

NORMAN®

SHUTTERS. BLINDS. SHADES.



Fabricator of Automated & Custom Window Coverings

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Woodlore® Plus Shutters

Program Reference Guide

2019

WOODLORE® PLUS

2019 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,l,n	Add 6 new hinge colors Change color coordination chart

WOODLORE® PLUS

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Effective 2019

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WOODLORE® PLUS

Features and Benefits

- Built around the concept of modern convenience, **Woodlore® plus** combines wood composite frames with durable ABS louvers. Wood composite materials used are harvested from well-managed forests and finished with a polypropylene coating that prevents moisture absorption and allows for easy stain removal. ABS co-polymer louvers are dimensionally stable, which **resist cupping, warping and twisting**.
- 36" wide single panel for enhanced view.
- **Reinforced engineered stiles** – Stile core durability reinforced with multiple layers of wood bonded together. The result is a robust support system for shutter panels.
- **UV inhibitor** protects shutters and home décor from UV rays, prevents color fading and sun damage.
- Multiple stile options are available in various sizes to accommodate different window configurations. **Astragal** or **Rabbet stiles** provide a natural light block between panels.
- A wide range of **frames with inserts**, which keep installation screws out of sight for a clean and decorative look, match any style and preference.
- Personalize shutters with **special options**. Choose from fixed louvers, hidden or offset tilt rods, café styles, bay and corner window shutters, track systems and many more.
- Quick and easy on-site assembly and installation with the **pre-installed magnets and hinges, pre-mitered frames** and **slotted keyholes**.

For Waterproof Option:

- The special option is perfect for wet or moisture prone areas in the home.
- Featuring enhanced resistance to moisture, shrinking and warping, the shutter frame, stile and louvers are made from durable and waterproof ABS co-polymer
- The unique UV inhibiting finish is designed for a virtually worry-free solution.
- Stainless steel hinges included in the option are guaranteed never to rust or corrode.

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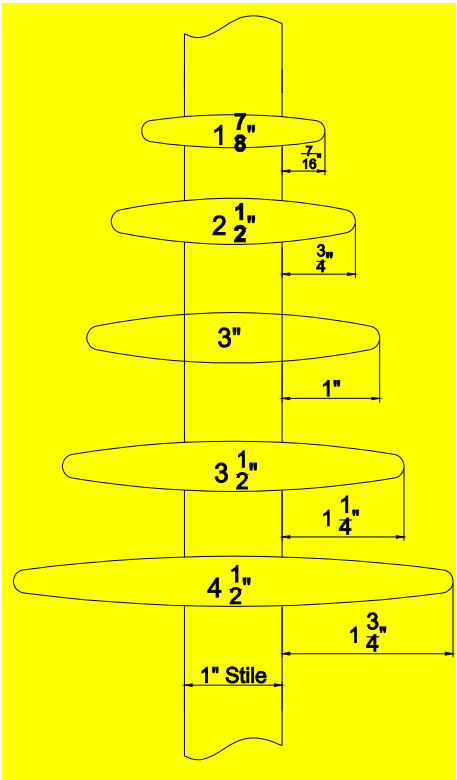
Colors & Louvers

No.	Color ID	Color Name
1	001	Pure White
2	002	Extra White
3	003	Silk White
4	004	Bright White
5	006	Pearl
6	007	Ivory Lace
7	009	Creamy
8	012	Crisp Linen
9	016	Butter
10	019	String
11	030	Moondust
12	032	Sea Mist
13	042	Hall Gray
14	046	Ice
15	048	Chai
16	049	Stone Gray
17	051	Brown Gray
18	053	Clay
19	063	Decorators White
20	066	Winchester White 2010
21	073	Sky Gray
22	074	Element Gray
23	075	Storm Gray
24	077	Dawn
25	078	Cloud Blue
26	080	Taupe Gray
27	836	Classic Black

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

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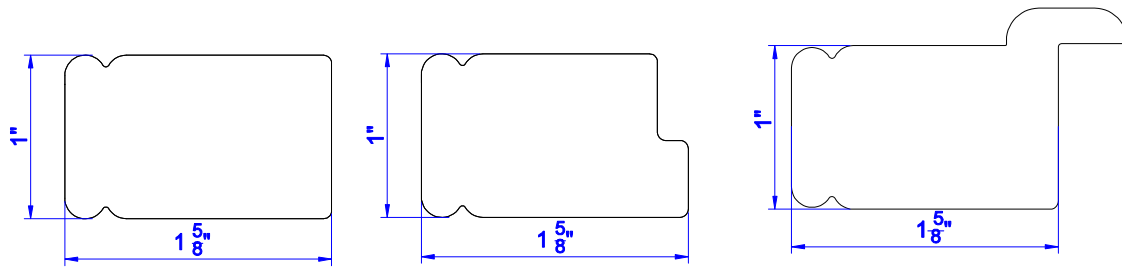
Louvers	
Elliptical	1 $\frac{7}{8}$ "*
	2 $\frac{1}{2}$ "
	3"
	3 $\frac{1}{2}$ "
	4 $\frac{1}{2}$ "



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

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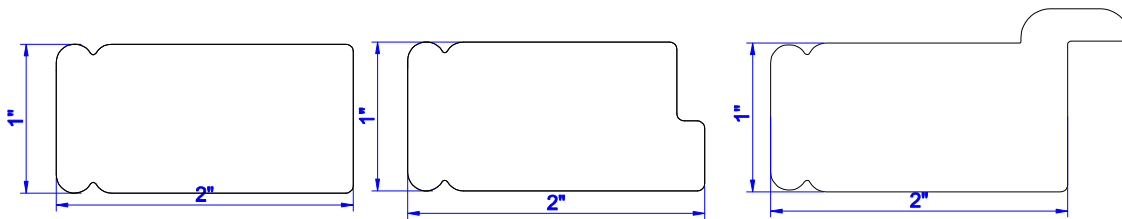
Stiles Options



1 5/8" Butt Stile

1 5/8" Rabbet Stile

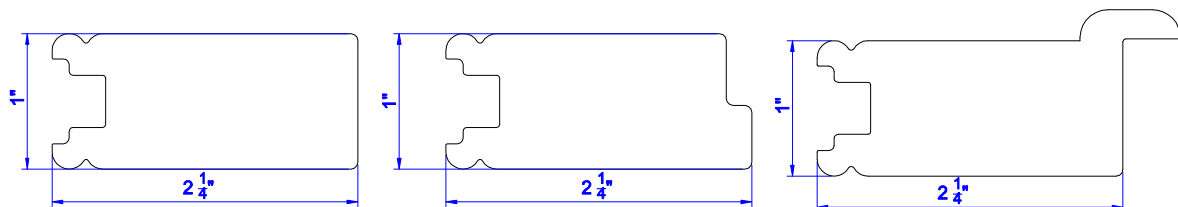
1 5/8" Astragal Stile



2" Butt Stile

2" Rabbet Stile

2" Astragal Stile



2 1/4" Butt Stile

2 1/4" Rabbet Stile

2 1/4" Astragal Stile

Note: 1 5/8" and 2 1/4" stile is not available for Waterproof option.

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Stiles (continued)

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 $\frac{5}{8}$ " (Optional for panel width ≤ 12 ")
 - 2" (default)
- II) Panel width ≥ 9 "
 - Butt stile only
 - 1 $\frac{5}{8}$ " (Optional for panel width ≤ 12 ")
 - 2" (default)



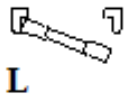
2 panels or more

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

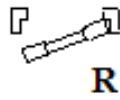
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Panel Configurations

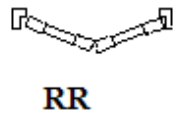
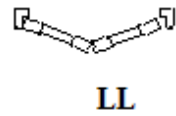
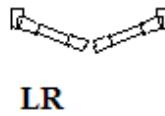
Single Panel



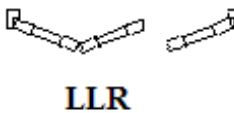
OR



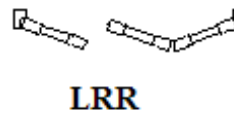
Two Panels



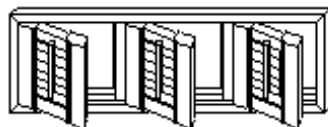
Three Panels



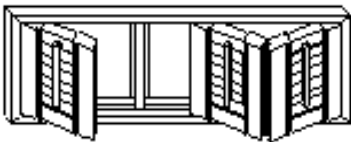
LLR



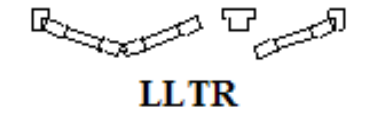
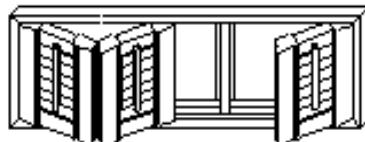
LRR



LTLTL



LTRR

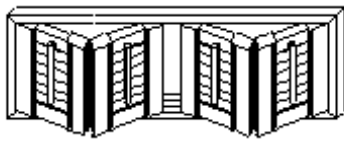


LLTR

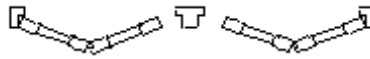
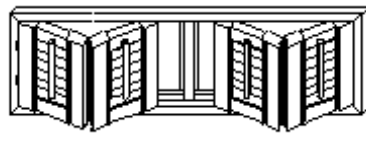
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Panel Configurations (continued)

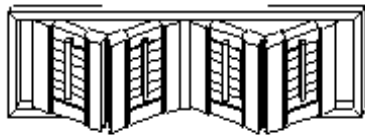
Four Panels



LLRR



LLTRR



RRTL

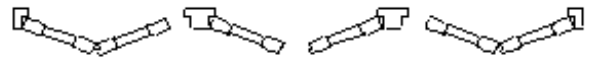


LTLRTR

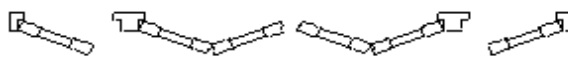
Six Panels



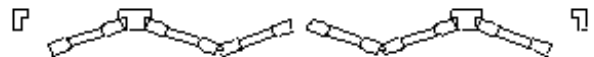
LRTLRTL



LLTLRTRR



LTLLRRTR

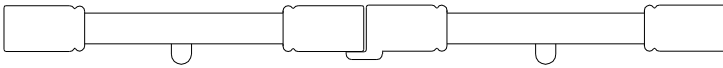


RTLRLRTL

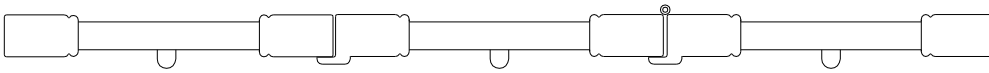
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Panel Configurations – Astragal Stile

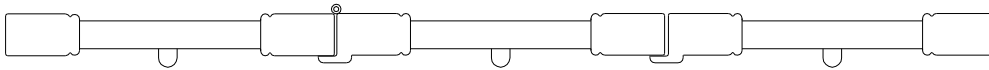
- 2 Panels – LR/LL/RR



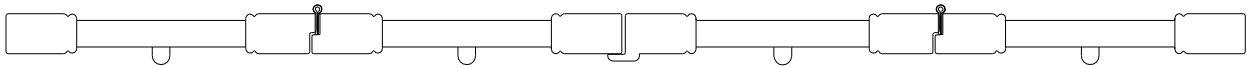
- 3 Panels - LRR



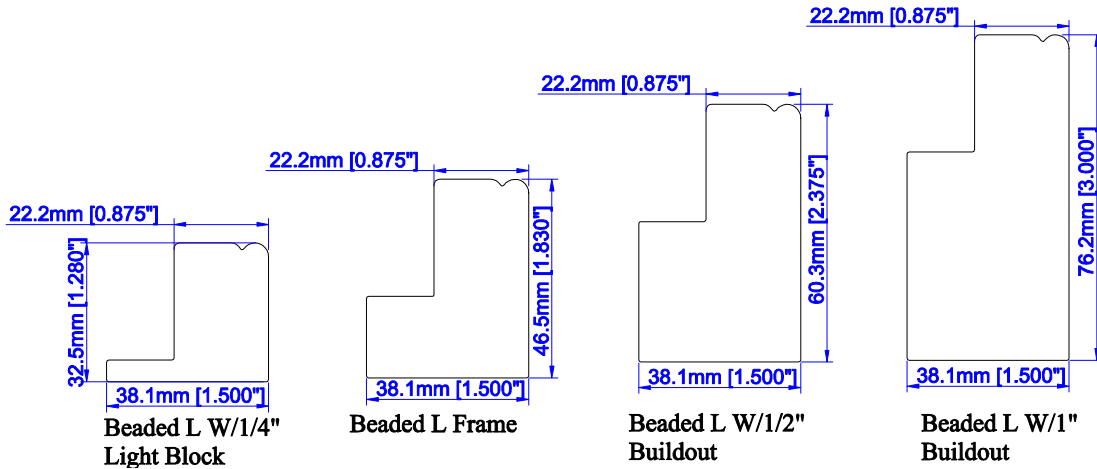
- 3 Panels – LLR



- 4 Panels - LLRR

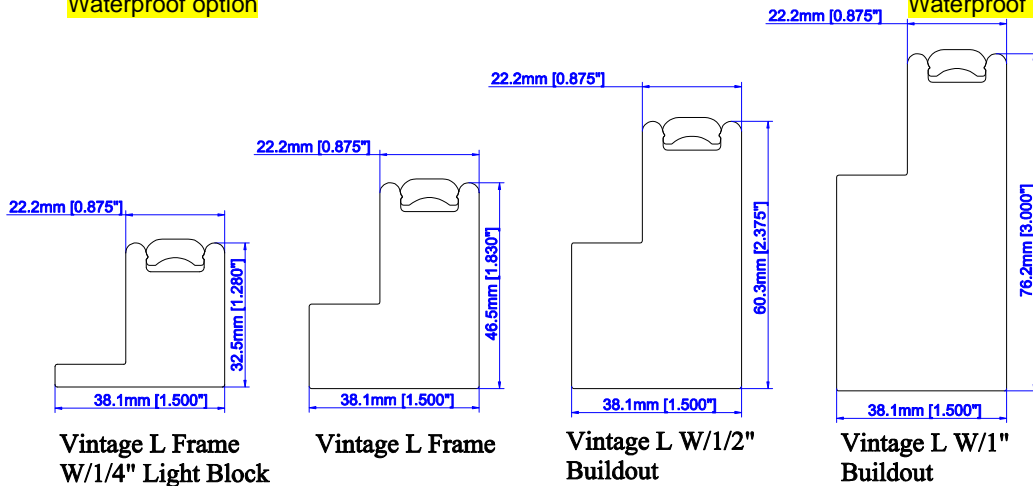


Frame Styles



Not available for
Waterproof option

Not available for
Waterproof option

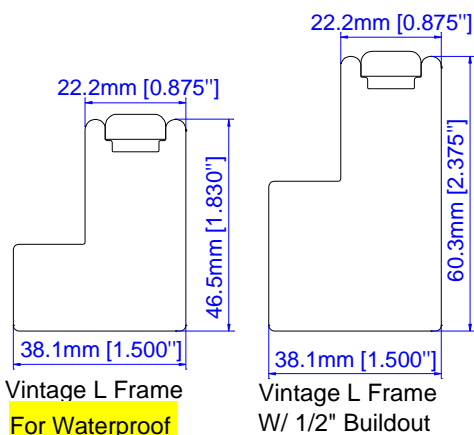


Not available for
Waterproof option

Not available for
Waterproof option

Not available for
Waterproof option

Not available for
Waterproof option



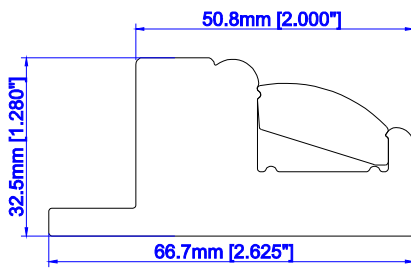
option only

For Waterproof option only

Note: Standard 1" extension for L frame for Waterproof option.

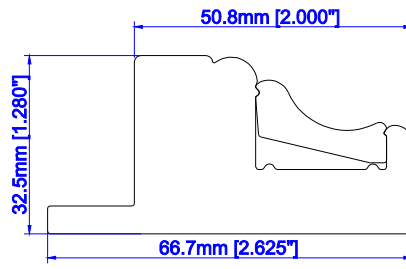
*Surcharge applies. Please see Options and Surcharges page for details.

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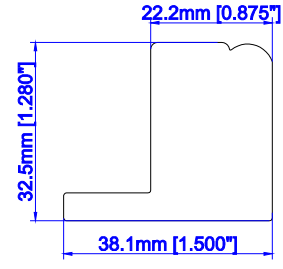
2" Camber Deco Frame

Not available for Waterproof option

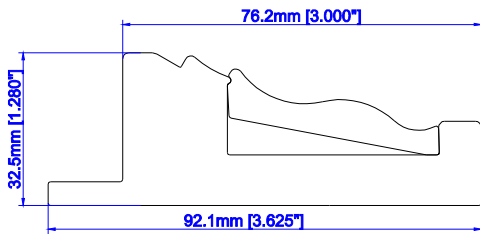


2" Classic Deco Frame

Not available for Waterproof option

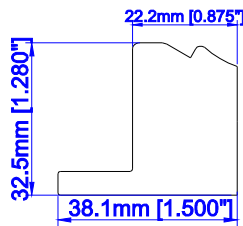


2" Deco Sill Plate



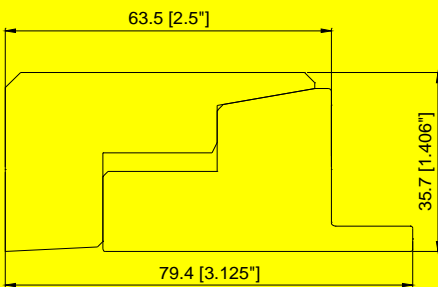
3" Ridge Deco Frame

Not available for Waterproof option



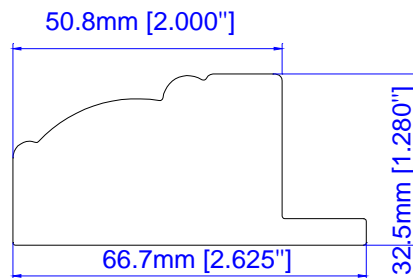
Ridge Deco Sill Plate

Not available for Waterproof option



2.5" Mission Deco Frame

Not available for Waterproof option



2" Camber Deco Frame

For Waterproof option only

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



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

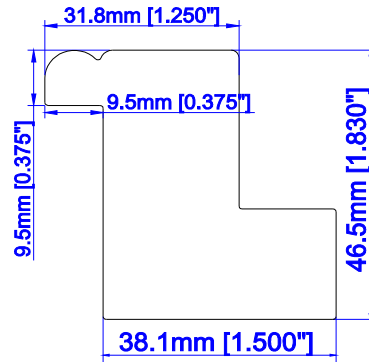
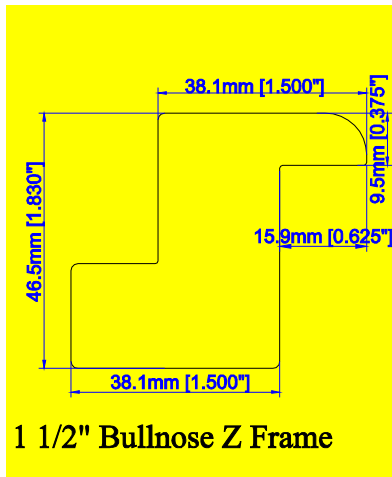
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2. Optional: light block part flush with window opening.

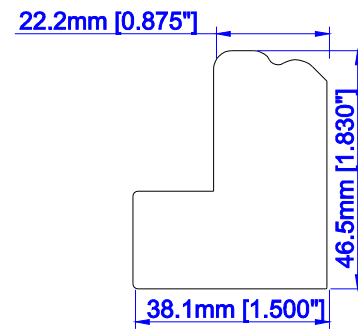
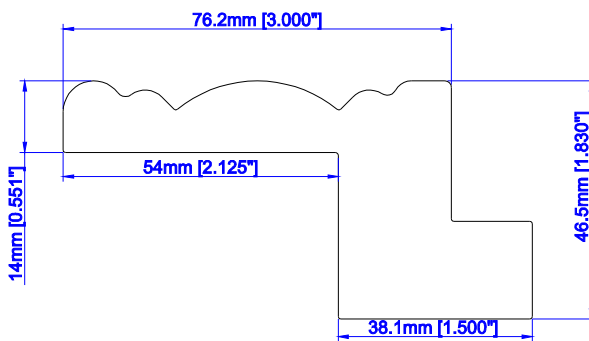
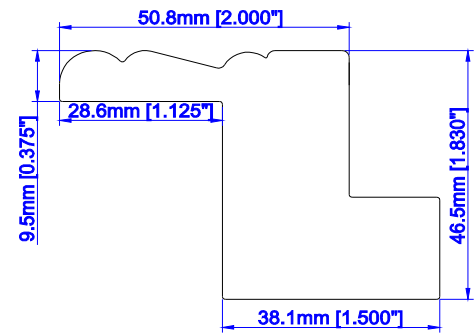
The window size is the exact size of the window opening;

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

The MFF size = Window Size + Frame Back Width

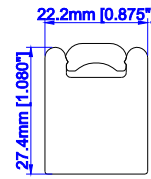
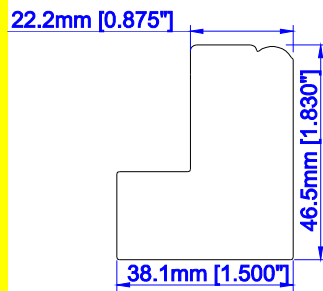
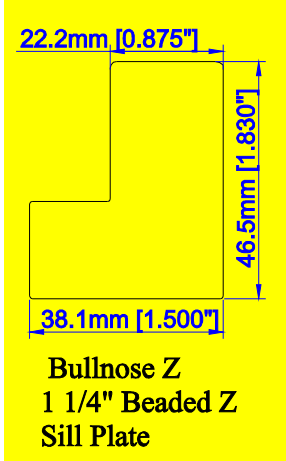


Not available for Waterproof option



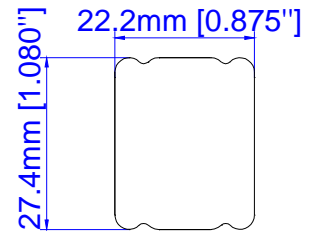
*Surcharge applies. Please see Options and Surcharges page for details.

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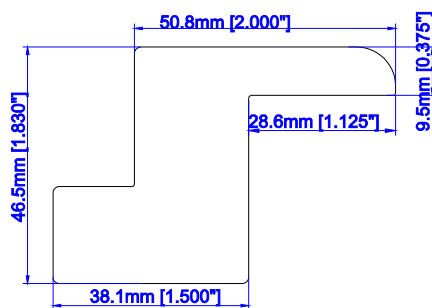
Vintage Hang Strip

Not available for
Waterproof option

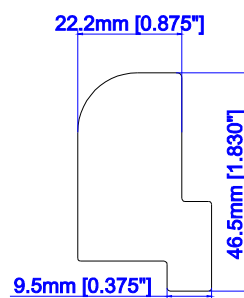


Traditional Hang Strip

For Waterproof option only

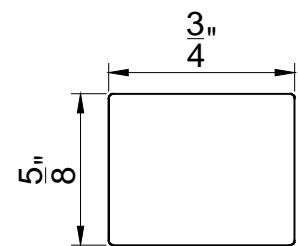


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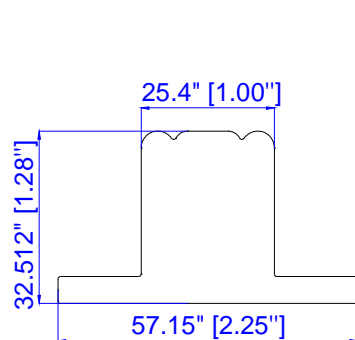
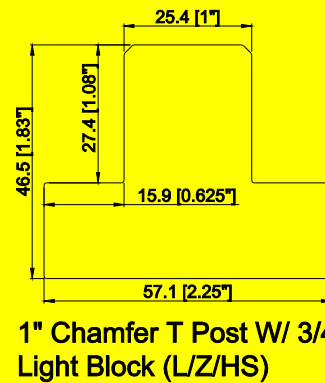
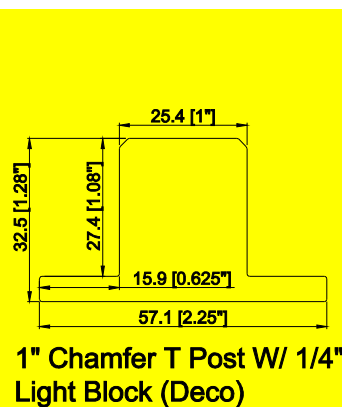


Tilt Out Z Frame

Not available for Waterproof option

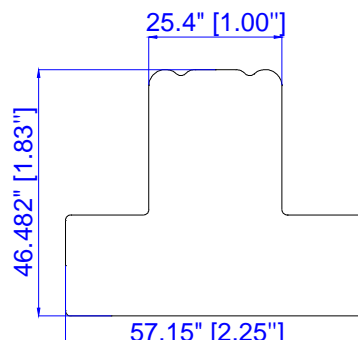


Light Block



**1\" T Post W/ 1/4\" Thick
Light Block (Deco)**

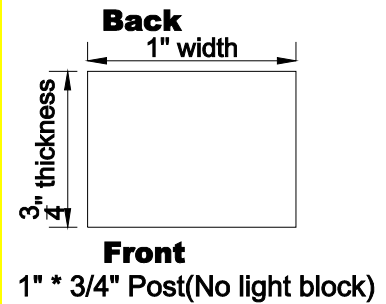
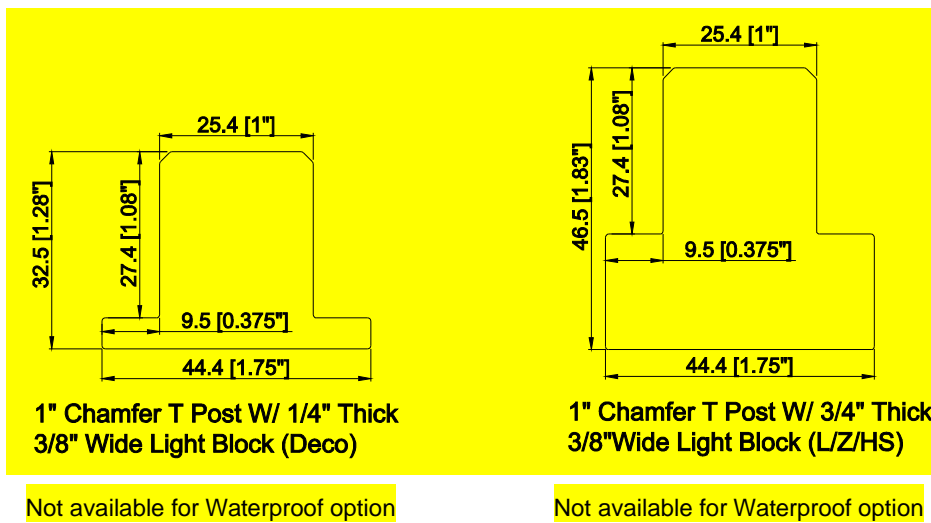
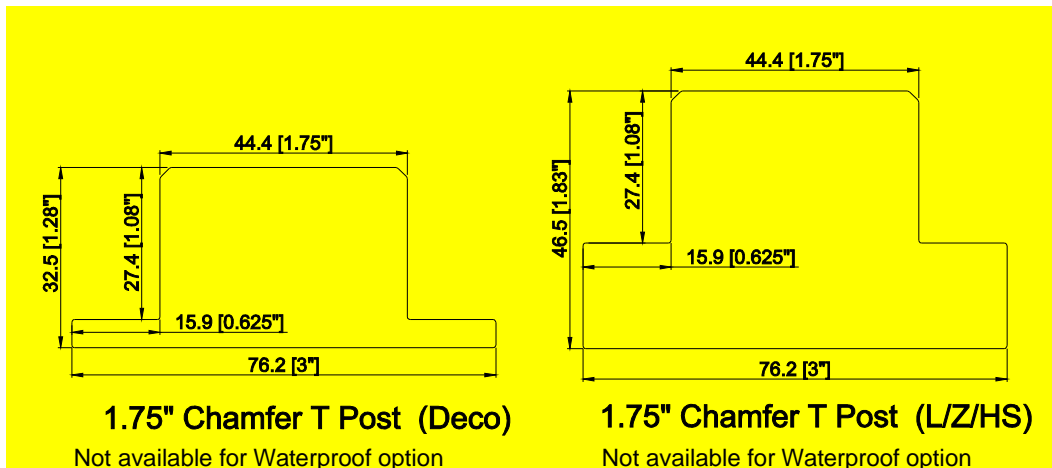
For Waterproof option only



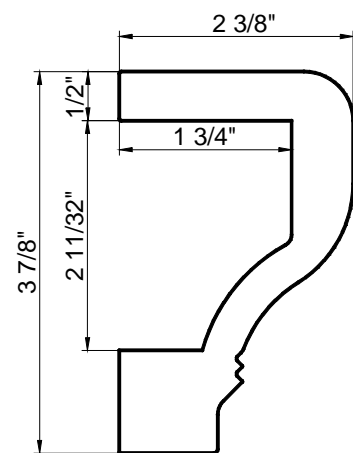
**1\" T Post W/ 3/4\" Thick Light
Block (L/Z/HS/Direct Mount)**

For Waterproof option only

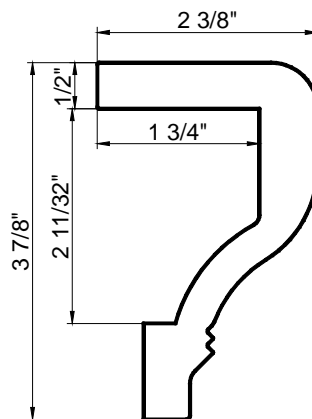
*Surcharge applies. Please see Options and Surcharges page for details.



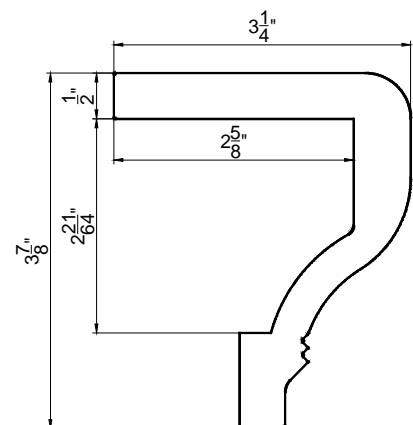
Note: The 1"x3/4" Post (No Light Block) is only available for Direct Mount. And no hardware will be supplied to install it on the existing window opening.



Curved Designer Sill Cap (L)



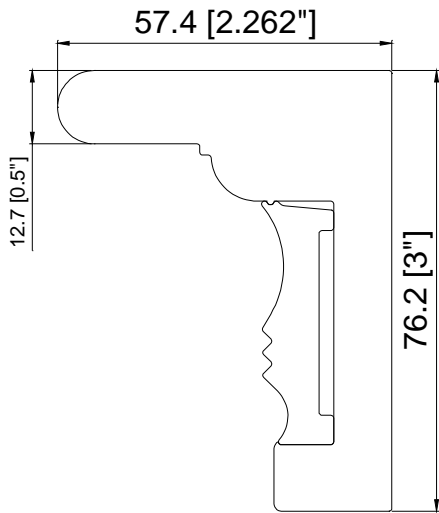
Curved Designer Sill Cap (D/HS)



Curved Designer Sill Cap (Z)

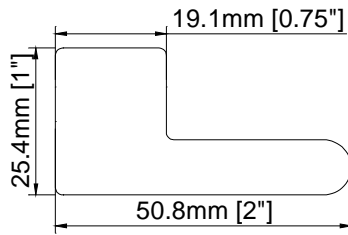
*Surcharge applies. Please see Options and Surcharges page for details.

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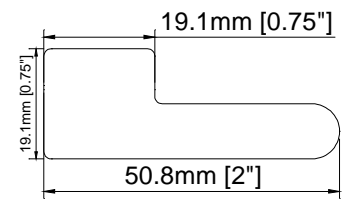


3" Deco Sill Frame

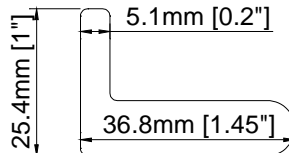
Not available for Waterproof option



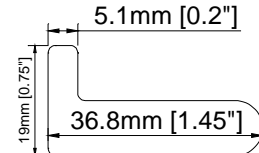
2" Sill Plate with 5/8" Light Block (L/Z)



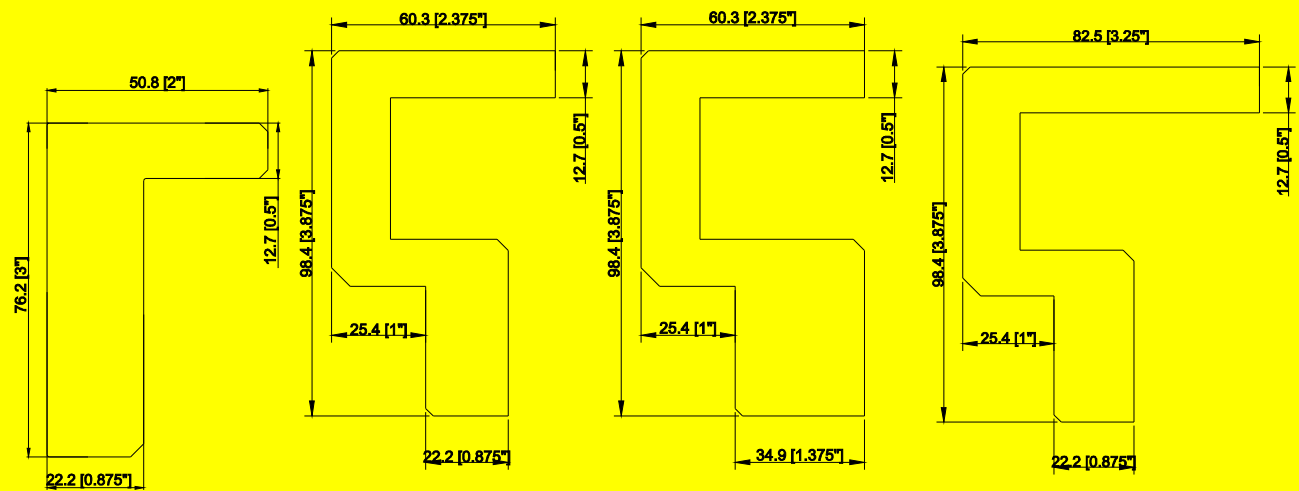
2" Sill Plate with 3/8" Light Block (L/Z)



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)

Not available for
Waterproof option

Not available for
Waterproof option

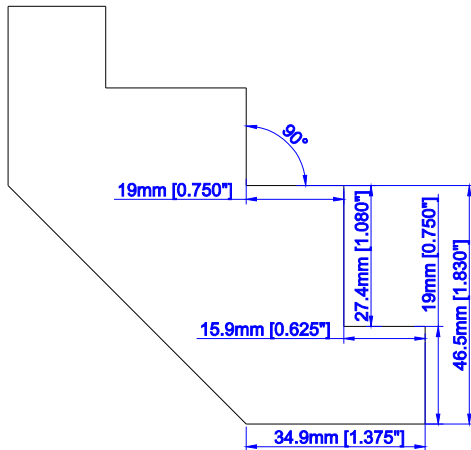
Not available for
Waterproof option

Not available for
Waterproof option

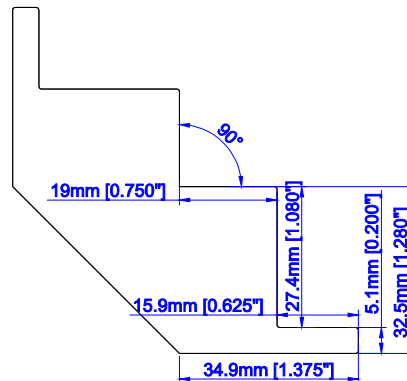
Note: For Mission Sill Cap, the extended size at each side needs to be 1" at least.

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

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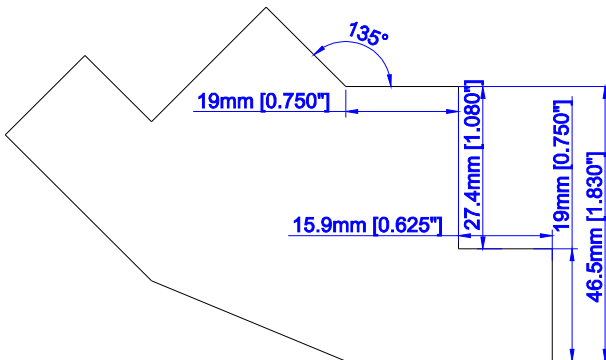


**Corner Post W/ 3/4"
Light Block (L/Z/HS)**

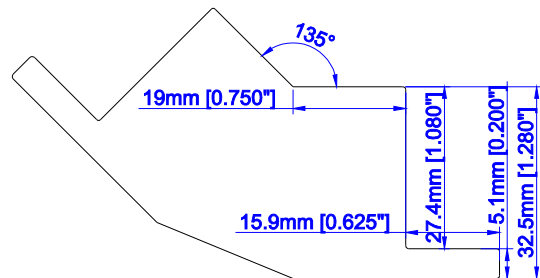


**Corner Post W/ 1/4"
Light Block (Deco)**

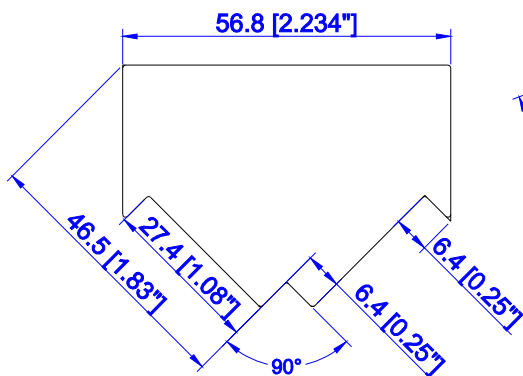
*Notch out corner post required if ordering Z Frame with solid drywall corner.



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

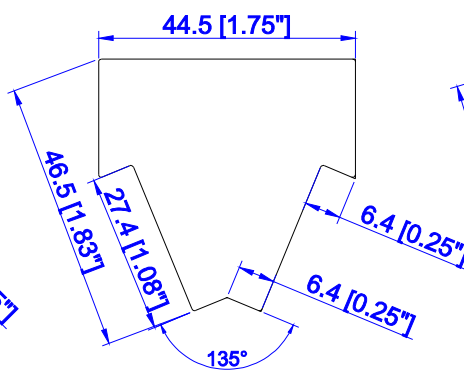


**Bay Post W/ 1/4"
Light Block (Deco)**



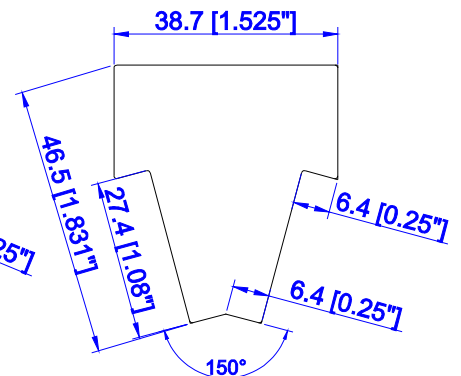
**Slim Fit Corner Post for
90 Degree (L/Z/HS)**

Not available for Waterproof option



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

Not available for Waterproof option

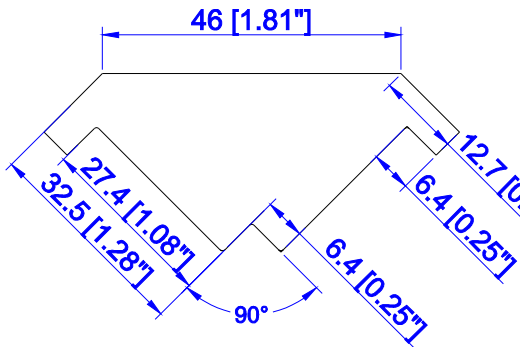


**Slim Fit Bay Post for
150 Degree (L/Z/HS)**

Not available for Waterproof option

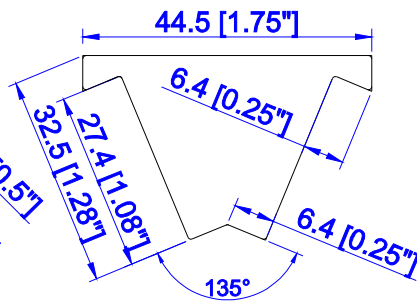
*Surcharge applies. Please see Options and Surcharges page for details.

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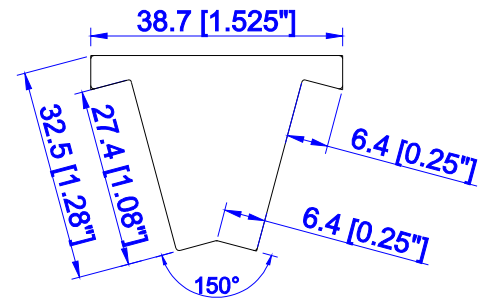
Slim Fit Corner Post for 90 Degree (D)

Not available for Waterproof option



Slim Fit Bay Post for 135 Degree (D)

Not available for Waterproof option



Slim Fit Bay Post for 150 Degree (D)

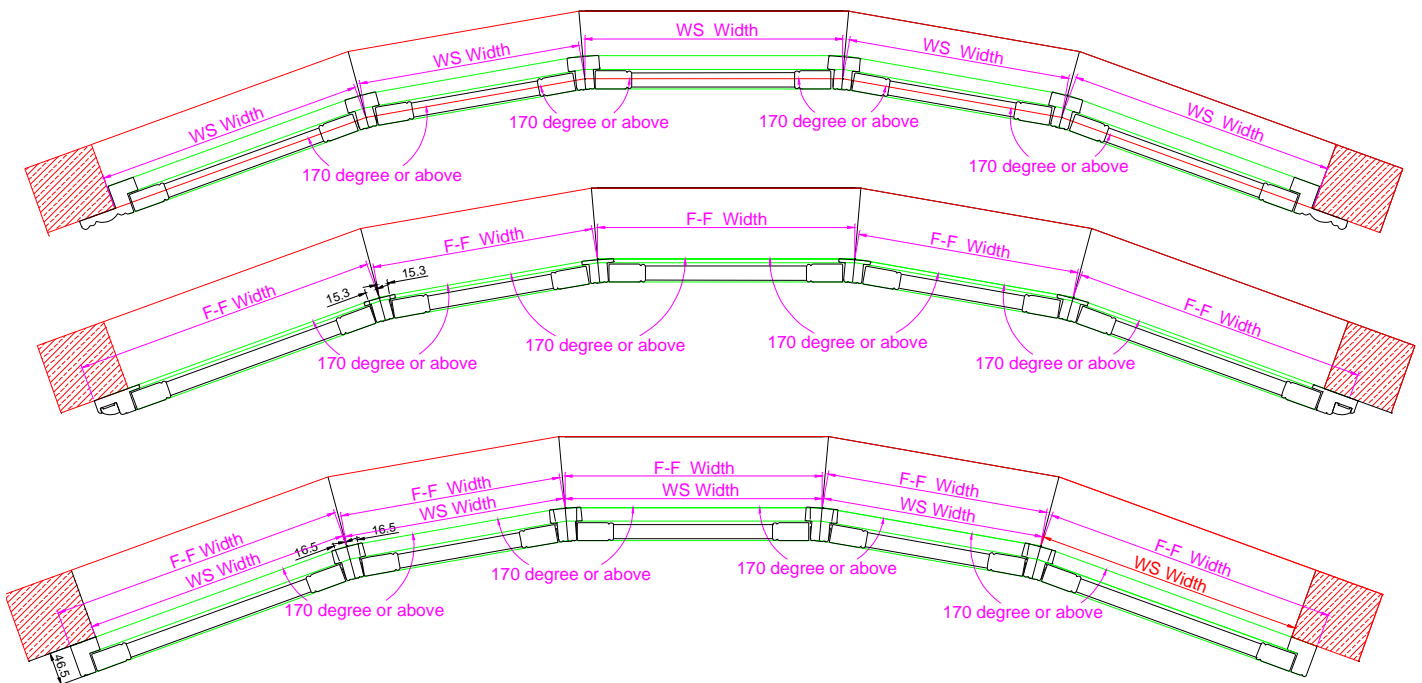
Not available for Waterproof option

Also available

- Custom width* up to 7½" for T Posts (Made of Wood), and not available for Waterproof option
- Custom angle bay posts* (Made of Wood for non-Waterproof and Made of ABS for Waterproof option).

For bay window at 170 degree or above

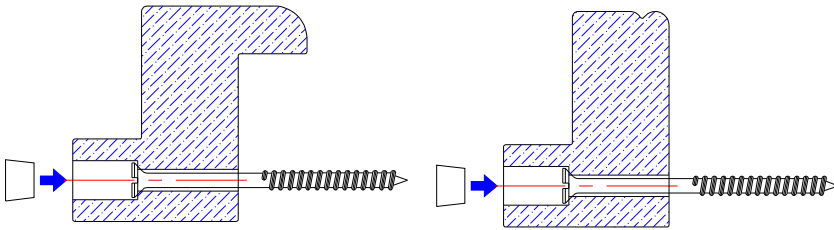
- 1" T Post with 3/8" light block will be used as Bay post;
- For Hang Strip (Behind Panel) and Waterproof option, bay post will be used.



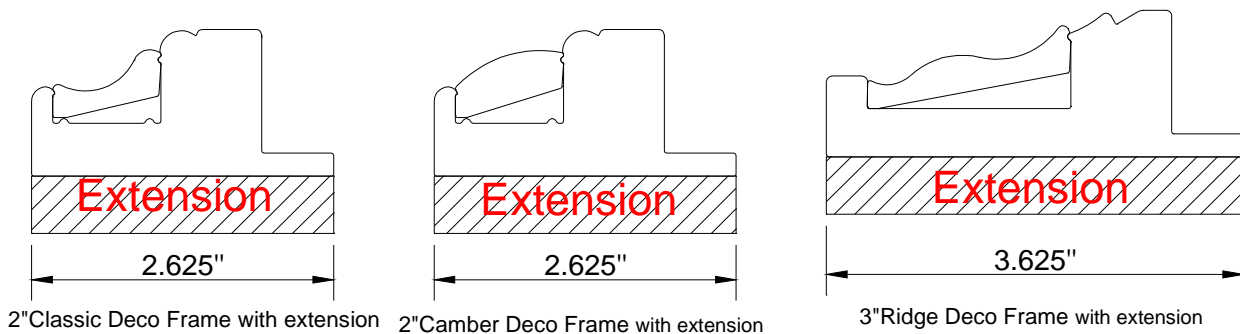
*Surcharge applies. Please see Options and Surcharges page for details.

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



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

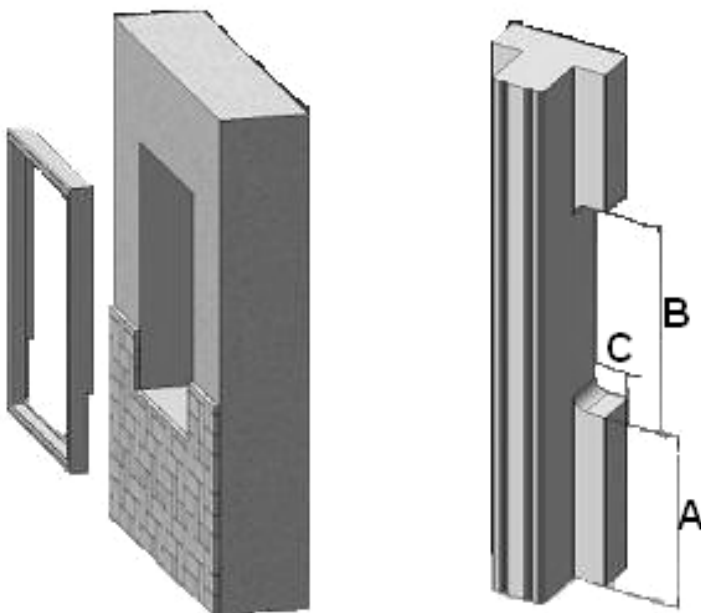


Note: When the extension thickness of the frame & T post is more than 2", the extension will not be attached with the frame and T post.

Notch out*:

- L Frame
- T Post

Specify dimensions in special instruction box.



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

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General Product Specifications

<u>Description</u>	<u>Minimum</u>	<u>Maximum</u>	
		<u>Non-Waterproof Option</u>	<u>Waterproof Option</u>
Single Panel Width (Regular)	6"	24" for 1 7/8" louver 36" for 2 1/2 ", 3", 3 1/2 ", 4 1/2 " louver	24" for 1 7/8" louver 31" for 2 1/2 ", 3" louver 36" for 3 1/2 ", 4 1/2 " louver
Single Panel Width (Bifold)	6"	24"	24"
Single Panel Width (Bifold Track)	6"	24"	24" for 1 7/8" louver 26" for 2 1/2 ", 3", 3 1/2 ", 4 1/2 " louver
Single Panel Height	10"	120"	
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	120" + frame	

Shutters without bottom supports

Woodlore Plus Shutters without bottom supports may sag and deform. Therefore, we strongly discourage the use of shutters for this application. We will continue to manufacture these shutters; however, they will not be covered under our warranty and will be subject to the guidelines listed below:

All Woodlore Plus panel configurations:

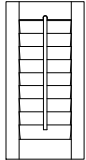
- You must inform Norman Window Fashions of situations where shutters will not have bottom support when placing the initial order.
- Informing Norman when placing such orders ensures that the factory will add extra hinges to support the panel. This will reduce the probability of the panels sagging and increase shutter integrity. You must release Norman Shutters from liability in these situations.
- If you fail to notify Norman that the shutter will be used without bottom support, this will constitute a misapplication of the shutter. Consequently, you will be responsible for the cost of any RGA that is submitted.
- If you want a bifold shutter, a track must be ordered to support the panels. Without a track, Norman will not manufacture the order even with liability waived.

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Tilt Rods

Standard Tilt Rod

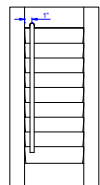
Default Location: In the middle of the panel on front side (default).



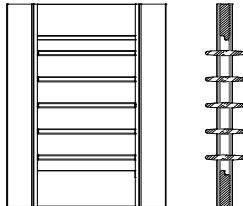
Offset Tilt Rod*

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 3/4" – 57 1/4"
3"	19	54 1/4" – 57"
3½"	16	54 3/4" – 58"
4½"	12	54 3/4" – 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

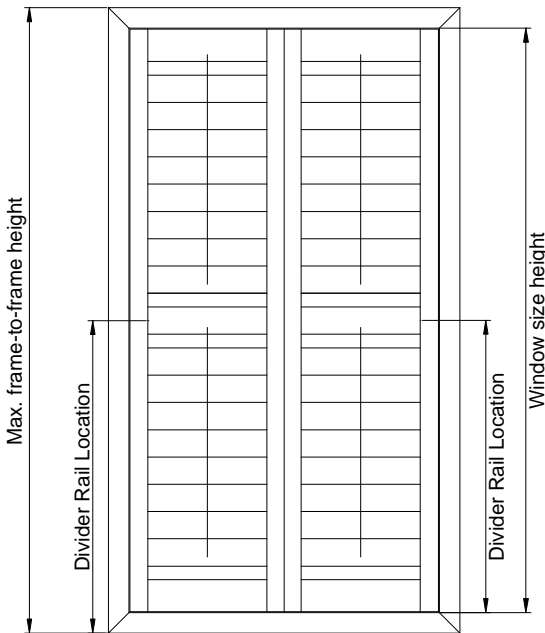
- A divider rail is an extra rail in the middle of the panel.
- Creates two sections in the panel so louvers can be operated independently.
- Strengthens the panel and enhances structural integrity.
- Required for panel heights over 78" for non-waterproof option.
- Required for panel heights over 72" for waterproof option.

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.



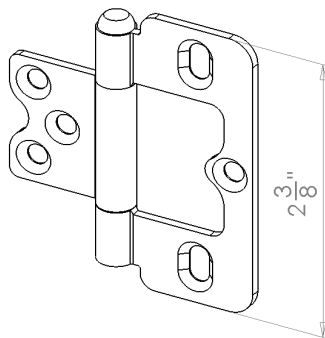
Divider rail allowable deviations

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 "

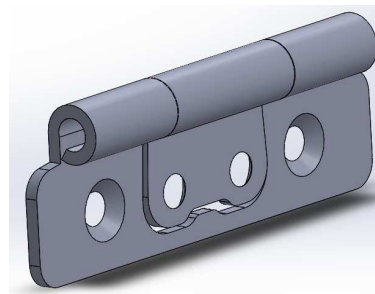
Hardware

Hinges

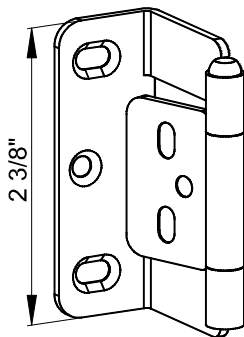
Self-Mortise Hinge



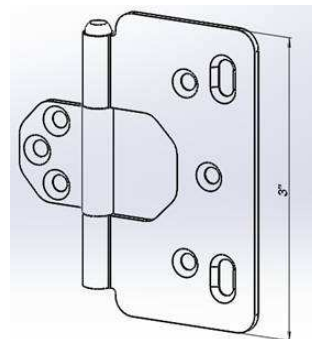
Bi-fold Hinge



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.

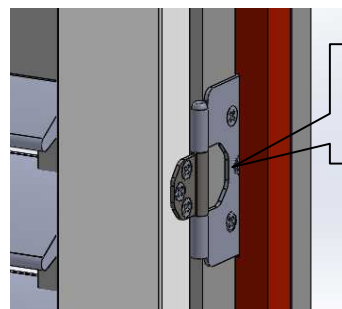
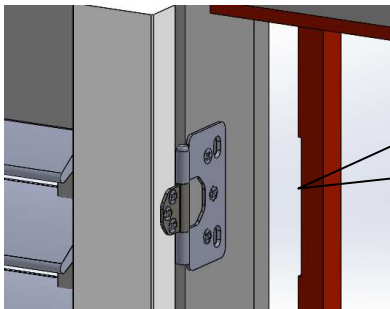
For Waterproof option, hinge color is only available in Stainless Steel, and Sleeve & Base Plate will be used as catches.

➤ Direct Mount 3" Hinge:

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

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1. The hinge position of the direct mount 3" hinge will be different from that of the 2.375" ones. For shutters used both the 2.375" and the direct mount 3" hinge, the hinge position of the 2.375" ones will match that of the direct mount 3" hinge;
2. The hinge is only to install between the panel and the existing window. For other situation, 2.375" hinges will be used;
3. To avoid confliction, there will be cut-out for the light block of the hinged side. Please refer to the drawing below.



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	/

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Tilt out Z Frame	N	/
1.25" Beaded Z Frame	Y	/
2" Bullnose Z Frame	Y	/
1.5" Bullnose Z Frame	Y	/
2" Bel Air Z Frame	Y	/
3" Crown Z Frame	N	/
7/8" Vintage Hang Strip	N	/
Traditional Hang Strip	N	/
1" 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" T-Post w/3/4" Light Block(for L/Z/HS)	Y	
1" Chamfer T-Post w/ 1/4" Light Block(for Deco)	Y	
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 side, 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

Preinstallation:

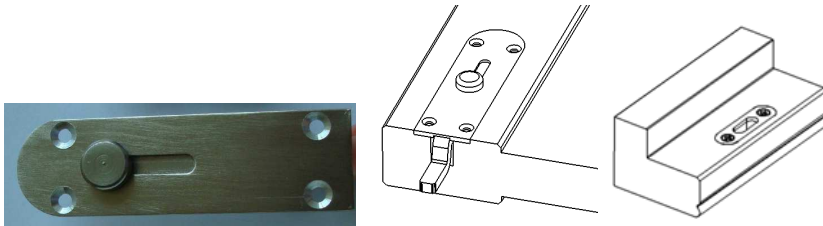
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Panels and frames will be packaged individually, and the hinge is preinstalled onto the frame/post, with the screws for the other half part on the panels in the hardware box.

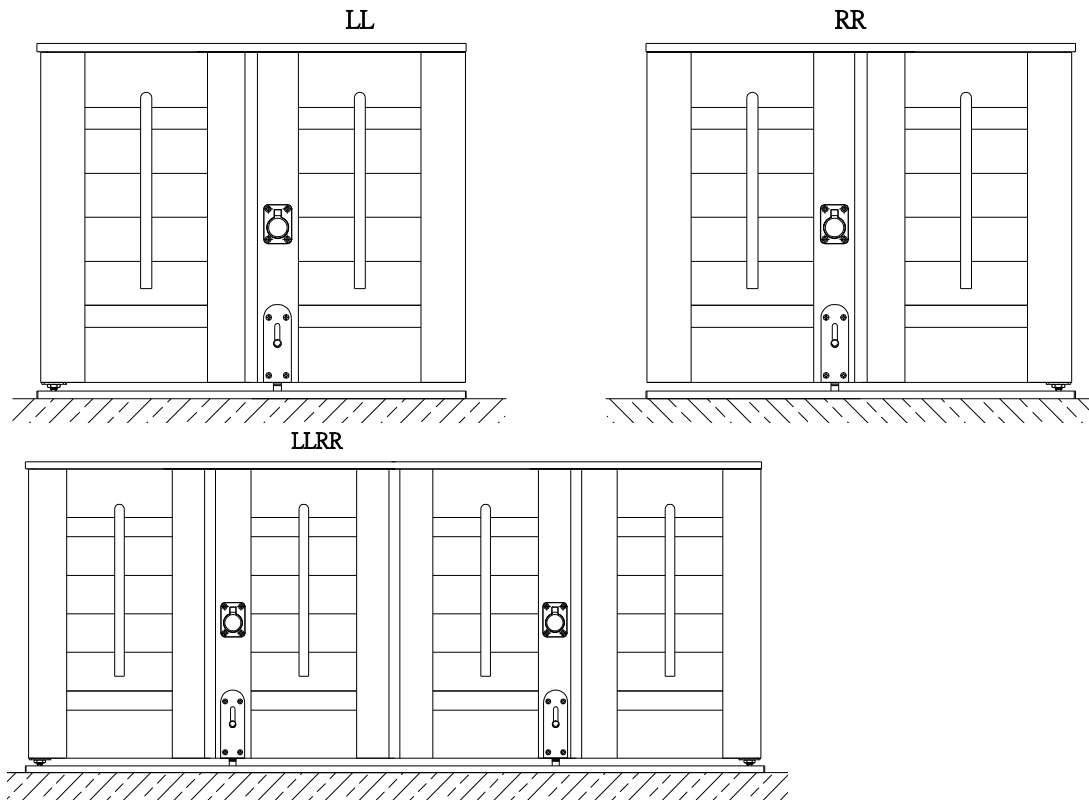
Panel Lock: (not available for 1.625" Stile)

Available Material: All

Color: Brush Nickel-Plated

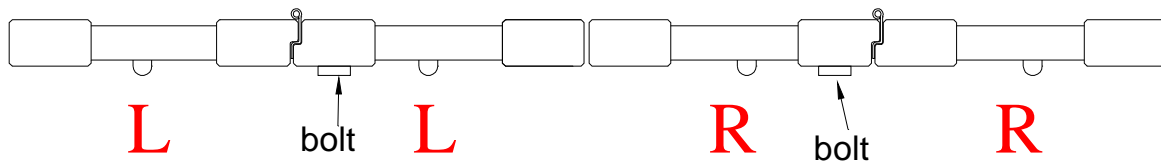


Position: (Only available on Bottom for Track Shutters with Bottom Track; For Regular, available on Top/Bottom/both Top and Bottom)



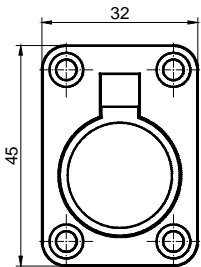
The Panel Lock location for both track system shutters and regular shutters would be the same. The general principle is that the Panel Lock position will avoid the stile which will install the spring-loaded guide at bottom (same stile as the Wheel carrier).

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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

For non-waterproof option:

Color ID	Color Name	New Hinge color (Default)	New Ring pull color	New T post connector color	Invisible Hinge	Direct Mount 3" Hinge color (Default)
001	Pure White	Pure White	White	Pure White	Pearl Chrome Plated	Pure White
002	Extra White	Silk White	White	Silk White		Silk White
003	Silk White	Silk White	White	Silk White		Silk White
004	Bright White	Silk White	White	Silk White		Silk White
006	Pearl	Pearl	Pearl	Pearl		Pearl
007	Ivory Lace	Bisque	Bisque	Bisque		Bisque
009	Creamy	Pearl	Pearl	Pearl		Pearl
012	Crisp Linen	Crisp Linen	Bisque	Bisque		Bisque

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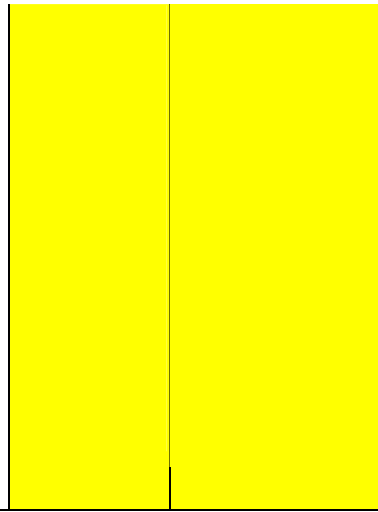
016	Butter	Crisp Linen	Bisque	Bisque	Bisque
019	String	String	Bisque	Bisque	Bisque
030	Moondust	Sea Mist	Brushed Nickel	Nickel Plated	Nickel Plated
032	Sea Mist	Sea Mist	Brushed Nickel	Nickel Plated	Nickel Plated
042	Hall Gray	Sea Mist	Brushed Nickel	Nickel Plated	Nickel Plated
046	Ice	Silk White	White	Silk White	Silk White
048	Chai	Nickel Plated	Brushed Nickel	Nickel Plated	Nickel Plated
049	Stone Gray	Stone Gray	Brushed Nickel	Nickel Plated	Nickel Plated
051	Brown Gray	Brown Gray	Brushed Nickel	Nickel Plated	Nickel Plated
053	Clay	Nickel Plated	Brushed Nickel	Nickel Plated	Nickel Plated
063	Decorators White	Silk White	White	Silk White	Silk White
066	Winchester White 2010	Pearl	Pearl	Pearl	Pearl
073	Sky Gray	Silk White	White	Silk White	Silk White
074	Element Gray	Sea Mist	Brushed Nickel	Nickel Plated	Nickel Plated
075	Storm Gray	Sea Mist	Brushed Nickel	Nickel Plated	Nickel Plated
077	Dawn	Silk White	White	Silk White	Silk White
078	Cloud Blue	Silk White	White	Silk White	Silk White
080	Taupe Gray	Taupe Gray	Brushed Nickel	Nickel Plated	Nickel Plated
836	Classic Black	Black	Black	Black	Black

For waterproof option:

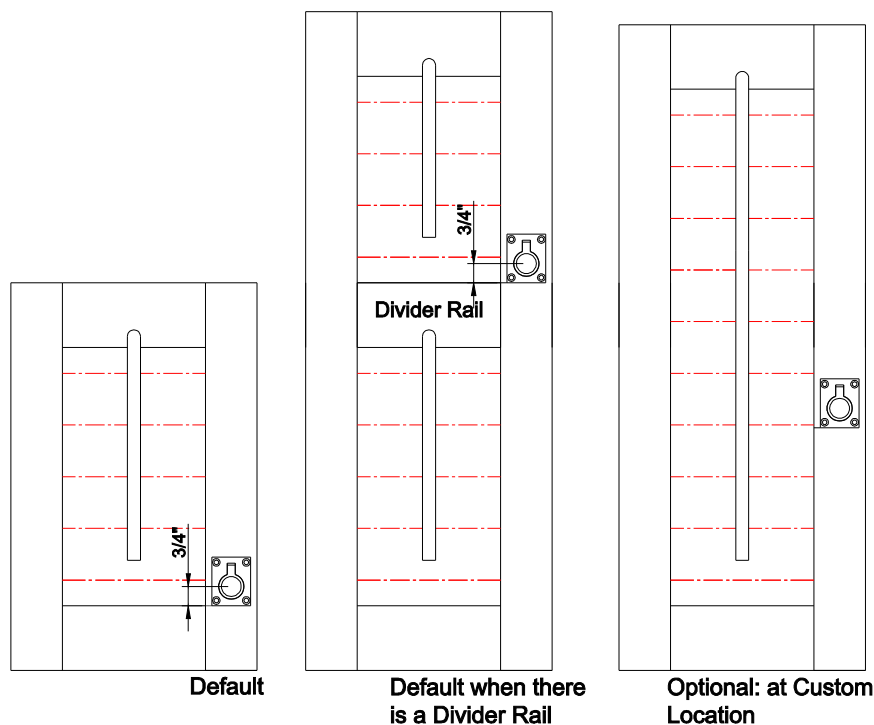
Color ID	Color Name	Hinge color (Default)	Invisible Hinge	Ring Pull color
001	Pure White	Stainless Steel	Pearl Chrome Plated	Brushed Nickel
002	Extra White			
003	Silk White			
004	Bright White			
006	Pearl			
007	Ivory Lace			
009	Creamy			
012	Crisp Linen			
016	Butter			
019	String			
030	Moondust			
032	Sea Mist			
042	Hall Gray			
046	Ice			
048	Chai			

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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



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



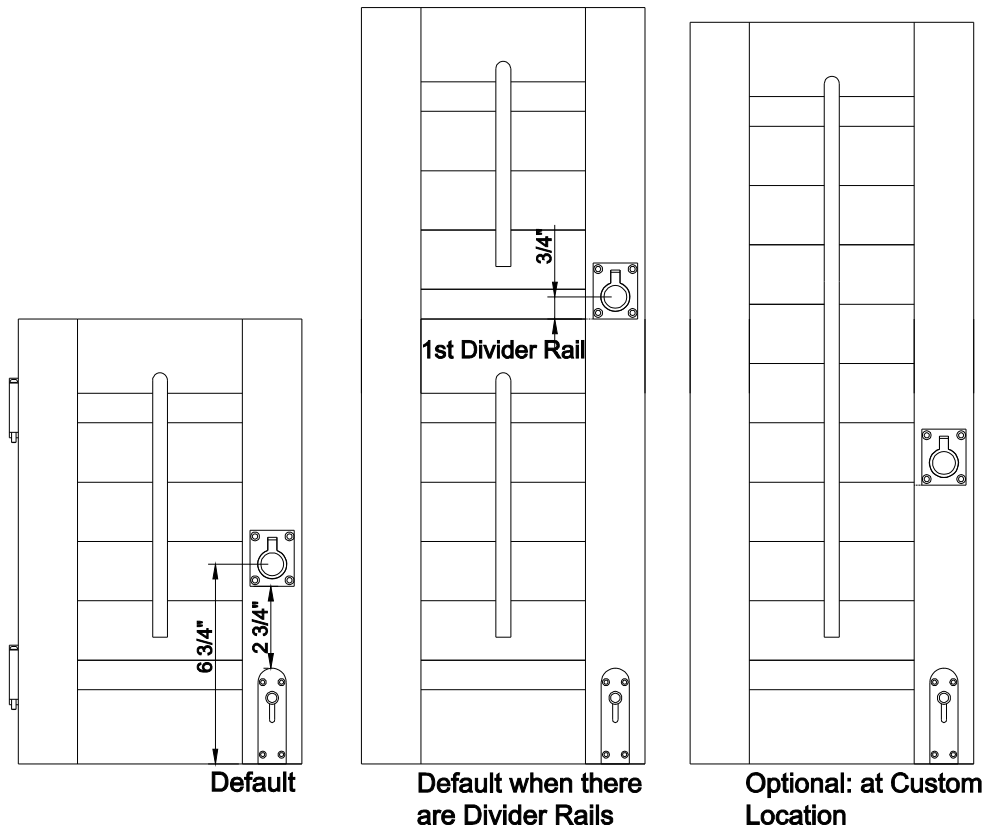
Position:

- 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.

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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.

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Side Magnet: Not available for Waterproof option

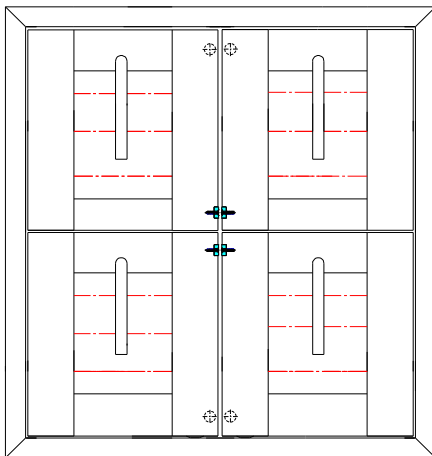
Available for Butt, rabbet and Astragal stile



Side Magnets will be applied in following situation:

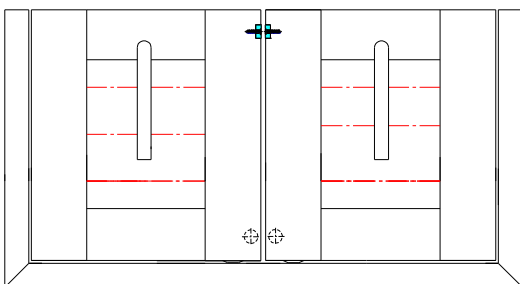
1. Double Hung shutter but without horizontal T post:

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



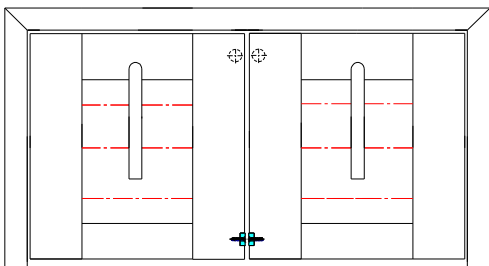
2. Café Shutter

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



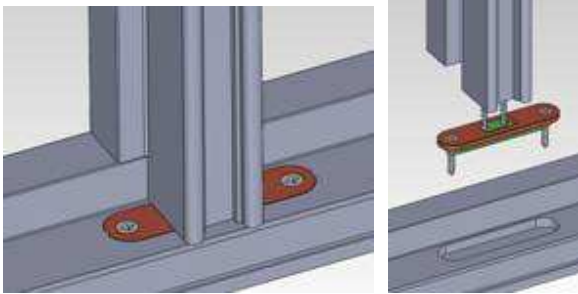
3. No frame or light block or L-shape striker plate on either top or bottom, or if larger than standard top or bottom gap is requested.

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



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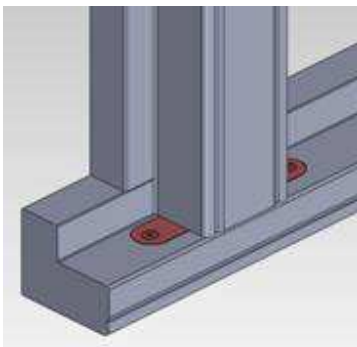
T-Post Connector



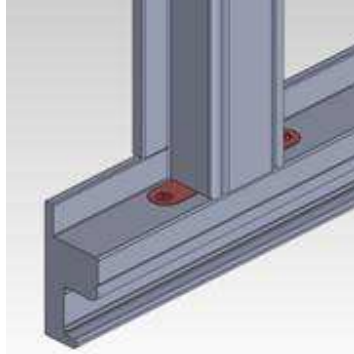
- Available colors: Pure White; White; Pearl; Bisque; Black; Nickel-Plated.
- Available for all types of T Posts (custom-width T posts excluded).

T Post Connector can be used with the following Frames.

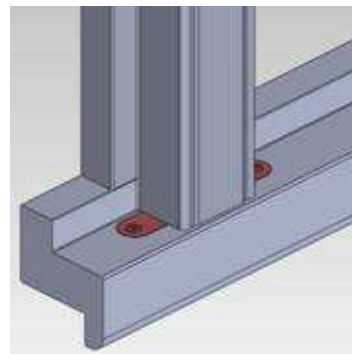
L Frame:



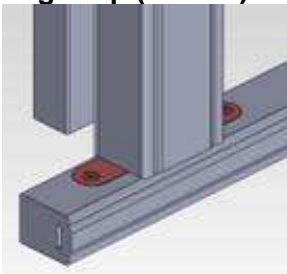
Deco Frame:



Z Frame:



Hang Strip (Beside)



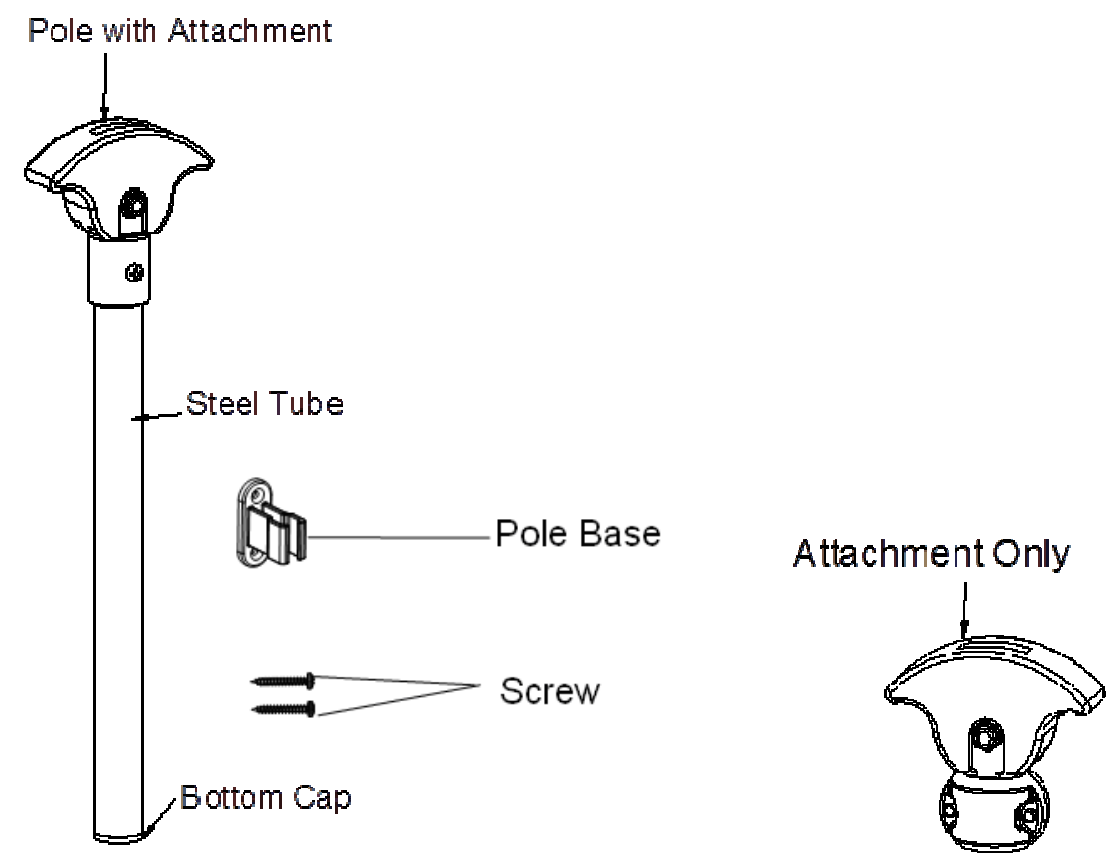
Note:

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. 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.
4. The screw color is Stainless Steel for Waterproof shutter regardless of the color of the T Post connector;
5. The screw color is Nickel Plated for Non-Waterproof shutter regardless of the color of the T Post connector;

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Optional Poles:

1. Terminology



Component

NO.	Name	Note
1	Pole with Attachment	Steel tube, Pole Base and Bottom Cap included *Surcharge applies.
2	Attachment only	●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"

2016 Track Shutters—Bypass

Guidelines and Specs:

Description	Minimum	Maximum		
		1⁷/₈"	2¹/₂" / 3"	3¹/₂" / 4¹/₂"
Single-Panel Width (Regular) for Non-Waterproof option	6"	24"	36"	36"
Single-Panel Width (Regular) for Waterproof option	6"	24"	31"	36"
Single-Panel Height	10"	120"	120"	120"

Outside Mount

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

Max frame-to-frame height: window height + 4¹/₂"

Semi-Inside Mount

Max frame-to-frame width: window width - 1¹/₈"

Max frame-to-frame height: window height + 1³/₈"

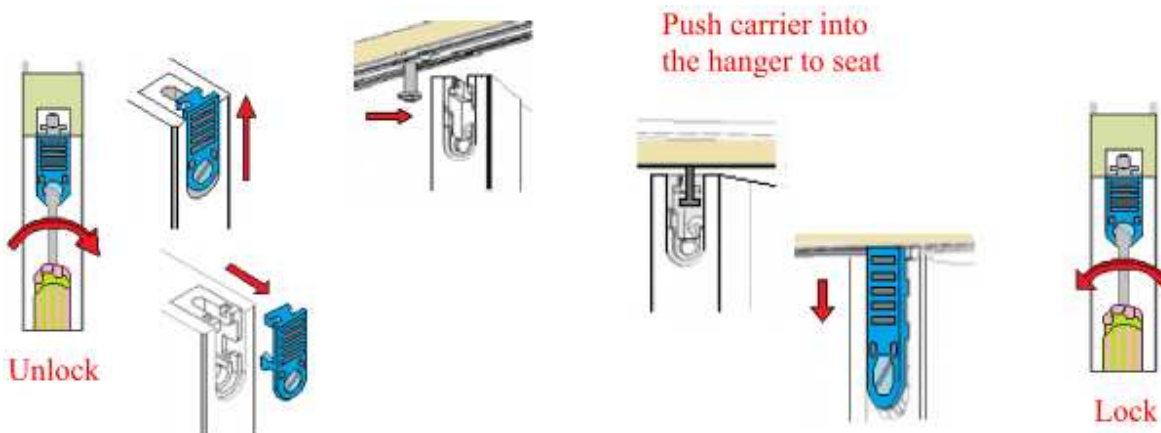
Inside Mount

Max frame-to-frame width: window width - 1¹/₈"

Max frame-to-frame height: window height - 1¹/₈"

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

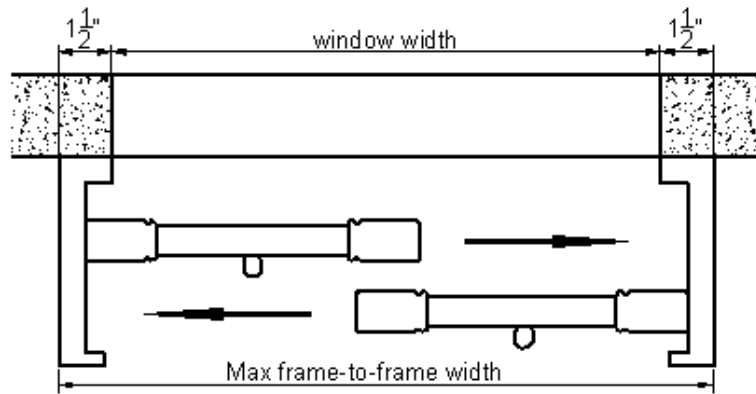
Adjustments to panel alignment are made by turning the Carrier Bolt with the wrench included in the Hardware Box



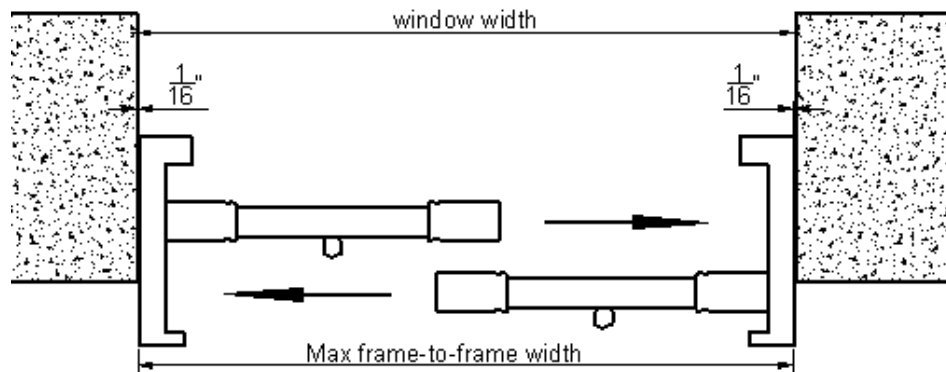
2016 Track Shutters—Bypass

Top View

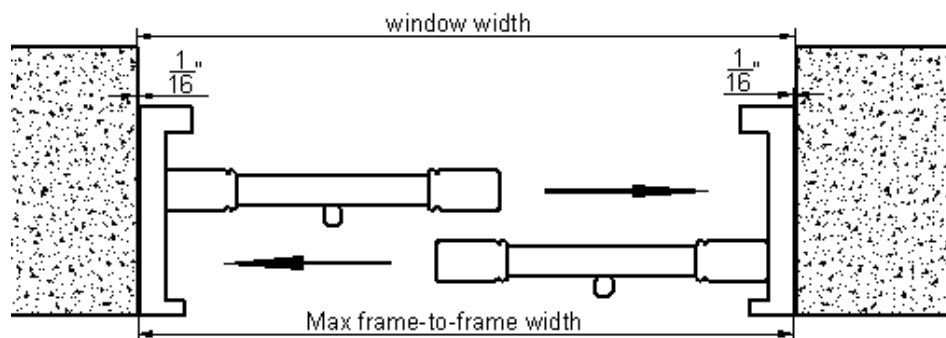
Outside Mount



Semi-Inside Mount



Inside Mount

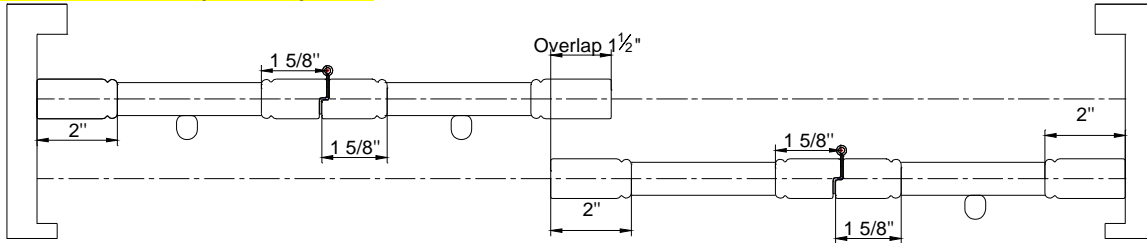


2016 Track Shutters—Bypass

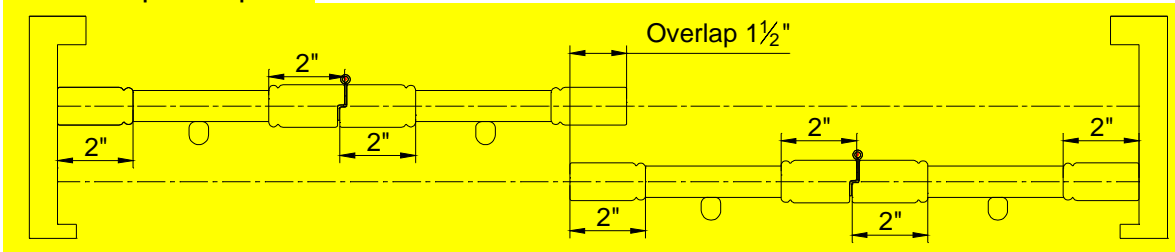
Top View

Combi - joined Panels (optional):

For Non-Waterproof option:

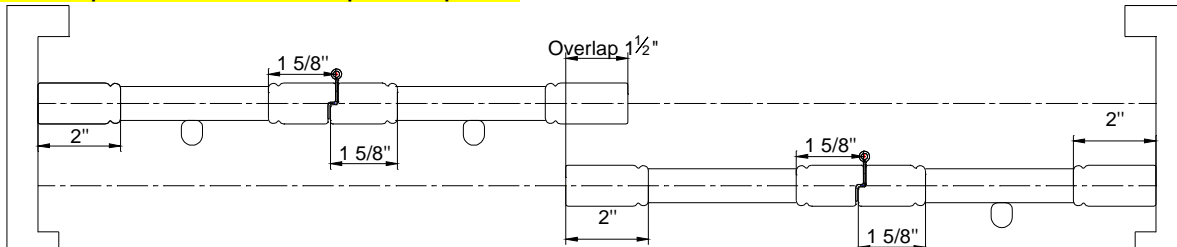


For Waterproof option:

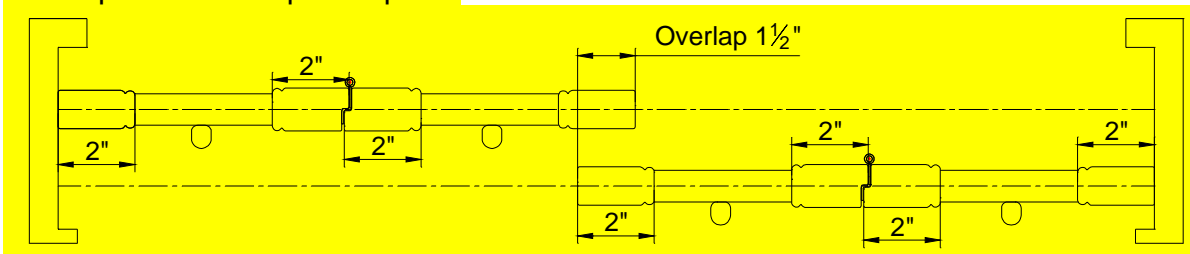


For shutters with 4 or more panels, please select "side open" or "center open"

Side Open for Non-Waterproof option:

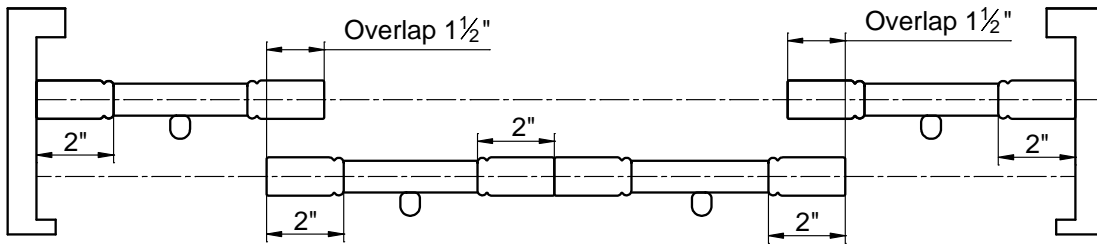


Side Open for Waterproof option:

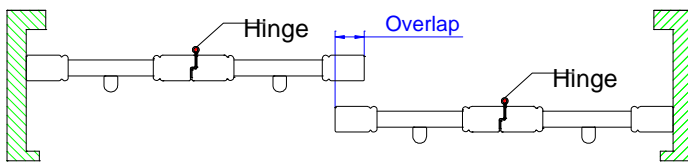


2016 Track Shutters—Bypass

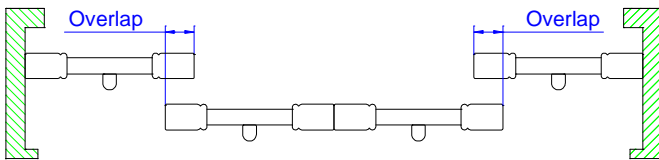
Center Open



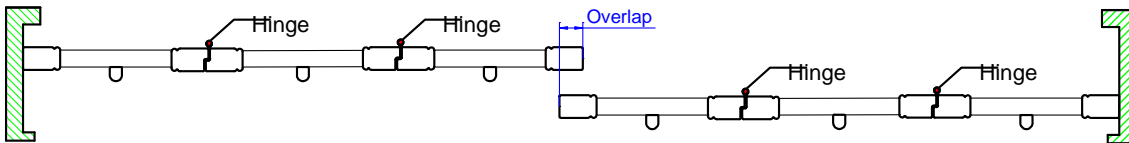
4 panels side open w/Rabbet stile



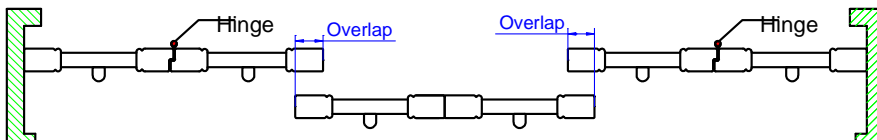
4 panels center open w/Rabbet stile



6 panels side open w/Rabbet stile



6 panels center open w/Rabbet stile



Stile: Only 2", 2 1/4" rabbet stiles are available,

1 5/8" rabbet stile only used for combi-joined panels for non-waterproof option.

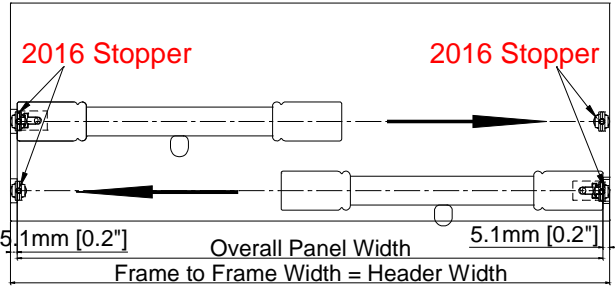
Center stile is not available.

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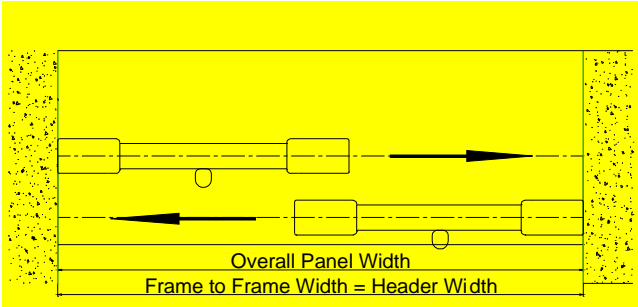
2016 Track Shutters—Bypass

Size Definition

For Semi-Inside/OM without side boards



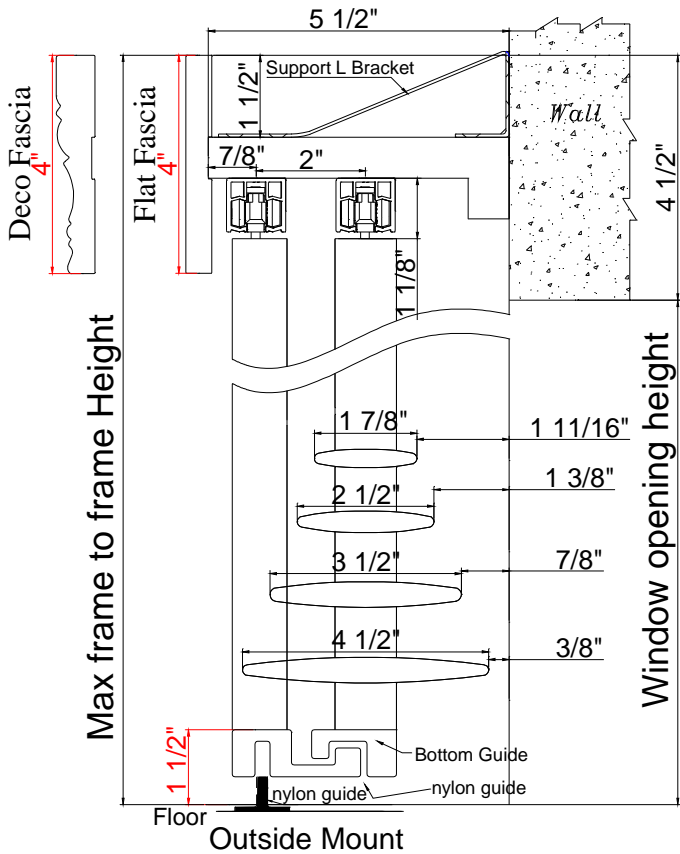
For IM without side boards



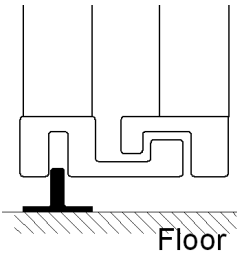
Note: For Semi-Inside/OM bypass without side boards but with fascia return, 2016 Stopper will be supplied.

Mounting Options (Closed Bypass)

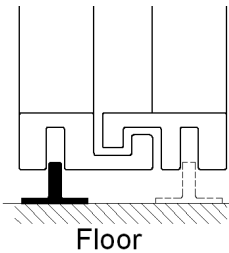
Side View



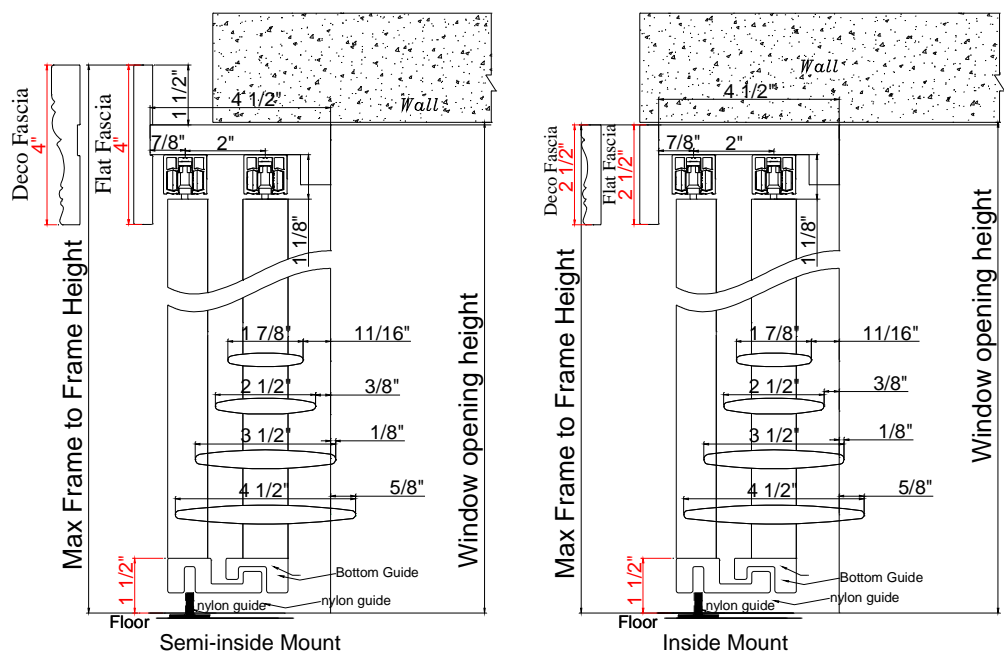
Bottom Guide For non-waterproof



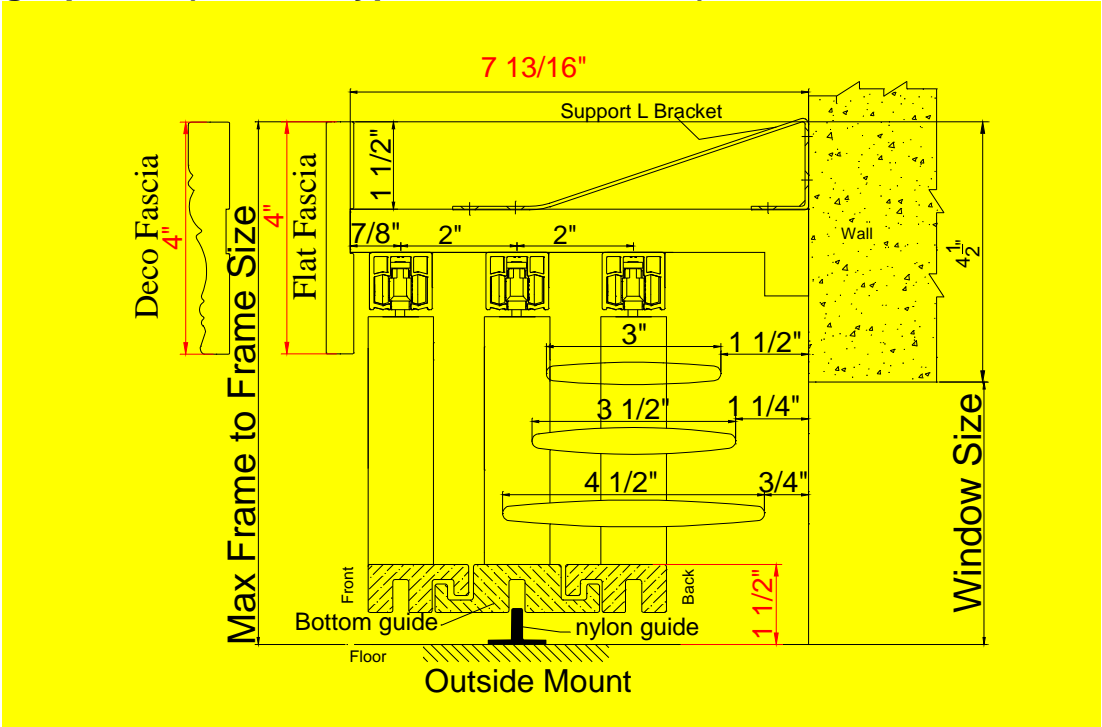
Bottom Guide For Waterproof option



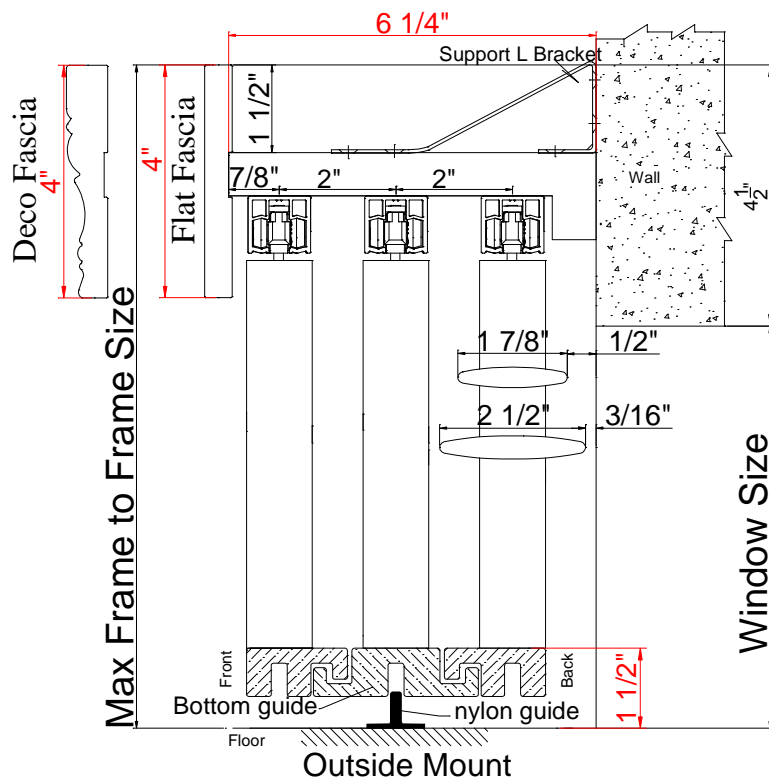
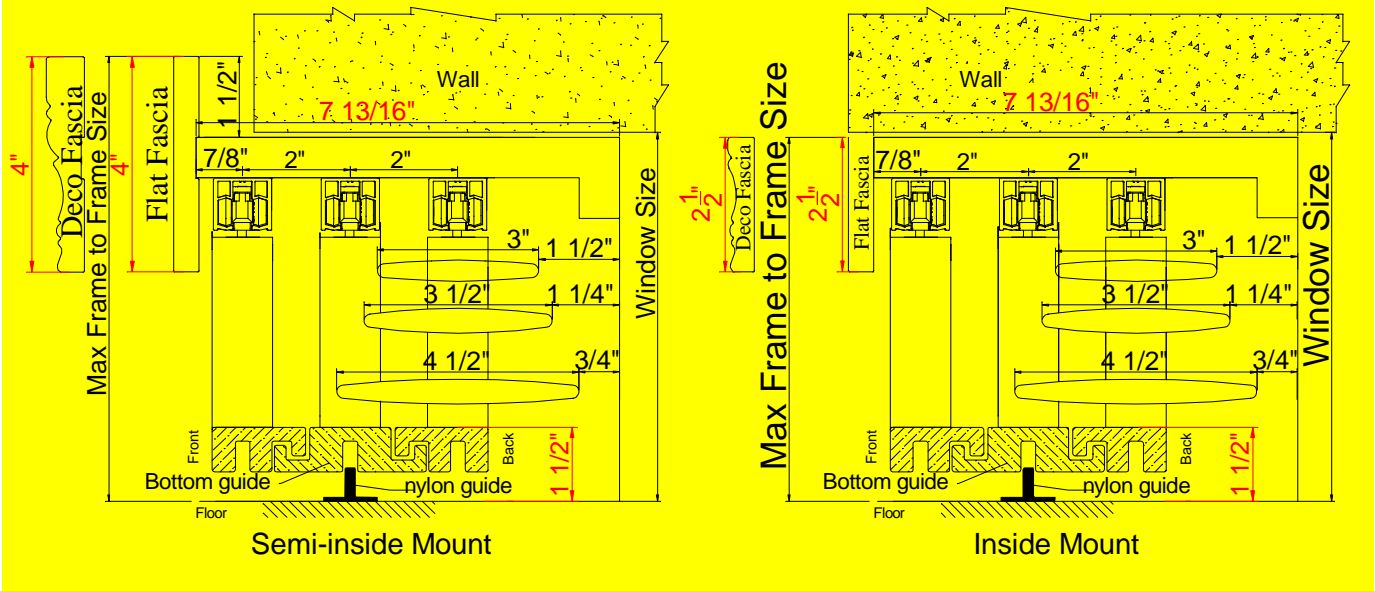
2016 Track Shutters—Bypass



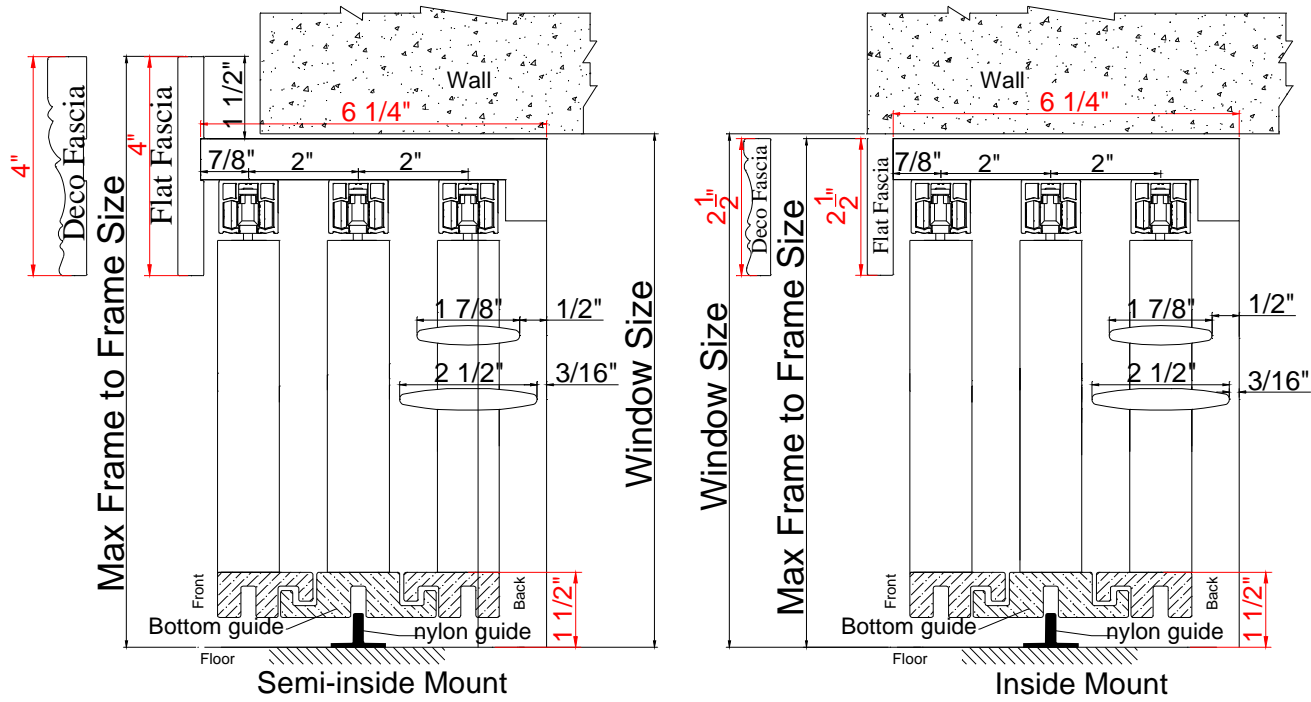
Mounting Options (Closed Bypass with 3 Tracks):



2016 Track Shutters—Bypass



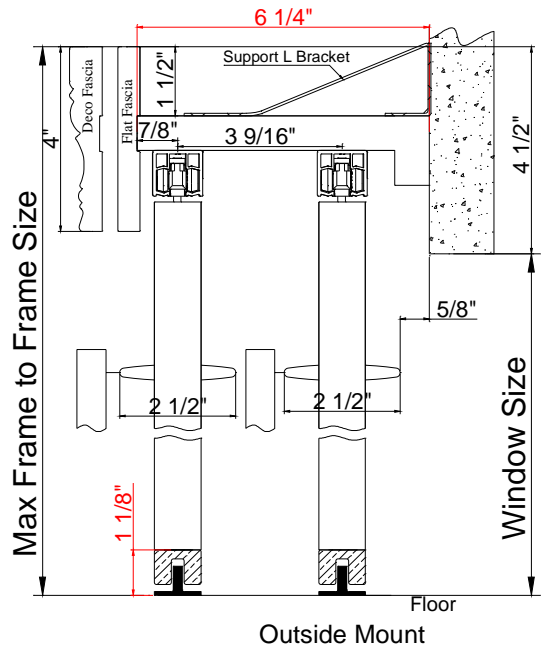
2016 Track Shutters—Bypass



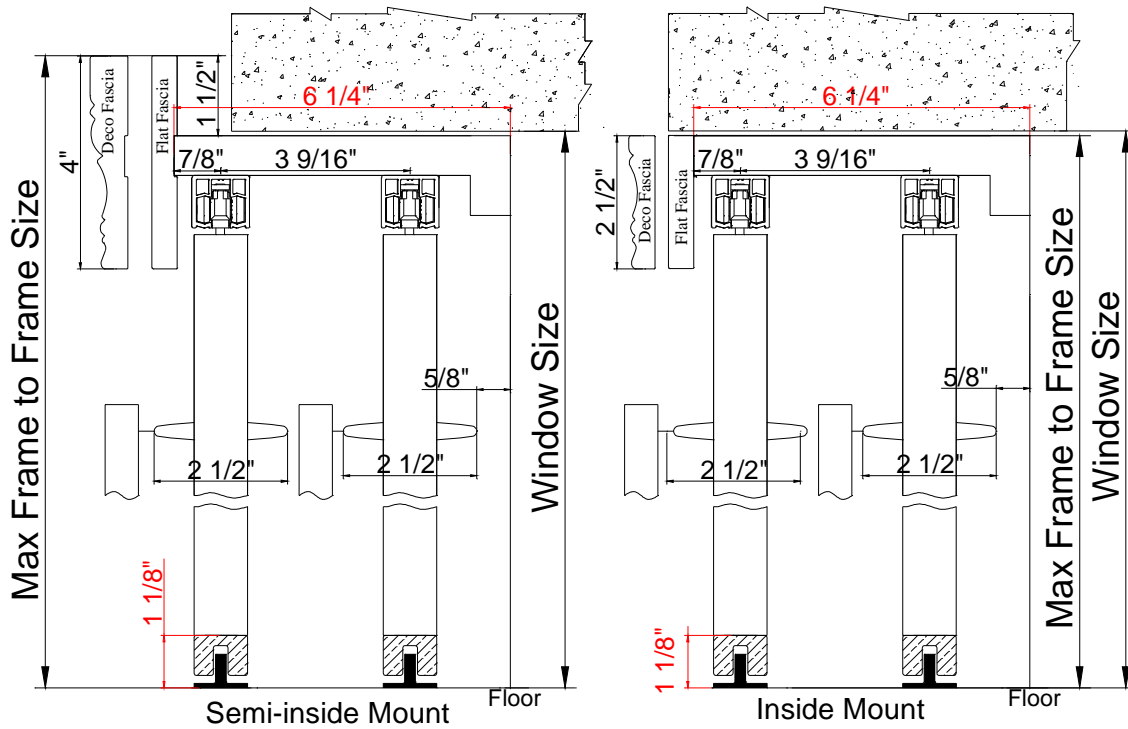
Mounting Options (Opened Bypass)

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

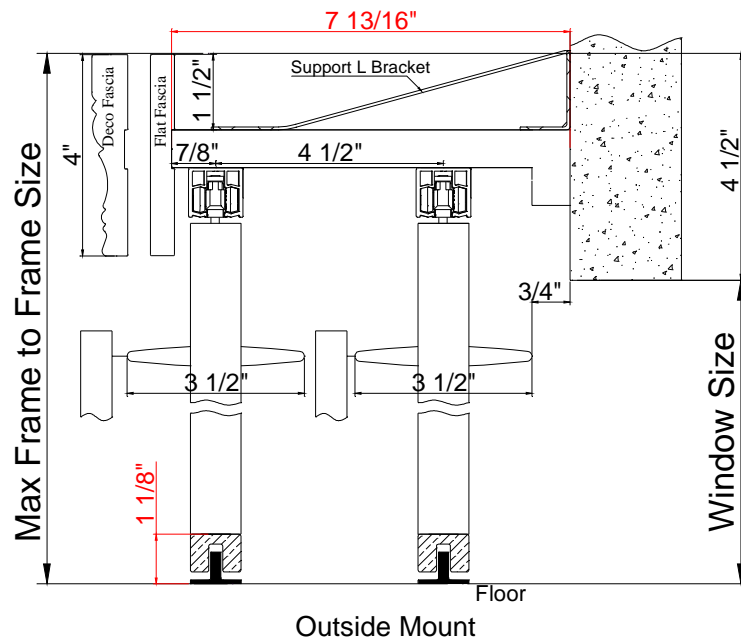
2 1/2" Louver



2016 Track Shutters—Bypass

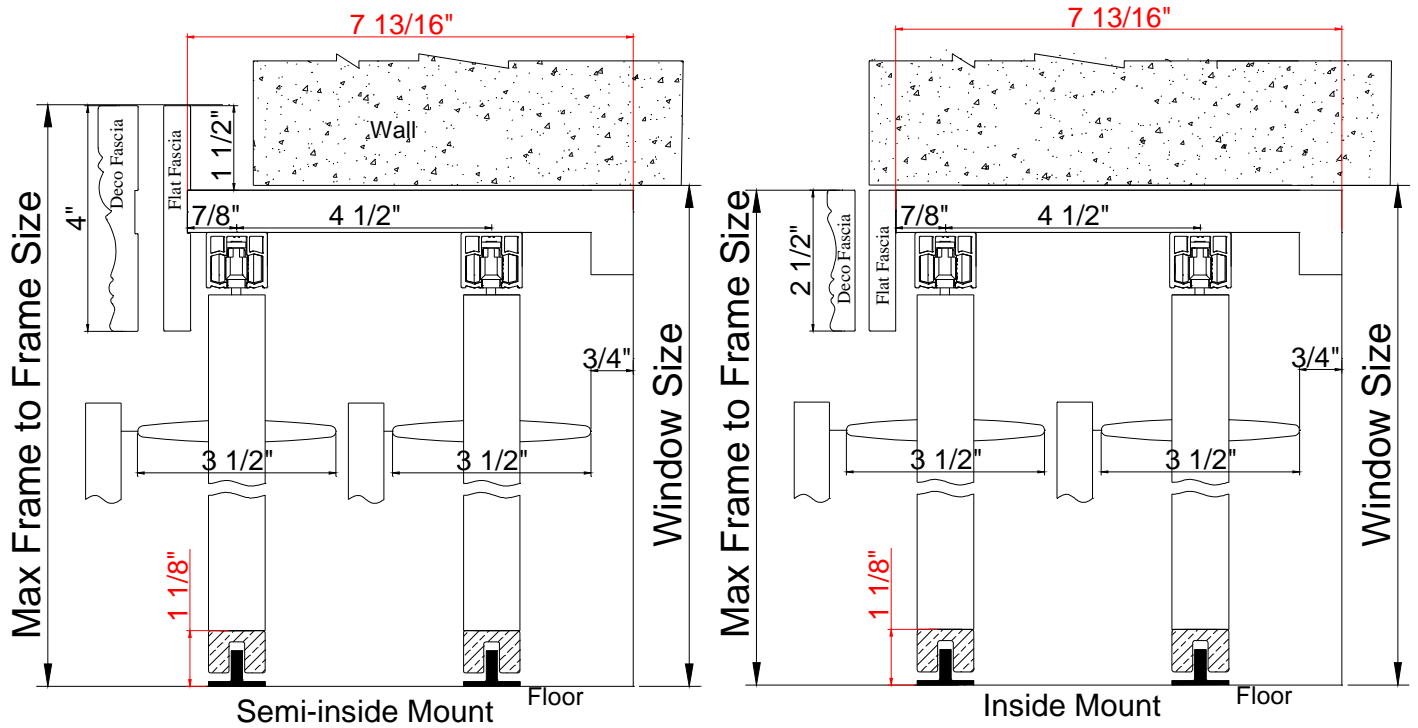


3" / 3 1/2" Louver

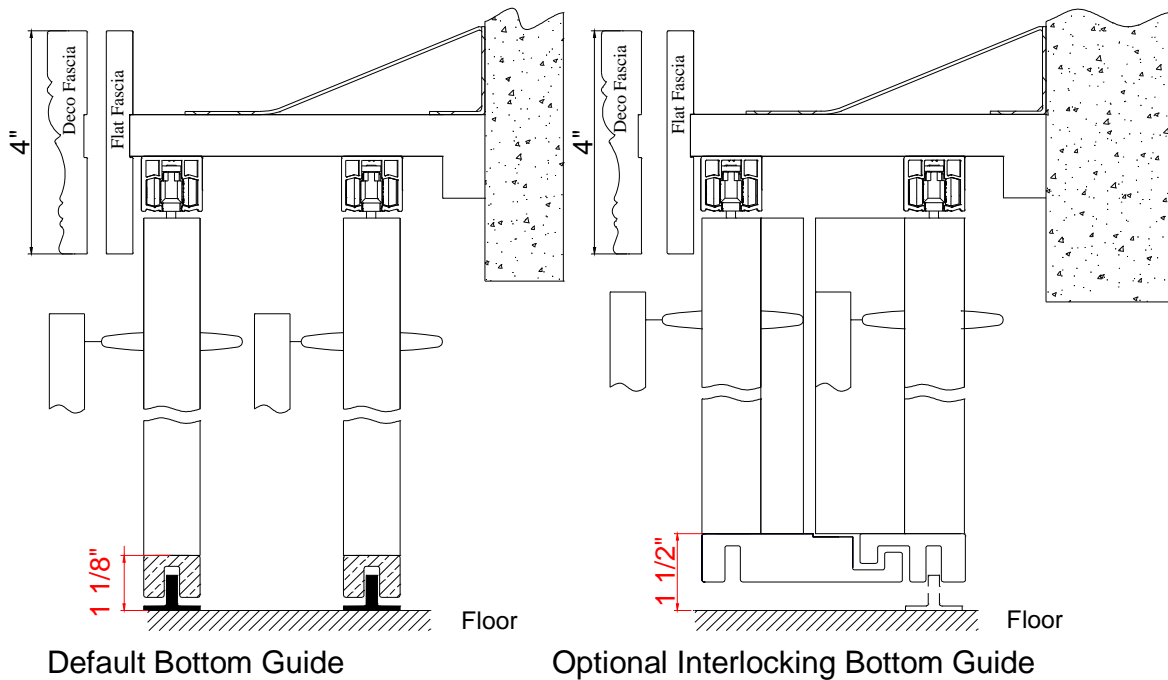


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2016 Track Shutters—Bypass



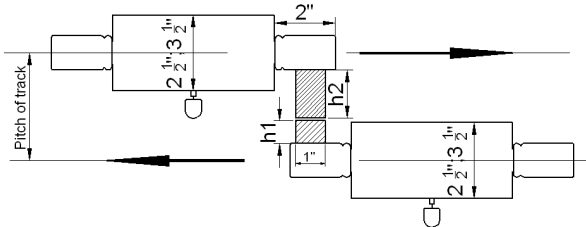
Open By Pass: has 2 kinds of bottom guide



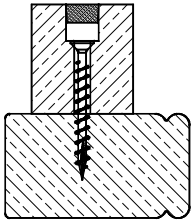
2016 Track Shutters—Bypass

Opened Bypass

Top View



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



Separation of track

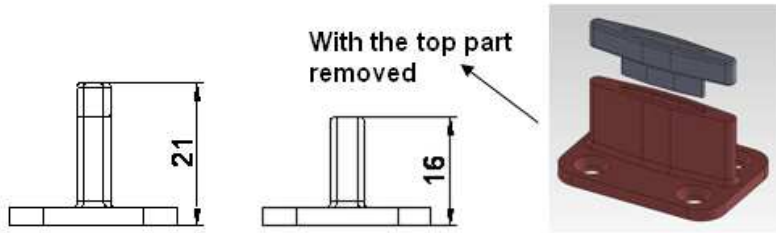
Louver	U shape bottom guide		Interlocking bottom guide	
	Regular Tilt Rod	Invisible tilt	Regular Tilt Rod	Invisible tilt
2.5"	3 9/16"	2 3/4"	3 9/16"	3 9/16"
3" / 3.5"	4 1/2"	3 5/8"	4 1/2"	4 1/2"

Light block thickness for panel

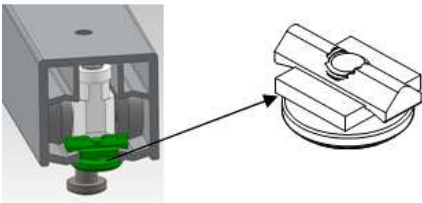
Louver		U shape bottom guide		Interlocking bottom guide	
		Regular Tilt Rod	Invisible tilt	Regular Tilt Rod	Invisible tilt
2.5"	h1	3/4"	3/4"	3/4"	1 9/16"
	h2	1 9/16"	3/4"	1 9/16"	3/4"
3" / 3.5"	h1	1 3/16"	1 3/16"	1 3/16"	1 15/16"
	h2	1 15/16"	1 3/16"	1 15/16"	1 3/16"

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.

2016 Track Shutters—Bypass

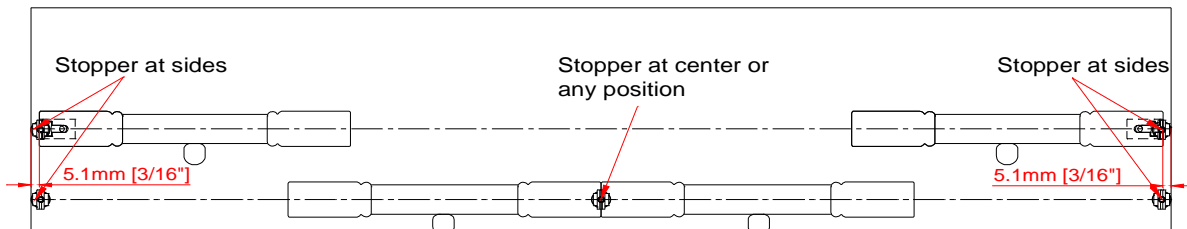


The 2016 Stopper



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

Track Shutters Framing Materials (For waterproof option, only plain fascia is available)

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 * $\leq 8"$	Custom * $\leq 8"$			
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 * $\leq 8"$	Custom * $\leq 8"$			
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)				

Track Shutters Framing Materials

Note:

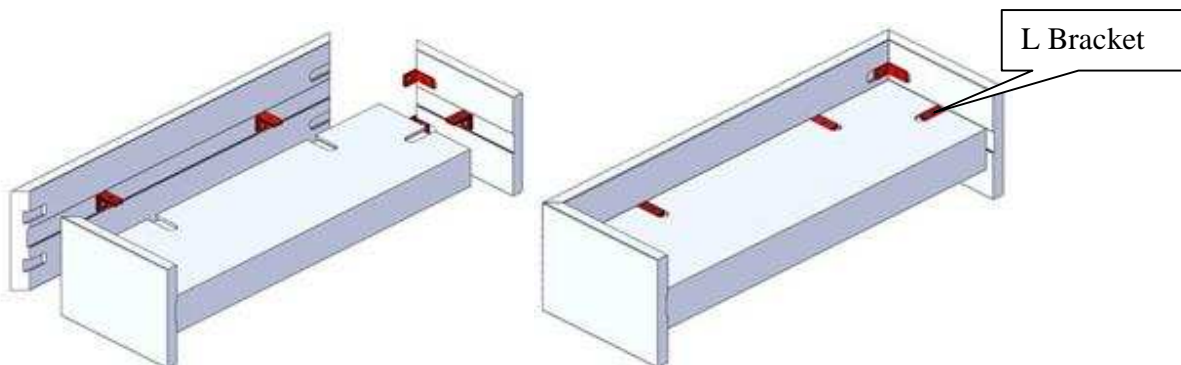
- When the header size is $4\frac{1}{2}"$, $5\frac{1}{2}"$, $6\frac{1}{4}"$ or $7\frac{13}{16}"$, the L Shape header and the U Shape Side Frame will be sent integrally. That is:
 1. The header and the supporting strip will be sent integrally as L Shape Header;
 2. The side frame, supporting strip and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

2016 Track Shutters—Bypass

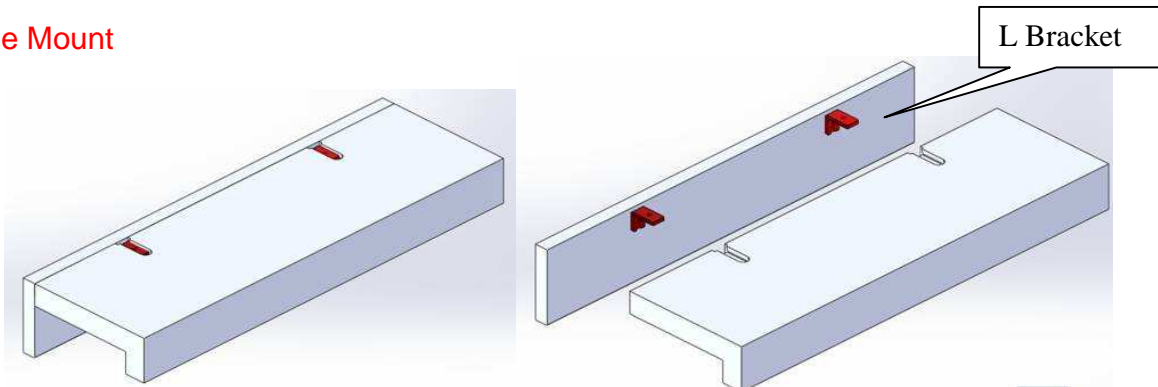
1. The header and the supporting strip will be sent separately for L Shape Header;
2. The side frame, supporting strip and the side fascia will be sent separately for U Shape Side Frame.

➤ The way to connect the bypass header & Fascia: Use the L Bracket to connect the fascia returns, fascia and header. This applies for Inside Mount, Semi-Inside Mount & Outside Mount. Please refer to the drawings below.

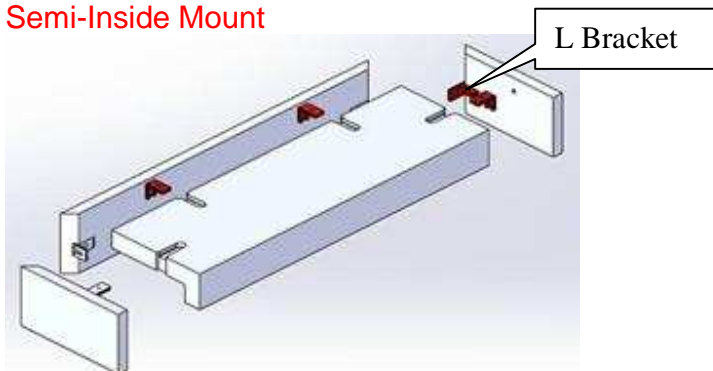
Outside Mount:



Inside Mount



Semi-Inside Mount



2016 Track Shutters—Bypass

Hardware Box

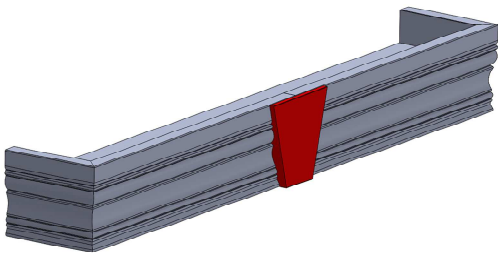
Hardware Box
Part
Wrench
Nylon Guide
$\frac{3}{4}$ " screws for Nylon Guide
Support L Bracket (based on the length of header)
$2\frac{1}{2}$ " screws for support L bracket
$\frac{3}{4}$ " screws for support L bracket

Keystone for Fascia of the Track Shutter

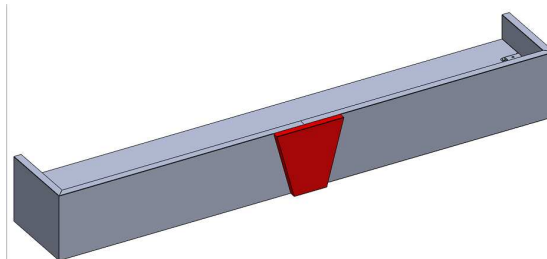
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

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

For Deco Fascia:

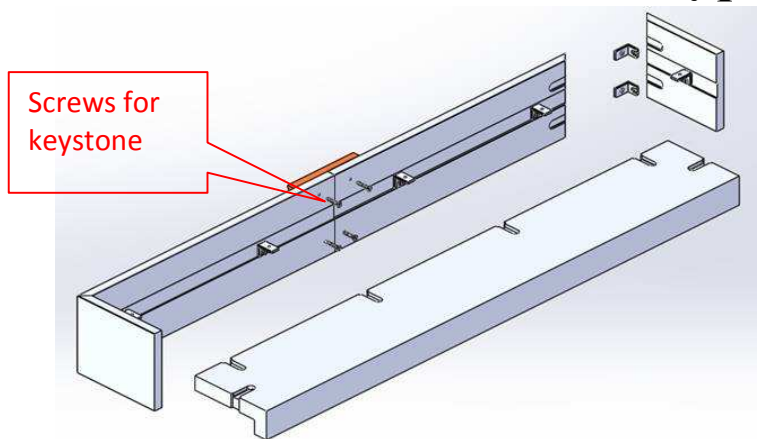


For Plain Fascia:



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

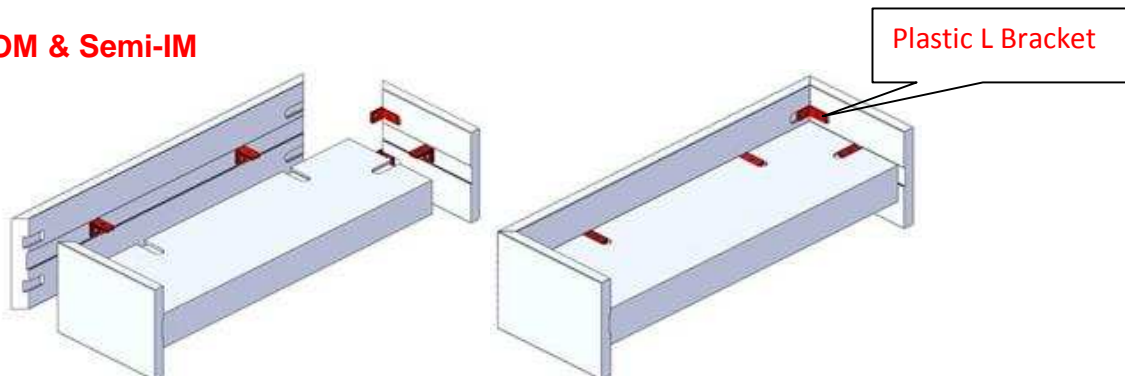


Plastic L Bracket to Connect the Header, Fascia & Fascia Returns

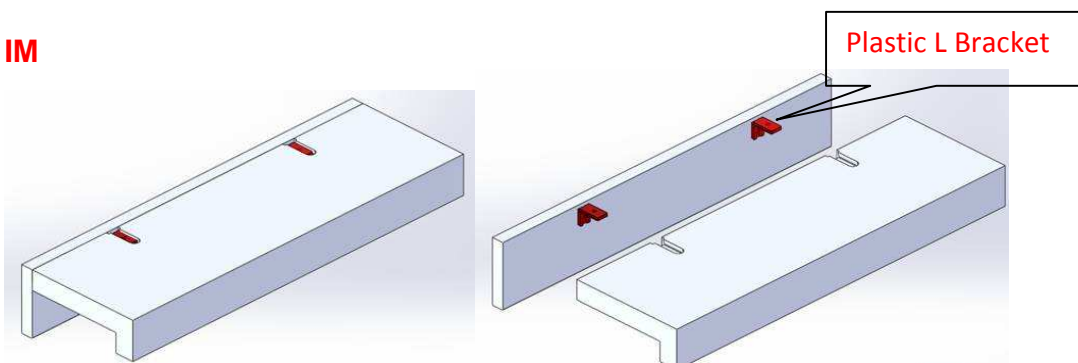


L Bracket will be used to connect the header, fascia and fascia returns for Bypass shutter. This applies for Inside Mount, Semi-Inside Mount & Outside Mount.

OM & Semi-IM



IM



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2016 Track Shutters—Bypass

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Bi-fold 180™

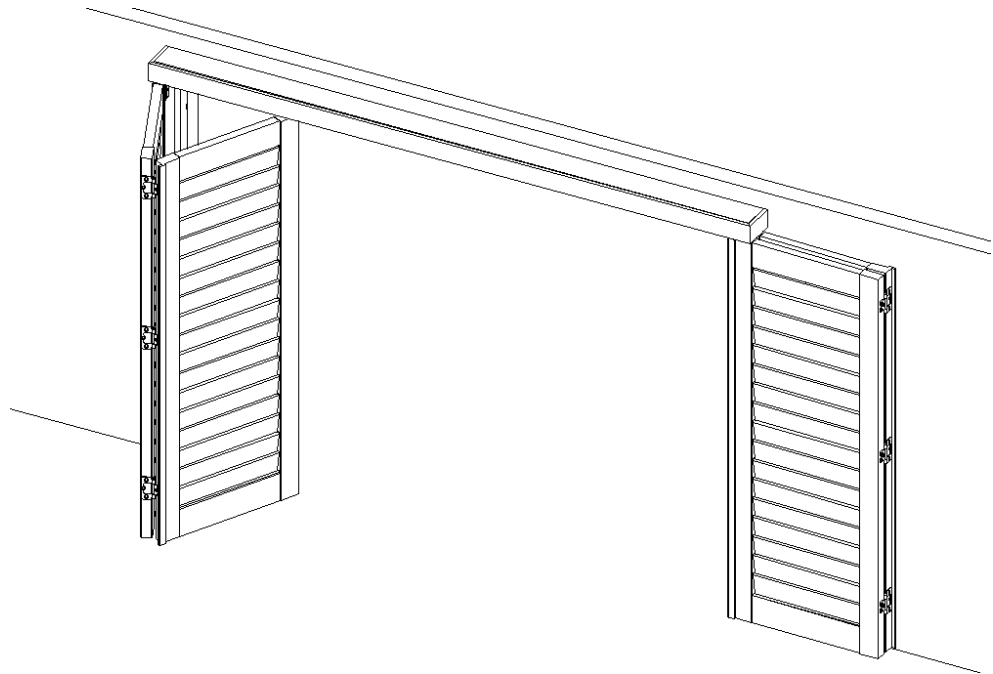
Guidelines and Specs:

Description	Minimum	Maximum	
		1 7/8"	2 1/2" ; 3" ; 3 1/2" ; 4 1/2"
Single-Panel Width (Bi-fold Track) for Non-Waterproof option	6"	24"	24"
Single-Panel Width (Bi-fold Track) for Waterproof option	6"	24"	26"
Single-Panel Width (LLL/RRR)	N/A	N/A	N/A
Single-Panel Height	10"	120"	120"

Outside Mount

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

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

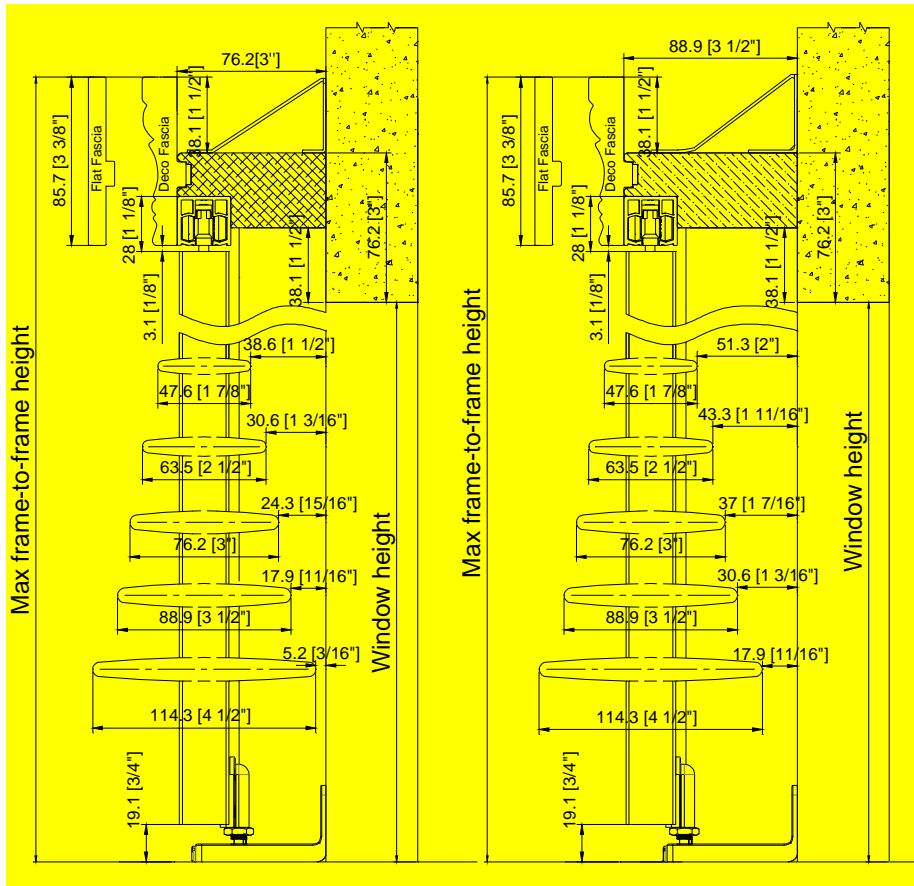


- Track is pre-installed on the header; standard 1 track only.

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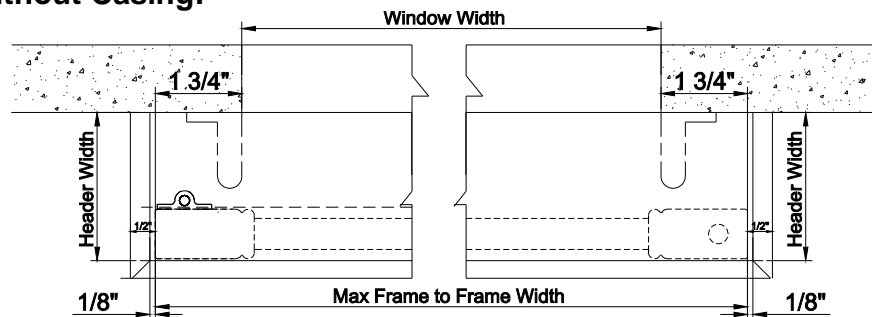
Mounting Options: Outside Mount only

Side View



Top View

Without Casing:

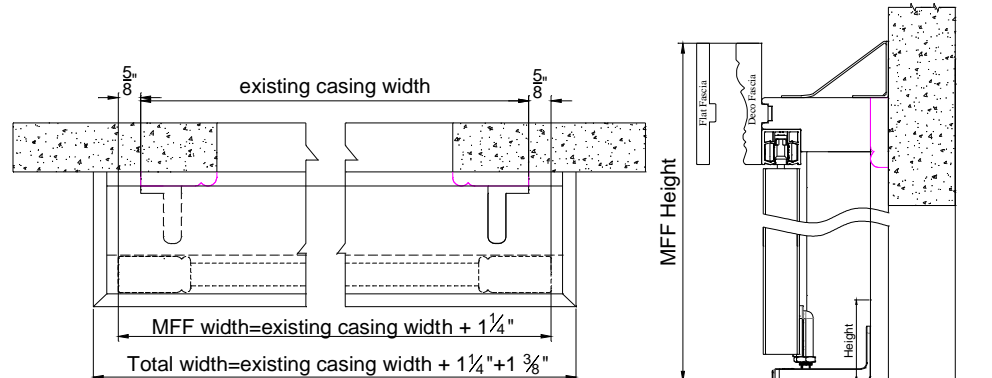


Note:

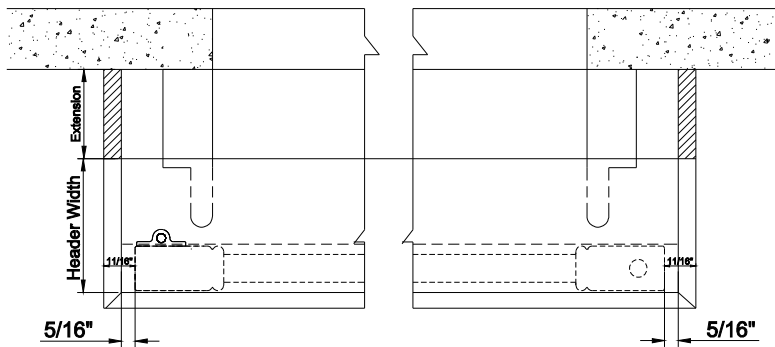
- ◇ Fascia return will protrude the panel about 1/2" for each side.
- ◇ The header will protrude the panel about 1/8" for each side.
- ◇ Header, light blocks, and bottom pivot bracket(s) must be installed on a flat surface.

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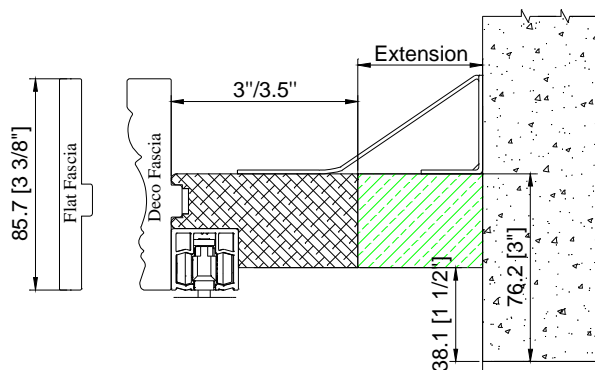
With Existing Casing:



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

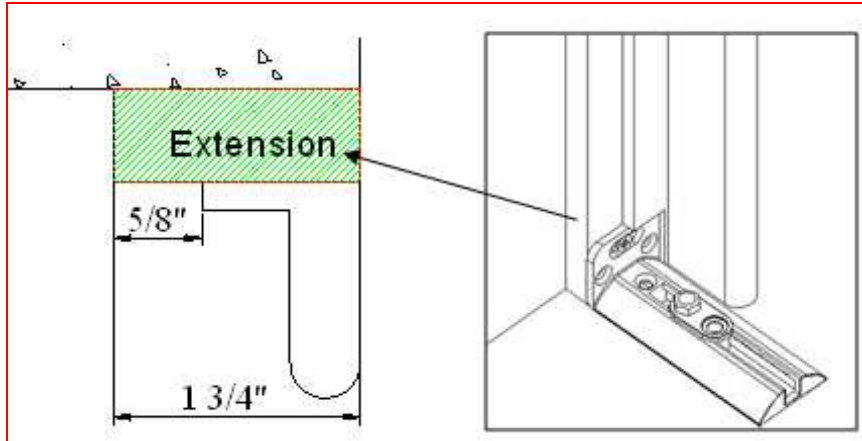


- ✧ The extension will be pre-attached.



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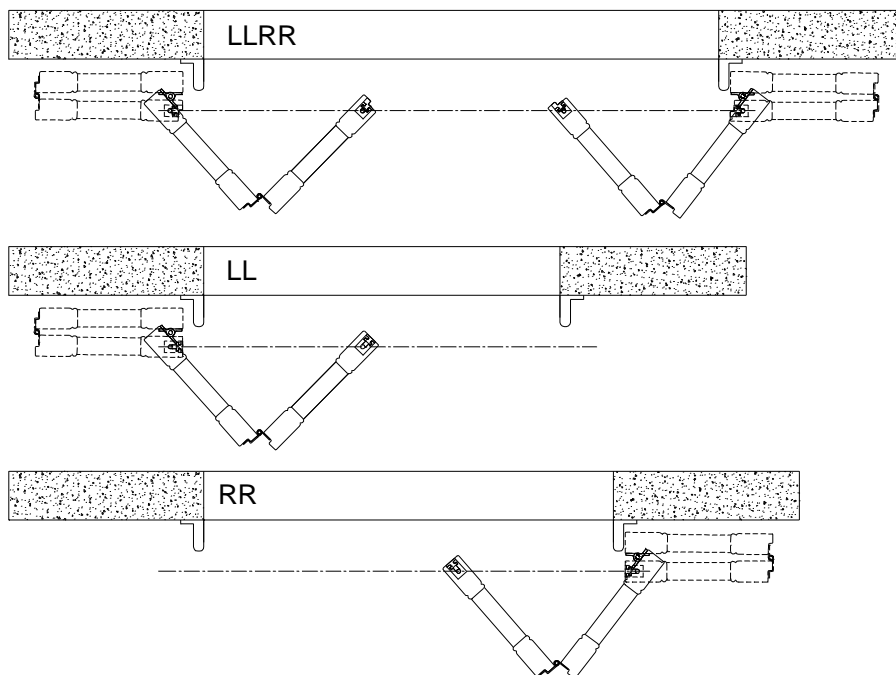
For 180 Bi-fold, if Bottom Pivot L Bracket is required, the extension for the L shape light block will be $1\frac{3}{4}$ " in width. Please see picture below:



Panel Configuration: Only 2", 2 1/4" rabbet and butt stiles are available for non-waterproof option.

Only 2" rabbet and butt stiles are available for waterproof option.

Center stile is not available.



Notes:

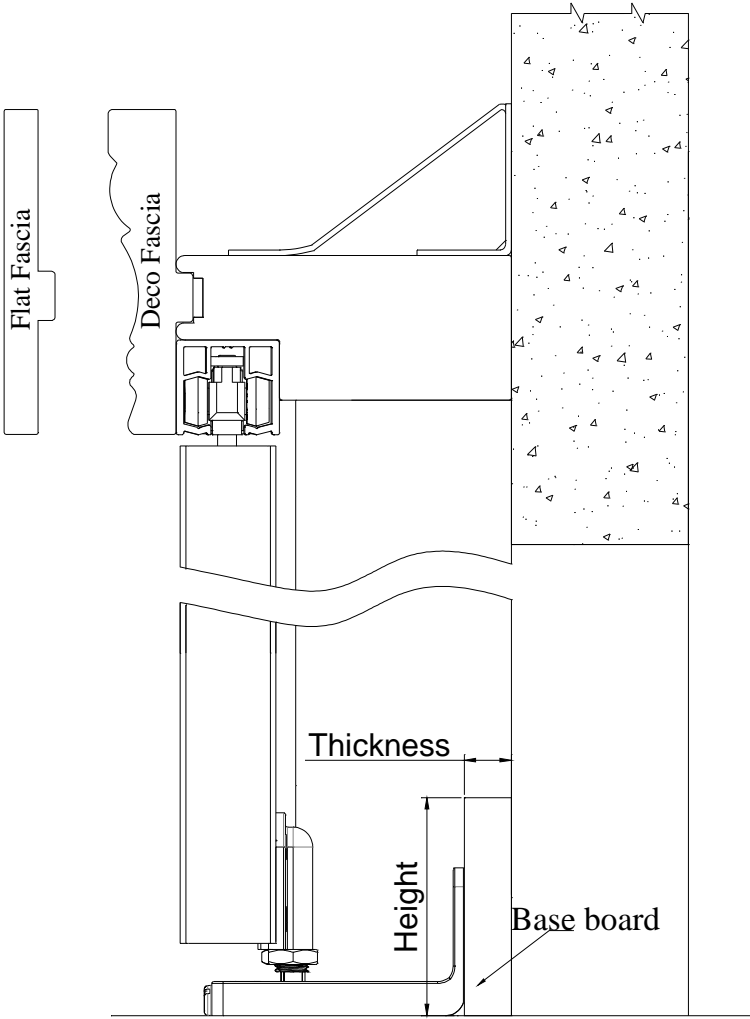
If there is no baseboard to the wall, 3" header can be used.

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

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

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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"

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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 predrilled screw holes

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Bi-fold 90

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 (Bi-fold Track) for Non-Waterproof option	6"	24"	24"
Single-Panel Width (Bi-fold Track) for Waterproof option	6"	24"	26"
Single-Panel Width (Multifold track up to 4 panels)	N/A	N/A	N/A
Single-Panel Height	10"	120"	120"

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

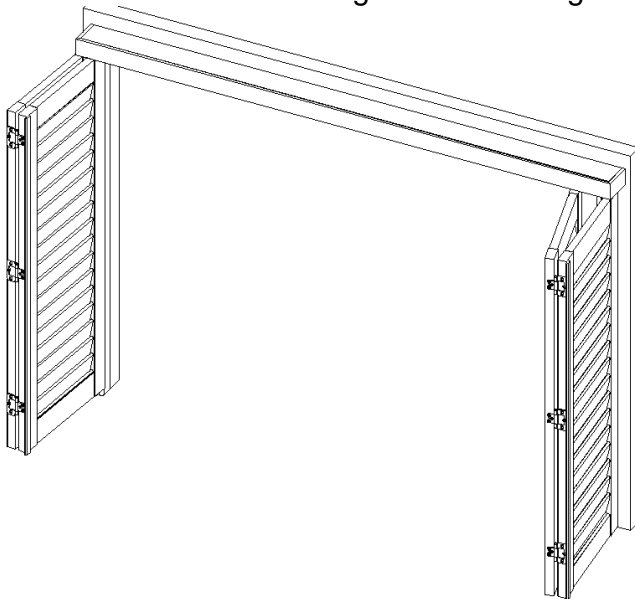
Max frame-to-frame width: window width - 1/8"

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"

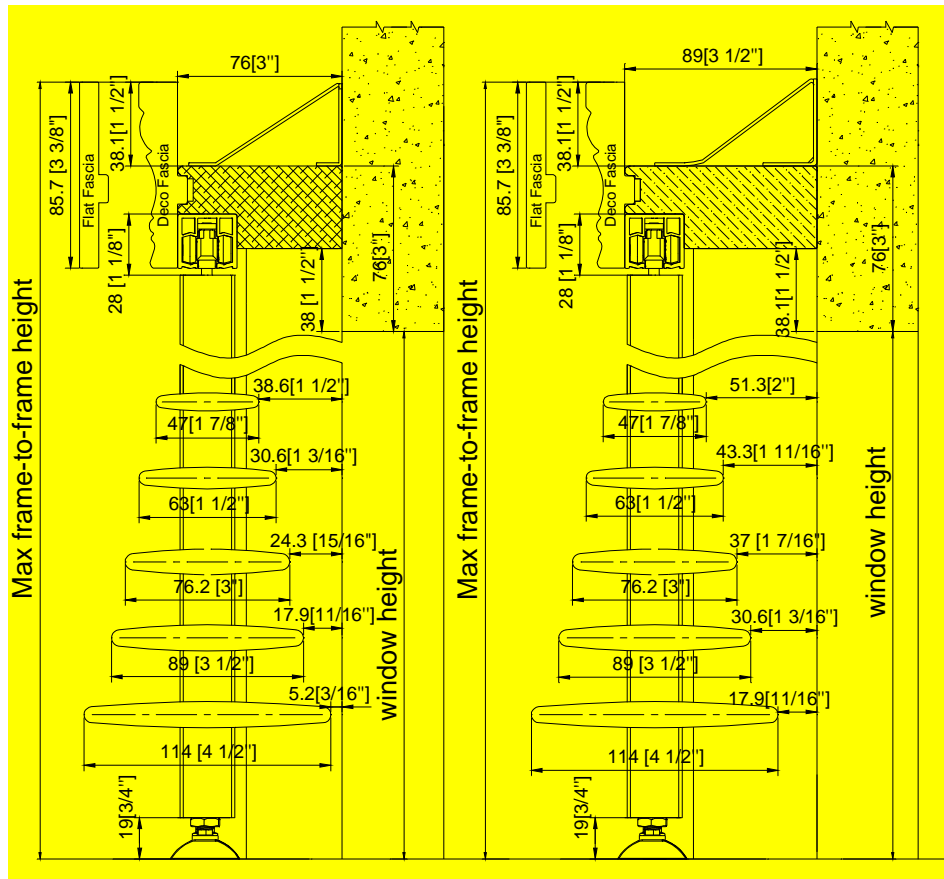


Track is pre-installed on the header; standard 1 track only.

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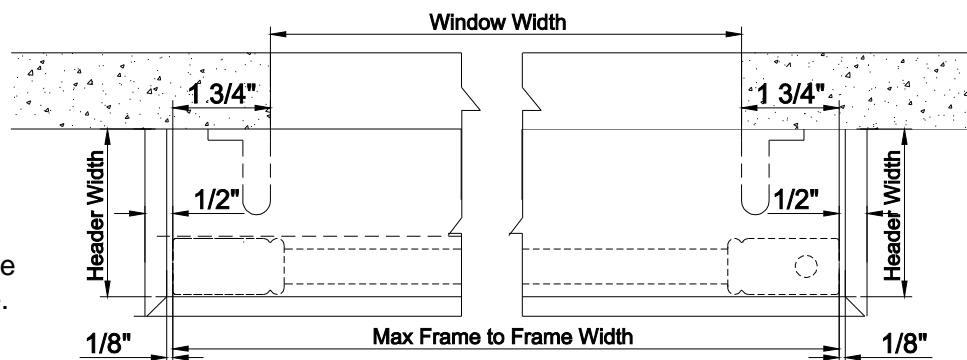
Mounting Options: Outside Mount

Side View



Top View

Without Casing:

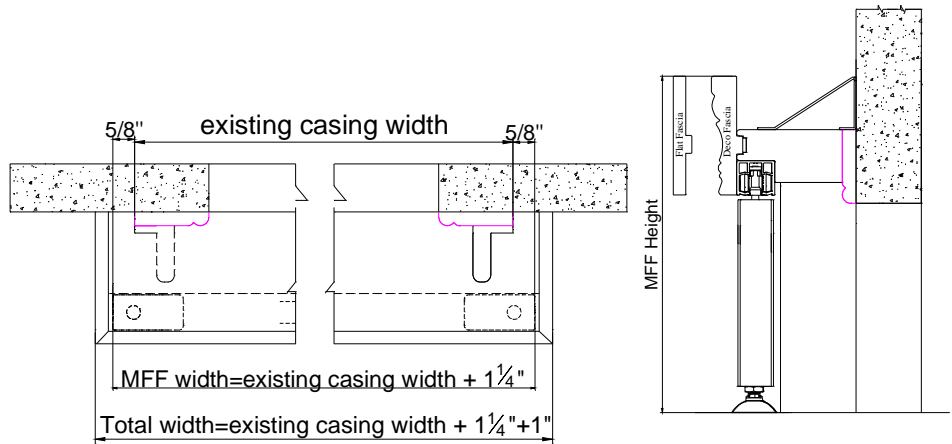


Note:

- ◆ 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.

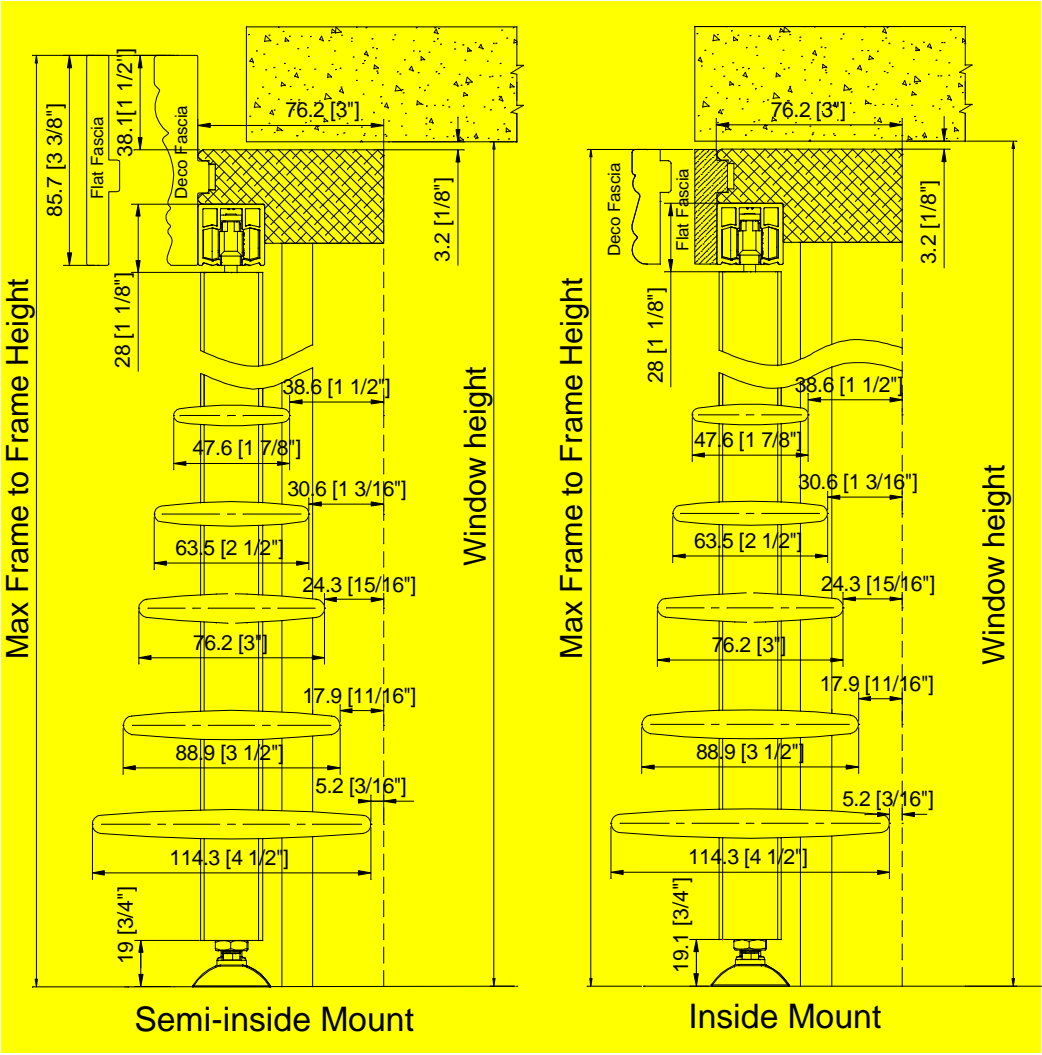
WOODLORE® PLUS

With Existing Casing:



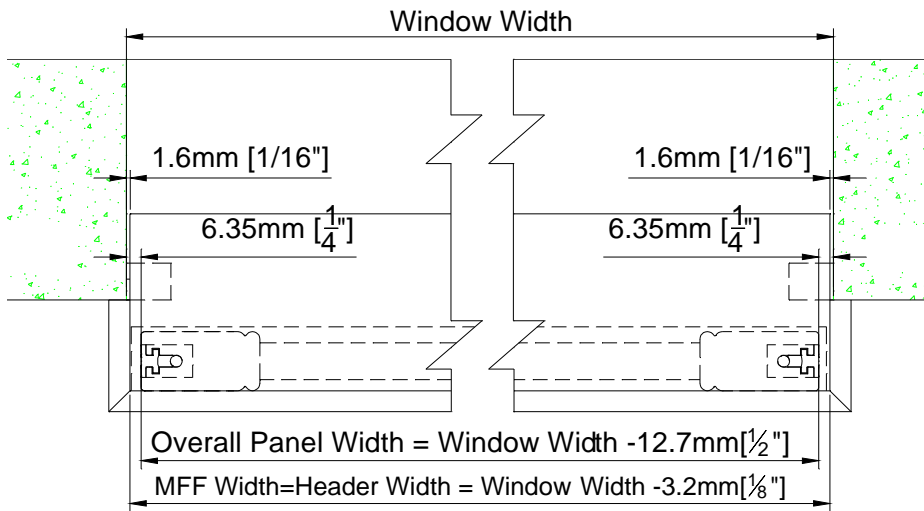
Semi-Inside/Inside Mount

Side View

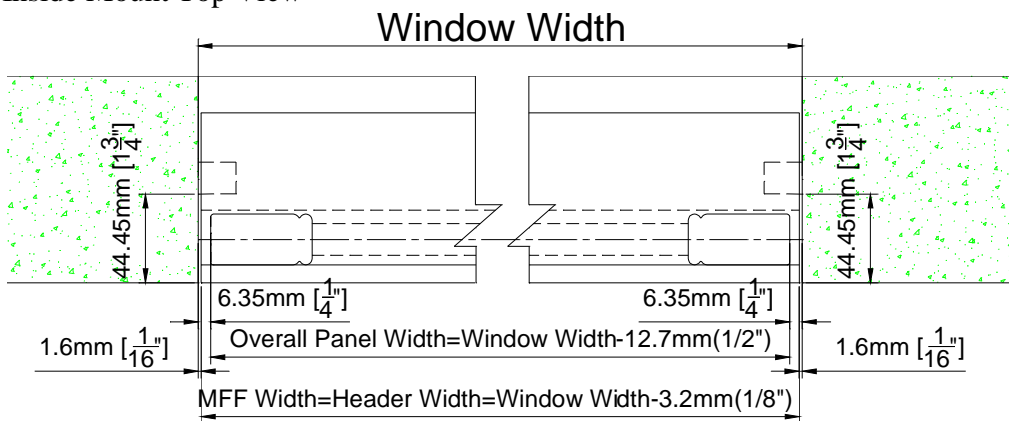


WOODLORE® PLUS

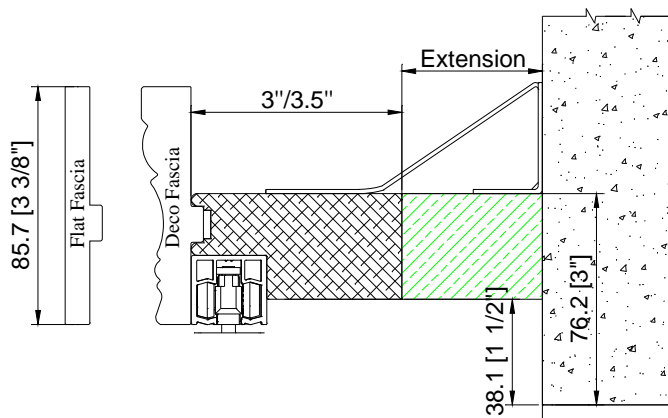
Semi-Inside Mount Top View



Inside Mount Top View



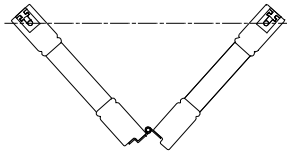
- ✧ Header Extension: Optional.
- ✧ Custom extension up to 2" for Header
- ✧ The extension will be pre-attached.



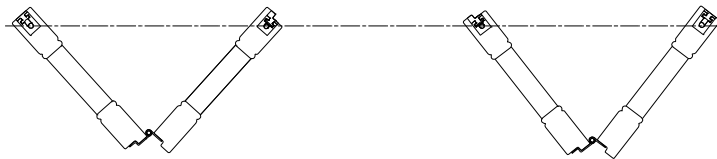
WOODLORE® PLUS

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

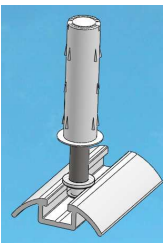
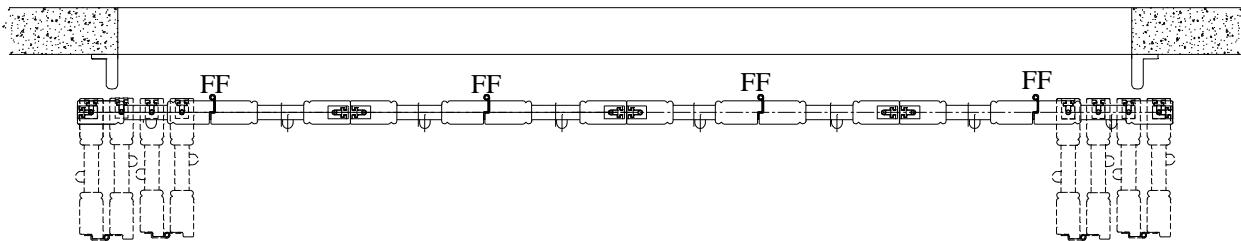
LL or RR



LLRR



90° Floating Panels



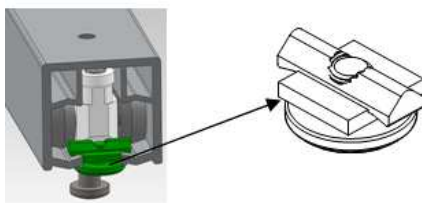
- Two panels can be hinged together, fold and slide to either direction
- Application comes with wheel carrier, spring loaded guide and floor track
- Can be used on large window

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.

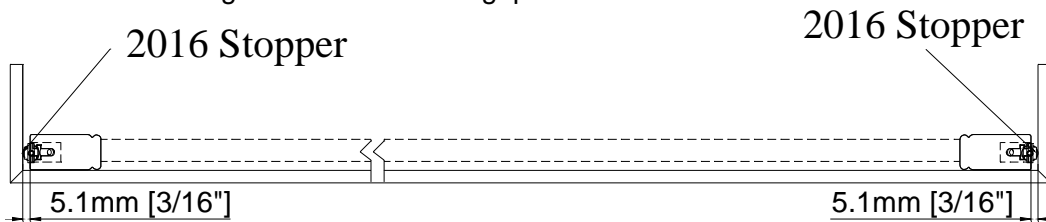
The 2016 stopper can also be used in the center or any position of the top track as an option.

2016 Stopper



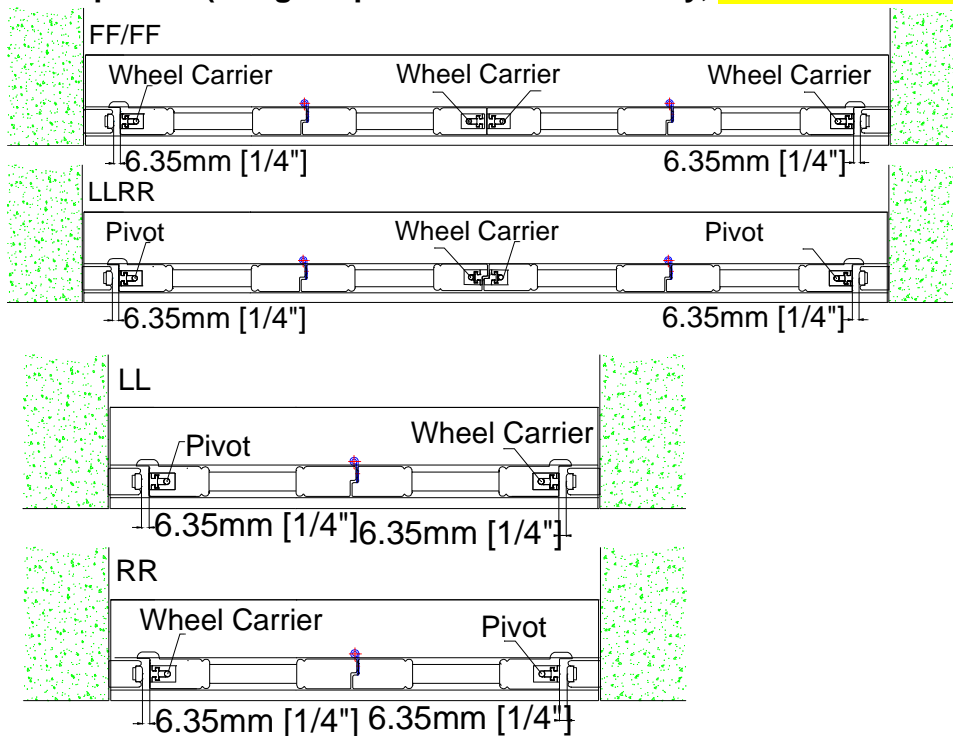
WOODLORE® PLUS

Please see drawing below to show the gap.

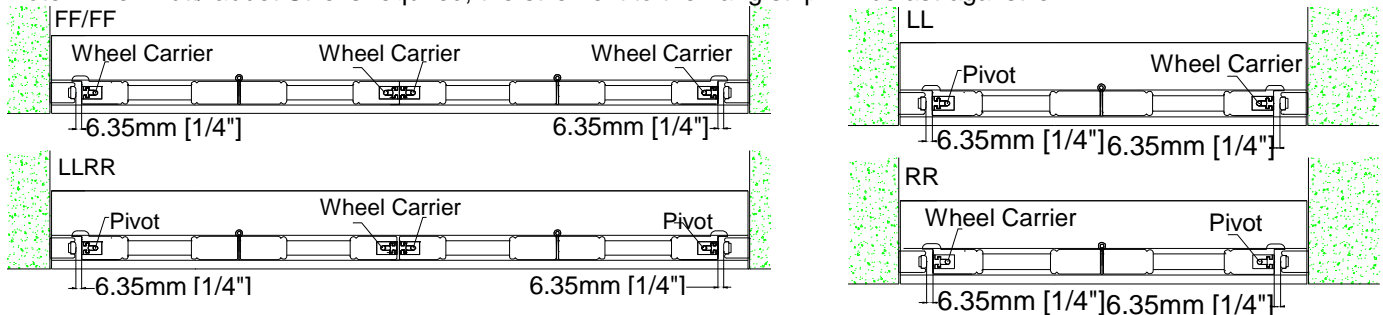


2. When rabbit stile required, the meeting stile of unhinged stile will be butt stile by default.

Optional (Hang Strip for Inside Mount Only, not available for Waterproof option)

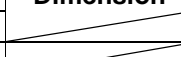
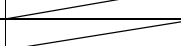


Note: When Butt/rabbit Stile is required, the stile next to the hang strip will be astragal stile.



WOODLORE® PLUS

90 degree Bi Fold Track Shutters Framing Materials (For Waterproof option, only plain fascia is available)

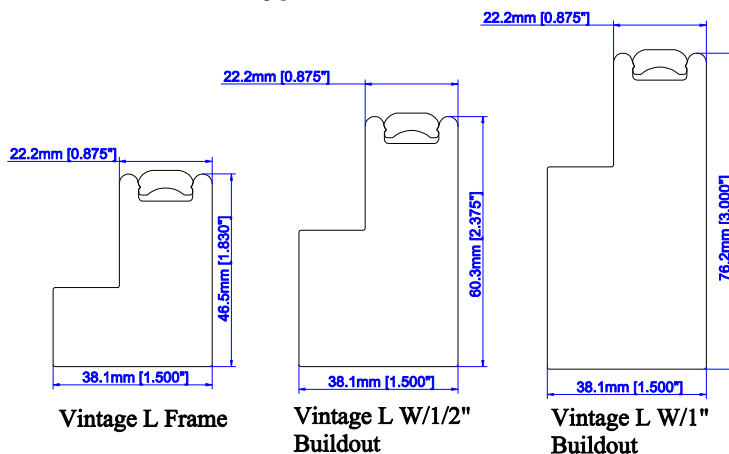
Type		Header Dimension	Top Fascia Dimension	Light Block Strip Dimension	Hang Strip Dimension
Header & Top Fascia & Light Block Strip	OM	3"	3 3/8"	1 9/16"	
		3 1/2"		2 1/16"	
	Semi-IM	3"	1 7/8"	5/8"x3/4"	
	IM	3"		5/8"x3/4"	

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

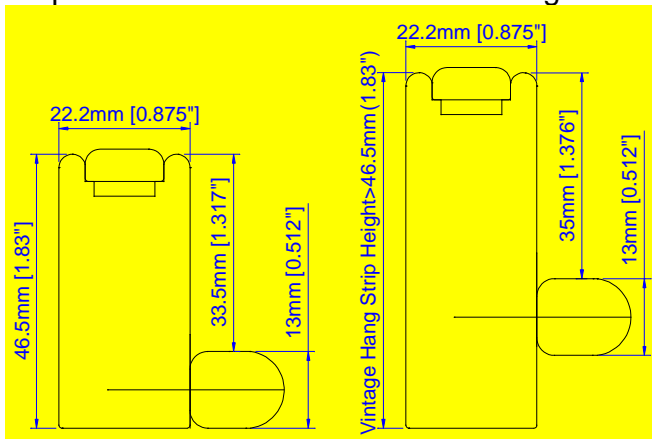
Frame Hinged Bifold (Not available for Waterproof option)

Available Stile: Rabbet Stile Only

Available Frame type



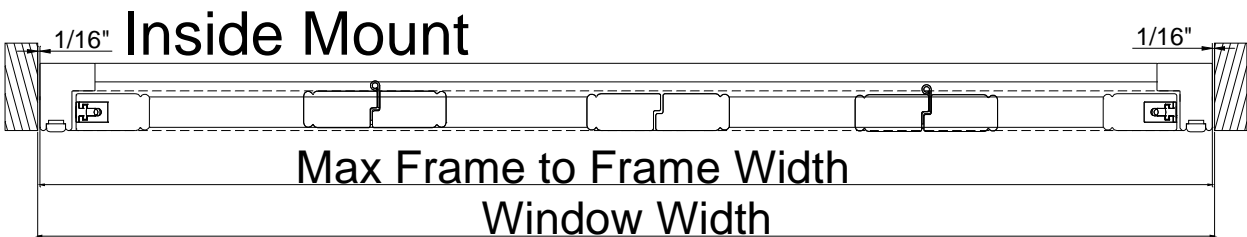
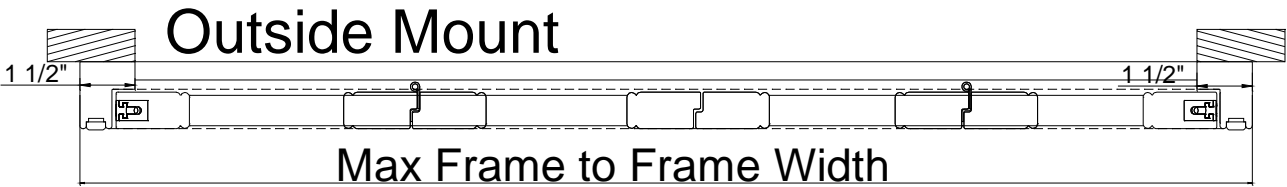
Vintage Hang Strip with 13mm light block: For single direction shutter with even panel qty, the frame on the unhinged side will be Vintage Hang Strip with 13mm [0.512"] light block, the height of the Vintage Hang Strip will match with that of the hinged side frame. The Vintage Hang Strip will be made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



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Top View

Hinged at Left or Right with wheel assembly at top;

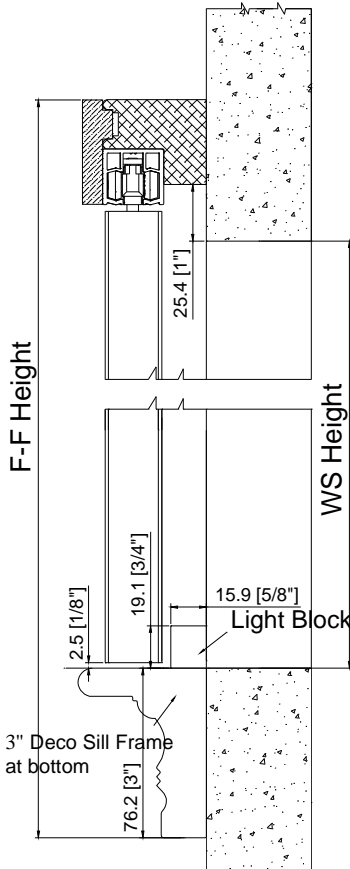
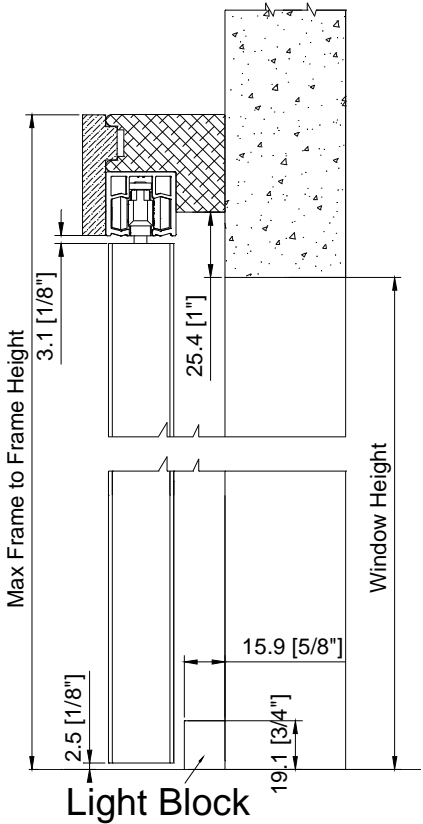


Side View

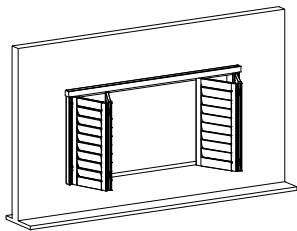
Outside Mount

3-Sides + bottom light block

3-Sides + 3" Deco Sill Frame

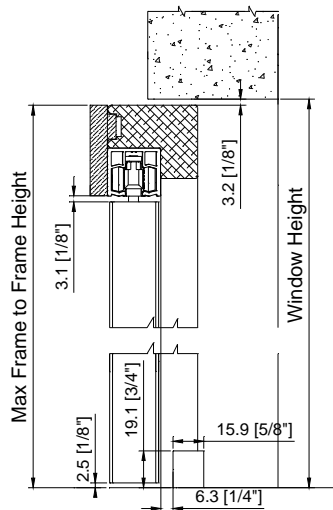


WOODLORE® PLUS

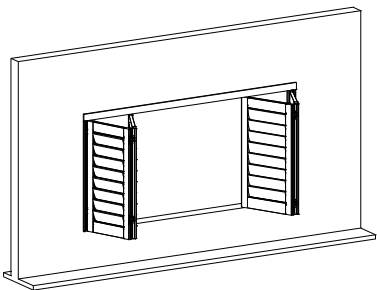
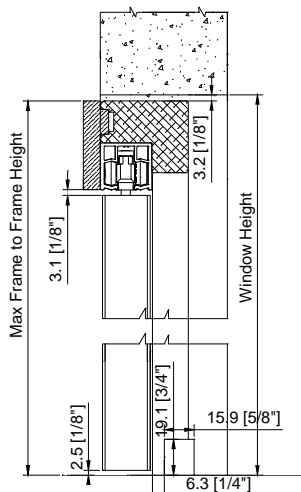


Note: For OM Frame Hinged Bifold shutter not to use as a door, if there is no existing sill at the bottom of the window opening, it is recommended to have the 3" Deco Sill Frame at the bottom.

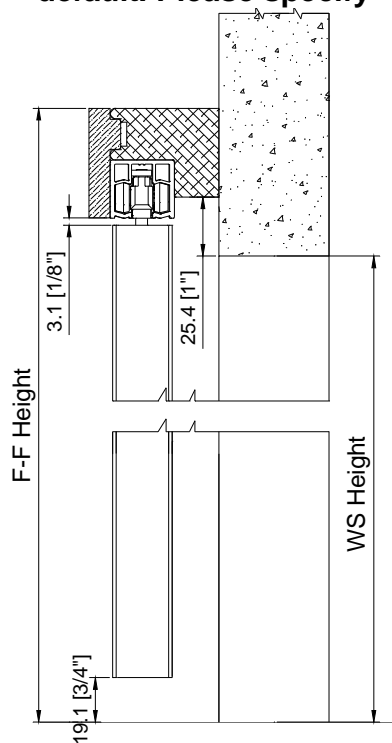
Semi-Inside



Inside Mount

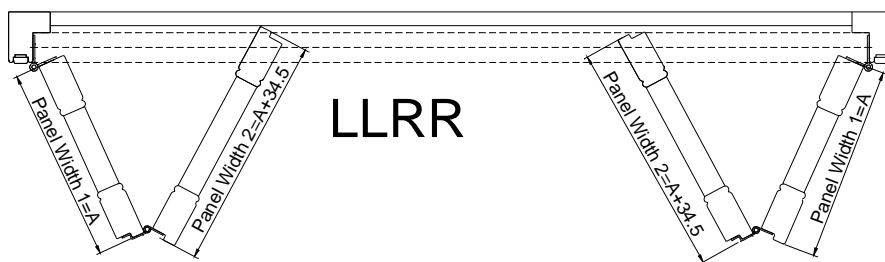
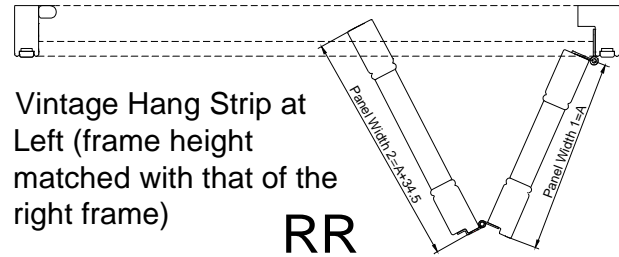
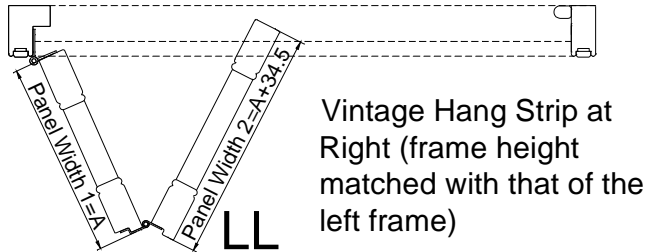


For frame hinged bifold track shutter used as door, the bottom gap will be 19mm by default. Please specify "Used As Door" on the order form.



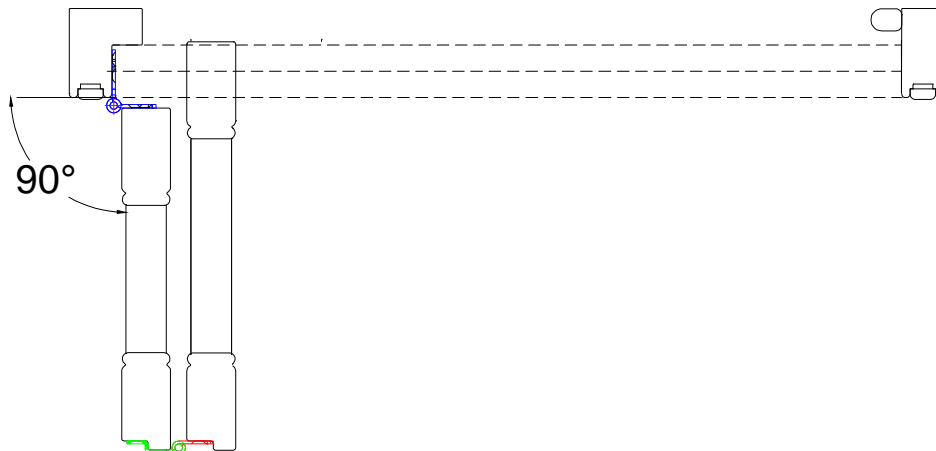
WOODLORE® PLUS

Panel Configuration (uneven panel width)



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

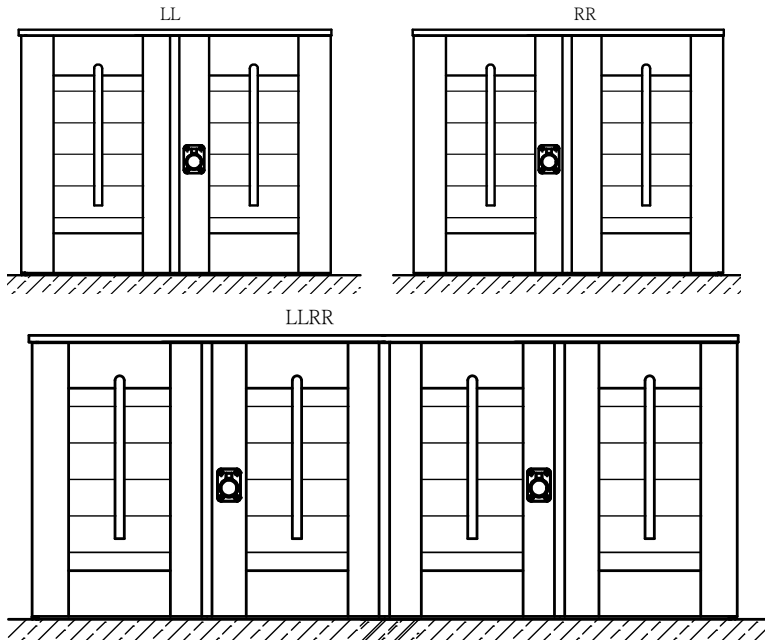
- 1) For top frame, the insert will be replaced by top fascia;
- 2) Top track will be pre-attached to the top frame;
- 3) Frame will be pre-drilled with screw holes same as regular shutters.

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Ring Pull: The ring pull will be provided as 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.

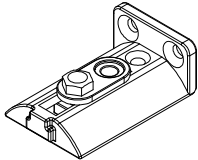
Ring pull color will match the hinge color.

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

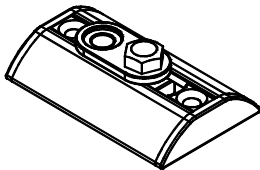


Bottom Pivot Bracket for 90 degree bifold:

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

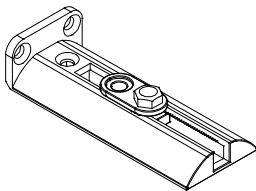


For Inside Mount, Bottom Pivot L Bracket will be supplied as default;



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

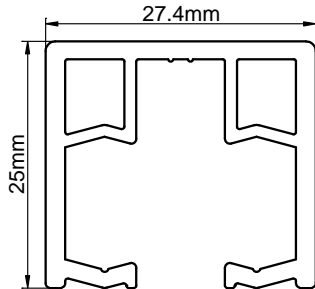
For 180° Bifold Track Shutter, 81mm Bottom Pivot L Bracket will be supplied as default.



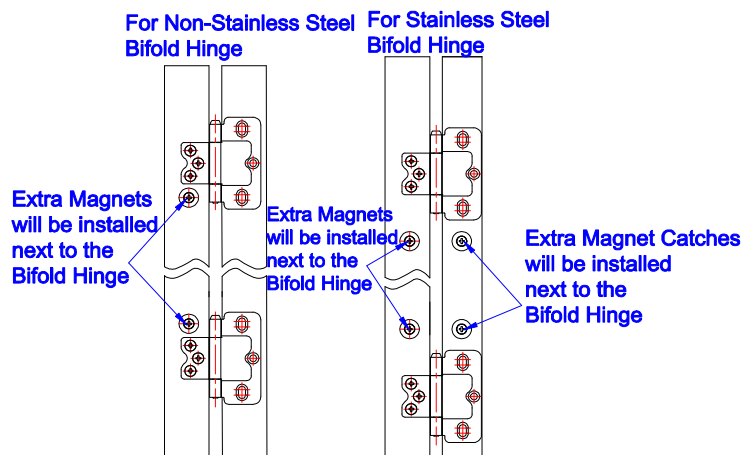
WOODLORE® PLUS

Track Dimension:

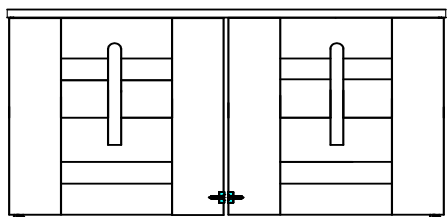
Top Track



Extra Magnets will be supplied for Bifold hinges: (only for the most top and bottom hinges, **not available for Waterproof option)**



Side Magnet: applied to the meeting stiles of LR panels, **not available for Waterproof option**



Extra magnet and Side Magnet (Not available for Waterproof option)



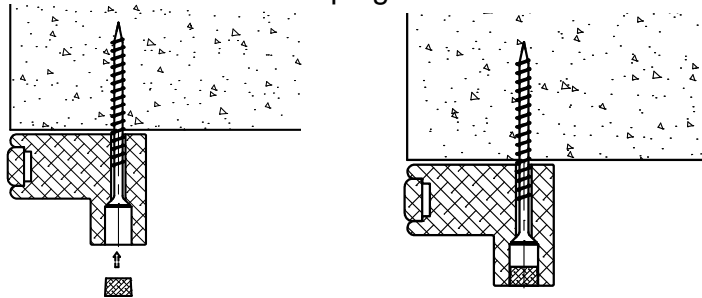
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90° Bi Fold Track Shutters Hardware Box

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 predrilled 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



3. For both 90° & 180° bi-fold track, for waterproof option, when 3" header is selected, the header will make as 2 3/8" (Vintage L frame for waterproof option) + 5/8" extension.

When 3 1/2" header is selected, the header will make as 2 3/8" (Vintage L frame for waterproof option) + 1 1/8" extension.

The extension for both header sizes will be pre-attached.

4. For waterproof option, only plain fascia is available.

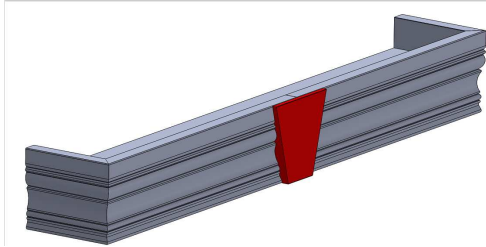
WOODLORE® PLUS

Keystone for Fascia of the Track Shutter

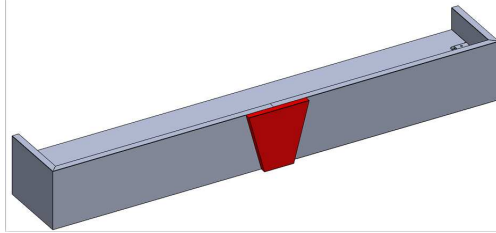
When fascia length exceeds the limitation and needs to split, keystone design fascia will be supplied without surcharge for track shutters.

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

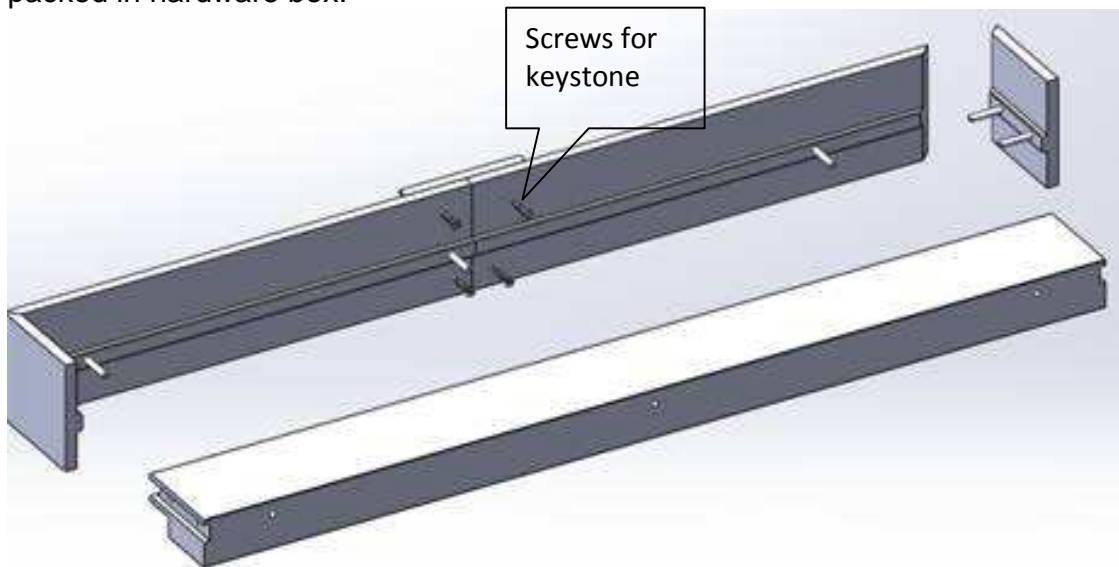
For Deco Fascia:



For Flat Fascia:



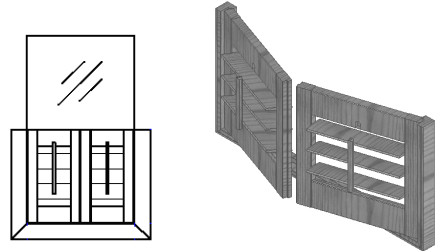
The keystone will be installed by screws. We will pre-drill the screw holes and the screws will be packed in hardware box.



Special Options

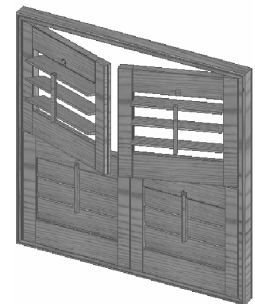
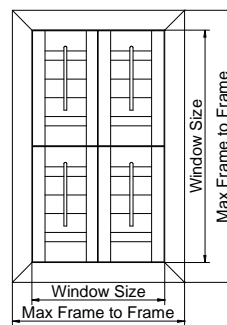
Café Shutters*

- 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.

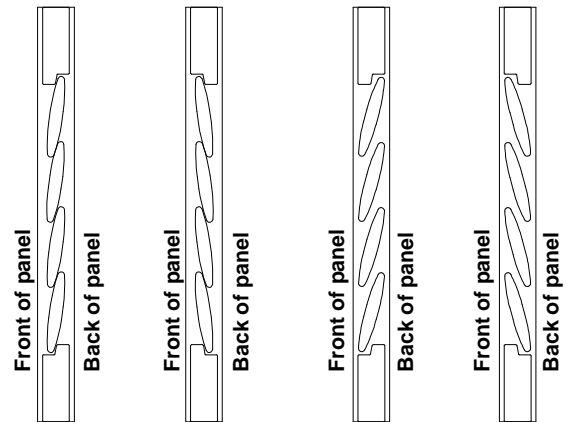
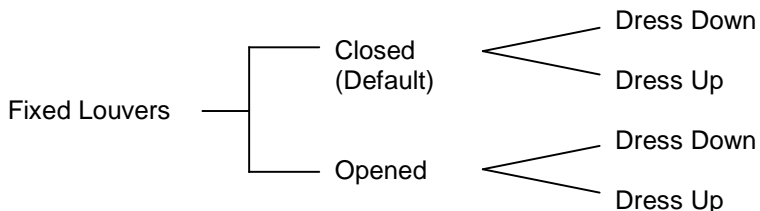


Double-Hung Shutters*

- For total number of panels, please include panels in both rows.
- Bifold panel is not available under this option.
- 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



Batten for Type E&F: (Not available for Waterproof option)

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"

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

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Special Options (continued)

Custom Colors *

Available in Woodlore® plus shutters.

Option (Color Code)	Sample Size	Confirmation Process
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.

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.

Hardwood Specialty Shape

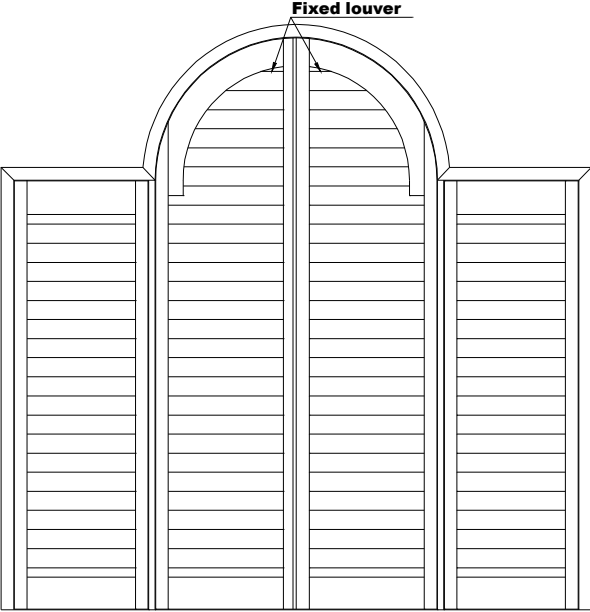
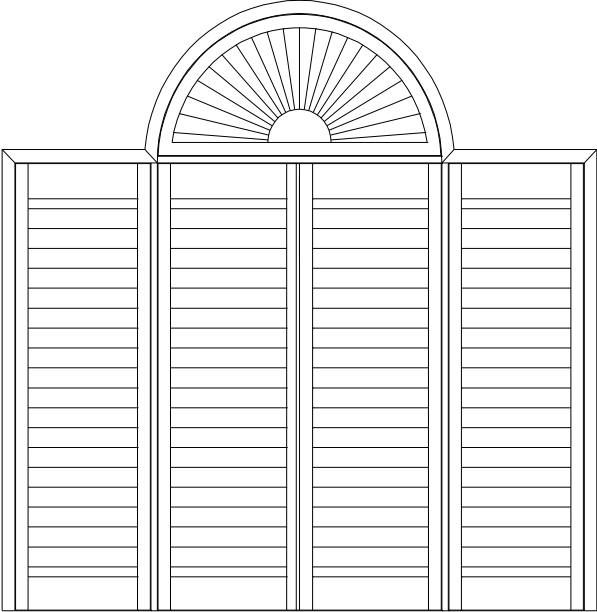
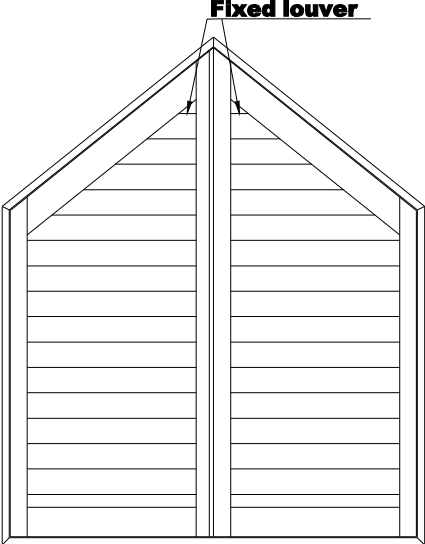
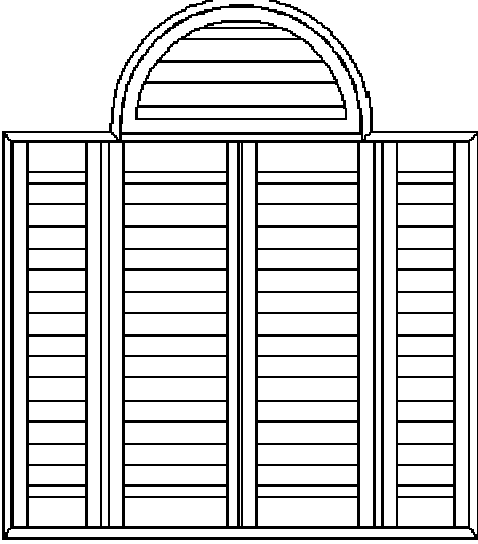
Specialty Shutters* (Not available for Waterproof option)

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 data-bbox="225 1077 368 1211"></div> <div data-bbox="209 1223 395 1283">Quarter Round Sunburst</div> <div data-bbox="459 1077 762 1223"></div> <div data-bbox="531 1245 671 1305">Half Round Sunburst</div> <div data-bbox="172 1357 437 1447"></div> <div data-bbox="252 1480 379 1541">Elongated Eyebrow</div> <div data-bbox="475 1357 807 1435"></div> <div data-bbox="568 1480 687 1541">Eyebrow Sunburst</div>	<div data-bbox="903 1077 1031 1223"></div> <div data-bbox="882 1245 1106 1305">Louvered Arch w/ Center Tilt Rod</div> <div data-bbox="1201 1077 1358 1223"></div> <div data-bbox="1177 1245 1377 1283">Circle Sunburst</div> <div data-bbox="906 1335 1066 1469"></div> <div data-bbox="935 1480 1054 1541">Hexagon Sunburst</div> <div data-bbox="1190 1323 1445 1491"></div> <div data-bbox="1265 1496 1369 1529">Triangle</div>
Angle Top	Louver Arch in a Rectangle
<div data-bbox="156 1731 272 1895"></div> <div data-bbox="177 1928 308 1962">Angle Top</div> <div data-bbox="488 1731 539 1917"></div> <div data-bbox="419 1951 722 2011">*Top louver of angle top might be fixed as shown</div> <div data-bbox="140 2018 1145 2054">Surcharge applies. Please see Options and Surcharges page for details.</div>	<div data-bbox="1106 1715 1217 1917"></div> <div data-bbox="1050 1928 1281 1995">Louver Arch in a Rectangle</div> <div data-bbox="1350 2018 1453 2054">WLPI-1</div>

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<p>Arch Top Picture Window with horizontal louvers</p>  <p>Fixed louver</p> <p>This diagram shows a window with a semi-circular arch top. The arch is filled with horizontal louvers. The main body of the window is also filled with horizontal louvers. A label 'Fixed louver' points to the top of the arch.</p>	<p>Arch Top Picture Window with Sunburst</p>  <p>This diagram shows a window with a semi-circular arch top. The arch is filled with a sunburst pattern. The main body of the window is filled with horizontal louvers.</p>
<p>Peak</p>  <p>Fixed louver</p> <p>This diagram shows a window with a peaked top. The peak is filled with horizontal louvers. The main body of the window is also filled with horizontal louvers. A label 'Fixed louver' points to the top of the peak.</p>	<p>Standard unit with horizontal arch center</p>  <p>This diagram shows a window with a semi-circular arch top. The arch is filled with horizontal louvers. The main body of the window is also filled with horizontal louvers.</p>

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

WLPI-2

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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 2" Classic 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

WOODLORE® PLUS

Pricing

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 1/2" Bullnose Z Frame 1 ¼ " Beaded Z Frame/ Bullnose Tilt Out Z Frame	4-sided	(Width+2")	x	(Height+2")	/ 144	x	\$/sq ft
	3-sided with Sill Plate (N/A w/ Tilt out Z)	(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 (N/A w/ Tilt out Z)	(Width+2")	x	(Height+1")	/ 144	x	\$/sq ft
	2-sided	(Width+2")	x	(Height)	/ 144	x	\$/sq ft
Vintage Hang Strip Traditional 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
Vintage L Frame/ Beaded 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

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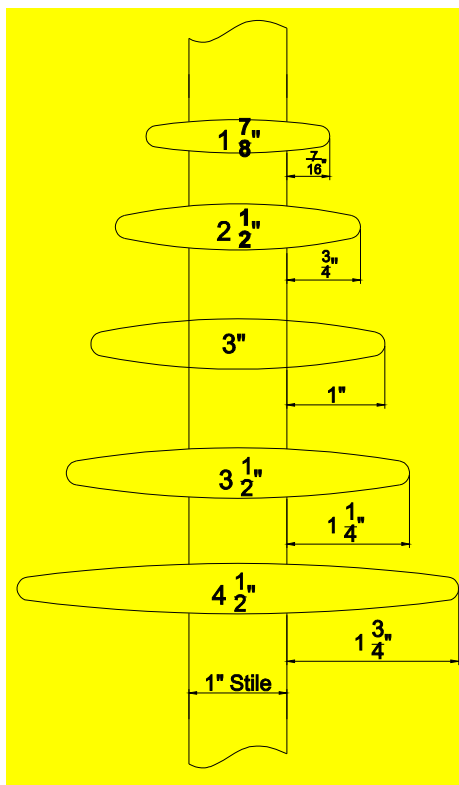
Appendix

Color Coordination Chart

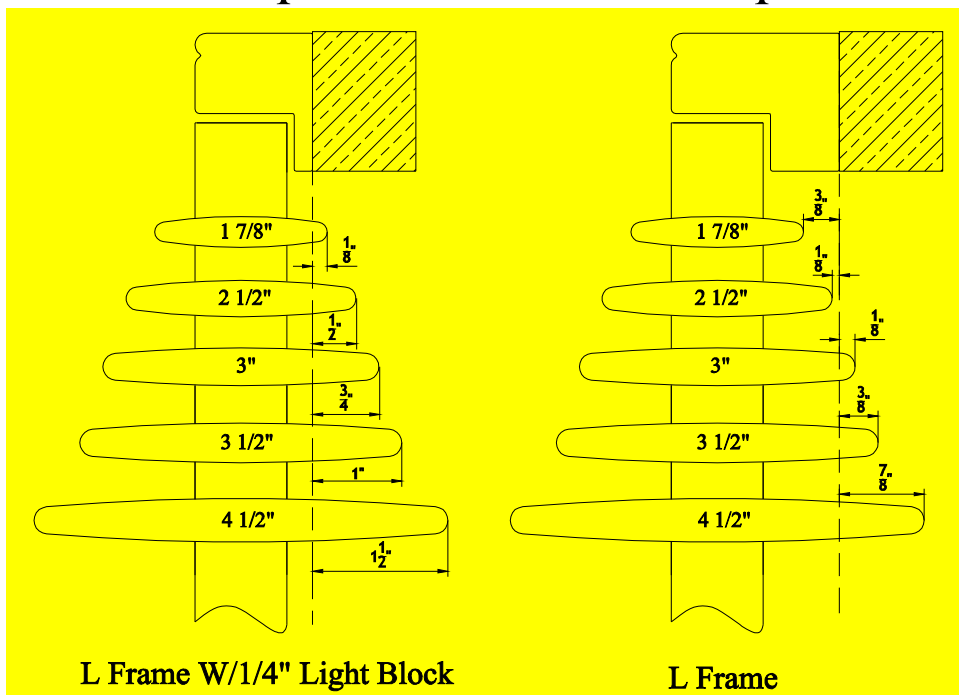
Color ID	Color Name	New Hinge color (Default for non-Waterproof option)	New Ring pull color	New T post connector color	Top Track color (Default)	Hinge color (Default for Waterproof option)
001	Pure White	Pure White	White	Pure White	White	Stainless Steel
002	Extra White	Silk White	White	Silk White	White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

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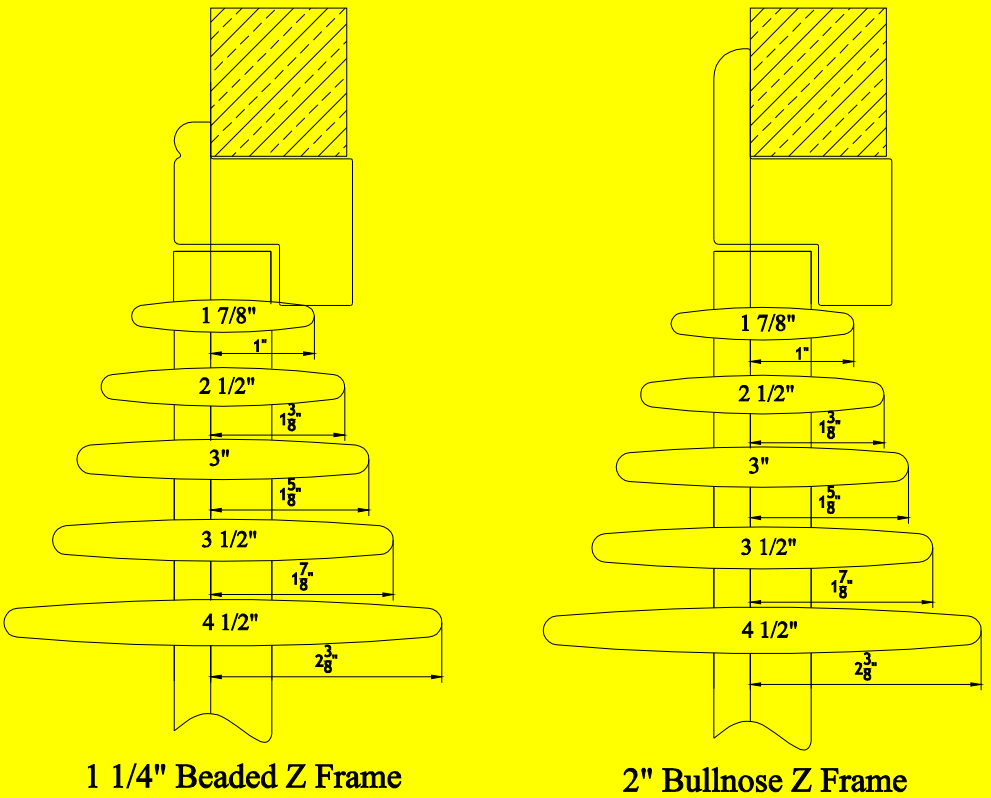
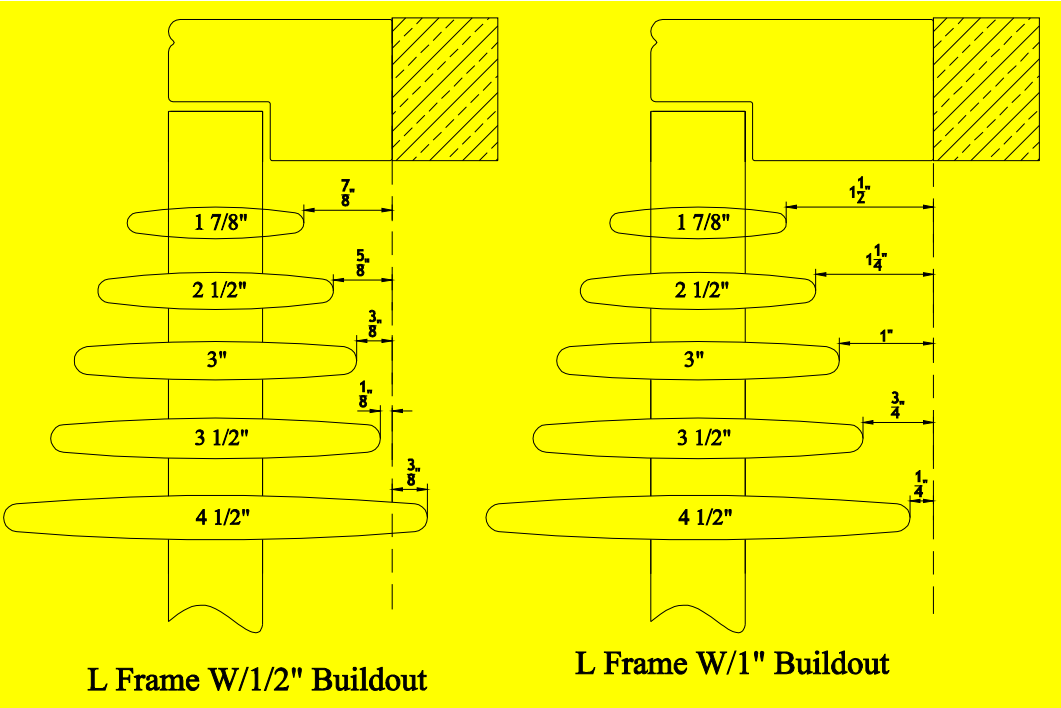
Louver Depth Clearance



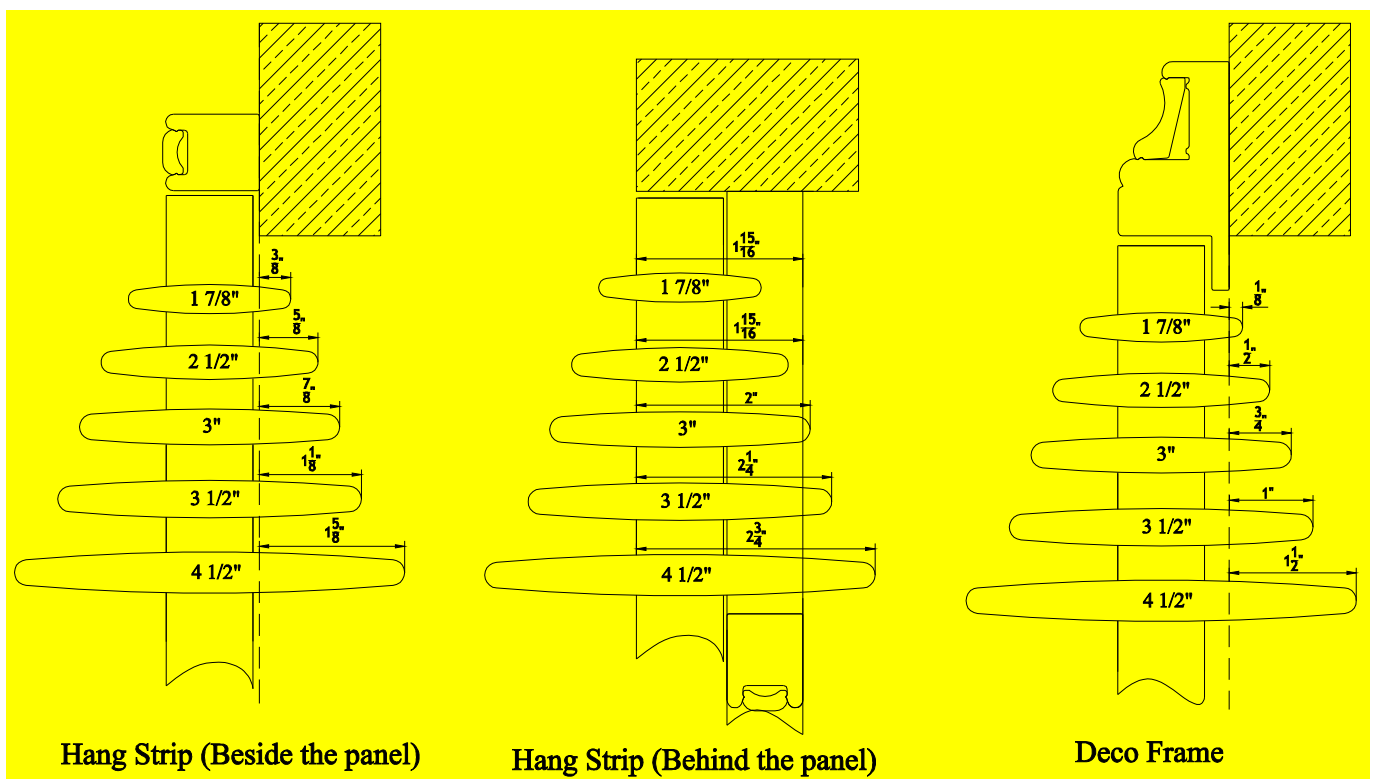
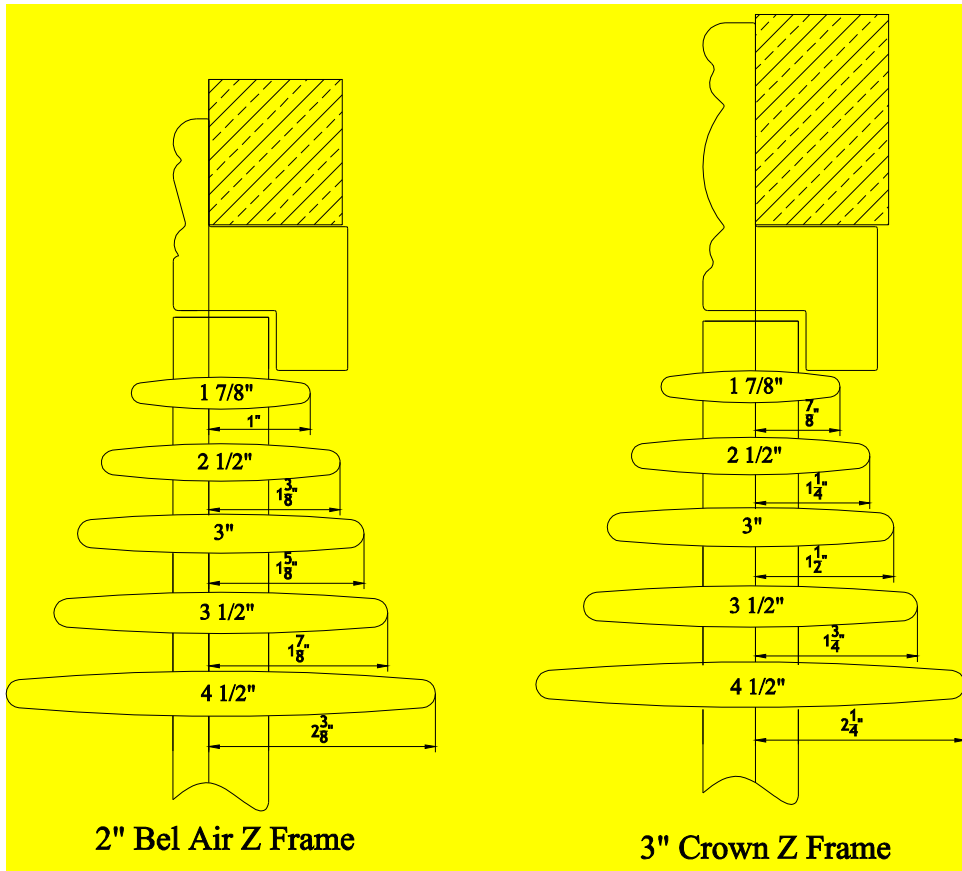
Louver Depth Clearance for Specific Frames



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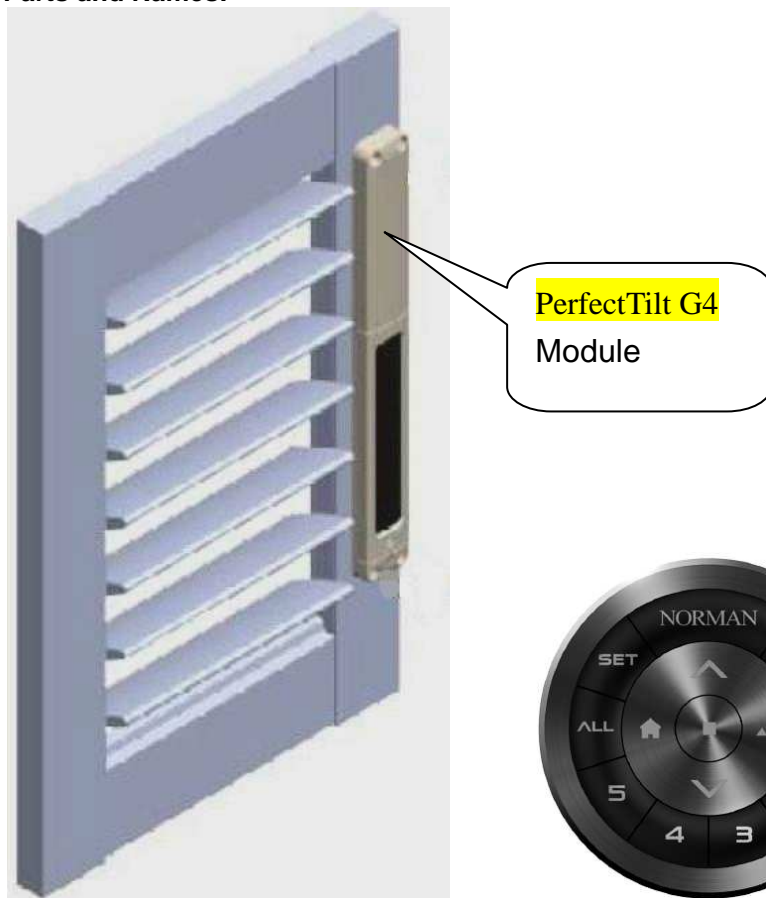
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New PerfectTilt RF (Not available for waterproof option)

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:



Norman Dial (Remote)


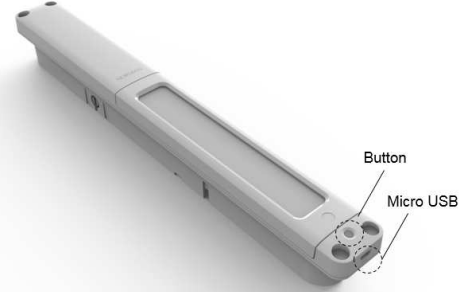

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Specifications:

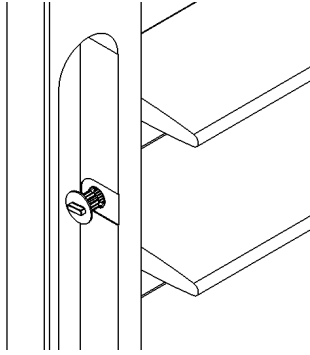


Shutter Type	All types except bi-fold double hung or panel with gap at bottom over 0.1" (no support on bottom)	
Specialty Shutter Shape	All shapes except shapes without a vertical stile in the middle (for example, eyebrow, elongated eyebrow, half-round sunburst without horizontal louvers)	
Tilt System	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	

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Components:

Items	drawing
<p>Norman Dial (Remote) and Docking:</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>	

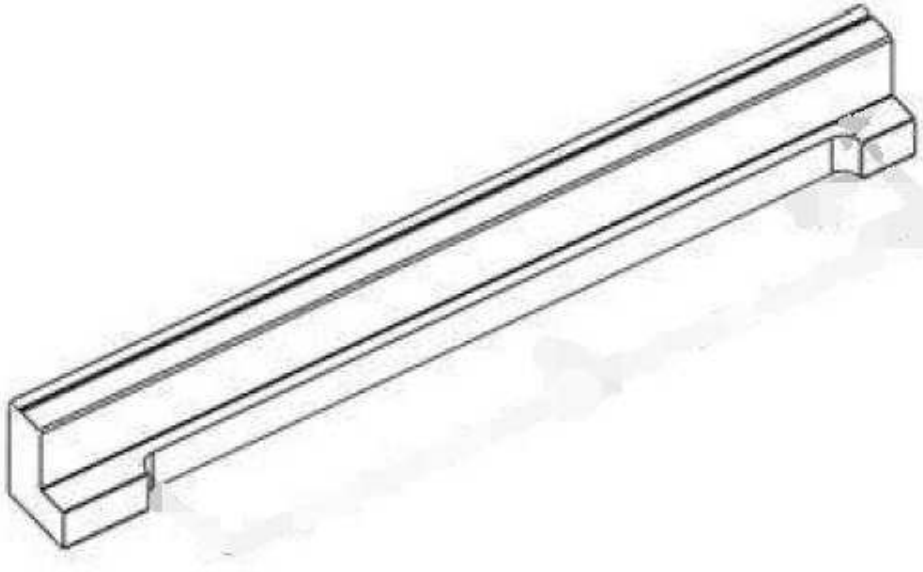
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<p>Slotted Point Driver</p> <p>One for each louver section.</p> <p>Connect the Easy Tilt and the Module; when fit the slotted point driver into the stile, make sure the angle is the same as that of the louvers.</p>	
<p>Norman Hub</p> <p>Color: Black</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

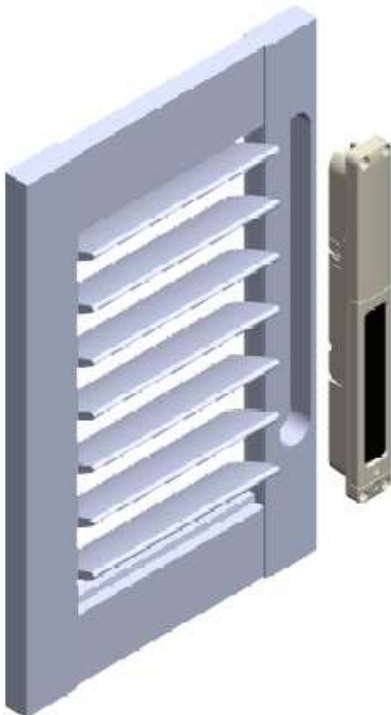
For single panel or configuration similar to single panel with frame, the module location will conflict with the light block of the frame, so there will be cut-out on the light block of the frame to stop the conflict, the length for the cut-out would be 335mm

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Clearance:

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

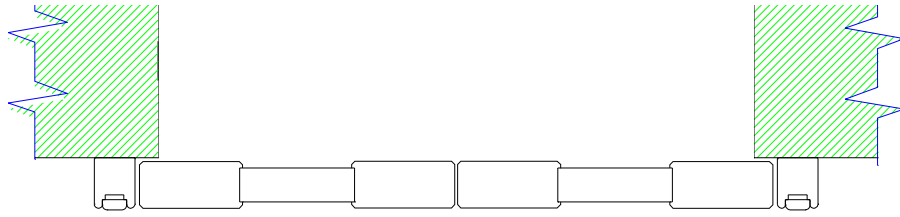


E.g.: Below is the situation **not available** for the module unless enough build-out is added to the frame.

Hang Strip OM: beside the panels

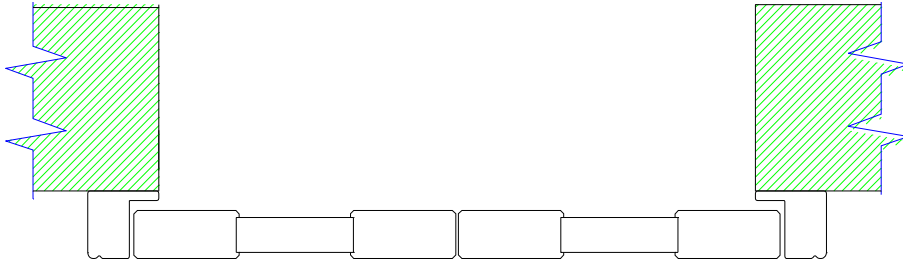
When module is on the left/right most stiles, the protrusion part will conflict with the wall.

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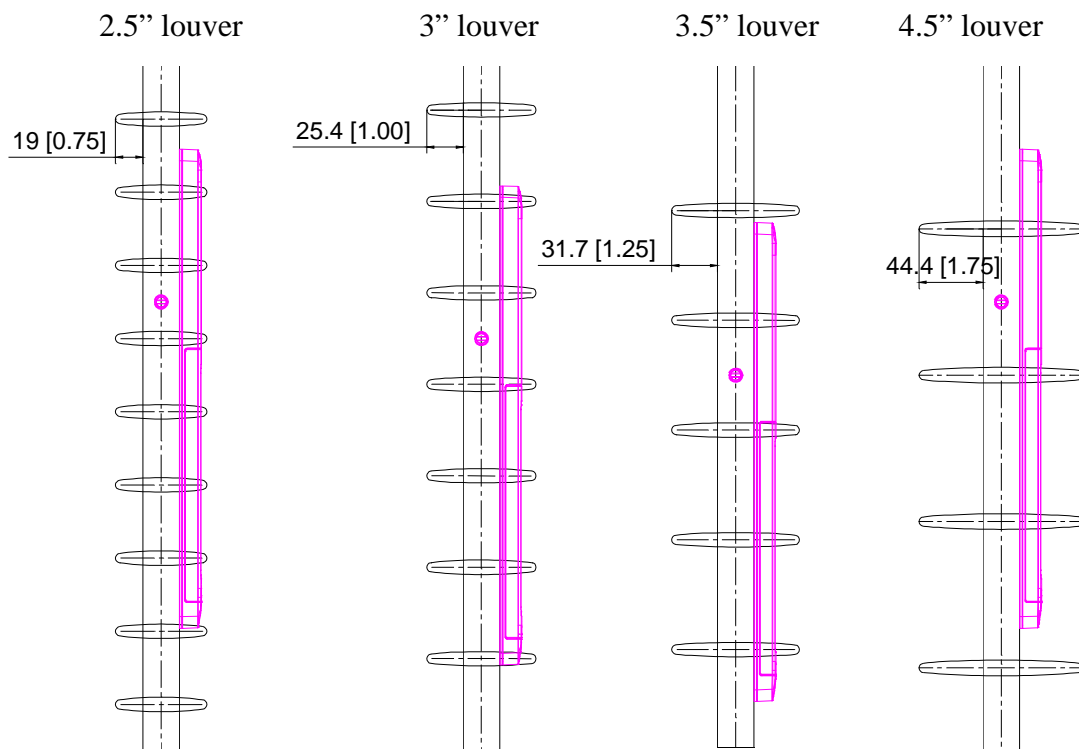


L Frame with light block thickness less than 3/4" OM:

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



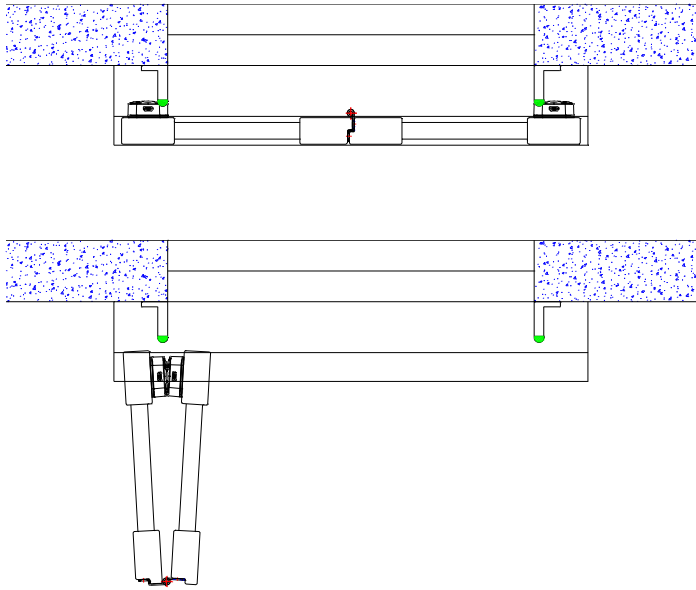
Side view for module in panel with different louver types



For Motorized 90° Bifold Track Shutter:

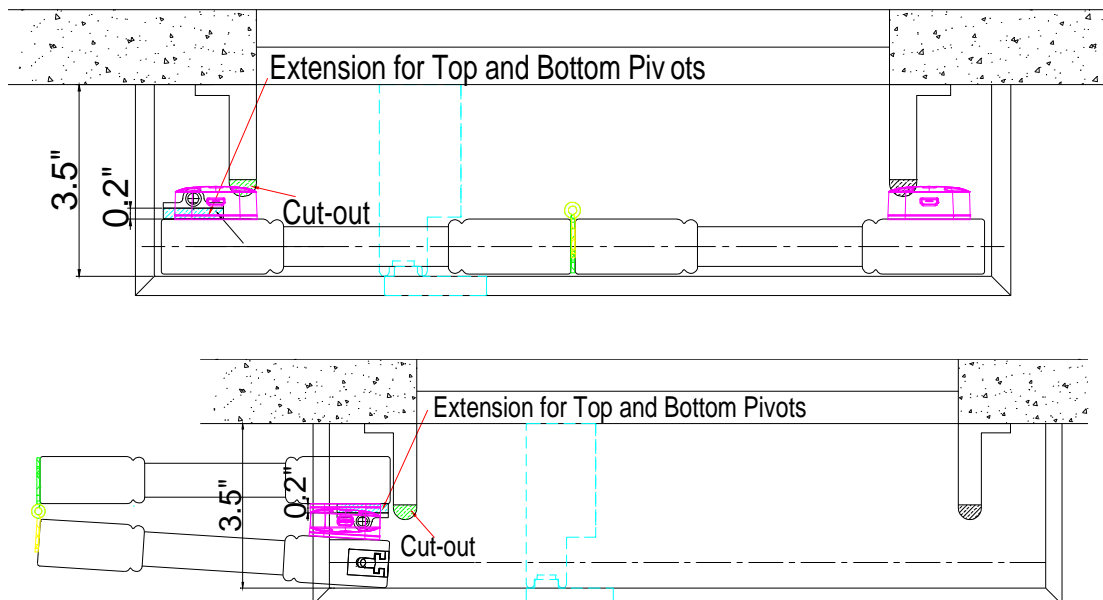
- 1) Both 3" and 3.5" Header are available;
- 2) The L Shape Light Block will be cut out 1/4" to avoid the conflict with the module;

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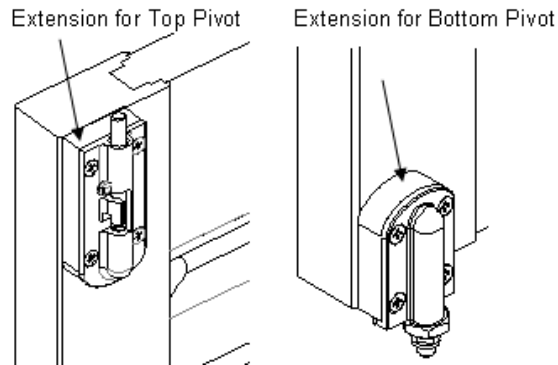


For Motorized 180° Bifold Track Shutter:

- 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;



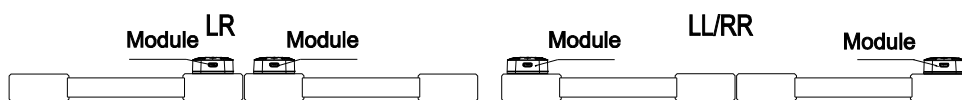
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Module Location: (Easy Tilt will be on the same side as the module)

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

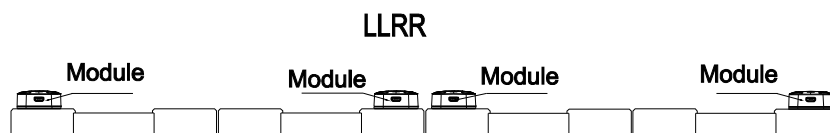
- 1) Single Panel: Module will be on the un-hinge stile
- 2) 2 Panels: LL, LR, RR



- 3) 3 Panels: LLR/LRR

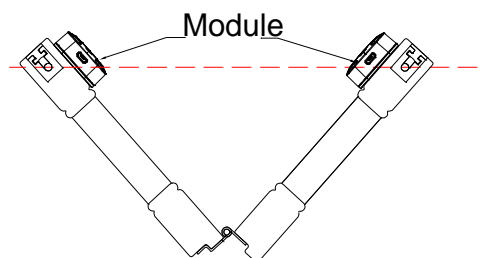


- 4) 4 Panels: LLRR

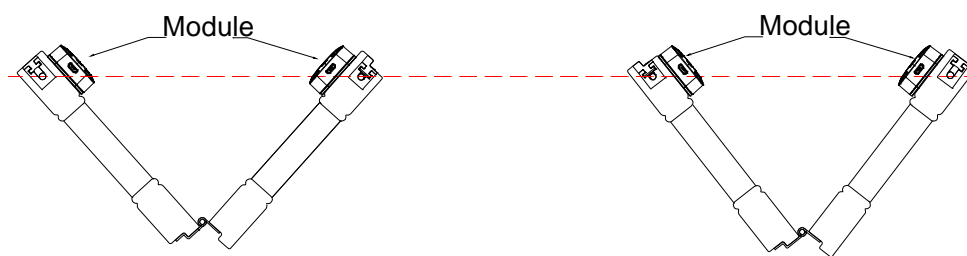


For 90° Bifold Track:

LL/RR



LLRR



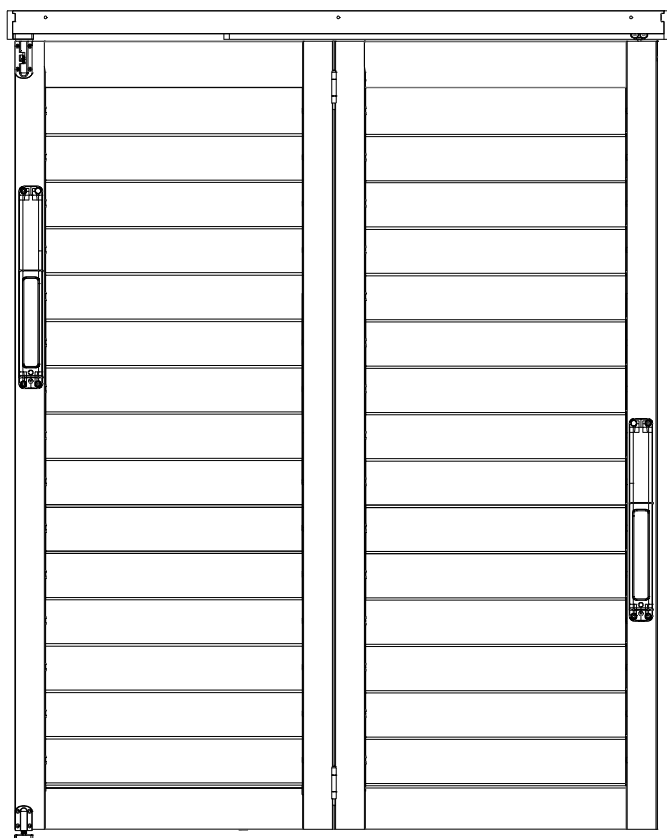
Special Note on Bi-fold Configurations

Please be aware that in bi-fold configurations, 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 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.

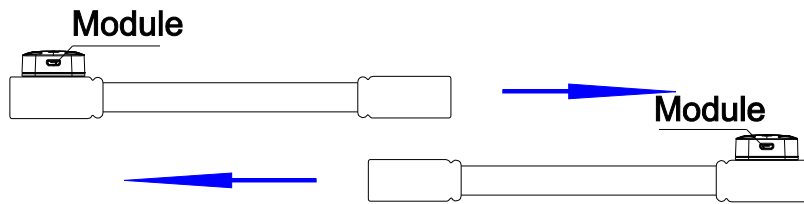
However, for 180° bifold track shutter, the modules can only be staggered.



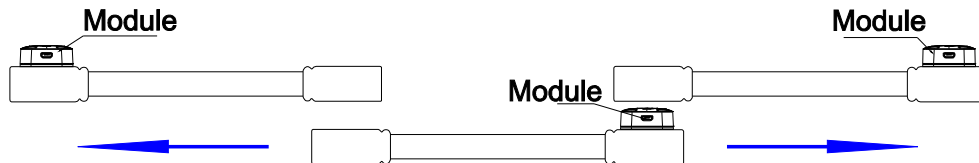
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For By-Pass Application

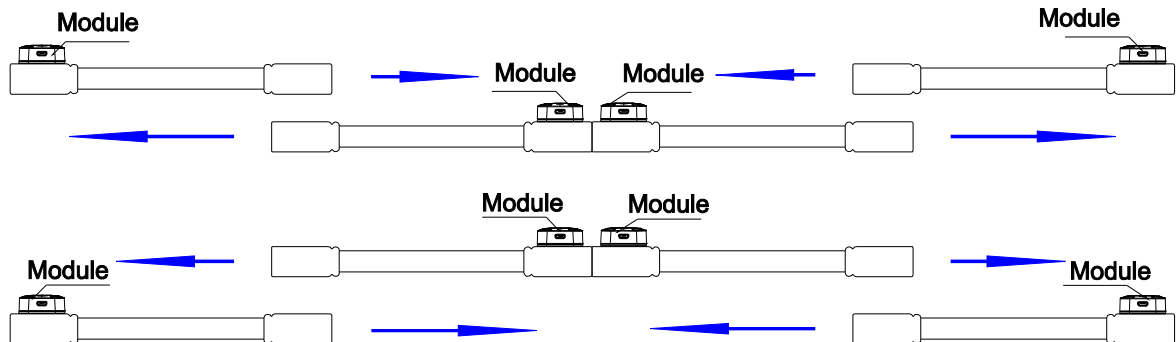
2 panels side open



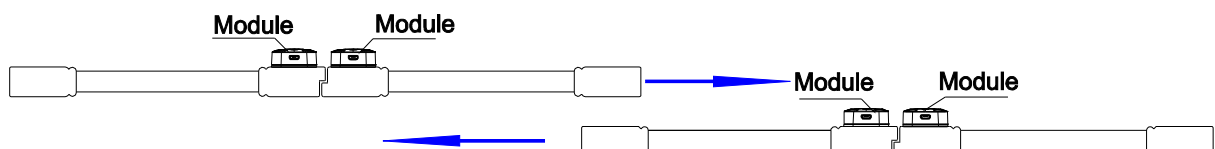
3 panels center open (not available for Open Bypass)



4 panels center open



4 panels side open



For Special Shape Application:

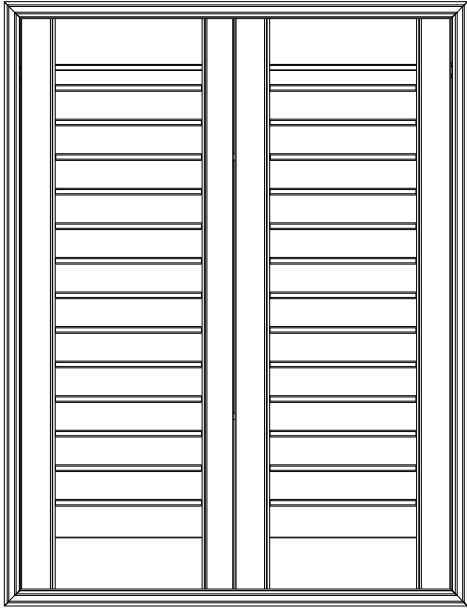
Module location will be the same as the Invisible Tilt location.

SHUTTER LOOK FROM FRONT AND BACK

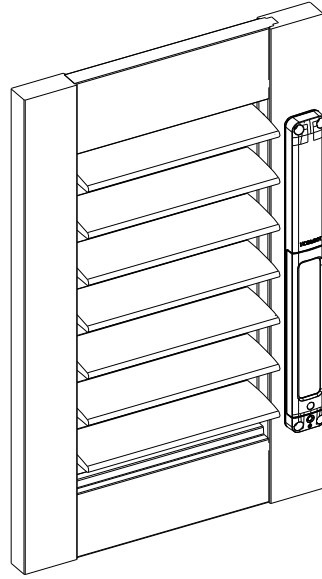
The front side of the shutter

The back side of the shutter

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



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