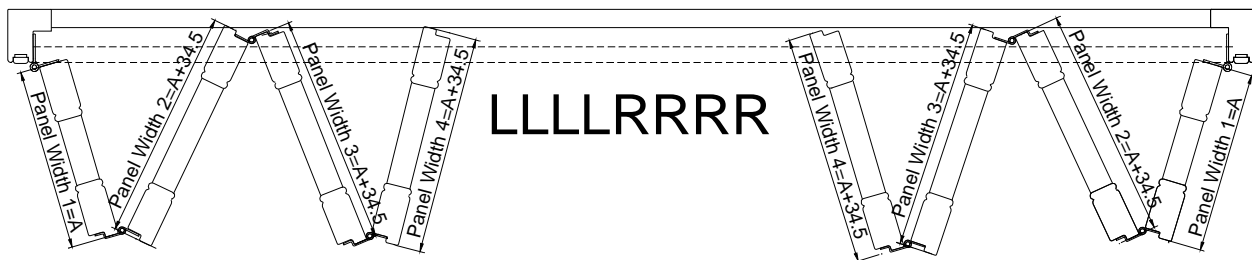
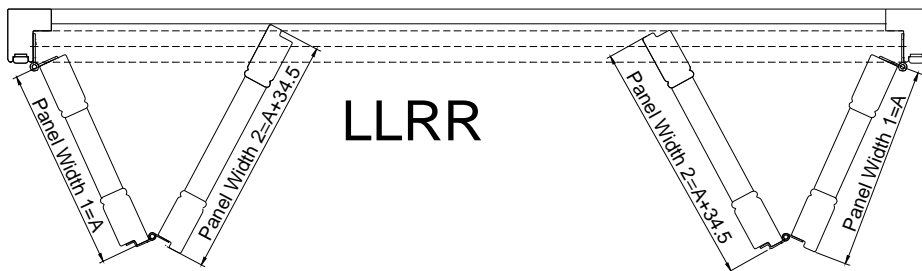
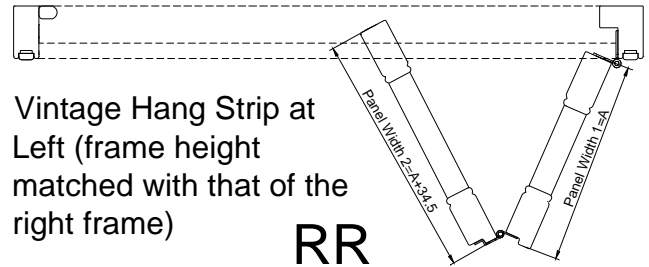
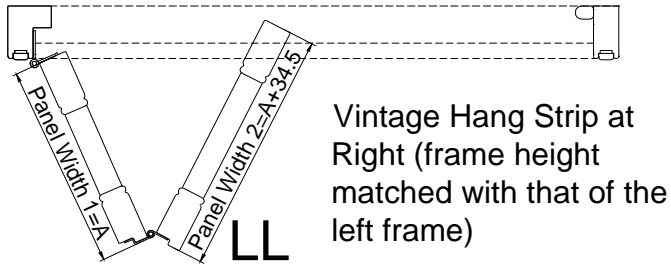


For frame hinged bifold track shutter used as door, the bottom gap will be 19mm by default. Please specify "Used As Door" on the order form.



Normandy Shutters

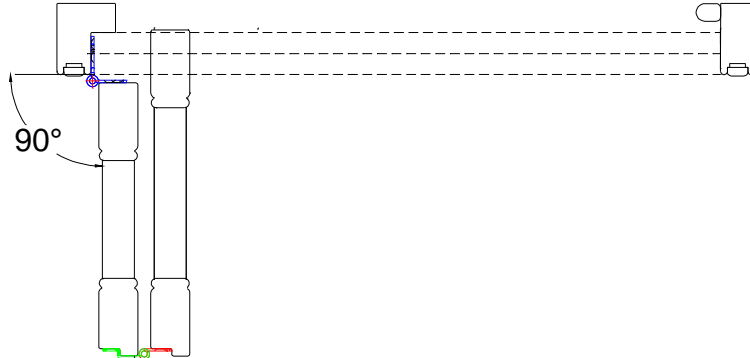
Panel Configuration (uneven panel width)



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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;

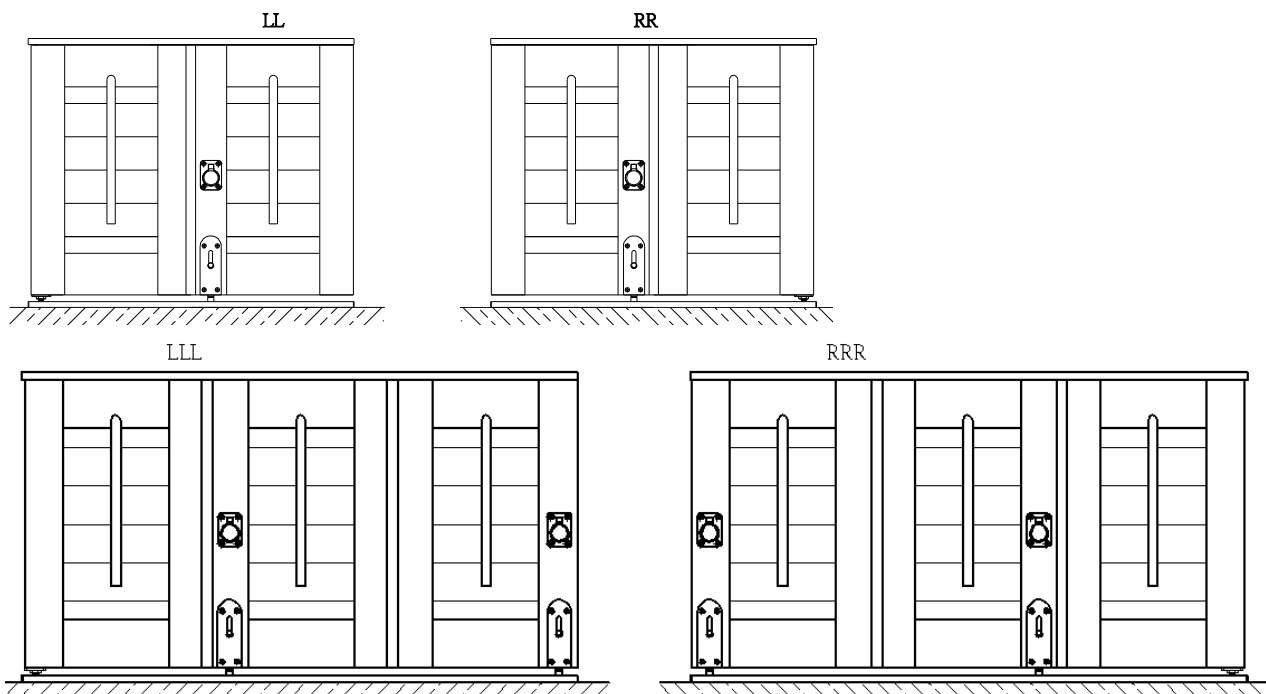


2. Frames available: Only Vintage L Frame

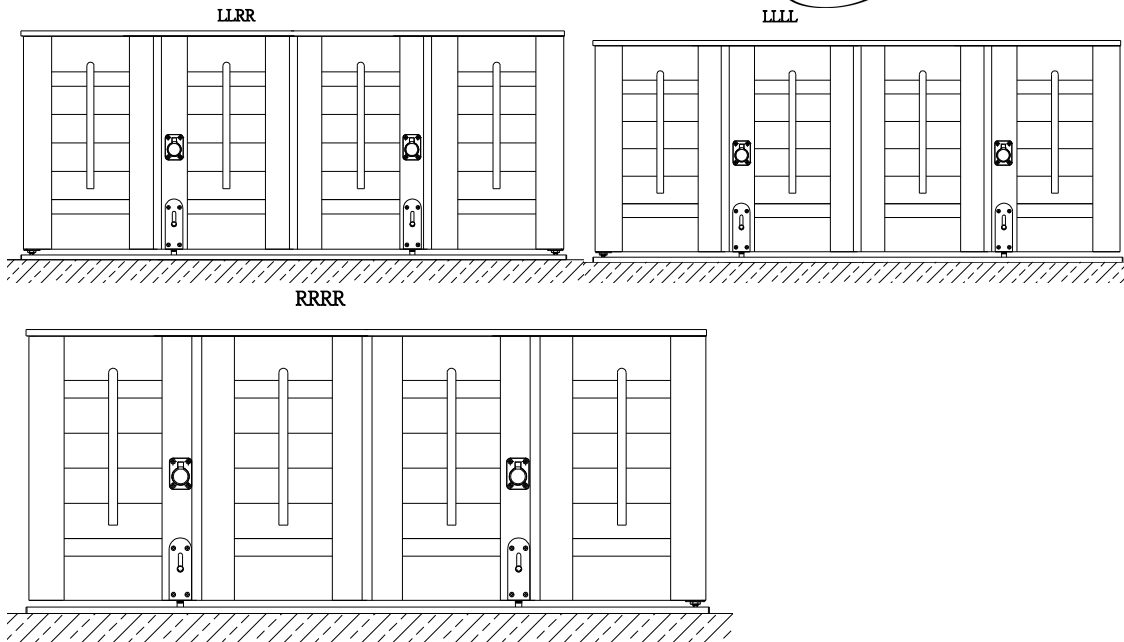
- 1) For top frame, the insert will be replaced by top fascia;
- 2) Top track will be pre-attached to the top frame;
- 3) Frame will be pre-drilled with screw holes same as regular shutters.

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:

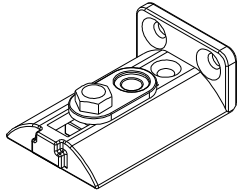


Normandy Shutters

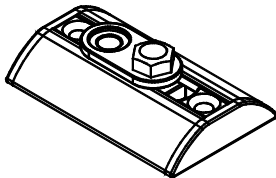


Bottom Pivot Bracket for 90 degree bifold:

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

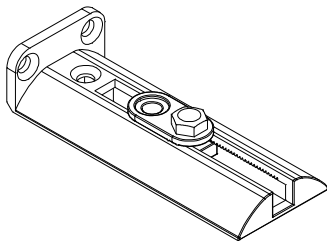


For Inside Mount, Bottom Pivot L Bracket will be supplied as default;



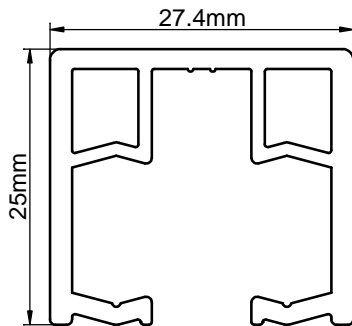
For Semi-Inside or Outside Mount, bottom pivot bracket will be supplied as default.

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

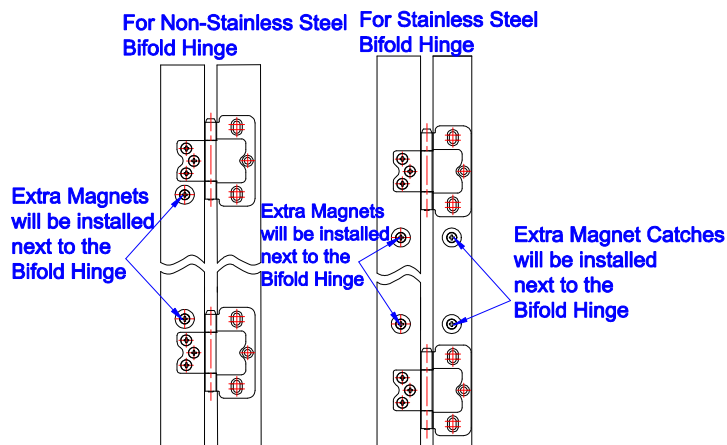


Track Dimension:

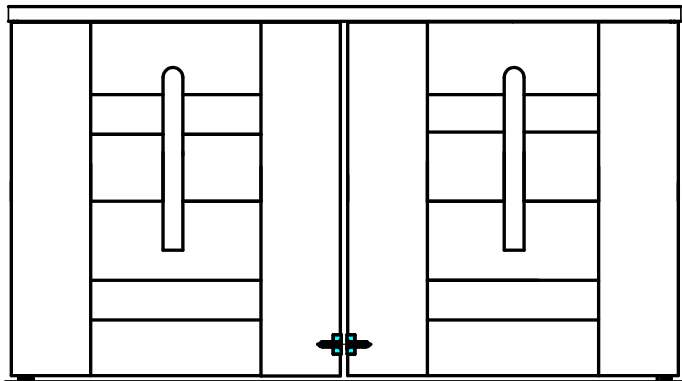
Top Track



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

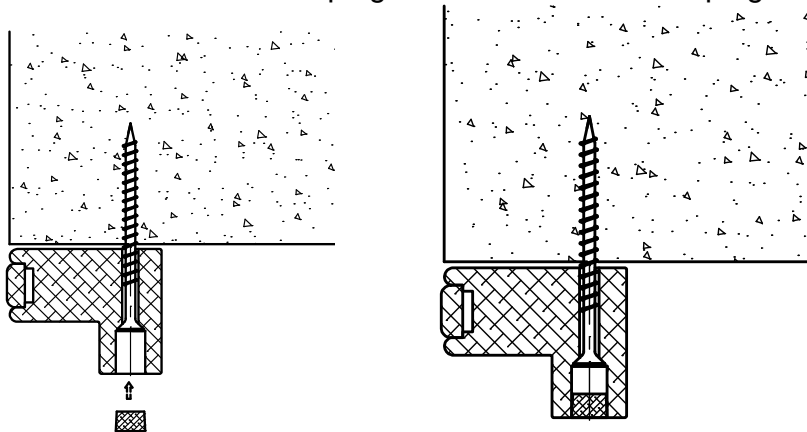


90° Bi Fold Track Shutters Hardware Box

Parts
Wrench
Hinge Pin
Support L Bracket (based on the length of header)
2 ½ " screws for support L bracket
¾ " screws for support L bracket
Bottom Pivot Bracket
38.1mm screws for bottom pivot bracket
63.5mm screws for Frame with pre-drilled screw holes

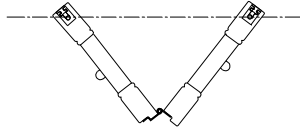
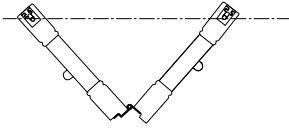
Notes:

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

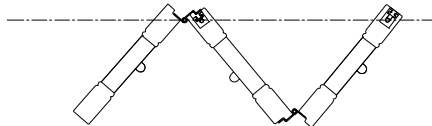
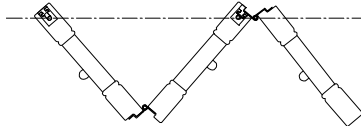


90 Degree Bifold Track & Floating Panels Hanger Location:

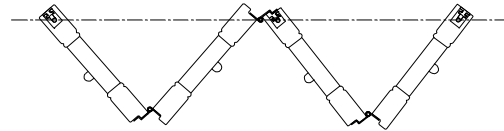
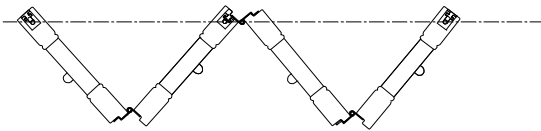
LL/RR/LLRR



LLL/RRR/LLLRRR

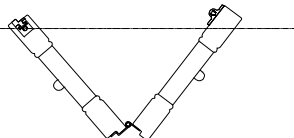
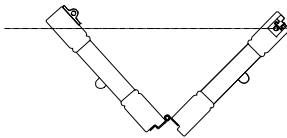


LLLL/RRRR/LLLLRRRR

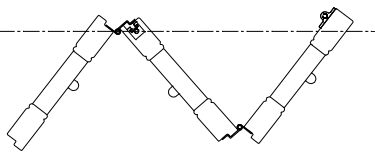
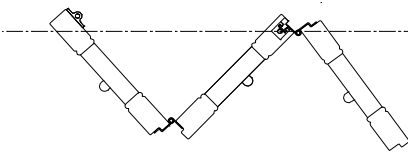


180 Degree Bifold Track Panel Hanger Location:

LL/RR/LLRR

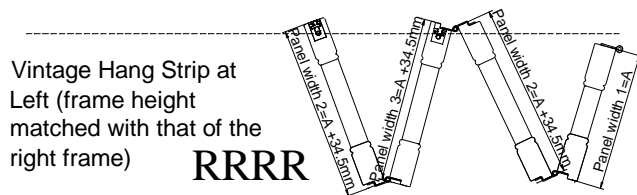
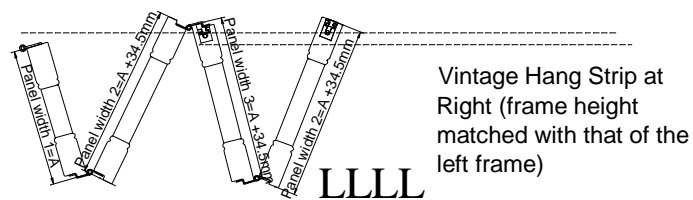
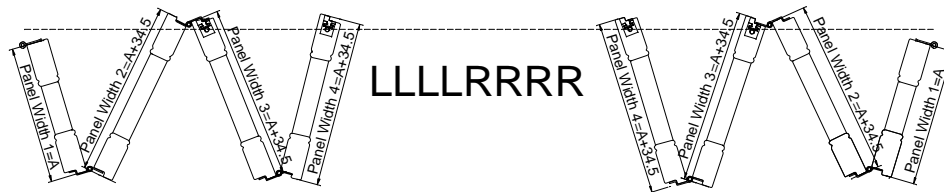
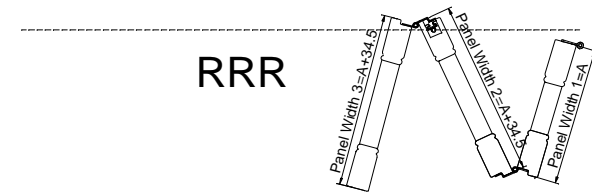
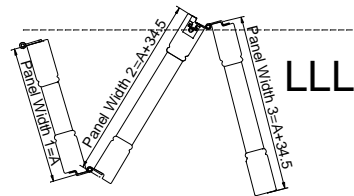
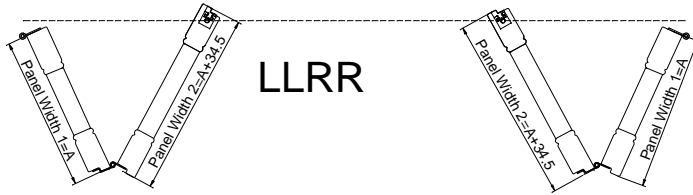
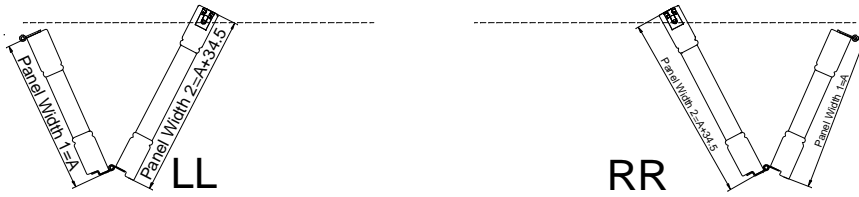


LLL/RRR/LLLRRR



Normandy® Shutters

Frame Hinged Bifold Track Panel Hanger Location:

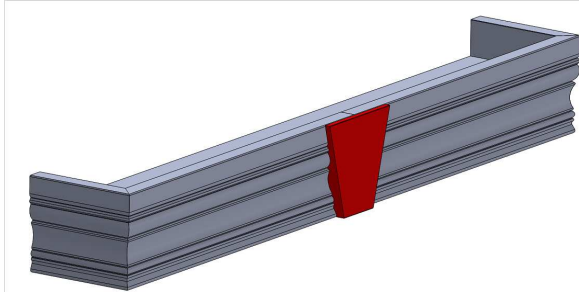


Keystone for Fascia of the Track Shutter

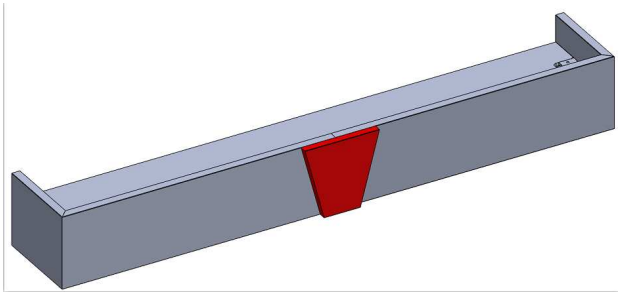
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

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

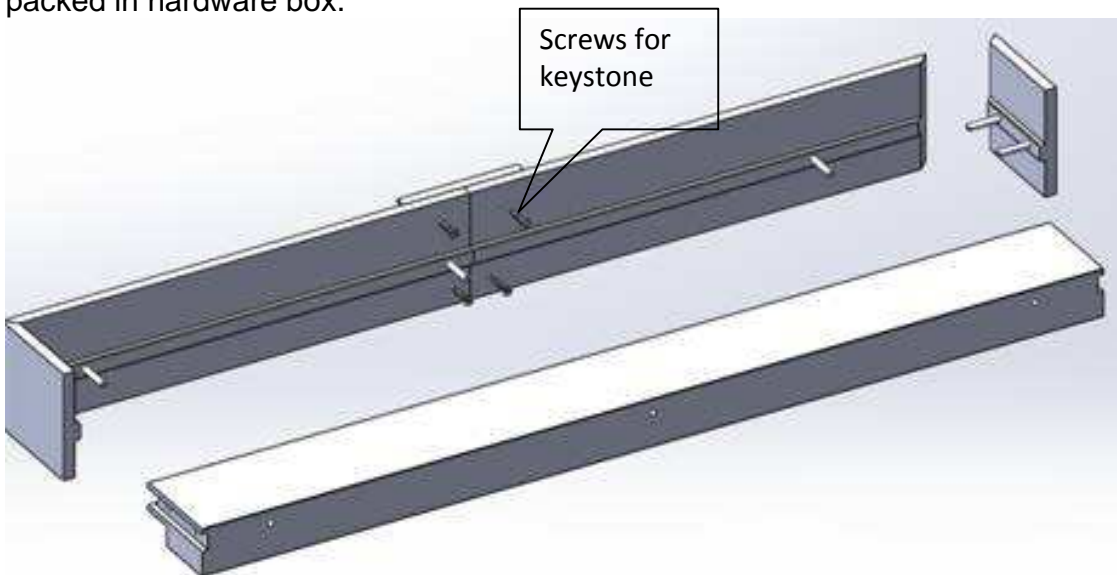
For Deco Fascia:



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.



2016 Track Shutters—Bypass

Normandy Shutters

Guidelines and Specs:

<u>Description</u>	<u>Minimum</u>	<u>Maximum</u>		
		1 $\frac{7}{8}$ "	2 $\frac{1}{2}$ " ; 3"	3 $\frac{1}{2}$ " ; 4 $\frac{1}{2}$ "
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 $\frac{1}{2}$ "

Semi-Inside Mount

Max frame-to-frame width: window width - $\frac{1}{8}$ "

Max frame-to-frame height: window height + 1 $\frac{3}{8}$ "

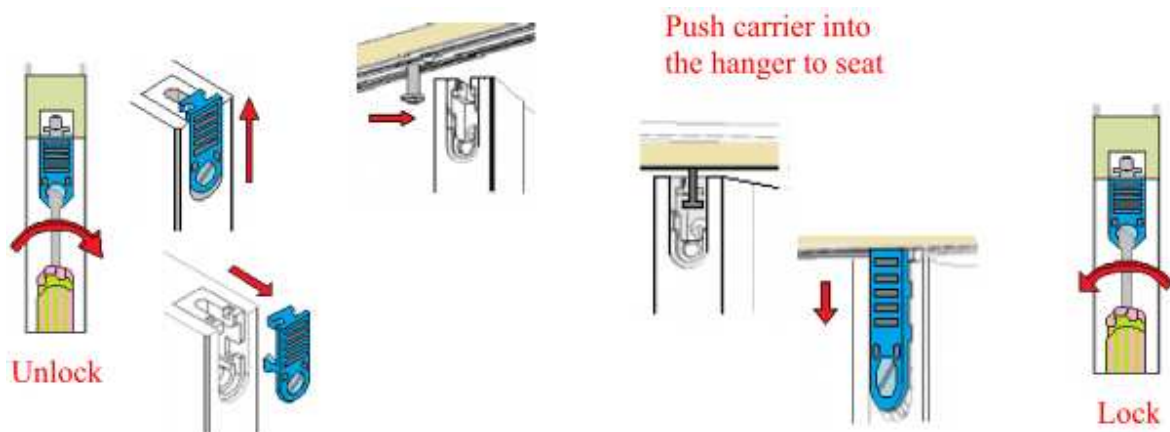
Inside Mount

Max frame-to-frame width: window width - $\frac{1}{8}$ "

Max frame-to-frame height: window height - $\frac{1}{8}$ "

Carriers are in the Track / Hangers are in the Panel:

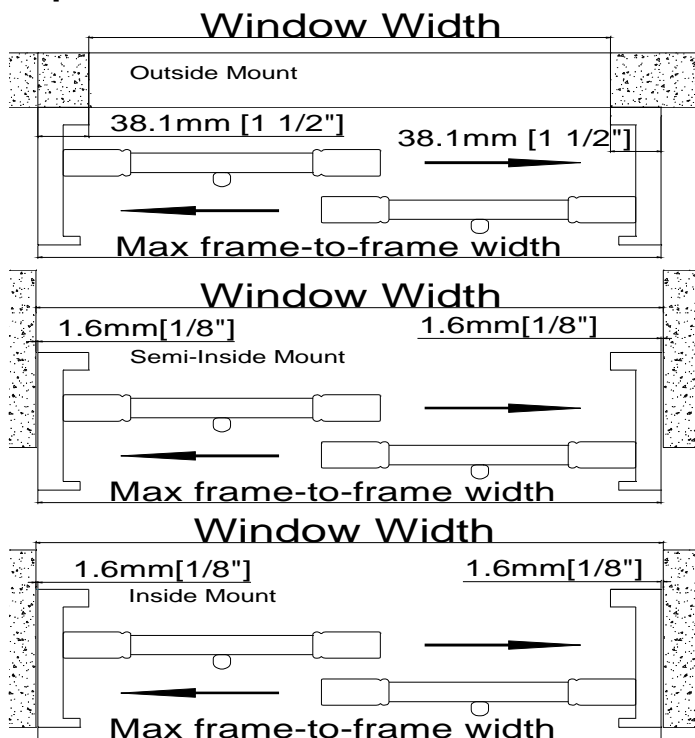
Adjustments to panel alignment are made by turning the Carrier Bolt with the wrench included in the Hardware Box



2016 Track Shutters—Bypass

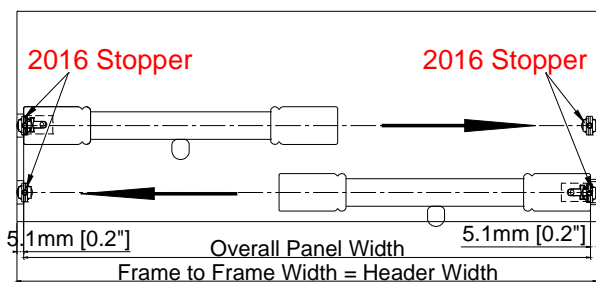
Normandy Shutters

Top View

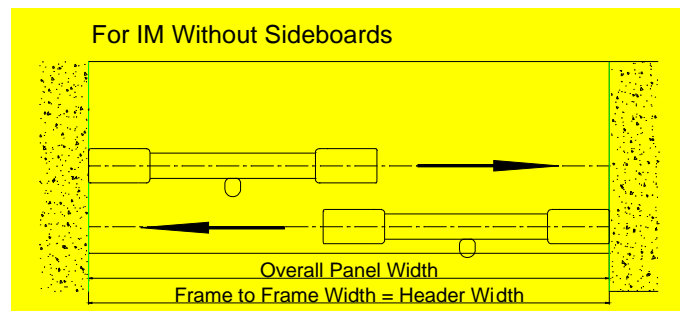


Size Definition

For Semi-Inside/OM without side boards



For IM without side boards



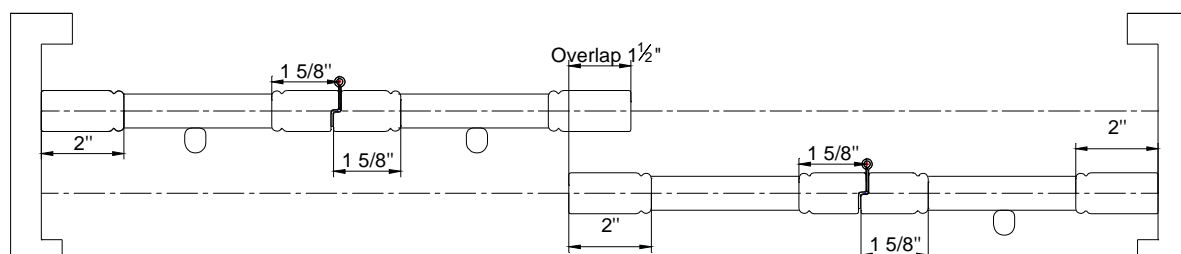
Note: For Semi-Inside/OM bypass without side boards but with fascia return, 2016 Stopper will be supplied.

2016 Track Shutters—Bypass

Normandy Shutters

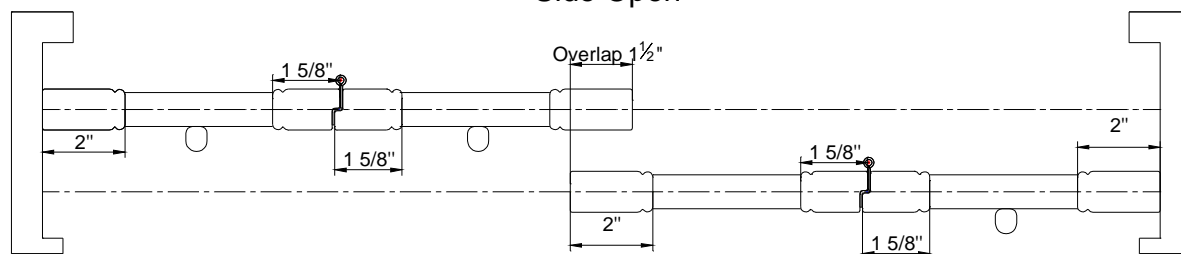
Top View

Combi - joined Panels (optional)

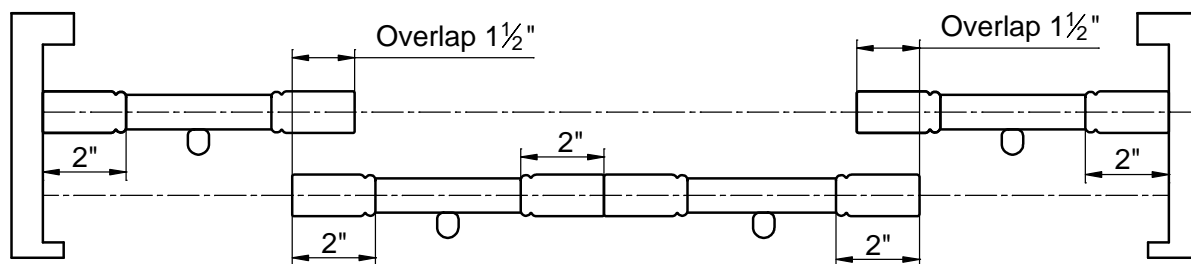


For shutters with 4 or more panels, please select “side open” or “center open”

Side Open



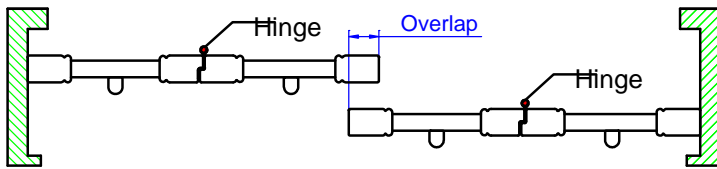
Center Open



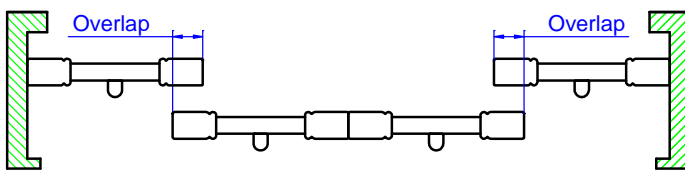
2016 Track Shutters—Bypass

Normandy Shutters

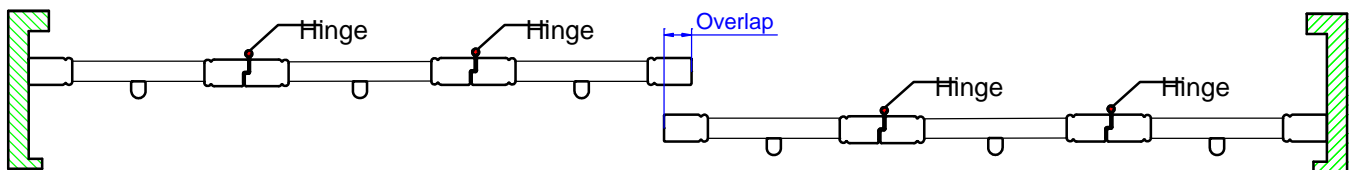
4 panels side open w/Rabbit stile



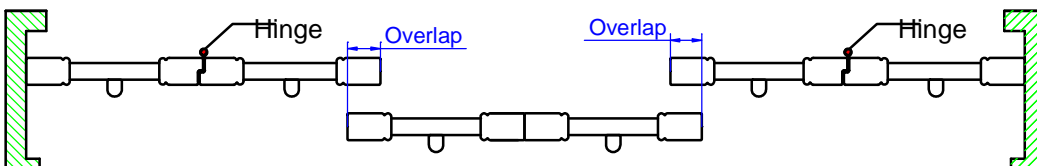
4 panels center open w/Rabbit stile



6 panels side open w/Rabbit stile



6 panels center open w/Rabbit stile



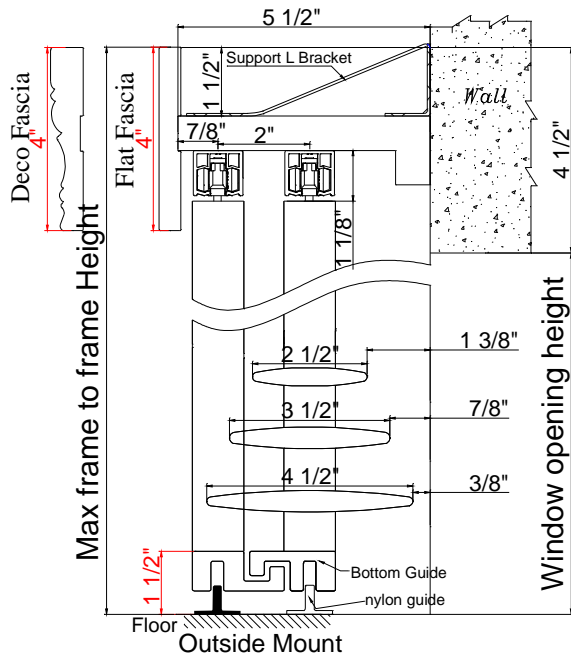
Stile: Only 2", 2 1/4" butt and rabbit stiles are available,
1 5/8" rabbit stile only used for combi-joined panels.
Center stile is not available.

2016 Track Shutters—Bypass

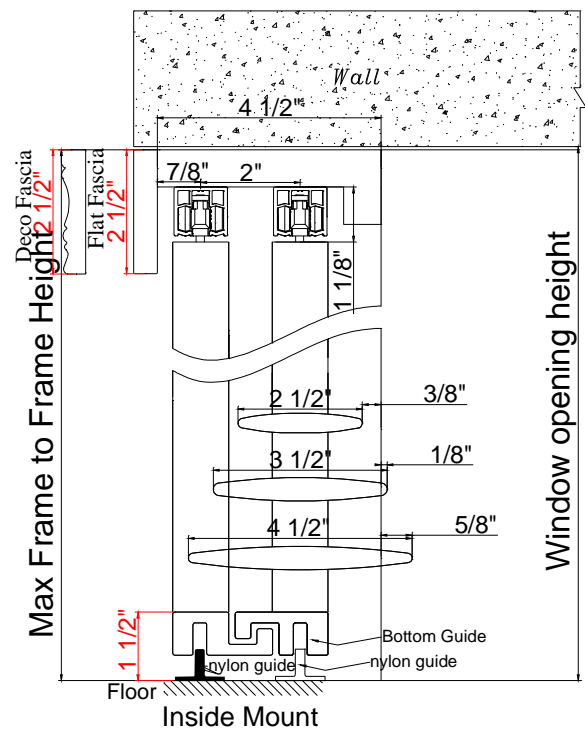
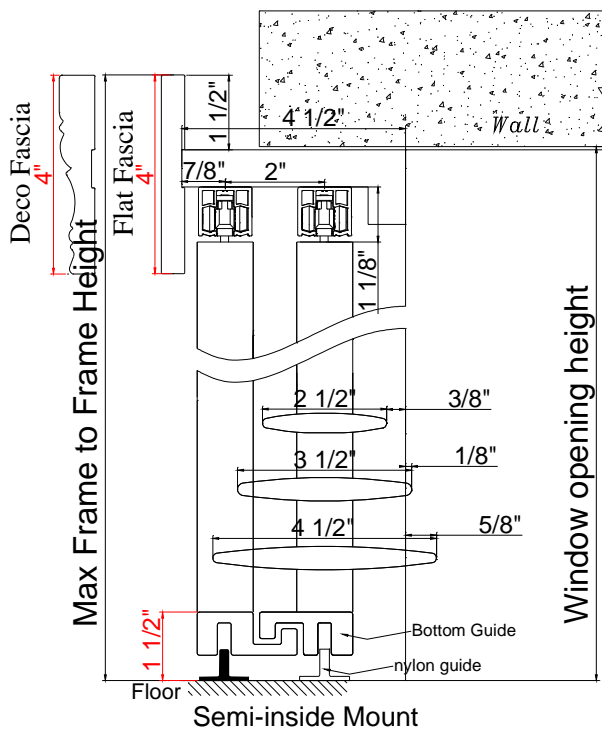
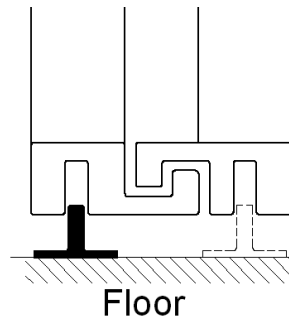
Normandy Shutters

Mounting Options (Closed Bypass)

Side View



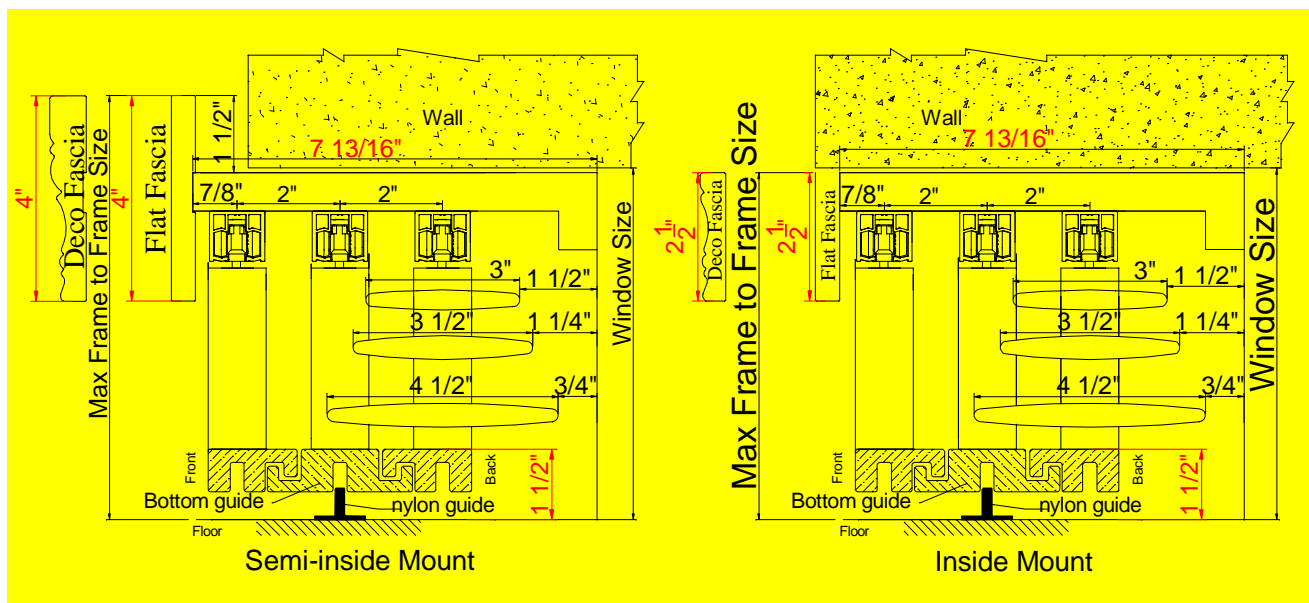
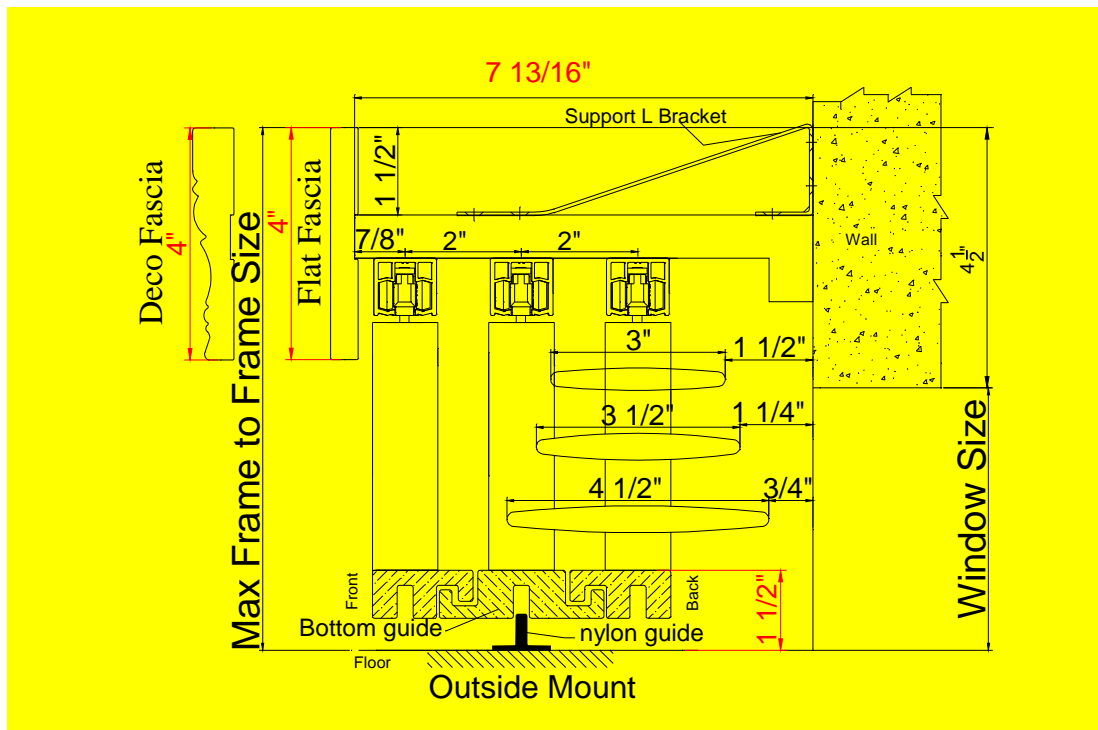
Bottom Guide



2016 Track Shutters—Bypass

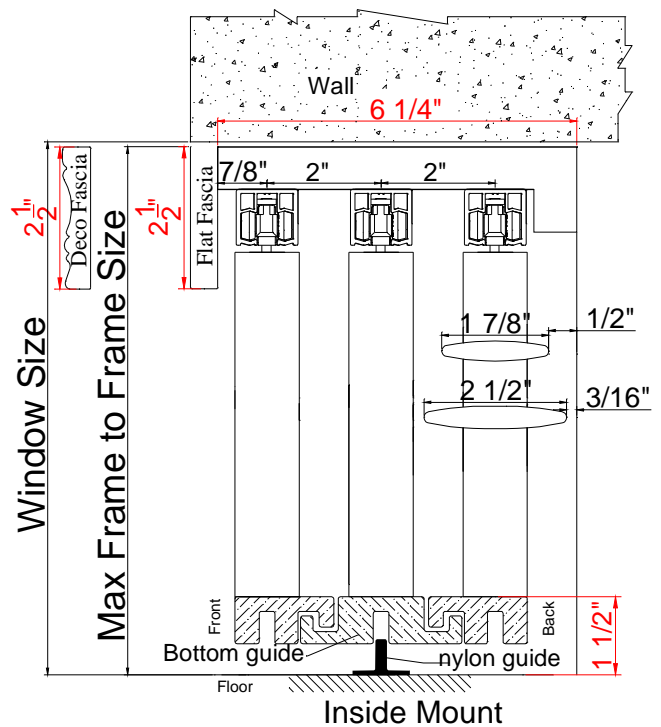
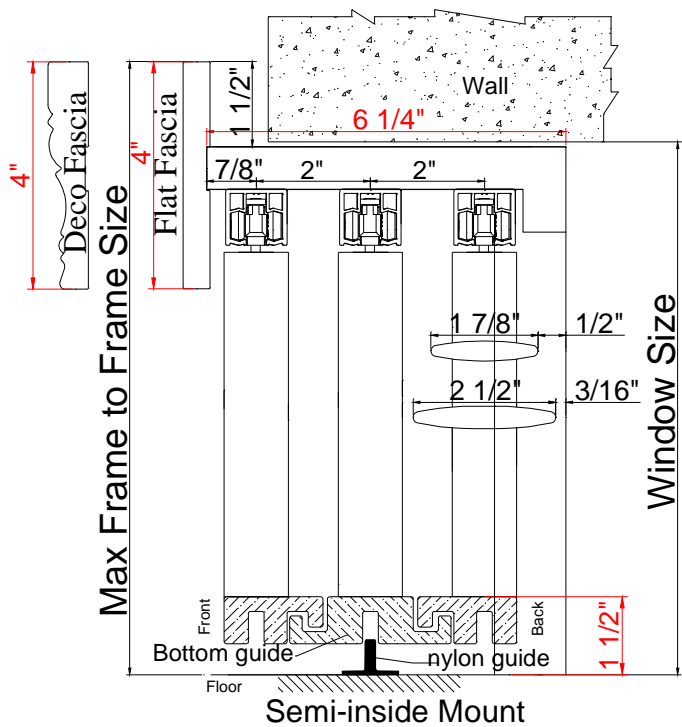
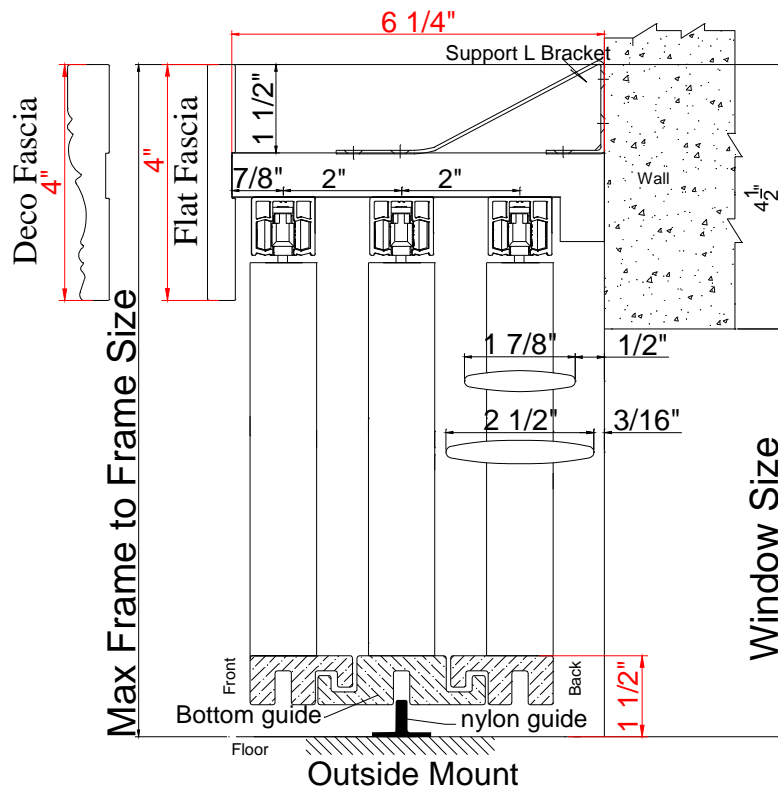
Normandy Shutters

Mounting Options (Closed Bypass with 3 Tracks):



2016 Track Shutters—Bypass

Normandy Shutters



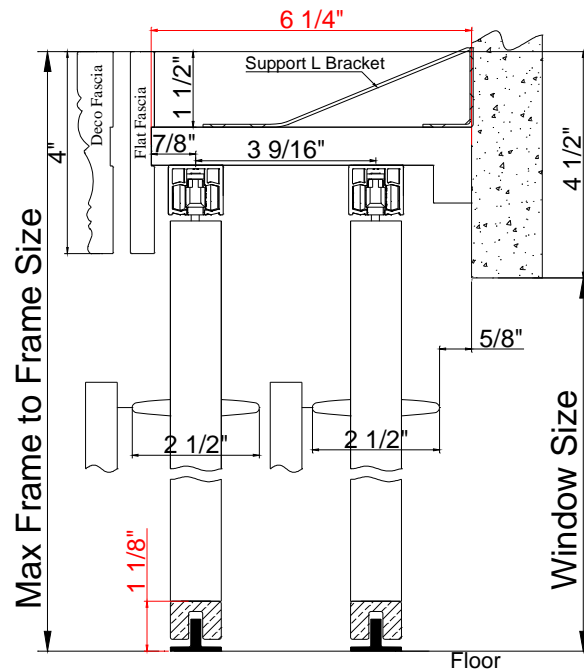
2016 Track Shutters—Bypass

Normandy Shutters

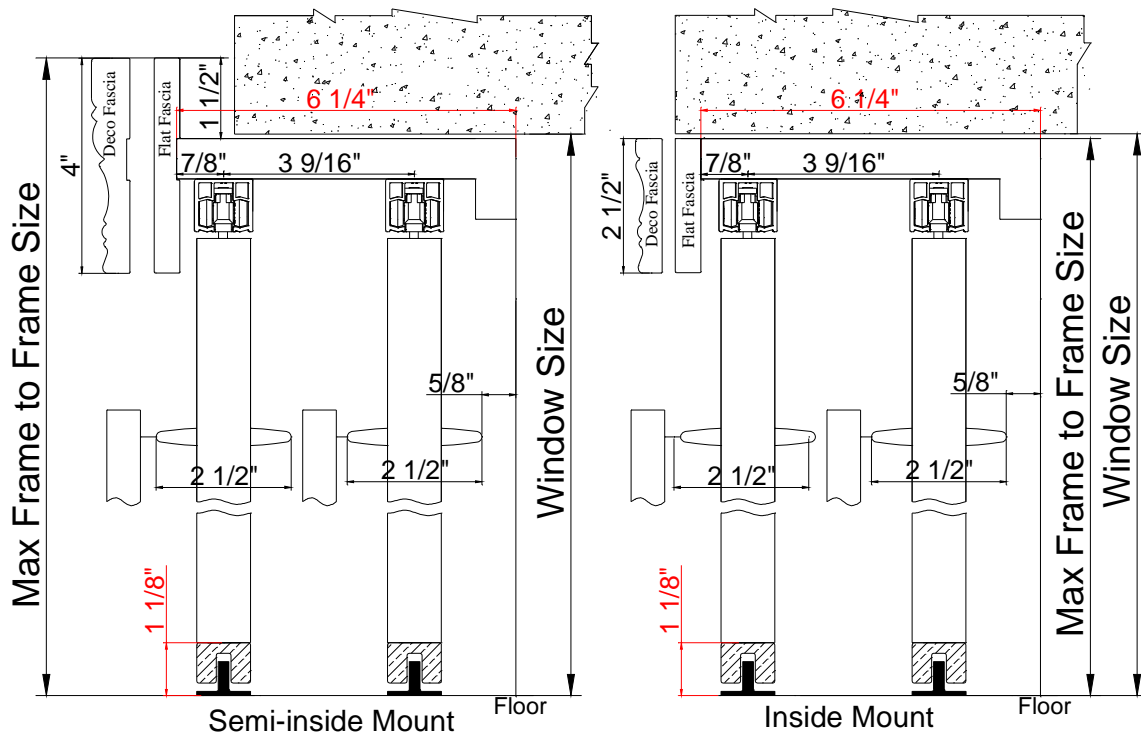
Mounting Options (Opened Bypass)

Only available in 2 1/2", 3" and 3 1/2" louver sizes

2 1/2" Louver



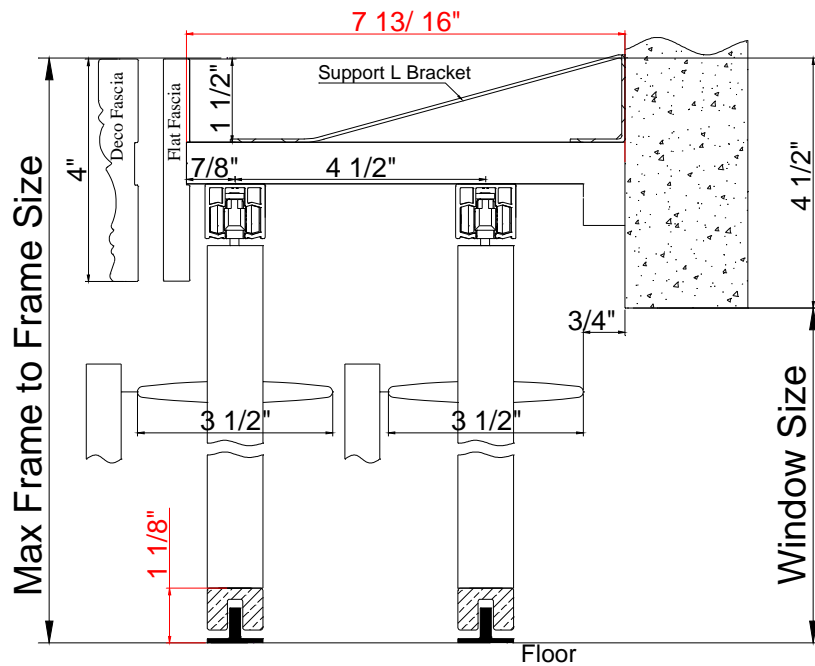
Outside Mount



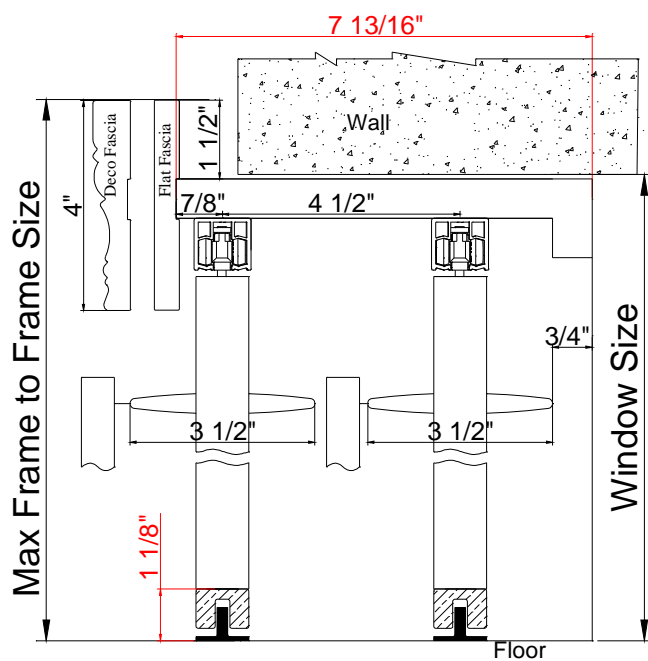
2016 Track Shutters—Bypass

Normandy Shutters

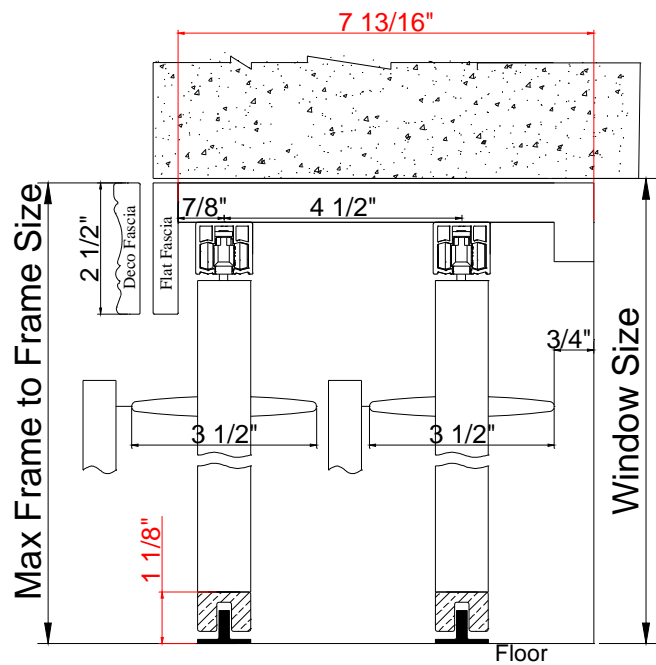
3" / 3 1/2" Louver



Outside Mount



Semi-inside Mount

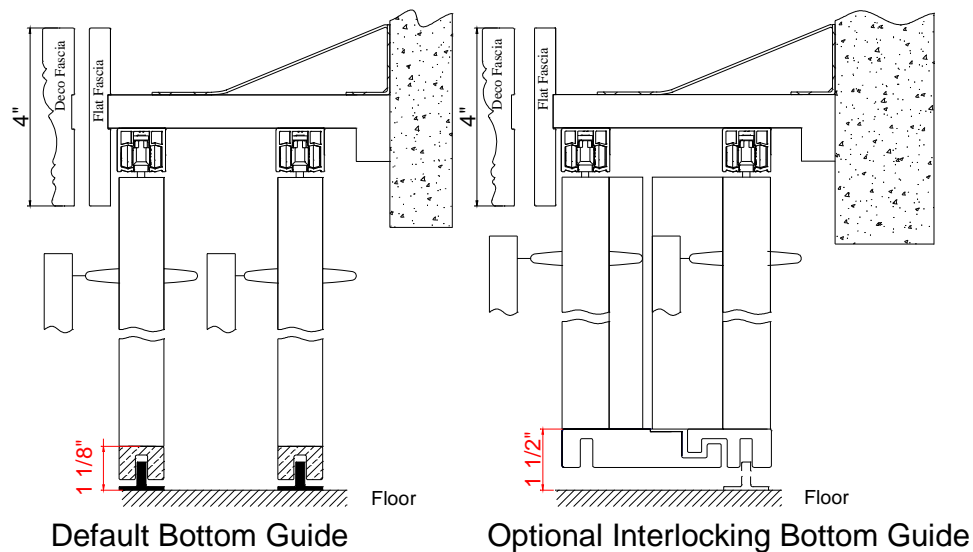


Inside Mount

2016 Track Shutters—Bypass

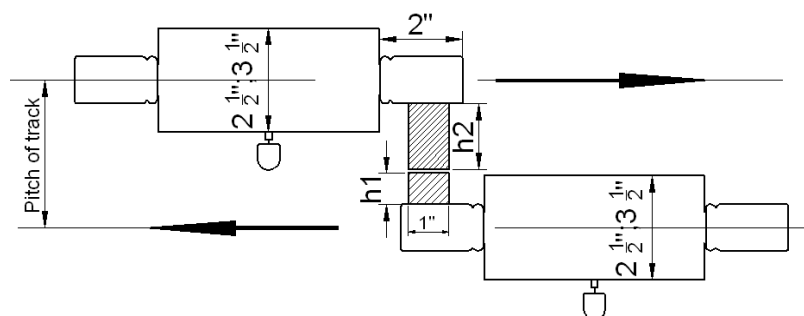
Normandy Shutters

Open By Pass: has 2 kinds of bottom guide

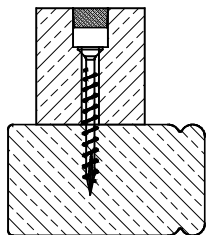


Opened Bypass

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"

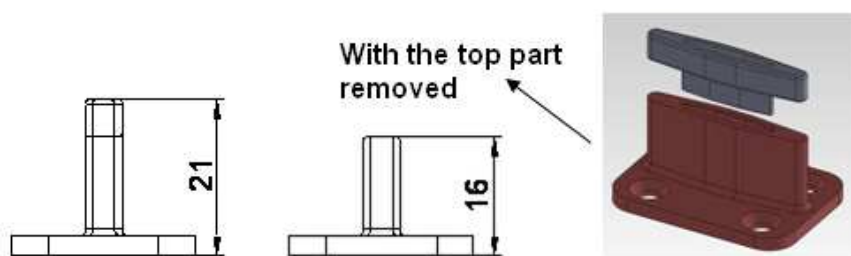
2016 Track Shutters—Bypass

Normandy Shutters

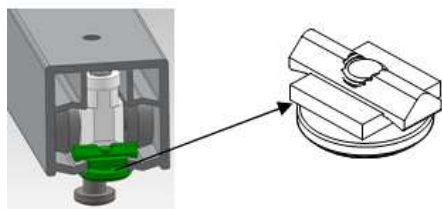
Light block thickness for panel

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"

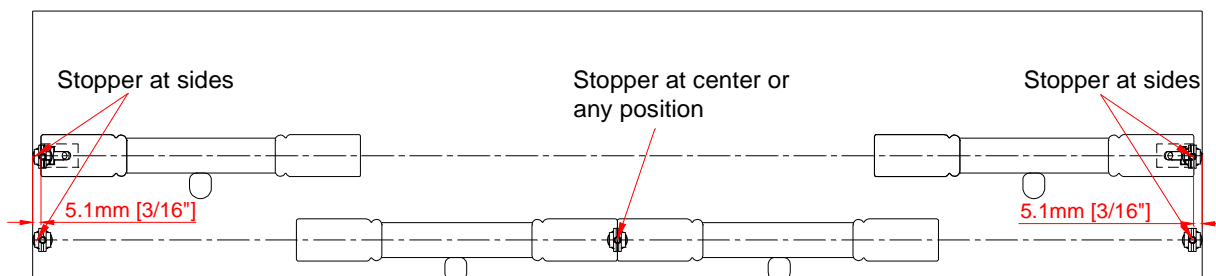
Nylon Guide: The nylon guide is composed by 2 parts and will supplied as a whole set by default (bottom part 16mm and top part 5mm), please remove the top part if necessary.



The 2016 Stopper



For outside mount/semi-inside mount bypass without side boards but with fascia returns, the 2016 Stopper will be supplied by default. The gap between the fascia return 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. Please see drawing below to show the gap.



2016 Track Shutters—Bypass

Normandy Shutters

Track Shutters Framing Materials

Framing	Size				Pc(s)
L Shape Header	Header (Closed Bypass)	Header (Opened Bypass)	Supporting Strip		1 pc
(2 in 1)	$\frac{3}{4}" \times 5\frac{1}{2}"^*$ (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	$\frac{3}{4}" \times 6\frac{1}{4}"^*$ (2½" Louver)	$\frac{3}{4}" \times \frac{3}{4}"$		
Header with Supporting Strip	$\frac{3}{4}" \times 4\frac{1}{2}"^*$ (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	$\frac{3}{4}" \times 7\frac{13}{16}"^*$ (3½" Louver)			
	Custom * ≤ 8"	Custom * ≤ 8"			
U Shape Side Frame	Side Frame (Closed Bypass)	Side Frame (Opened Bypass)	Supporting Strip	Side Fascia	2 pcs
(3 in 1)	$\frac{3}{4}" \times 5\frac{7}{8}"^*$ (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	$\frac{3}{4}" \times 6\frac{5}{8}"^*$ (2½" Louver)	$\frac{3}{4}" \times \frac{3}{4}"$	$\frac{3}{8}" \times 1\frac{1}{4}"$	
Side Frame with Supporting Strip & Side Fascia	$\frac{3}{4}" \times 4\frac{7}{8}"^*$ (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	$\frac{3}{4}" \times 8\frac{1}{4}"^*$ (3½" Louver)			
	Custom * ≤ 8"	Custom * ≤ 8"			
Top Fascia (Plain/Deco)	4" (Semi-inside and Outside Mount)				1 pc
	$\frac{1}{2}" \times 2\frac{1}{2}"$ (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.

2016 Track Shutters—Bypass

Normandy Shutters

Hardware Box

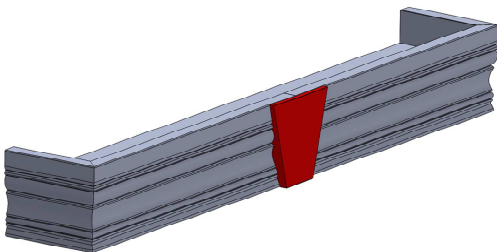
Hardware Box
Part
Wrench
Nylon Guide
$\frac{3}{4}$ " screws for Nylon Guide
Support L Bracket (based on the length of header)
$2 \frac{1}{2}$ " screws for support L bracket
$\frac{3}{4}$ " screws for support L bracket

Keystone for Fascia of the Track Shutter

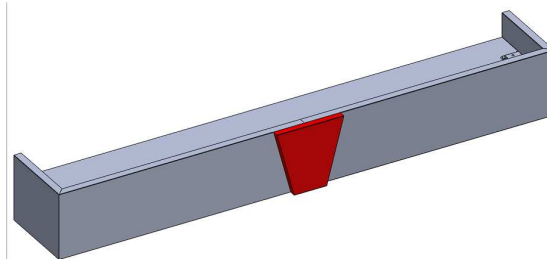
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

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

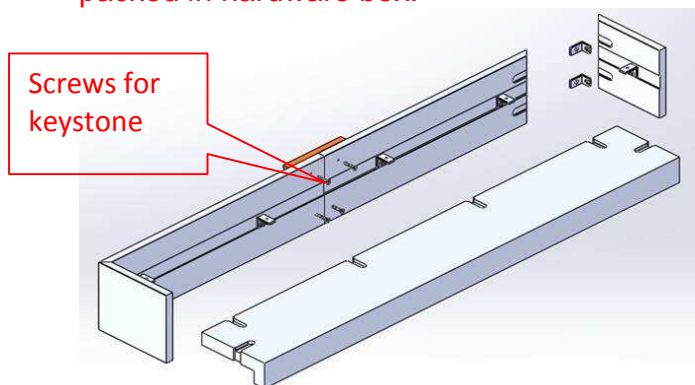
For Deco Fascia:



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.



2016 Track Shutters—Bypass

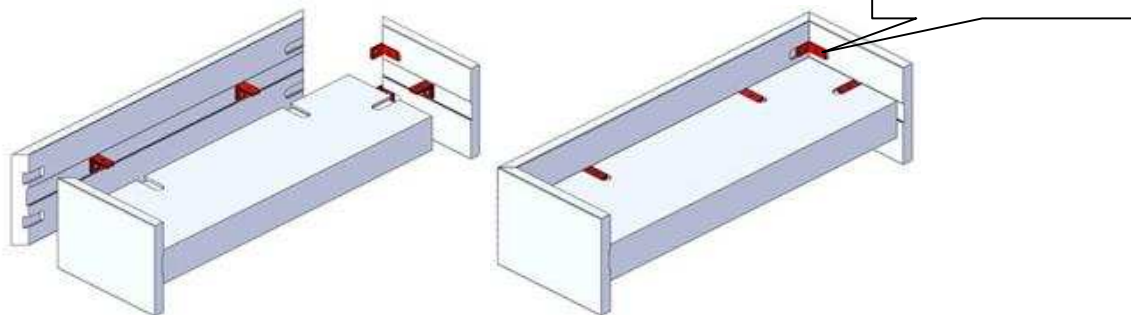
Normandy Shutters

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

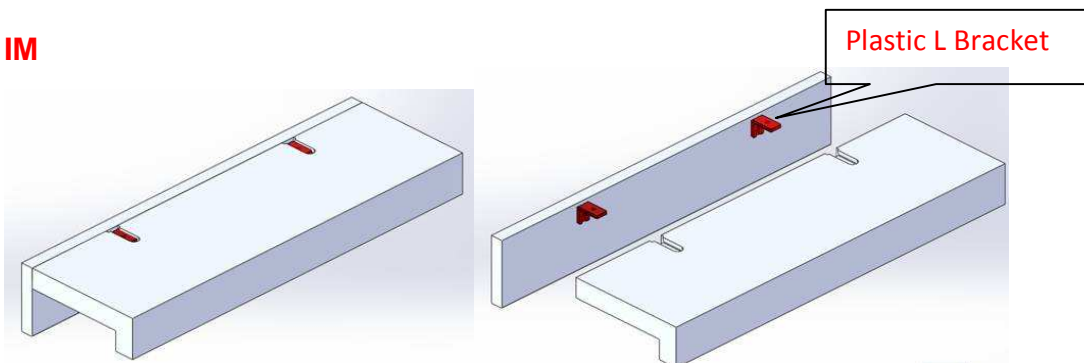


L Bracket will be used to connect the header, fascia and fascia returns for Bypass shutter. This applies for Inside Mount, Semi-Inside Mount & Outside Mount.

OM & Semi-IM



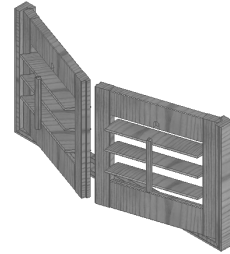
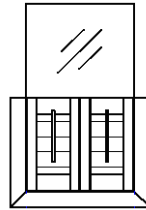
IM



Special Options

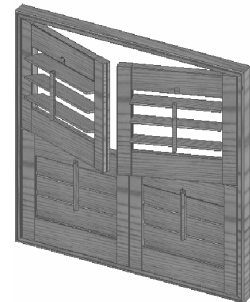
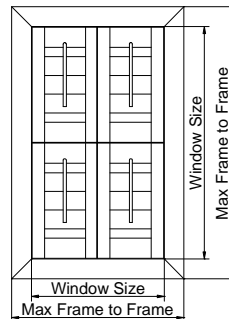
Café Shutters*

- 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.

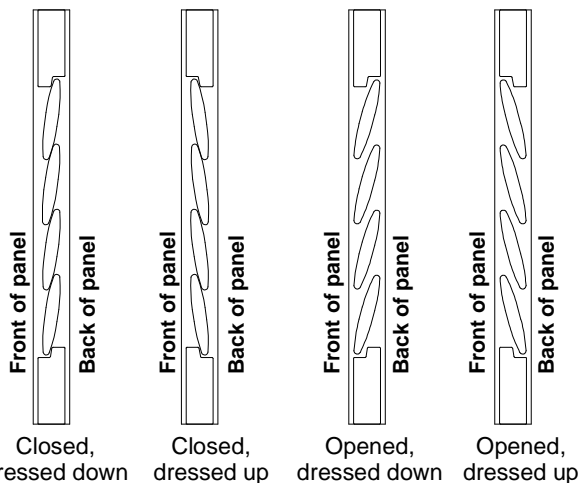
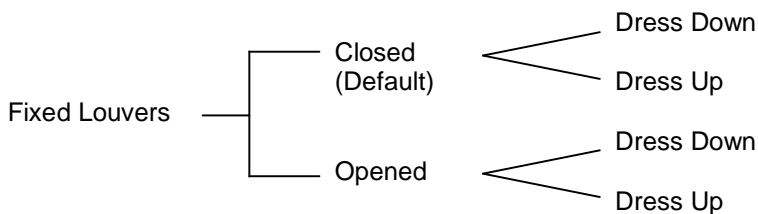


Double-Hung Shutters*

- 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".



Fixed Louvers



* Surcharge applies. Please see Options and Surcharges page for details.

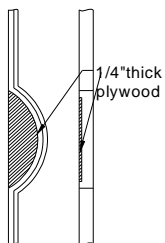
Special Options (continued)

French Door Cut-out Collection*

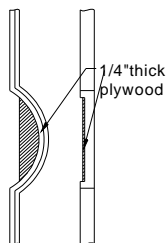
- Flush and offset cutout options are available in both curved and square French door cutout.
 ◇ Offset cutout is good option for French Door with molding around the glass.
- All French door cutouts are only available in L frame except Type E and F. The batten is placed behind the Type E/F panel to block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

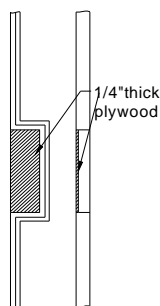
- For measurement details please refer to Form section.
- French Door cutouts with Arch/Quarter Arch at the top are also available except Type E and F



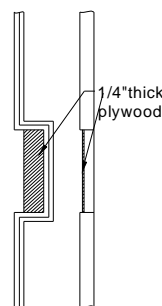
Type A



Type B



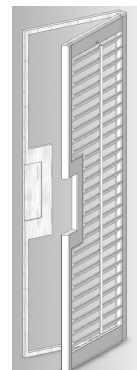
Type C



Type D



Type E



Type F

* Surcharge applies. Please see Options and Surcharges page for details.



Special Options (continued)

Custom Colors *

Available in Normandy® shutters.

Option (Color Code)	Sample Size	<u>Confirmation Process</u>
Custom Solid (C01)	At least 4" x 4" on a clean, flat surface such as wood or cardboard	All orders require customer's confirmation via actual swatch in the mail before production. Additional shipping and handling fee applies.
Custom Stain (C02)	At least 4" x 4" on a clean, flat surface such as wood or cardboard	All orders require customer's confirmation via digital photo OR actual swatch in the mail before production. Additional shipping and handling fee applies.

Note:

- 1) All custom colors will only be finished with the standard gloss used on all Norman products.
- 2) Please note that we will only be able to match the tone instead of the texture or finish of the sample you submit.
- 3) Only one dispute is allowed during the color confirmation process.
- 4) Customer may waive confirmation to shorten production lead time. Norman® will not be responsible for any color variation afterwards.

Disclaimer:

Benjamin Moore, Benjamin Moore Classic Colors, Sherwin Williams ColorSnap and Sherwin Williams Designer Expressions are registered trademarks or trademarks of their respective owners. All other trademarks mentioned herein are the property of Norman International, Inc. and/or its affiliates in the U.S. and certain other countries. Reference herein to the commercial products or service of others by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement.

* Surcharge applies. Please see Options and Surcharges page for details.

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.
- Available in January 2017.

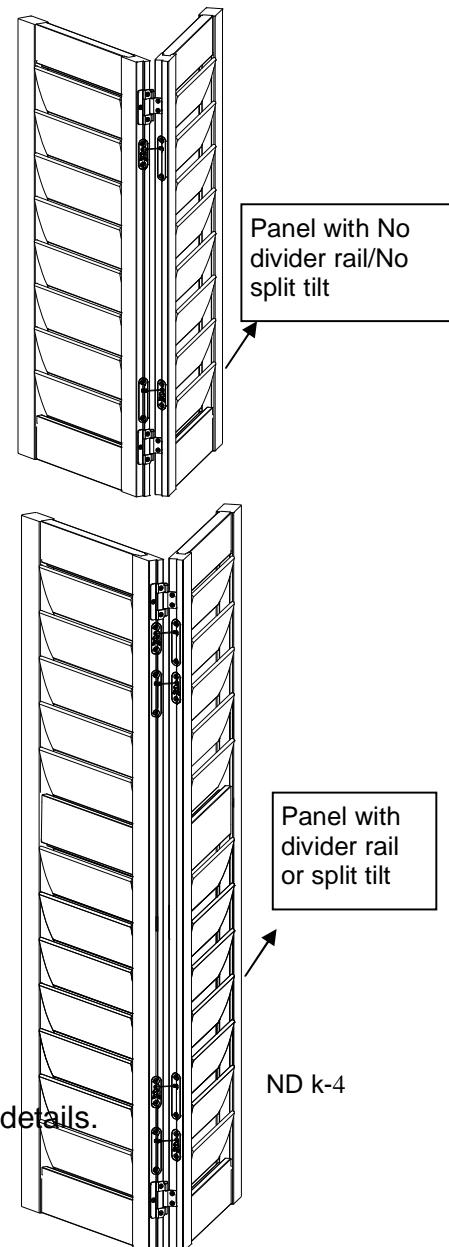
When there is only one louver section (no divider rail/no split tilt)

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

* Surcharge applies. Please see Options and Surcharges page for details.



3.5"	2.75"~6.5"	3
4.5"	2.75"~6.5"	3

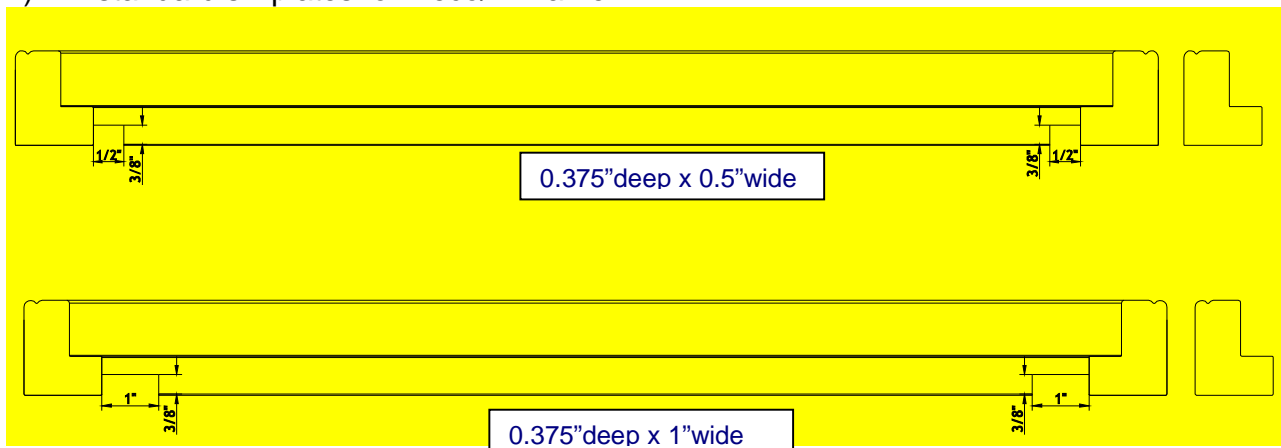
Standard frame cutouts: R cutout, S cutout, L cutout, C cutout. The sizes can vary.

- 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:

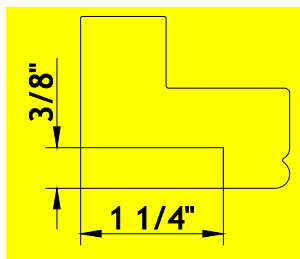
- 1) All types of the L/Deco/Z frames;
- 2) All standard sill plates for Deco/Z Frame.



- 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;

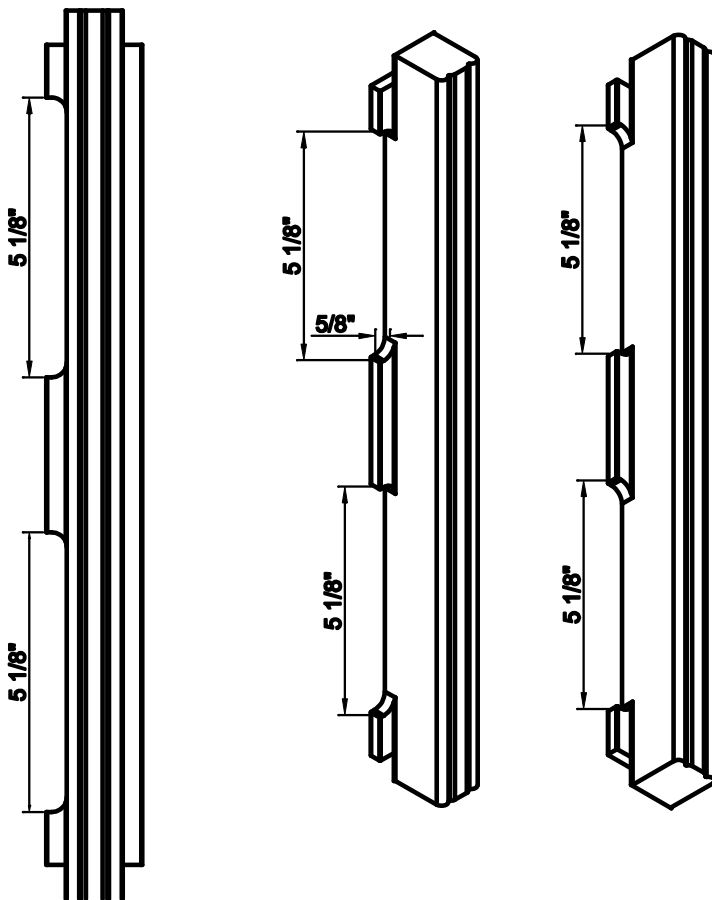
* Surcharge applies. Please see Options and Surcharges page for details.

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

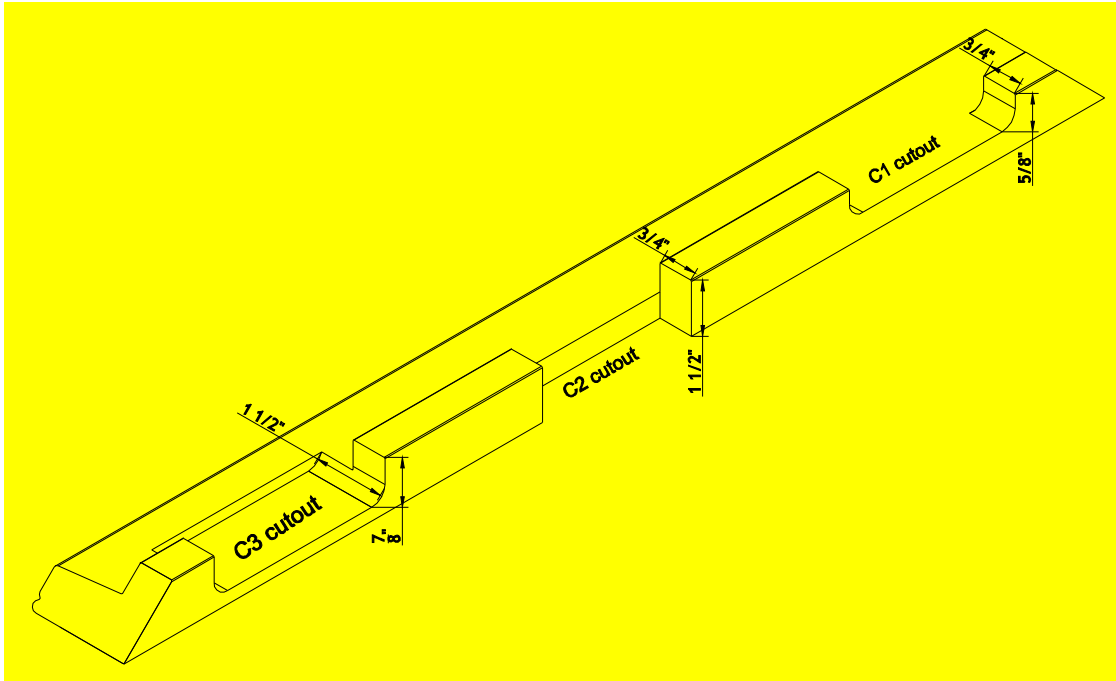
Available frame type for C3:

- 1) All types Z-frames except Tilt Out Z
- 2) All standard sill plates for Z Frame

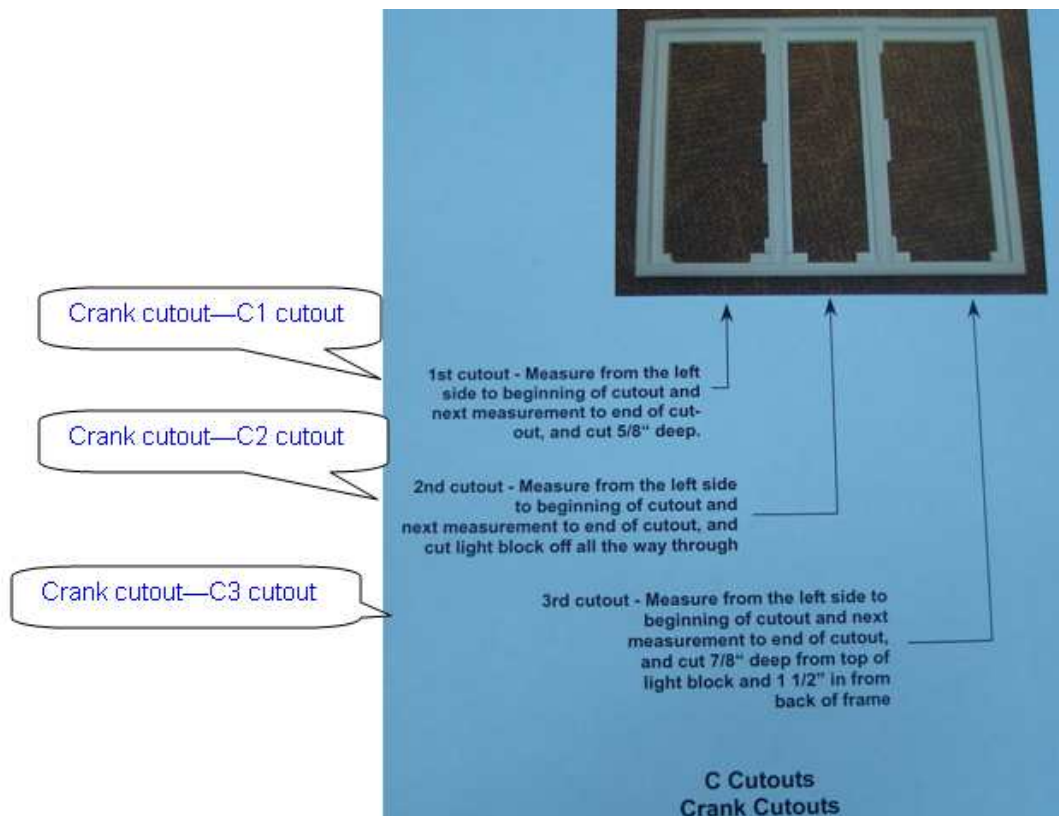
* Surcharge applies. Please see Options and Surcharges page for details.

Normandy® Shutters

- 3) All type of L Frame except for all Vintage L Frames with different height or Beaded L Frame with 1/4" light block.



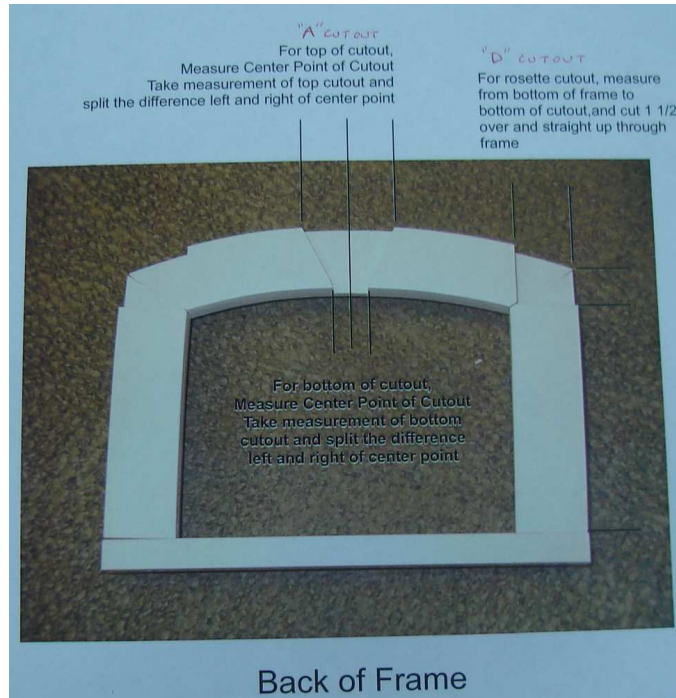
For C1 & C2 cutout, the cutout depth of light block is 1/4" for L Frame with 1/4" Light block.



* Surcharge applies. Please see Options and Surcharges page for details.

Normandy® Shutters

- 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”:



* Surcharge applies. Please see Options and Surcharges page for details.

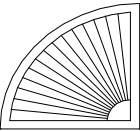
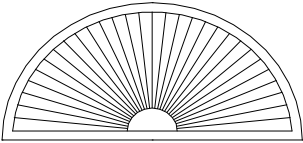
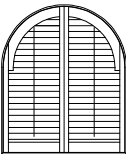
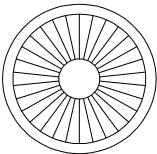
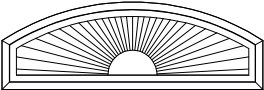
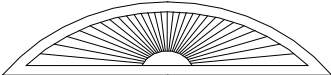
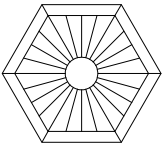
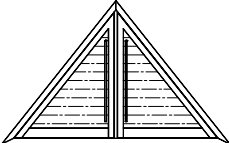
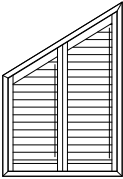

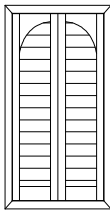
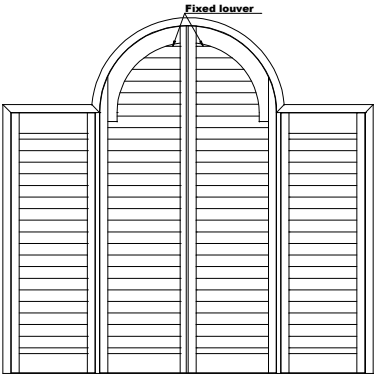
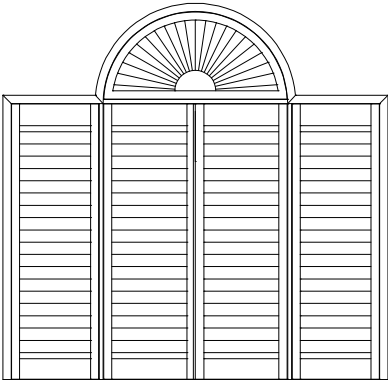
Specialties



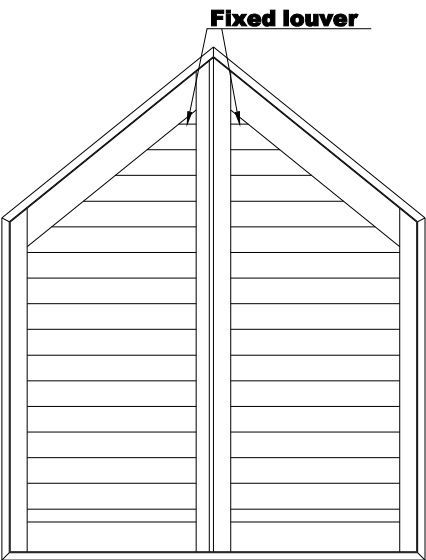
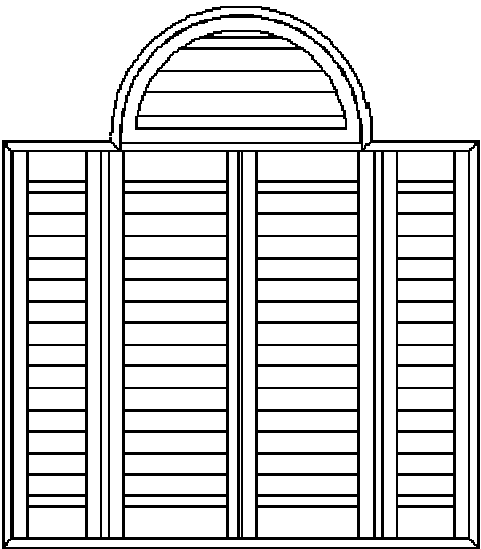
Specialty Shutters*

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.

- * All frames for specialty shutters will be made as solid frames (not with an insert). However, if there is a regular shutter below a specialty shutter and the frames for both shutters are separated by a divider strip, then the top frame will be made as a solid frame but the bottom frames will be made as regular frames with inserts. If the top frames and the side frames are not separated by a divider strip, both side frames and the bottom frames will be made as solid frames.

Arch Windows	Special Shapes
<div>  <p>Quarter Round Sunburst</p> </div> <div>  <p>Half Round Sunburst</p> </div>	<div>  <p>Louvered Arch w/ Center Tilt Rod</p> </div> <div>  <p>Circle Sunburst</p> </div>
<div>  <p>Elongated Eyebrow Sunburst</p> </div> <div>  <p>Eyebrow Sunburst</p> </div>	<div>  <p>Hexagon Sunburst</p> </div> <div>  <p>Triangle</p> </div>
Angle Top	Louver Arch in a Rectangle
<div>  <p>Angle Top</p> </div> <div>  <p>*Top louver of angle top might be fixed as shown above</p> </div>	<div>  <p>Louver Arch in a Rectangle</p> </div>
Arch Top Picture Window with horizontal louvers	Arch Top Picture Window with Sunburst
	

* Surcharge applies. Please see Options and Surcharges page for details.

Peak	Standard unit with horizontal arch center
<p>Fixed louver</p> 	

* Surcharge applies. Please see Options and Surcharges page for details.

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 L Frame/ Vintage L Frame	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
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

Appendix

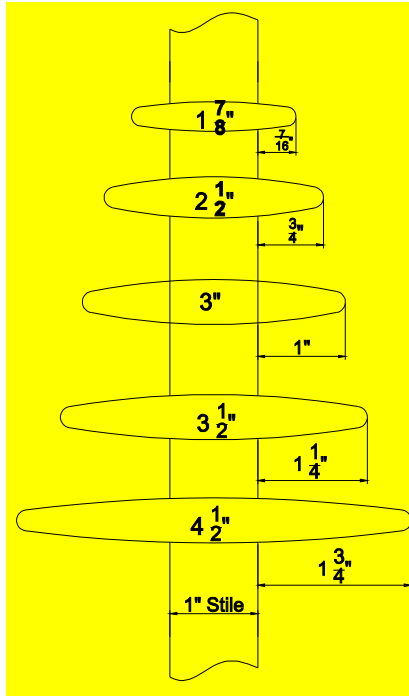
Color Coordination Chart

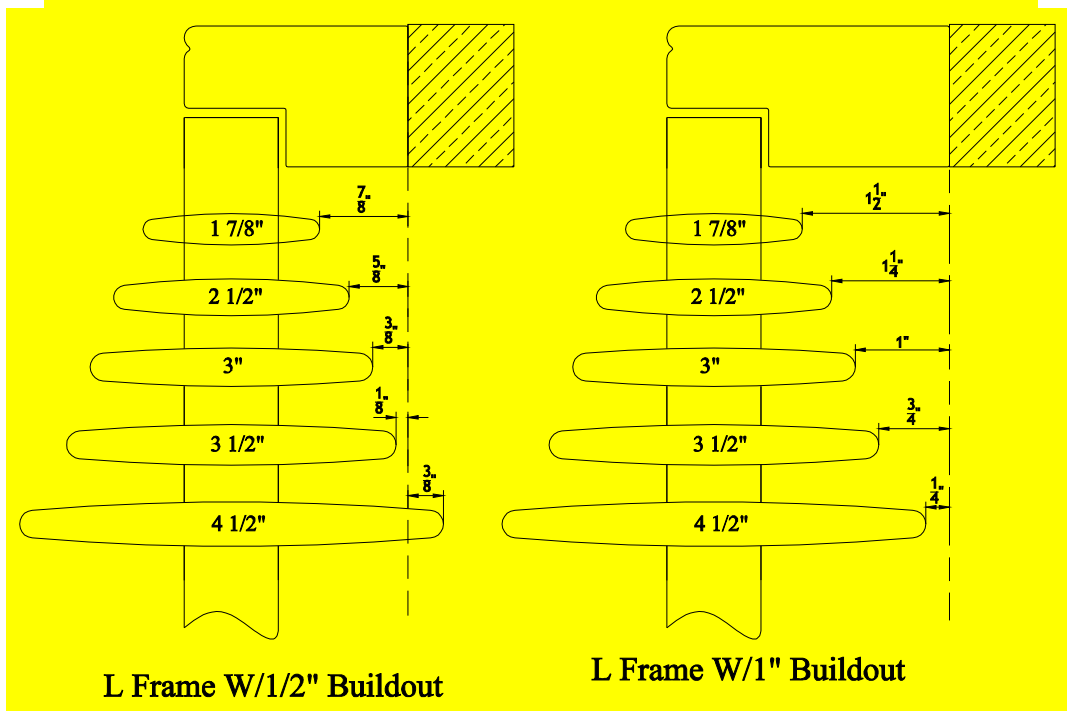
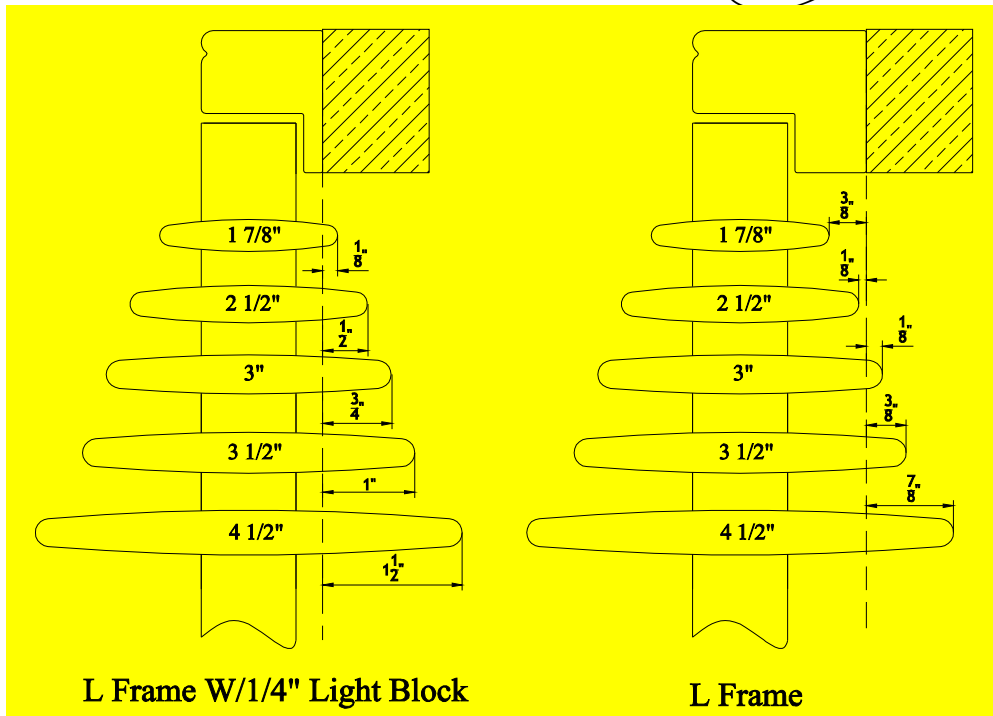
	Color ID	Color Name	New Hinge color (Default)	New T post connector color	Top Track color (Default)
Paint (27 colors)	001	Pure White	Pure White	Pure White	White
	002	Extra White	Silk White	Silk White	White
	003	Silk White	Silk White	Silk White	White
	004	Bright White	Silk White	Silk White	White
	006	Pearl	Pearl	Pearl	White
	007	Ivory Lace	Bisque	Bisque	White
	009	Creamy	Pearl	Pearl	White
	012	Crisp Linen	Crisp Linen	Bisque	White
	016	Butter	Crisp Linen	Bisque	White
	019	String	String	Bisque	White
	030	Moondust	Sea Mist	Nickel Plated	Anodised Silver
	032	Sea Mist	Sea Mist	Nickel Plated	Anodised Silver
	042	Hall Gray	Sea Mist	Nickel Plated	Anodised Silver
	046	Ice	Silk White	Silk White	White
	048	Chai	Nickel Plated	Nickel Plated	Anodised Silver
	049	Stone Gray	Stone Gray	Nickel Plated	Anodised Silver
	051	Brown Gray	Brown Gray	Nickel Plated	Anodised Silver
	053	Clay	Nickel Plated	Nickel Plated	Anodised Silver
	063	Decorators White	Silk White	Silk White	White
	066	Winchester White 2010	Pearl	Pearl	White
	073	Sky Gray	Silk White	Silk White	Anodised Silver
	074	Element Gray	Sea Mist	Nickel Plated	Anodised Silver
	075	Storm Gray	Sea Mist	Nickel Plated	Anodised Silver
	077	Dawn	Silk White	Silk White	White
	078	Cloud Blue	Silk White	Silk White	White
	080	Taupe Gray	Taupe Gray	Nickel Plated	Anodised Silver
	836	Classic Black	Black	Black	Anodised Silver

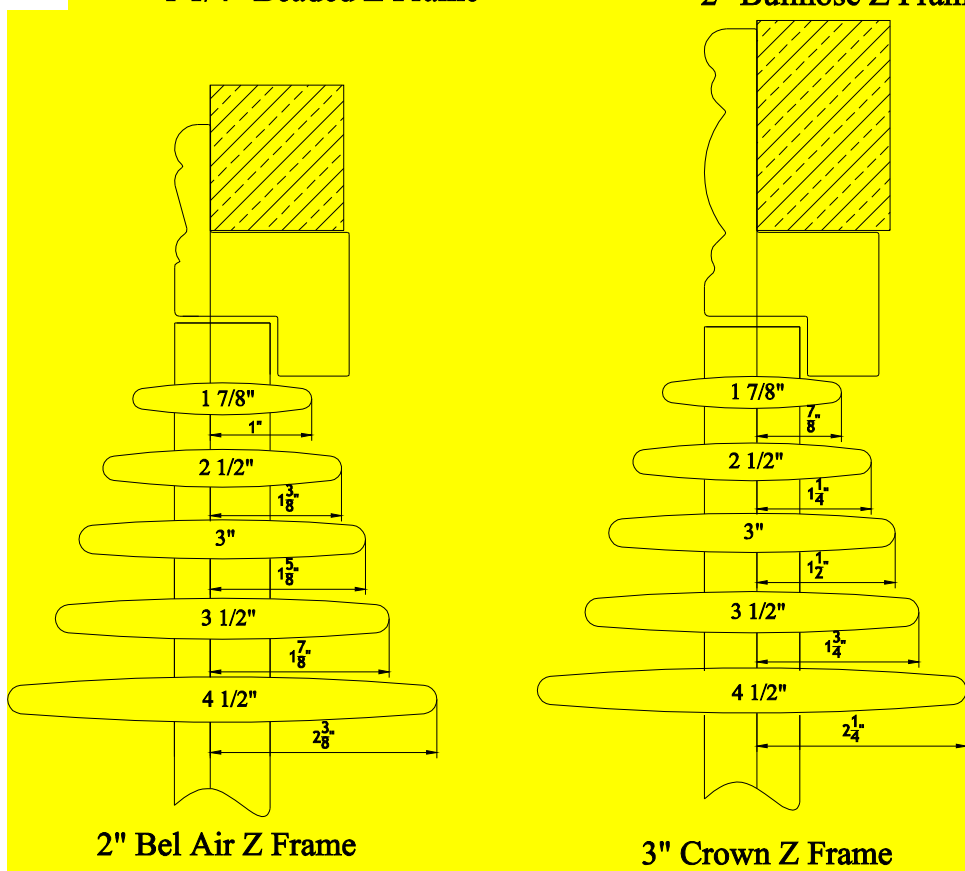
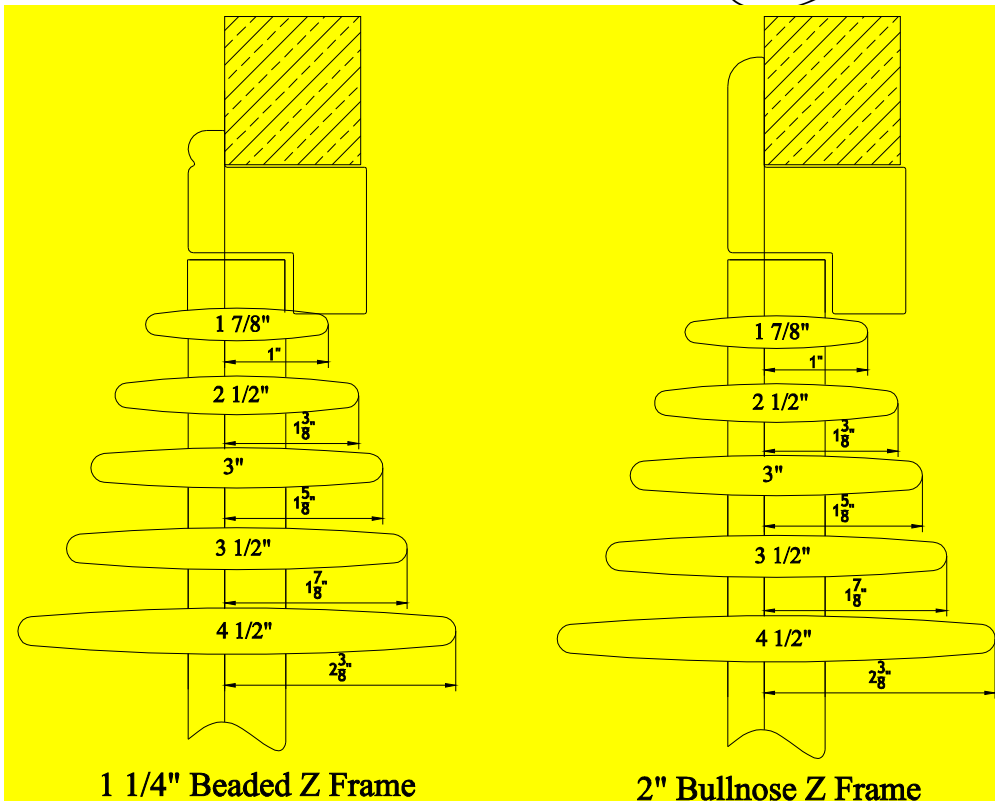
Normandy® Shutters

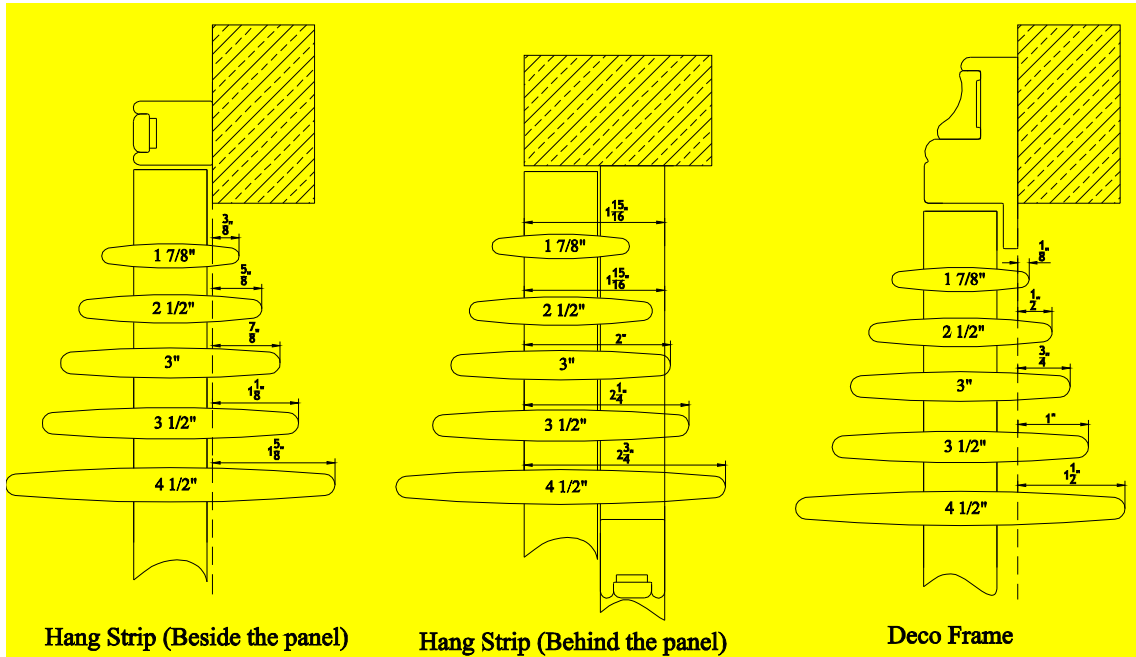
	Color ID	Color Name	Hinge color (Default)	Topost Connector color (Default)	Top Track color (Default)
Stain (24 colors)	108	Rustic Gray	Nickel Plated	Nickel Plated	Anodised Silver
	109	Weathered Teak	Nickel Plated	Nickel Plated	Anodised Silver
	110	Limed White	Silk White	Silk White	White
	111	Pebble	Silk White	Silk White	White
	200	Natural	Antique Brass	Nickel Plated	Coffee
	202	Golden Oak	Antique Brass	Nickel Plated	Coffee
	205	Goldenrod	Antique Brass	Nickel Plated	Coffee
	212	Dark Teak	Antique Brass	Nickel Plated	Coffee
	215	Cordovan	Antique Brass	Nickel Plated	Coffee
	220	New Ebony	Antique Brass	Nickel Plated	Coffee
	221	Black Walnut	Antique Brass	Nickel Plated	Coffee
	227	Red Oak	Antique Brass	Nickel Plated	Coffee
	229	Rich Walnut	Antique Brass	Nickel Plated	Coffee
	230	Old Teak	Antique Brass	Nickel Plated	Coffee
	237	Wenge	Antique Brass	Nickel Plated	Coffee
	242	Auburn	Antique Brass	Nickel Plated	Coffee
	246	Matte Black	Black	Black	Anodised Silver
	248	Pretzel	Antique Brass	Nickel Plated	Coffee
	250	Sumatra	Antique Brass	Nickel Plated	Coffee
	252	Toffee	Antique Brass	Nickel Plated	Coffee
	254	Driftwood	Nickel Plated	Nickel Plated	Anodised Silver
	255	Silver Gray	Nickel Plated	Nickel Plated	Anodised Silver
	256	Mist	Silk White	Silk White	White
	862	French Oak	Antique Brass	Nickel Plated	Coffee

Louver Depth Clearance







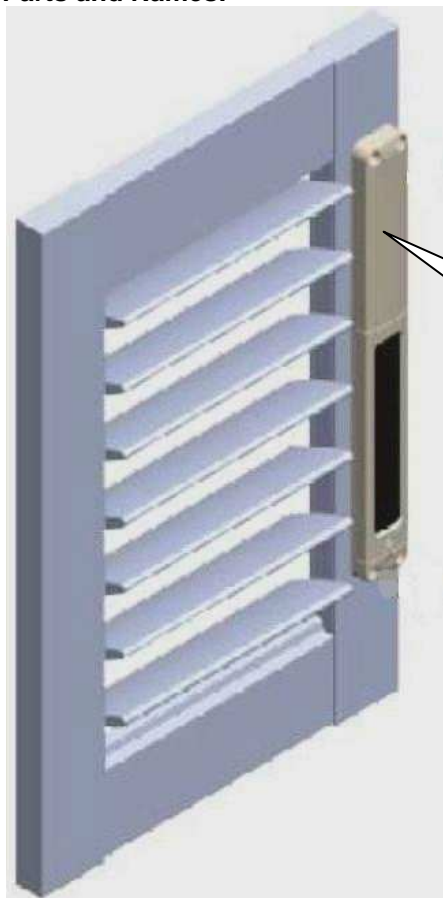


New PerfectTilt RF

The new PerfectTilt RF has many exciting features & benefits.

- iPhone and iPad control with hub (optional)
- Quick response to tilt commands
- 8 pre-programmed louver positions and one custom position with remote.
Over 30 custom louver positions with Dial.
- Louvers can be tilted by hand, remote or app (via hub) without neither the need for flipping switches nor the risk of damage because of incorrect switch settings.
- Two long-lasting rechargeable 18650 Lithium-ion batteries per module unit last up to 1 year on a single charge via USB port
- High efficiency solar panel included for extending battery charge
- Water repellant module units
- Built-in jam protection for child and pet safety

Parts and Names:



PerfectTilt G4
Module



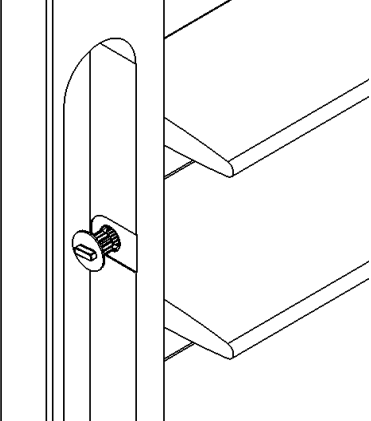


Norman Dial (Remote)

Specifications:

Shutter Type	All types except bi-fold double hung or panel with gap at bottom over 0.1" (no support on bottom)	
Specialty Shutter Shape	All shapes except shapes without a vertical stile in the middle (for example, eyebrow, elongated eyebrow, half-round sunburst without horizontal louvers)	
Tilt System	Invisible Tilt only, the tilting system will not split unless specified	
Stile Width	2.25" stile only	
Louver	2.5", 3", 3.5", 4.5" Elliptical louver	
Panel Size Limit	Min. Panel Height	
	With lined up Motors	With Staggered motors (which is default for 180 degree bifold track shutters; and optional for other types of shutters)
	18"	Louver space not less than 26", so at least 13 louvers for 2.5" louver; 11 louvers for 3" louver; 9 louvers for 3.5" louver; 7 louvers for 4.5" louver.
	Max. Panel Height without divider rail: 78" Min. Panel Width Limit: 8 11/16" Max Width Limit: same as regular non-motorized shutters	

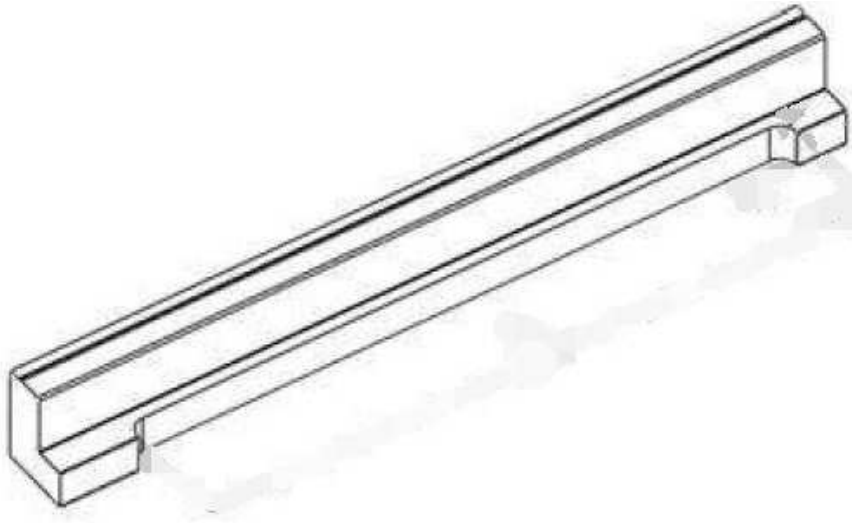
Components:

Items	Drawing
<p>Norman Dial (Remote) and Docking: Radio Frequency; Battery: 2x CR2032</p> <p>Dimensions : 68mm diameter x 34mm</p> <p>Distance of transmission (control): 100 meters without shelter</p> <p>Default color ring's color: black</p> <p>Optional color ring's colors: White, Gray, Brone, Red</p>	
<p>Module</p> <p>Model : PerfectTilt G4</p> <p>Module color is White for shutter colors Pure White, Silk White & Pearl;</p> <p>Module color will be match shutter colors except Pure White, Silk White & Pearl.</p> <p>Dimensions : 332.5 x 38.5 x 36.8 mm</p> <p>One for each louver section,</p> <p>2X long-lasting rechargeable 18650 lithium-ion batteries built-in, charge PerfectTilt G4 Module by Micro USB interface with 5V.1A power bank or adaptor.</p>	
<p>Micro USB cable (Optional)</p> <p>Color: White</p> <p>For charging PerfectTilt G4 Module.</p>	

<p>Slotted Point Driver</p> <p>One for each louver section.</p> <p>Connect the Easy Tilt and the Module; when fit the slotted point driver into the stile, make sure the angle is the same as that of the louvers.</p>	
<p>Norman Hub</p> <p>Color: Black</p> <p>Dimensions: 94mm diameter x 27.8mm</p> <p>Micro USB cable</p> <p>Color: Black</p> <p>Connect the Smart phone and the Norman hub, all shutters assigning to the remote can be controlled by APP via Norman hub.</p> <p>Note: It will be available in March 2019.</p>	
<p>Repeater</p> <p>Color: black</p> <p>Plug Repeater into the enclosed Power Adapter and then plug into home power supply.</p> <p>It is recommended to deploy each room with a repeater;</p> <p>If the distance is more than 10 meters, add one more repeater.</p>	

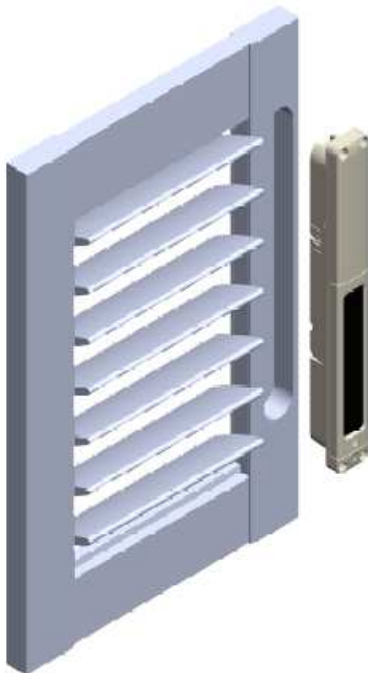
✧ Frame Cut-Out

For single panel or configuration similar to single panel with frame, the module location will conflict with the light block of the frame, so there will be cut-out on the light block of the frame to stop the conflict, the length for the cut-out would be 335mm



Clearance:

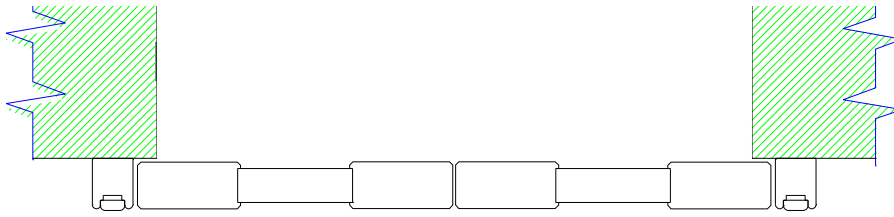
The module will protrude 15.5mm (5/8") from the back of the stile, please allow 17mm (11/16") clearance for the module.



E.g.: Below is the situation **not available** for the module unless enough build-out is added to the frame.

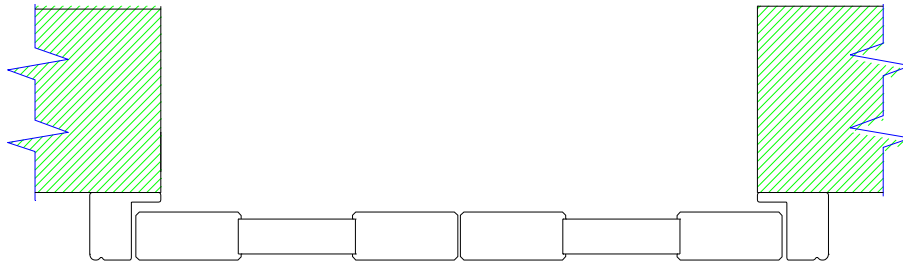
Hang Strip OM: beside the panels

When module is on the left/right most stiles, the protrusion part will conflict with the wall.

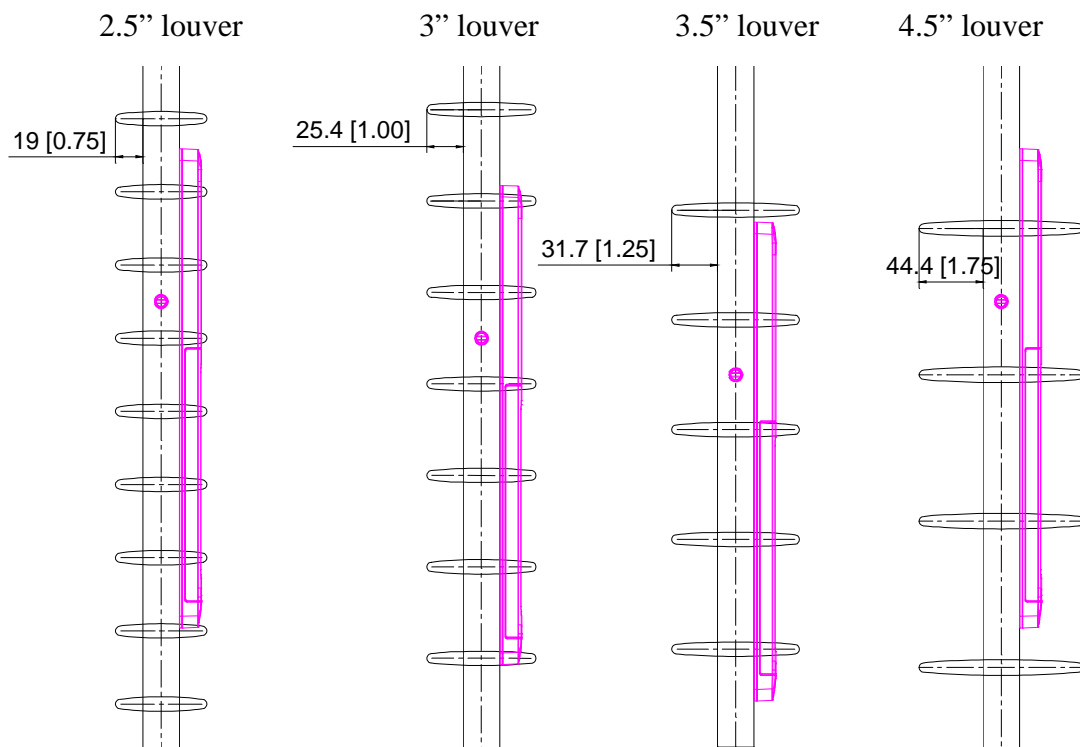


L Frame with light block thickness less than 3/4" OM:

When module is on the left/right most stiles, the protrusion part will conflict with the wall.

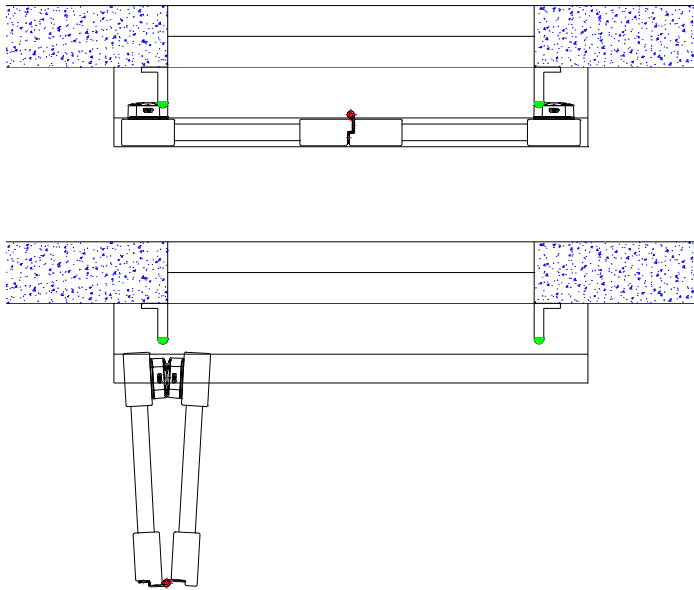


Side view for module in panel with different louver types



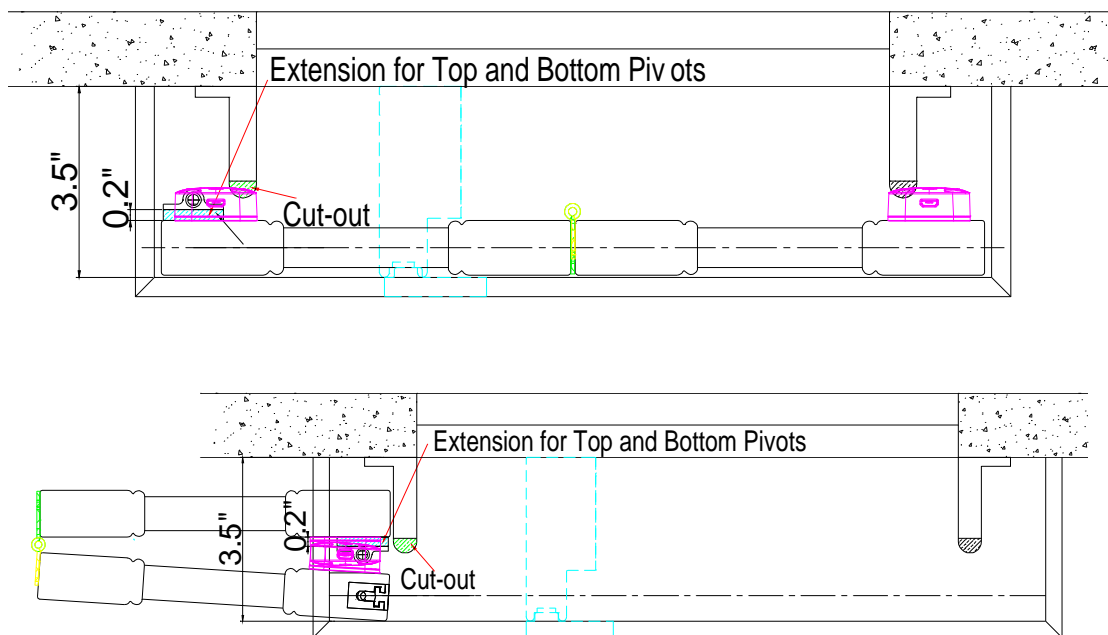
For Motorized 90° Bifold Track Shutter:

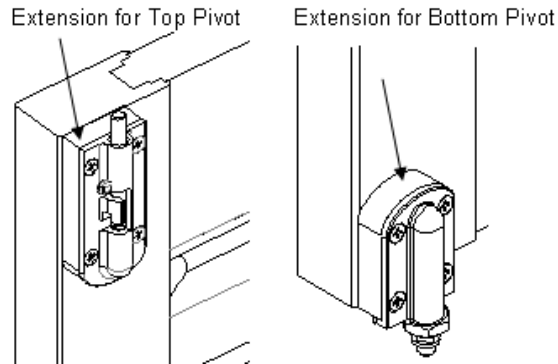
- 1) Both 3" and 3.5" Header are available;
- 2) The L Shape Light Block will be cut out 1/4" to avoid the conflict with the module;



For Motorized 180° Bifold Track Shutter:

- 1) The default header width is 3.5"; The min. Header width is 3.25"; so for 3" header, 1/4" extension is required;
- 2) The L Shape Light Block will be cut out to avoid the conflict with the module; 0.2" extension is necessary for installation of the top and bottom pivots;

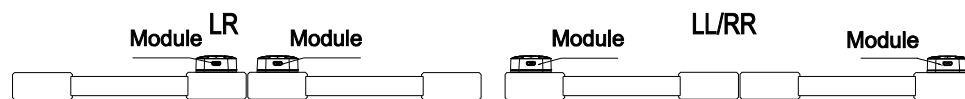




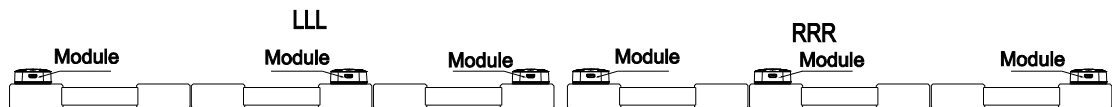
Module Location: (Easy Tilt will be on the same side as the module)

For regular shutter and bi-fold Application (Except for bifold track):

- 1) Single Panel: Module will be on the un-hinge stile
- 2) 2 Panels: LL, LR, RR



- 3) 3 Panels: LLL/RRR

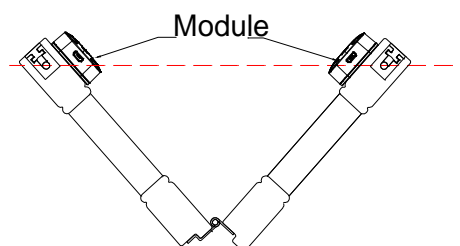


- 4) 4 Panels: LLRR/LLLL/RRRR

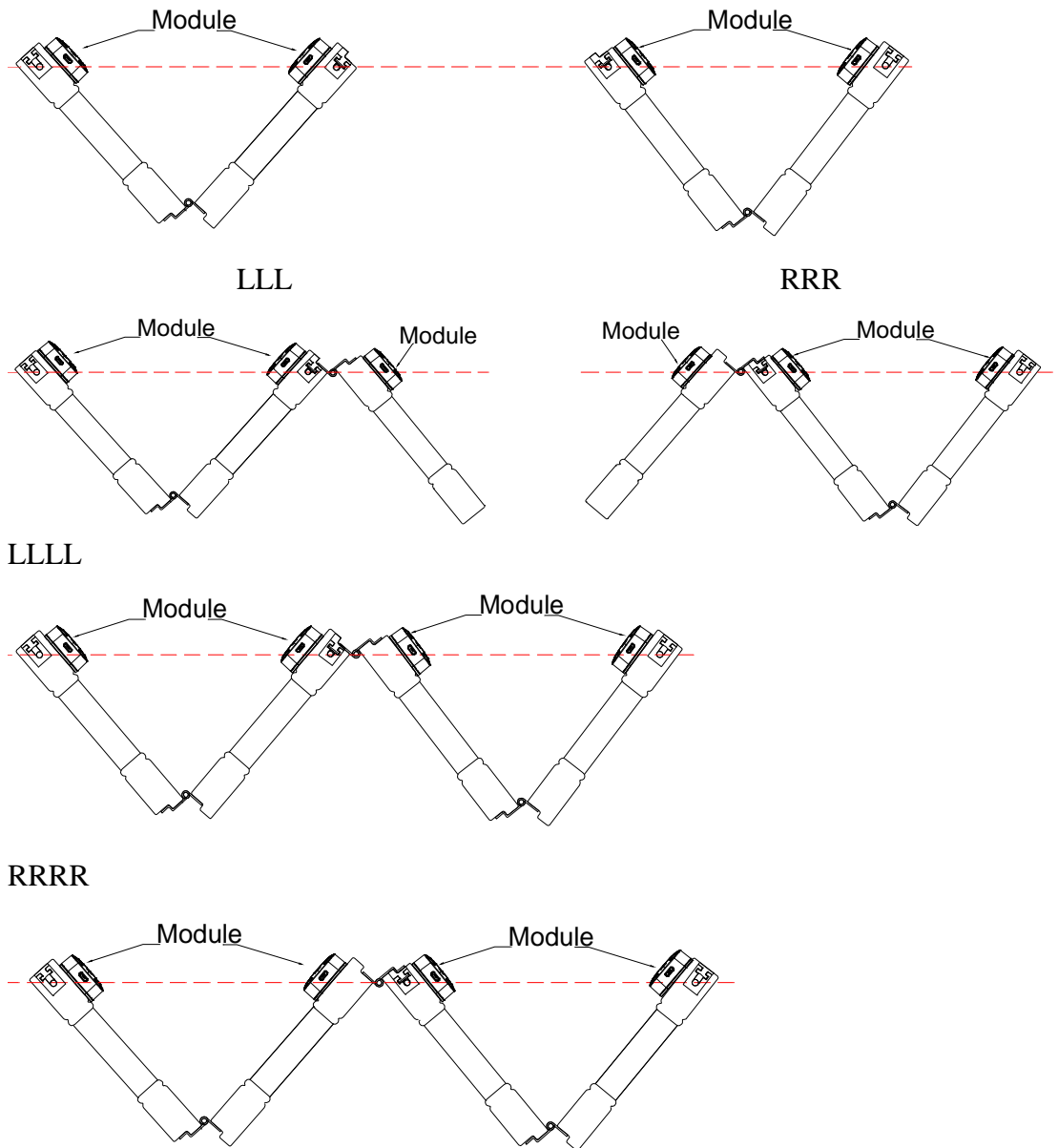


For 90° Bifold Track:

LL/RR



LLRR



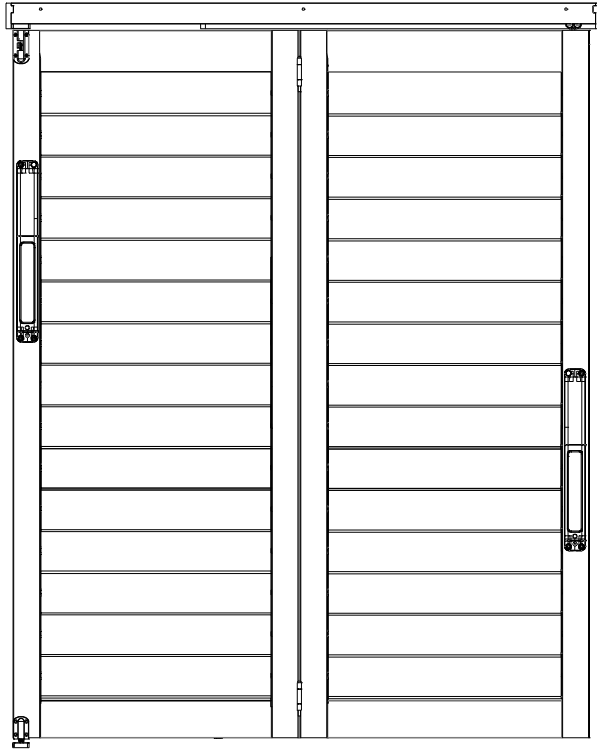
Special Note on Bi-fold or Multi-fold Configurations

Please be aware that in bi-fold or multi-fold configurations of RF, the motorization modules will touch each other when the panels are folded together, so the panels can't be able to stack together as tightly as that of the non-motorized shutters.

Additionally, before folding the bi-fold or multi-fold panels together, please ensure that the louvers are returned to a completely closed position (either up or down) to prevent louver damage when folding panels.

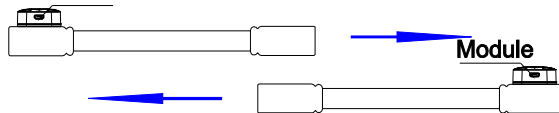
For better fold, it is optional to have the modules staggered for bi-fold/multi-fold shutters.

However, for 180° bifold track shutter, the modules can only be staggered.

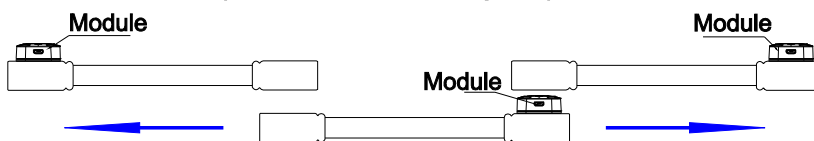


For By-Pass Application

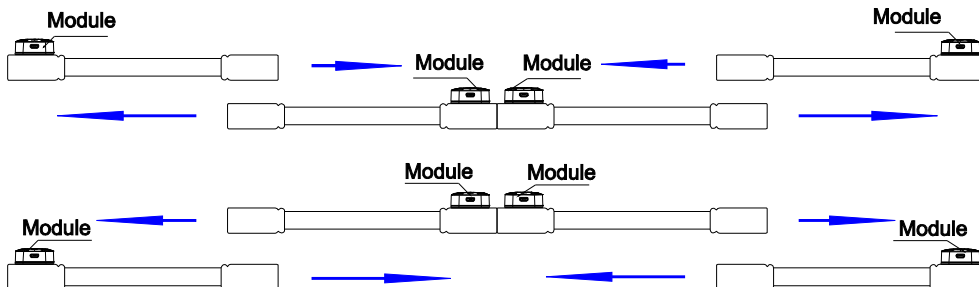
2 panels side open
Module



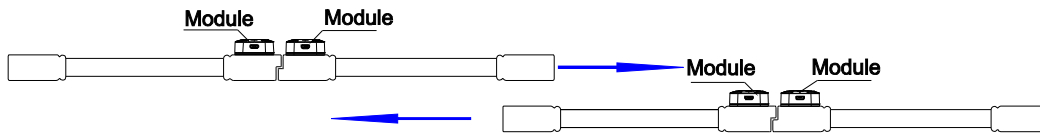
3 panels center open (not available for Open Bypass)



4 panels center open
Module



4 panels side open

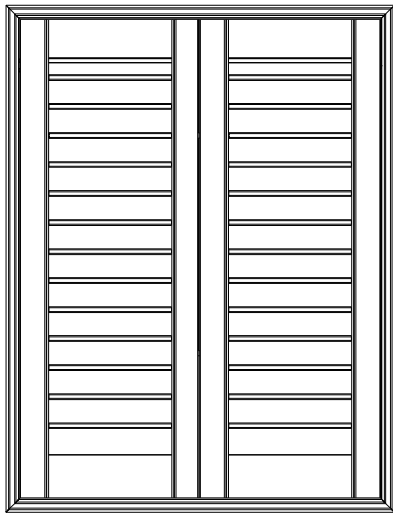


For Special Shape Application:

Module location will be the same as the Invisible Tilt location.

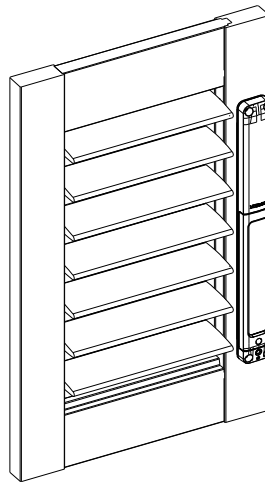
SHUTTER LOOK FROM FRONT AND BACK

The front side of the shutter



- * No Receiver / Louver Cap
- * Invisible tilt only

The back side of the shutter



- *The light block would be cut out along the module.