2013 Log

Date	Topic	Page	Note
1/1/2013	Hardware	Page i	Add Panel Lock, Ring Pull, Side Magnet
1/1/2013	Special Options	Page k	New PerfectTilt RF

Normandy® Shutters

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Features and Benefits

- Brings a touch of timeless elegance to your home. The **textured finish of Normandy shutters** blends the tranquility of nature with distinctive luxury.

- Normandy is treated with our exclusive **Prescription Wood Conditioning™** technique according to the moisture content of the final installation location to reduce post-installation shrinking and swelling.

- A wide range of **frames with inserts** that keep installation screws out of sight for a clean and decorative look to match any style and preference.

- **Reinforced engineered stiles** -- Multiple layers of wood bonded together to reinforce durability to the core of the stile, which results in a robust support system for the shutter panel.

- Multiple stile options available in various sizes to accommodate different window configurations. **Astragal (solid color shutters only) or Rabbet stiles** provide a natural light block between panels.

- Employs **mortise and tenon joinery** that resists shear and racking forces endured by shutters and ensures prolonged stability and durability.

- Quick and easy on-site installation with the **pre-installed magnets and hinges**, as well as **pre-mitered frames** and **slotted keyholes**.

- Labor-intensive **hand finishing process** involves **multiple sequences of sanding and coating** with fine layers of stain or paint for a brilliant, lustrous finish.

- Personalize shutters with **special options.** Choose from hidden or offset tilt rods, double-hung panels, café shutters, track systems, specialty shapes and many more.

- **Special panel and frame designs** are finely crafted to accommodate unique window configurations. Create unity or attract attention with Normandy's exclusive decorative elements.

- Available in **classic paint and radiant stain** that harmonize into the style of any home.

- A guarantee of Norman's exemplary quality with a **lifetime limited warranty on materials and workmanship.**
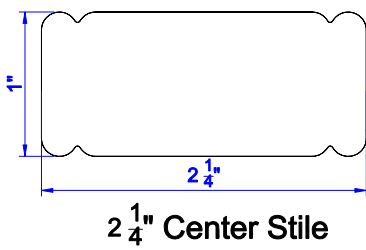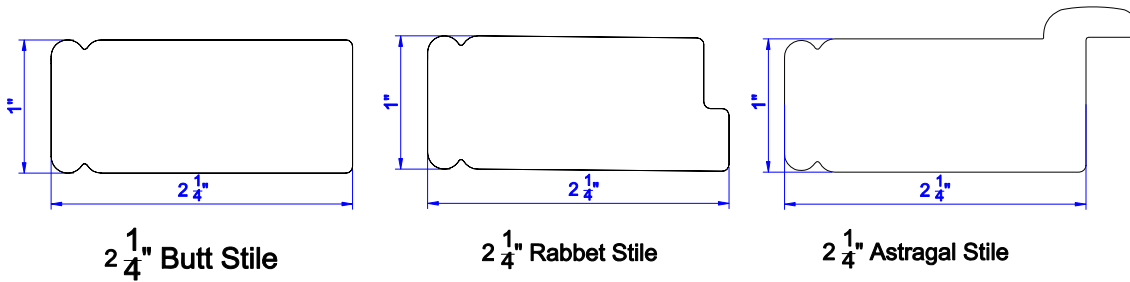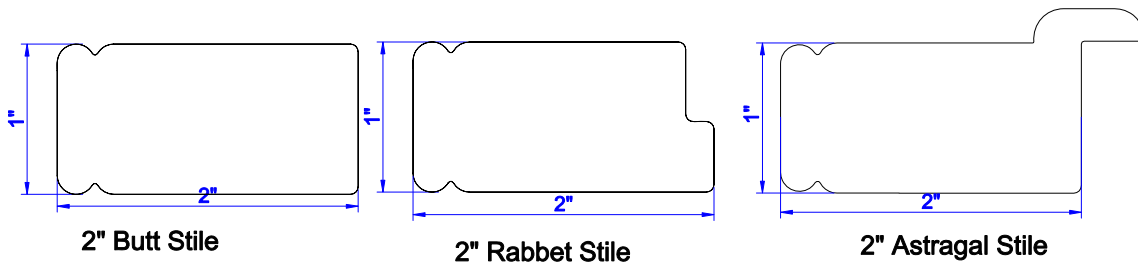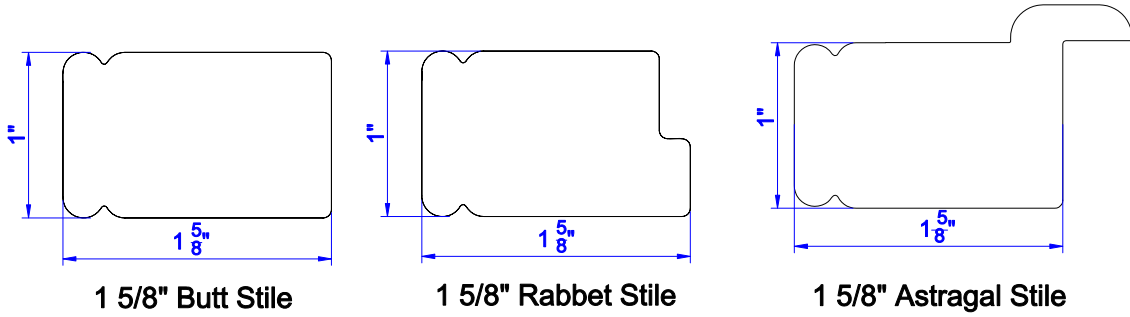
Colors & Louvers

Solid Colors	Louvers	
001 Pure White		
003 Silk White		
004 Bright White		
006 Pearl		
009 Creamy		
012 Crisp Linen		
030 Moondust		
046 Ice		
Stain Colors*		
108 Rustic Gray		
110 Limed White		
205 Goldenrod		2½"
211 Cherry	Elliptical	3½"
221 Black Walnut		4½"
227 Red Oak		
229 Rich Walnut		
230 Old Teak		
231 Spring Rose		
232 Red Mahogany		
233 Dark Mahogany		
237 Wenge		
242 Auburn		
249 Acorn		
250 Sumatra		

Optimal™*
Optimal™ safeguards your window treatments from accumulating airborne germs and disease-causing bacteria so that you have on less thing to worry about.
** Custom sheen options available

$2\frac{1}{2}"$ $\frac{3}{4}"$

$3\frac{1}{2}"$ $1\frac{1}{4}"$

$4\frac{1}{2}"$ $1\frac{3}{4}"$

1" Stile
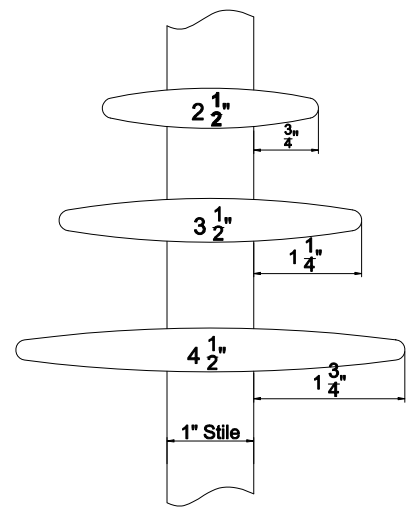
Colors available till June 30, 2013

Color Code	Color Name	Note
011	Cameo	Discontinue on June 30, 2013
013	Bisque	Discontinue on June 30, 2013
103	Maple Sugar	Discontinue on June 30, 2013
105	Hermitage Green	Discontinue on June 30, 2013
206	Pecan	Discontinue on June 30, 2013
214	Cocoa	Discontinue on June 30, 2013
222	Light Pine	Discontinue on June 30, 2013
224	Mellow Beech	Discontinue on June 30, 2013
226	Chestnut	Discontinue on June 30, 2013

Stiles
Options

1" — $1\frac{5}{8}$"

1 5/8" Butt Stile

1 5/8" Rabbet Stile

1 5/8" Astragal Stile

2" Butt Stile

2" Rabbet Stile

2" Astragal Stile

$2\frac{1}{4}$" Butt Stile

$2\frac{1}{4}$" Rabbet Stile

$2\frac{1}{4}$" Astragal Stile
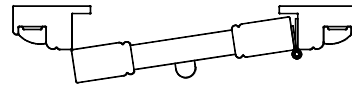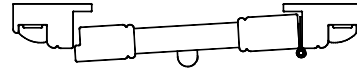
$2\frac{1}{4}$" Center Stile

Normandy Shutters

Stile between panel closure

Single panel

I) Panel width < 9"
- Rabbeted stile (Deco frame, L frame, Z frame and Hang strip beside panel
  - 1 $^5/_8$"
  - 2" (default)
- Butt stile only (Hang strip behind panel)
  - 1 $^5/_8$"
  - 2" (default)

II) Panel width ≥ 9"
- Butt stile only
  - 1 $^5/_8$" (Optional for panel width ≤ 12")
  - 2" (default)

2 panels or more

- Astragal stile
  - 1 $^5/_8$" (Optional for panel width ≤ 12")
  - 2" (default)
- Rabbet stile
  - 1 $^5/_8$" (Optional for panel width ≤ 12")
  - 2"

Panel Configurations

Single Panel

L   OR   R

2 Panels

LR   LL   RR

3 Panels

LLR   LRR   LTLTL   LTRR   LLTR

4 Panels
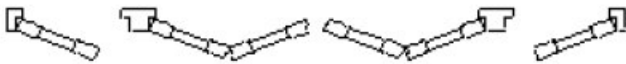
LLRR

LLTRR
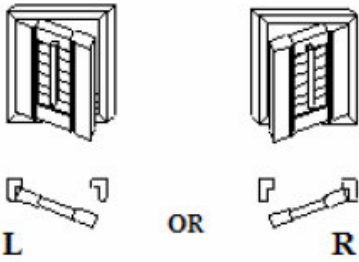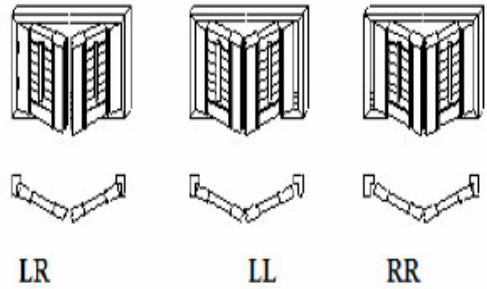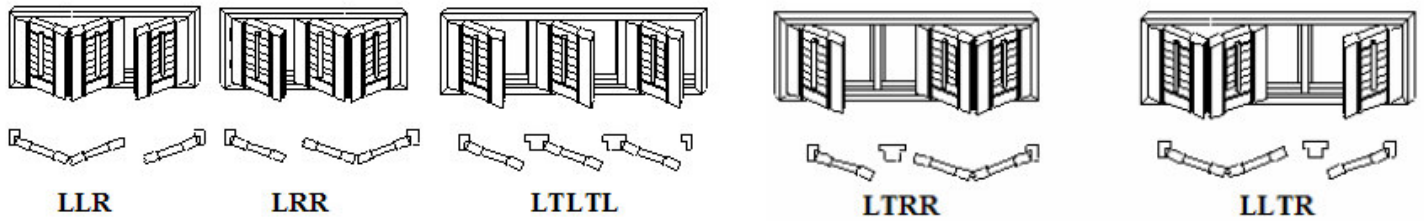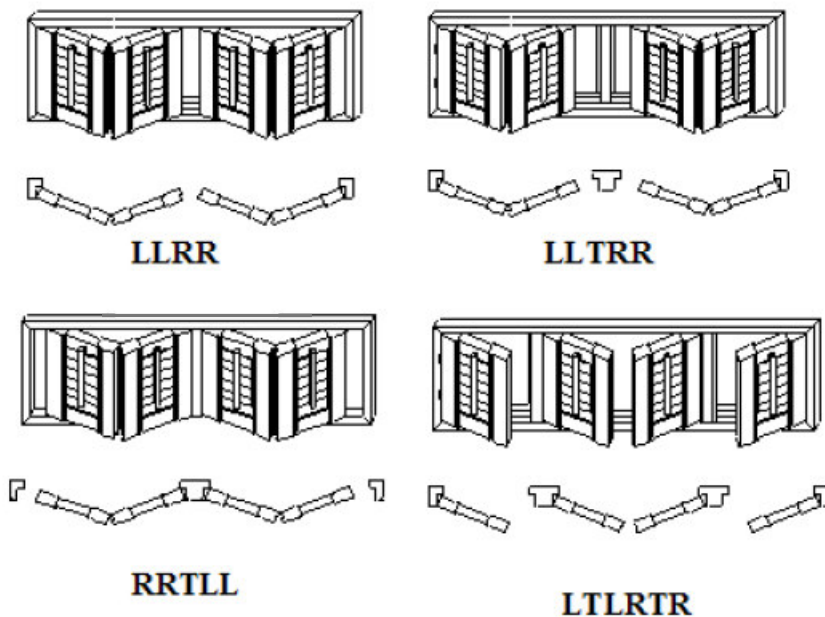
RRTLL

LTLRTR

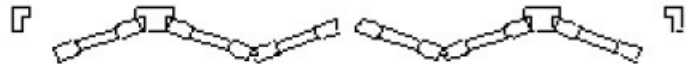# Panel Configurations (continued)

6 Panels

LRTLRTLR
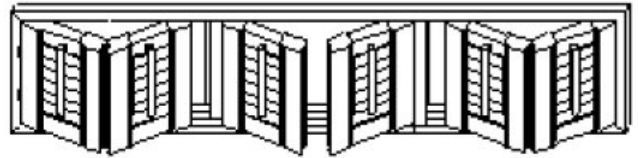
LLTLRTRR

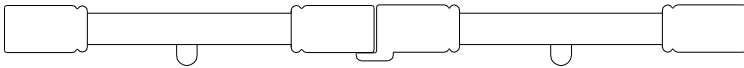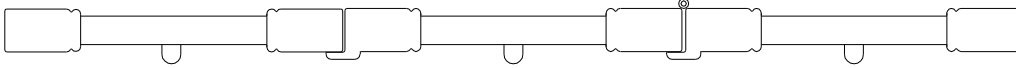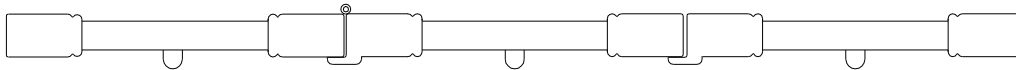LTLLRRTR

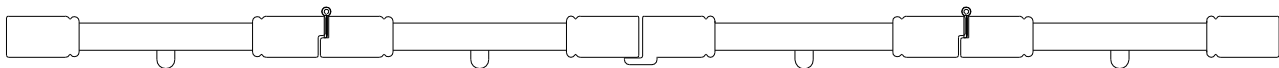RTLLRRTL

Panel Configurations – Astragal Stile

○ 2 Panels – LR

○ 3 Panels - LRR

○ 3 Panels – LLR

○ 4 Panels - LLRR

Frame Styles

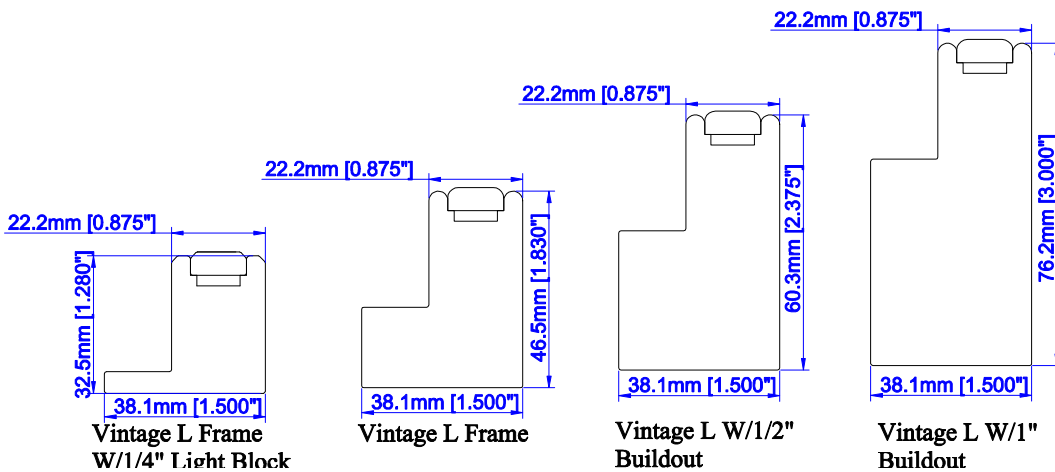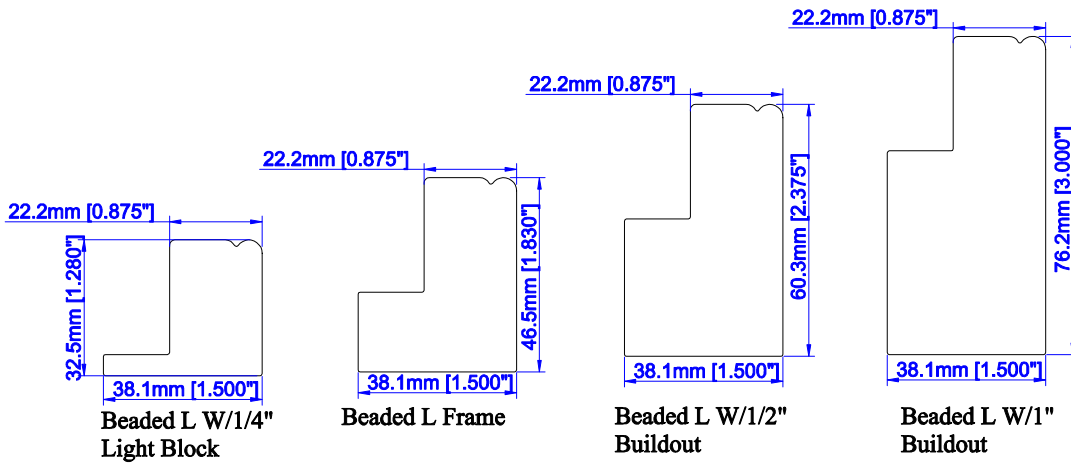**Beaded L W/1/4" Light Block**
22.2mm [0.875"]
32.5mm [1.280"]
38.1mm [1.500"]

Beaded L Frame
22.2mm [0.875"]
46.5mm [1.830"]
38.1mm [1.500"]

Beaded L W/1/2" Buildout
22.2mm [0.875"]
60.3mm [2.375"]
38.1mm [1.500"]

Beaded L W/1" Buildout
22.2mm [0.875"]
76.2mm [3.000"]
38.1mm [1.500"]

Vintage L Frame W/1/4" Light Block
22.2mm [0.875"]
32.5mm [1.280"]
38.1mm [1.500"]

Vintage L Frame
22.2mm [0.875"]
46.5mm [1.830"]
38.1mm [1.500"]

Vintage L W/1/2" Buildout
22.2mm [0.875"]
60.3mm [2.375"]
38.1mm [1.500"]

Vintage L W/1" Buildout
22.2mm [0.875"]
76.2mm [3.000"]
38.1mm [1.500"]

Bullnose L
22.2mm [0.875"]
46.5mm [1.830"]
38.1mm [1.500"]

Bullnose L Frame W/ 1/2" Buildout
22.2mm [0.875"]
60.3mm [2.375"]
38.1mm [1.500"]

Bullnose L Frame W/ 1" Buildout
22.2mm [0.875"]
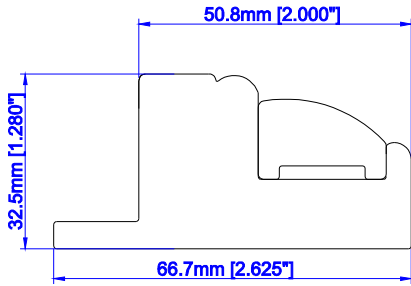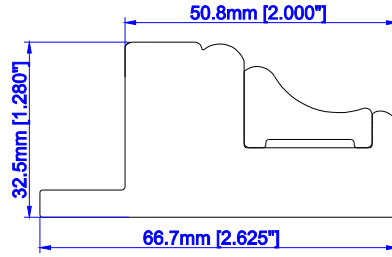76.2mm [3.000"]
38.1mm [1.500"]

Also available
○ Custom extensions* up to 2" for L frames

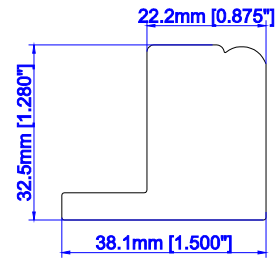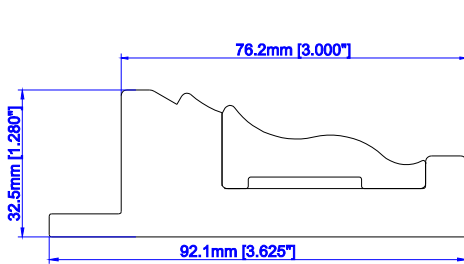* Surcharge applies. Please see Options and Surcharges page for details.
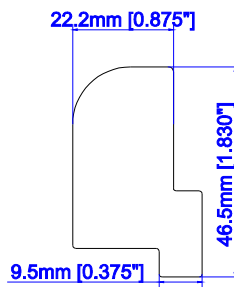
Frame Styles
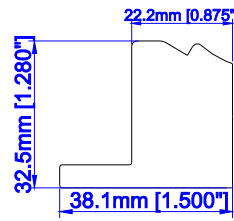

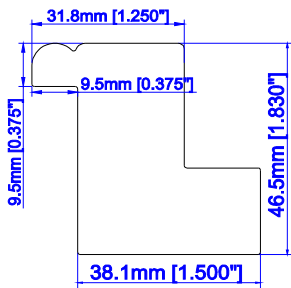2" Camber Deco Frame

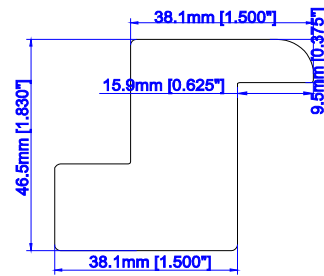2" Classic Deco Frame

2" Deco Sill Plate

3" Ridge Deco Frame

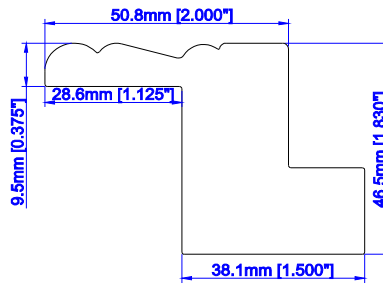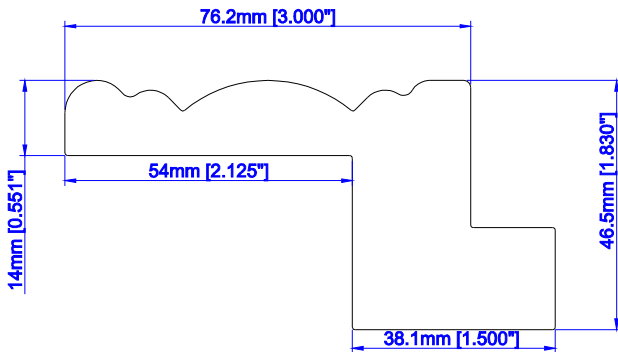
Tilt Out Z Frame

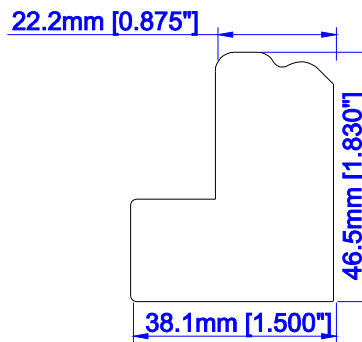Ridge Deco Sill Plate

1 1/4" Beaded Z Frame

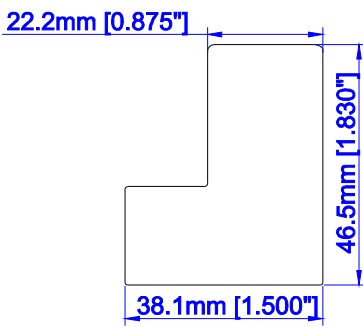1 1/2" Bullnose Z Frame

2" Bel Air Z Frame

3" Crown Z Frame

3" Crown Z Sill Plate

Also available
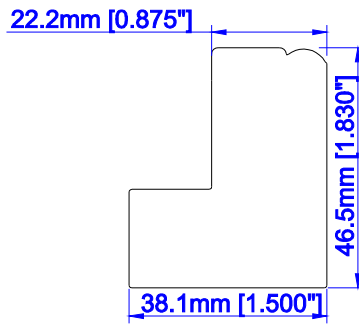
○ Custom extensions* up to 1" for Z frames

○ ½", 1" and 1½" standard extensions* and custom extensions* up to 2" for Deco frames

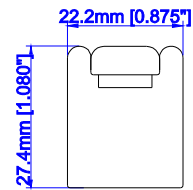○ Custom extensions* up to 2" for hang strips (OM)

ND e-2

Normandy® Shutters

Frame Styles

22.2mm [0.875"] 46.5mm [1.830"] 38.1mm [1.500"]

1 1/2" Bullnose Z
1 1/4" Beaded Z
Sill Plate

22.2mm [0.875"] 46.5mm [1.830"] 38.1mm [1.500"]
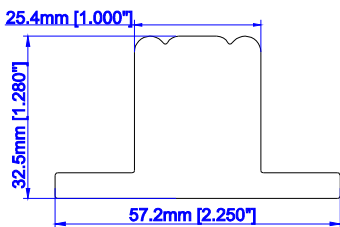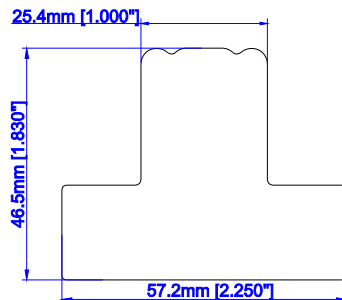
2" Bel Air Z Sill Plate

22.2mm [0.875"] 27.4mm [1.080"]

Vintage Hang Strip

25.4mm [1.000"] 32.5mm [1.280"] 57.2mm [2.250"]

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

25.4mm [1.000"] 46.5mm [1.830"] 57.2mm [2.250"]

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

$\frac{3}{4}"$ $\frac{5}{8}"$

Light Block

44.4mm [1.750"] 32.5mm [1.280"] 76.2mm [3.000"]

1 3/4" T Post W/ 1/4" Light Block (Deco)

44.5mm [1.750"] 46.5mm [1.830"] 76.2mm [3.000"]

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

$\frac{1}{2}"$ $\frac{3}{4}"$
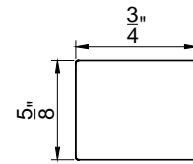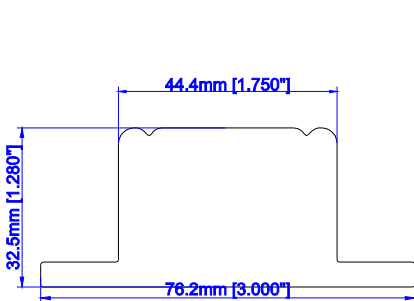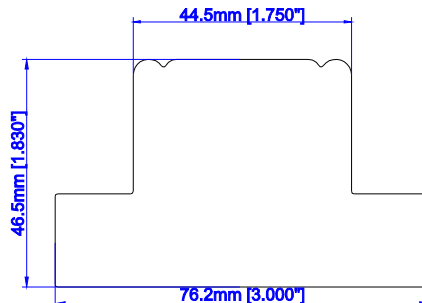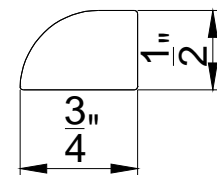
Scribe Trim

Normandy Shutters
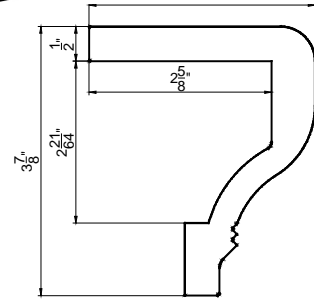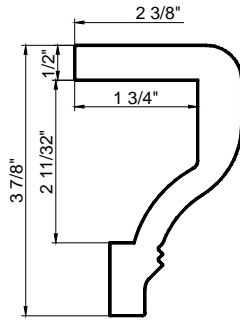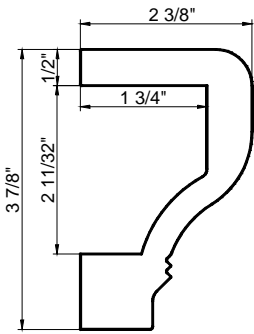
Curved Designer Sill Cap (L)   Curved Designer Sill Cap (D/HS)   Curved Designer Sill Cap (Z)
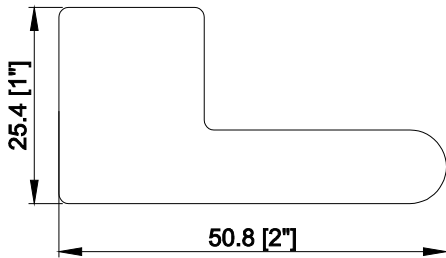
2" Sill Plate
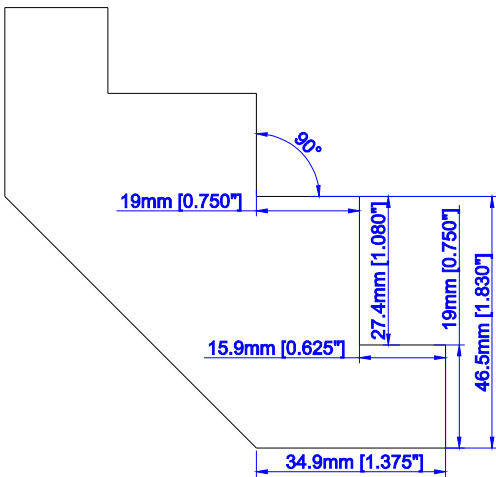
Corner Post W/ 3/4"
Light Block (L/Z/HS)
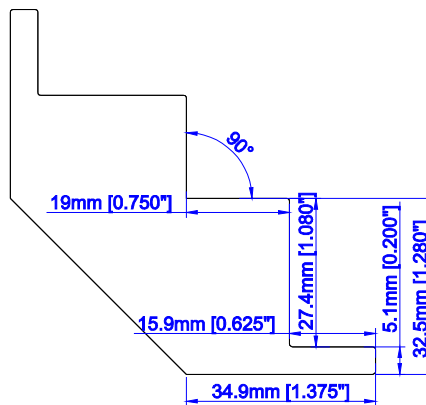
Corner Post W/ 1/4"
Light Block (Deco)

Frame Styles

135°
19mm [0.750"]
27.4mm [1.080"]
19mm [0.750"]
15.9mm [0.625"]
46.5mm [1.830"]

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

135°
19mm [0.750"]
27.4mm [1.080"]
5.1mm [0.200"]
15.9mm [0.625"]
32.5mm [1.280"]

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

1.75"
1.83"
1.08"
0.25"
0.25"
135°
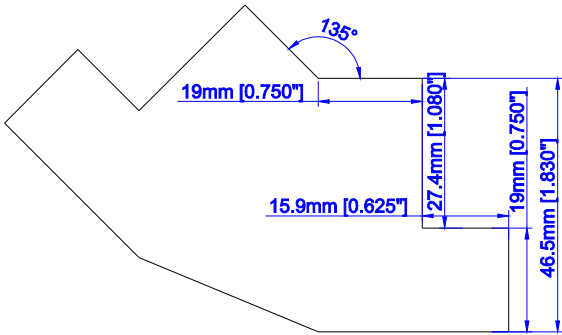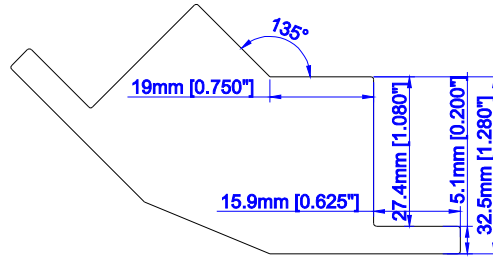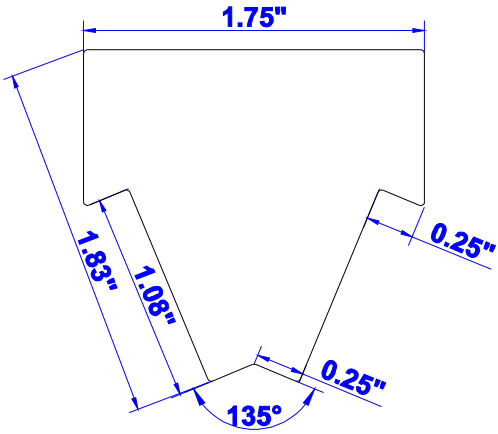
**Slim Fit Bay Post for 135 Degree
(L/Z/HS)**

1.52"
1.83"
1.08"
0.25"
0.25"
150°

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

1.52"
1.28"
1.08"
0.125"
0.25"
135°
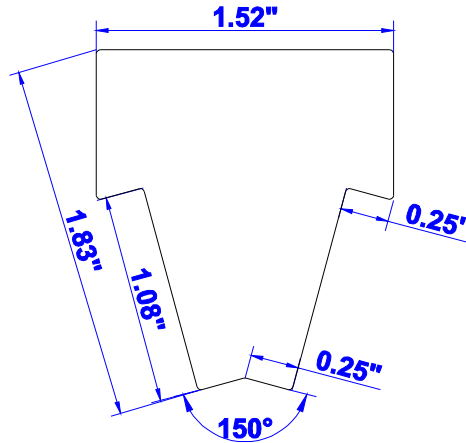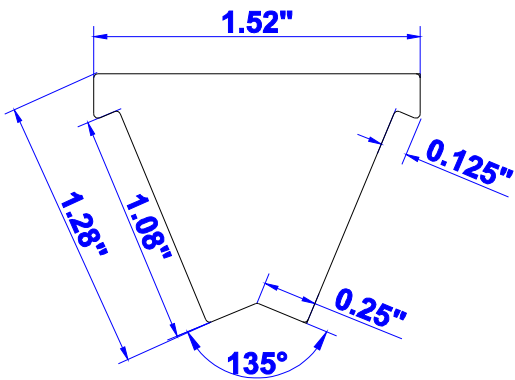
Slim Fit Bay Post for 135 Degree (D)

1.28"
1.28"
1.08"
0.125"
0.25"
150°
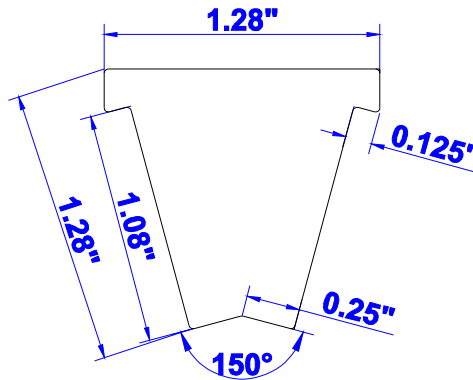
Slim Fit Bay Post for 150 Degree (D)

Frame Styles
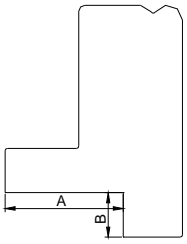
Notch Out

Beaded L Frame (A) [*]
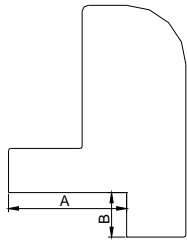
Notch Out

Bullnose L Frame (A) [*]
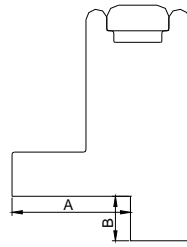
Notch Out

Vintage L Frame (A) [*]
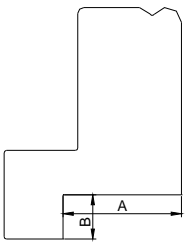
Notch Out

Beaded L Frame (B) [*]
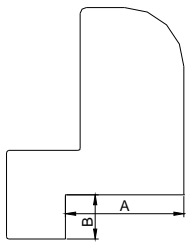
Notch Out

Bullnose L Frame (B) [*]
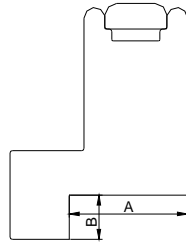
Notch Out

Vintage L Frame (B) [*]

Also available

○ Custom depth[*] up to 2" / width[*] up to 7½ for T Posts

○ Custom angle bay posts[*]

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

Pre-drill L or Z frames:
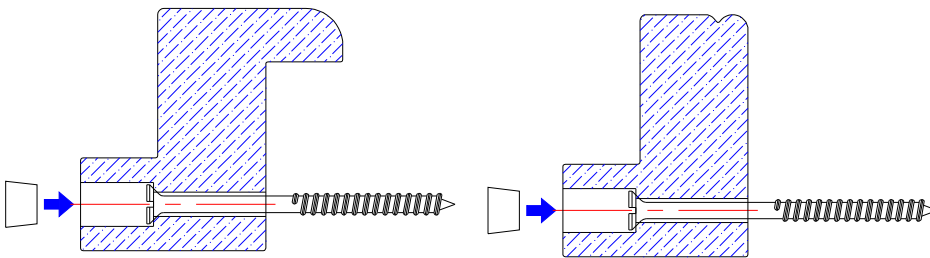
General Product Specifications

Description	Minimum	Maximum
Single Panel Width (Regular)	6"	42" for 3.5" & 4.5" louvers, 36" for other louver sizes
Single Panel Width (Bifold)	6"	26"
Single Panel Width (for Bypass Panel With Center Stile)	6"	36"-50"
Single Panel Height	10"	133"
Shutter Width (Without T Post)	N/A	4x single panel width (bifold) + frame
Shutter Width (With T Post)	N/A	Unlimited (frame* pieces exceeding 142" will be spliced)
Shutter Height	N/A	133" + frame

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

Shutters without bottom supports

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

All Normandy panel configurations:

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

◊ 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.

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

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

Tilt Rod
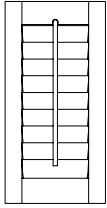
Standard Tilt Rod
    Default Location   In the middle of the panel on front side (default).
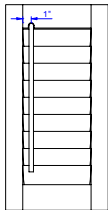
Offset Tilt Rod*
    Default Location   On the front side of the panel and at 1" from the louver ends
on the hinged side.
Optional location: per your request.

InvisibleTilt™ *
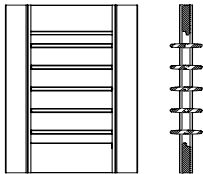
Louver tilting system embedded within panel stile. It is not available for $1^7/_8$" louver. The tilting system is split when the number of louvers exceeds the limits as listed below:

Louver Size	Maximum Possible Louvers	Height Range
2½"	21	47 ¾" – 55 ¼"
3½"	14	45 3/4" – 53 ¼"
4½"	10	47 ¾" – 55 ¼"

- 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.
- Minimum panel width is changed to 8 11/16"

Divider Rails

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

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.
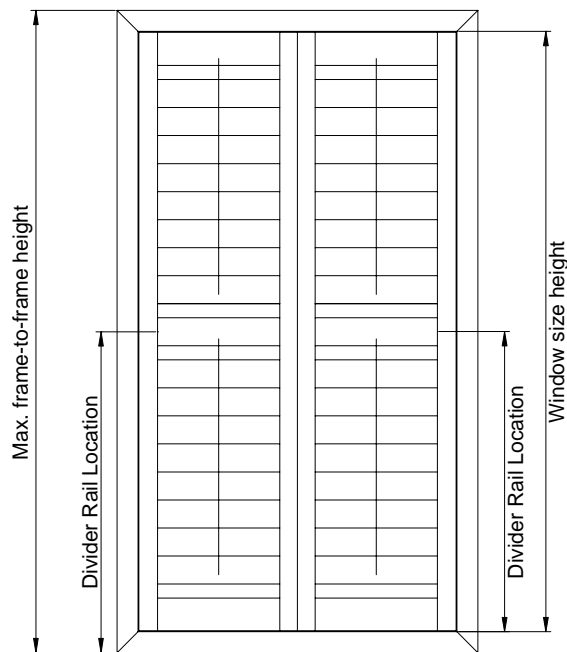
Divider rail allowable deviations

Louver Size	Allowable ± Deviation
2½"	1"
3½"	1½"
4½"	2"

Hardware

Hinges

Self-Mortise Hinge

Bi-fold Hinge

$2\frac{3}{8}$"

$2\frac{3}{8}$"

L Hinge

2 3/8"
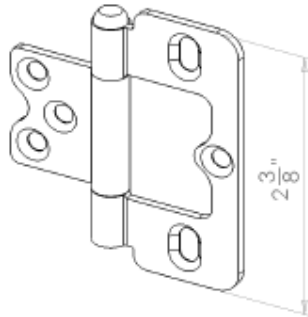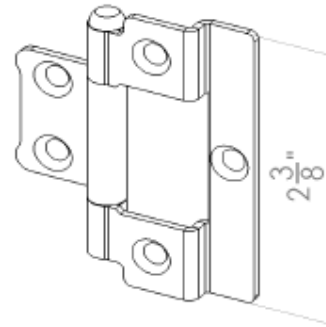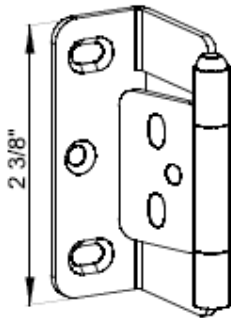
Hinges are available in :

Silk White, Bisque, Pearl, Bright Brass, Antique Brass, Black, Nickel plated and Stainless Steel *

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

Invisible Hinge

Frame Options	Hinge	Notes
2'' Camber Deco Frame	Y	/
2'' Classic Deco Frame	Y	/
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	/
Bullnose L	N	/
Bullnose L Frame w/ 1/2" Buildout	N	/
Bullnose L Frame w/ 1" Buildout	N	/
Tilt out Z Frame	N	/
1.25" Beaded 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 (31mm) (27mm for 1" stile)	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 3/4" T-Post w/1/4" Light Block(for Deco)	Y	available with hinge on BOTH side, for example, RTL.
1 3/4" T-Post w/3/4" Light Block(for L/Z/HS)	Y	

Corner Post w/1/4" Light Block(for Deco)	Y	/
Corner Post w/3/4" Light Block(for L/Z/HS)	Y	/
Bay Post w/1/4" Light Block(for Deco)	Y	/
Bay Post w/3/4" Light Block(for L/Z/HS)	Y	/

Invisible Hinge Qty

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

Available Stile:Butt and Astragal

Preinstallation:

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

If bifold/multi-fold panels are packaged together, the hinges are installed before shipping, or the hinges & screws are packed into the hardware box.

Panel Lock: (not available for 1.625" Stile)

Available Material: All
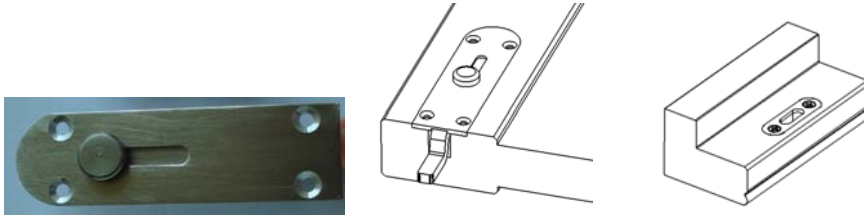
Position: (Only available on Bottom for Track Shutters with Bottom Track; For Regular, available on Top/Bottom/both Top and Bottom)
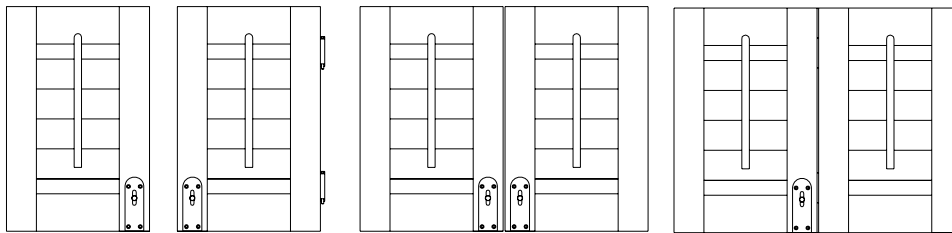
Panel Config: L   Panel Config: R   Panel Config: LR   Panel Config: LL
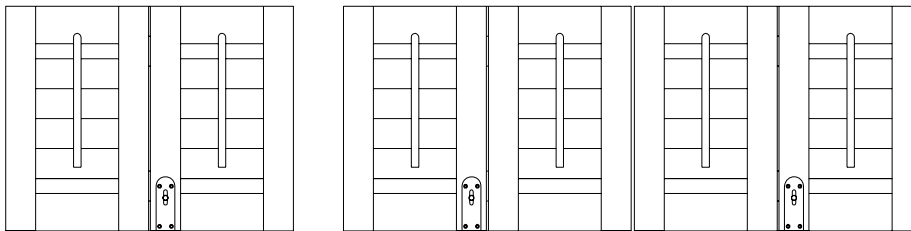
Panel Config: RR   Panel Config: LLRR
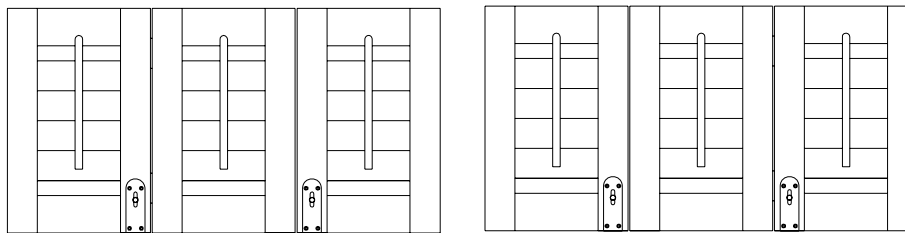
Panel Config: LLR   Panel Config: LRR
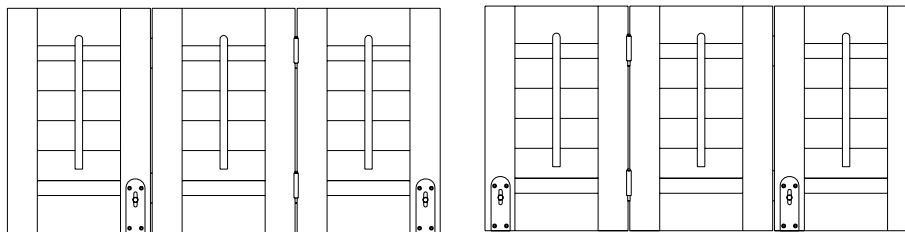
Panel Config: LLL   Panel Config: RRR
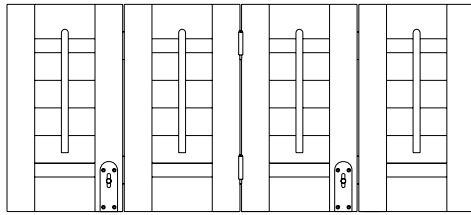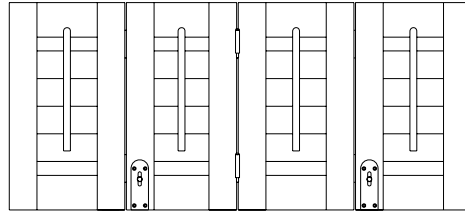
Panel Config: LLLL

Panel Config: RRRR
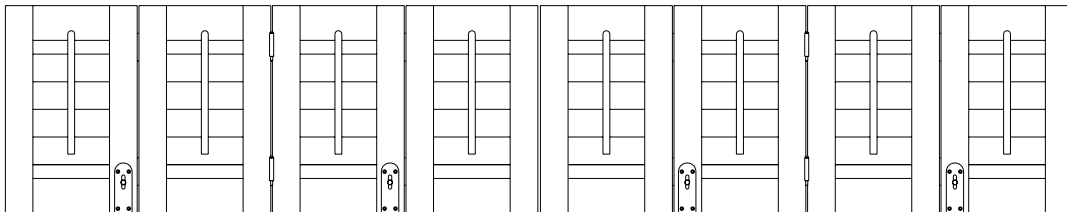
Panel Config: LLLLRRRR
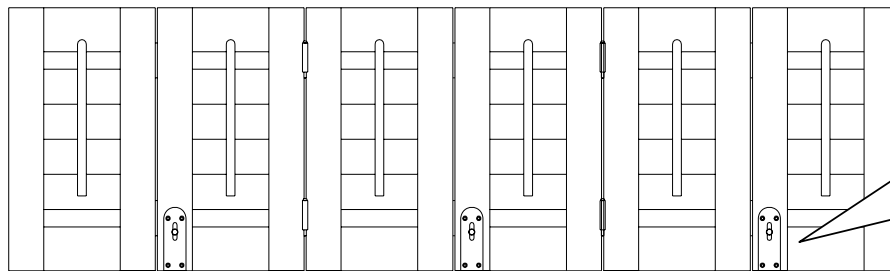
Panel Config: FFFFFF(R)

Default:
Floating panels
stacked to Right

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).

Pivot Wheel carrier Wheel carrier Wheel carrier Pivot
bolt bolt bolt bolt
L L L L R R R R
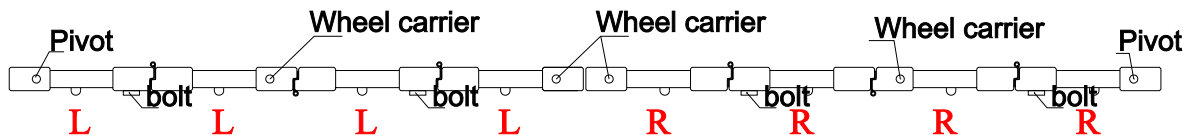
Ring Pull

for easy opening and closing (only available in stainless steel)

(Not available for 1.625" Stile)

Available Material: ALL

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

19±0.5

Divider Rail

19±0.5

Default

Default when there is a Divider Rail
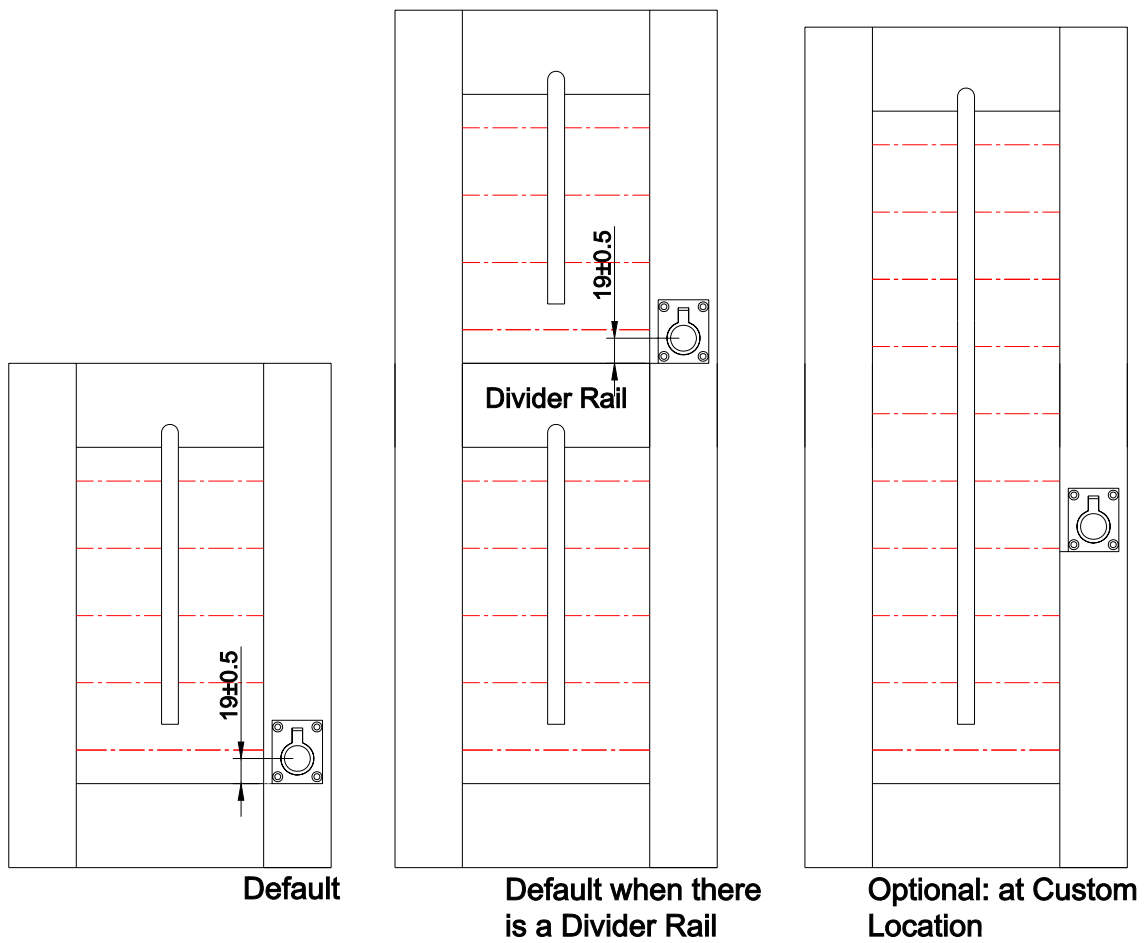
Optional: at Custom Location

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 70mm, and the ring pull location is 171mm from the bottom of panel.
When there is no mid rail, ring pull will be just on the top of Panel Lock (70mm 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.

Default   Default when there   Optional: at Custom
                       are Divider Rails   Location
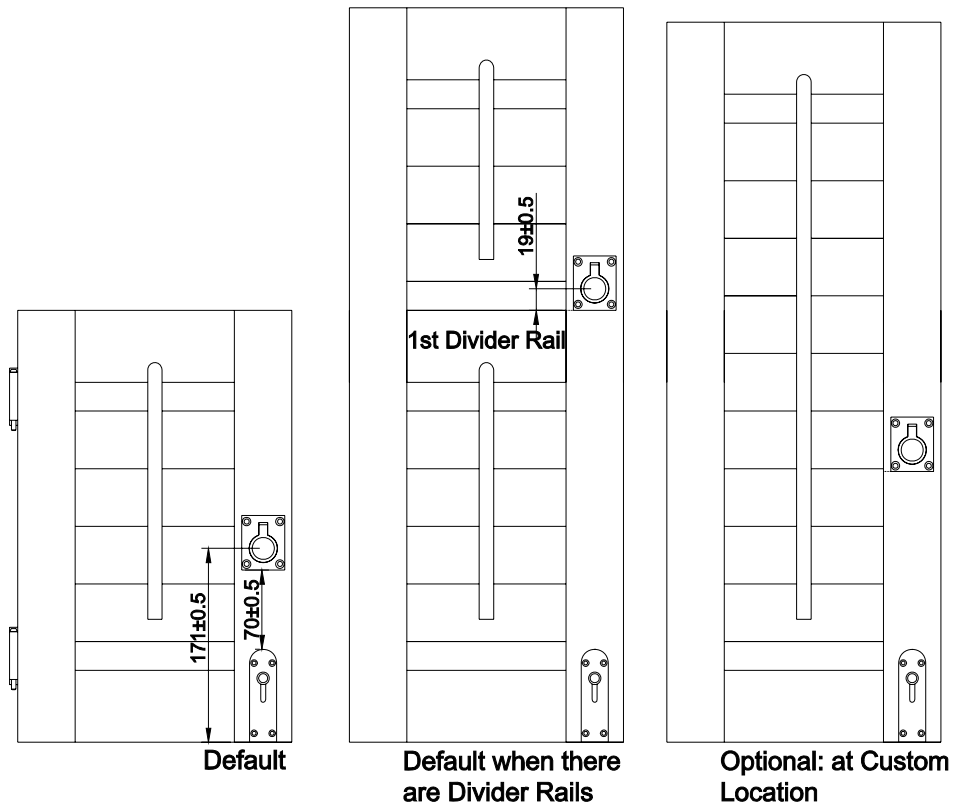
Position:

A. 70mm 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.

<u>Side Magnet:</u> Only available for Butt and Astragal stile

This option is applied to the meeting stiles of LR panels.
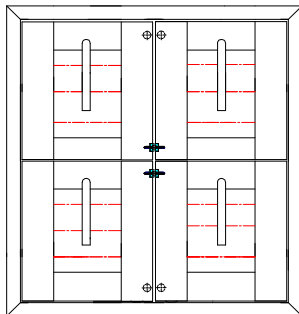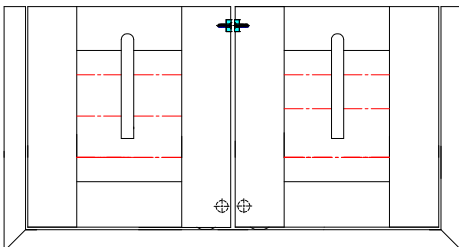
Application to following condition:

1. Double Hung shutter without horizontal T post:
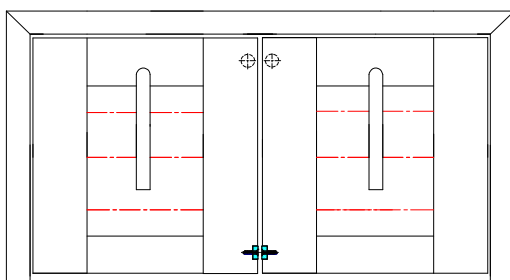
    The side magnet will be installed on the top of bottom tier and bottom of top tier.

2. Café Shutter

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.

Track Shutters—Bifold & Multi-fold

Guidelines and Specs:

Description	Minimum	Maximum
Single-Panel Width (Bifold Track)	6"	26"
Multi-fold Panels	6"	20"
Single-Panel Height	10"	133"

Outside Mount
Max frame-to-frame width: window width + 3"
Max frame-to-frame height: window height + 4½''

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 - $^1/_8$"

Panel Configuration:
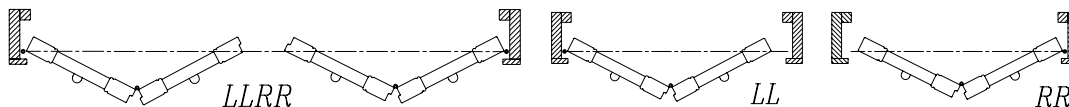
LLRR   *LL*   *RR*

The max frame-to-frame height measurement should be from the floor to the top of the fascia, and the width measurement should be from the left side frame to the right side frame.

- Track is pre-installed on the header; standard 1 track only.
- Wheel carrier bracket and top pivot are pre-installed on the panel.
- Top pivot bracket, wheels and buffers will be installed in the track.
- Support L brackets on header are provided for OM boxout.

Track Shutters—Bifold & Multi-fold

Multi-Fold Track Shutters

Maximum single panel width for multi-fold is 20"

Panel Configuration : LLLL, RRRR, or LLLLRRRR

$\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$" $\frac{9}{32}$"

L   L   L   L   R   R   R   R
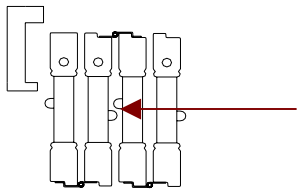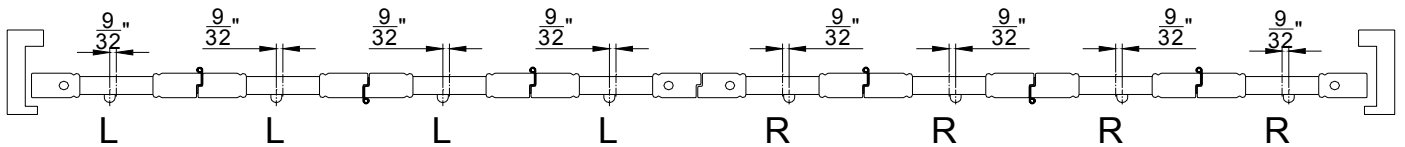
Tilt Rods are offset by $\frac{9}{32}$" to the left for left panel and to the right for right panel to enable the shutters to fold completely.
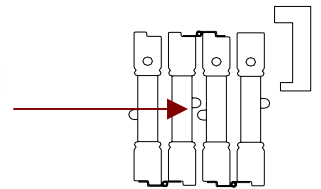
Track Shutters—Bifold & Multi-fold

Mounting Options
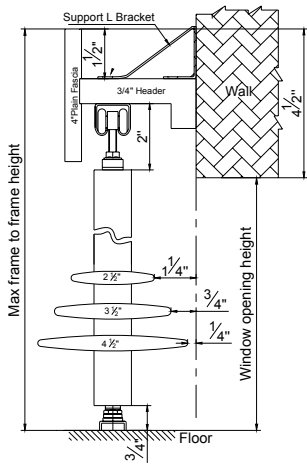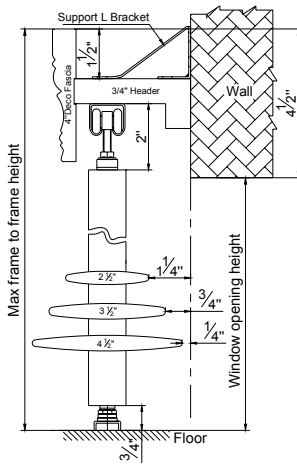
Plain Boxout   Deco Boxout

Outside Mount
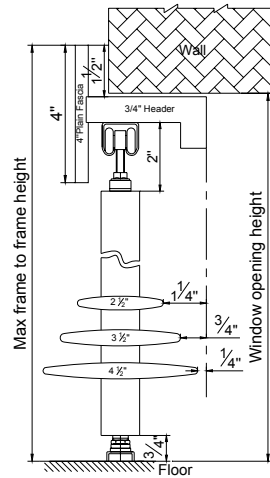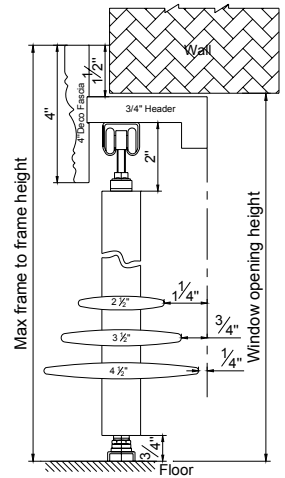
Plain Boxout   Deco Boxout

Semi-Inside Mount
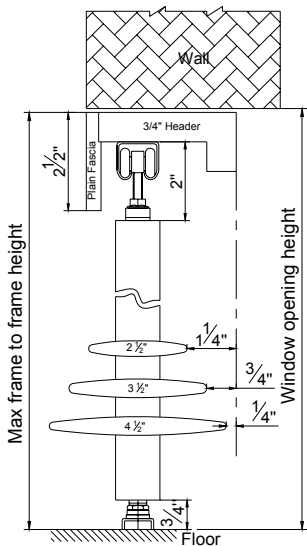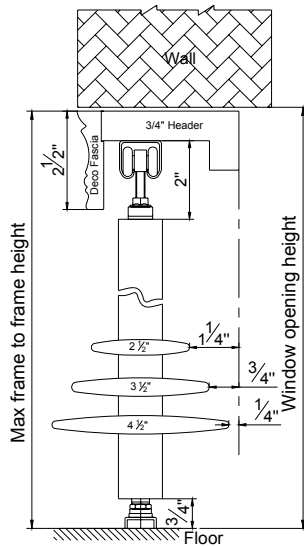
Plain Boxout   Deco Boxout

Inside Mount

Track Shutters—Bifold & Multi-fold

Floating Panels*
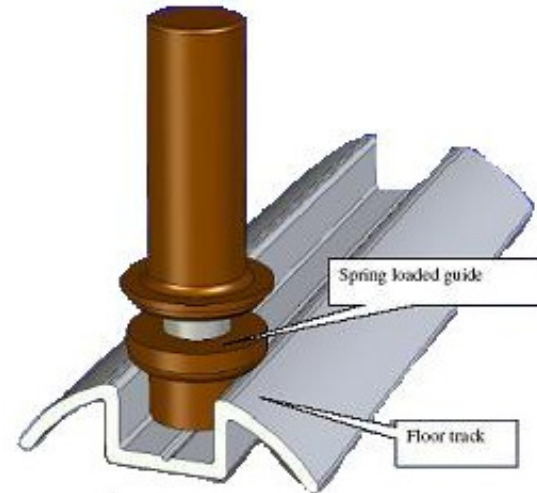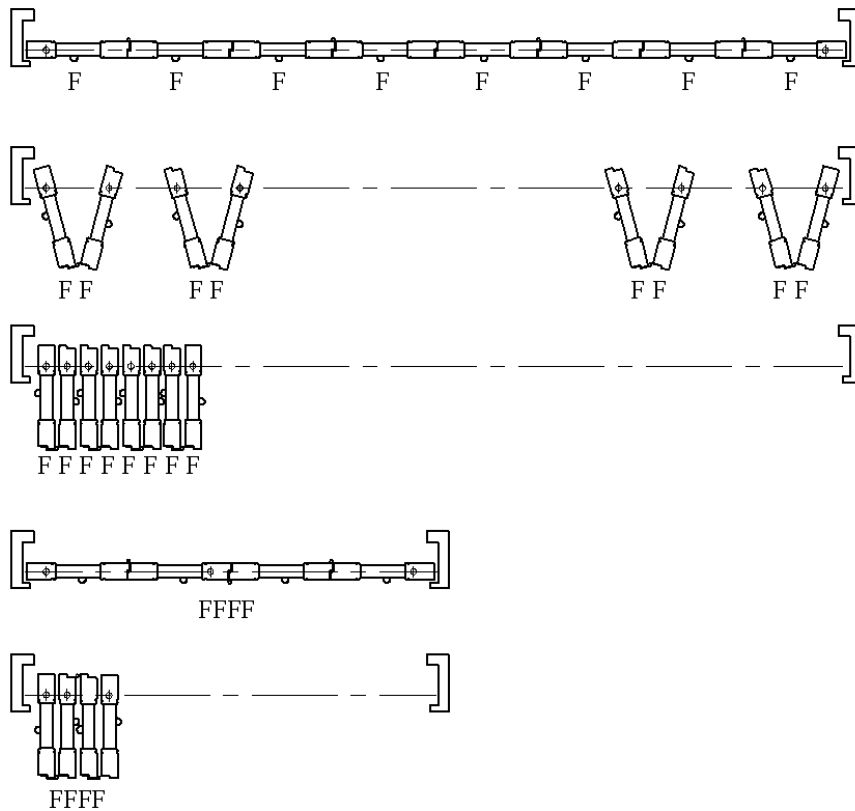
Outside Mount Bottom Track

- Spring loaded guide
- Floor track

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

Track Shutters—Bifold & Multi-fold

Track Shutters Framing Materials

Framing	Size			Pc(s)
L Shape Header **(2 in 1)** Header with Supporting Strip	**Header**		**Supporting Strip**	1 pc
	¾" x 3½"* (Default) ¾" x 4½"* or 5½"* (Optional) Custom * ≤ 8"		¾" x ¾"	
U Shape Side Frame **(3 in 1)** Side Frame with Supporting Strip & Side Fascia	**Side Frame**	**Supporting Strip**	**Side Fascia**	2 pcs
	¾" x 3 ⅞"* (Default) ¾" x 4½"* or 5 ⅞"* (Optional) Custom * ≤ 8"	¾" x ¾"	⅜" x 1¼ "	
Top Fascia (Plain/Deco)	4" (semi-inside and outside Mount) 2½" (Inside Mount)			1 pc
Top Fascia Return	4" (semi-inside and outside Mount) N/A (inside mount)			2 pcs

* L Shape Header and U Shape Side Frame are only available in 3½", 4½"and 5½". For other sizes, these framing materials come in separate pieces.

* If framing material in separate pieces is preferred for 3½", 4½" and 5½", please state clearly under the Special Instructions section of the order form.

Track Shutters—Bifold & Multi-fold

Hardware Box

Hardware Box	
Part	**Qty**
Wrench	1
Hinge Pin	According to number of hinges
Bottom Pivot Bracket	1 for panels folding in one direction
	2 for panels folding in both directions
1 ½ " screws for bottom pivot bracket	1 screw for each bottom pivot bracket
¾ " screws for bottom pivot bracket	3 screws for each bottom piovt bracket
Touch up paint	1
Support L Bracket (based on the length of header)	Header Length: Less than 90"- 2 brackets included 60"~120"- 3 brackets included 120"~150"- 4 brackets included For header length 150" and above, 1 bracket will be added for each additional 30".
2 ½ " screws for support L bracket	4 screw for each support L bracket
¾ " screws for support L bracket	5 screws for each 4",5 1/4",7" support L bracket 4 screws for each 3" support L bracket

Track Shutters—Bypass

Guidelines and Specs:

Description	Minimum	Maximum
Single-Panel Width (Regular)	6"	36"
Single-Panel Width (for Bypass With Center Stile)	6"	36" ~ 50"
Single-Panel Height	10"	133"
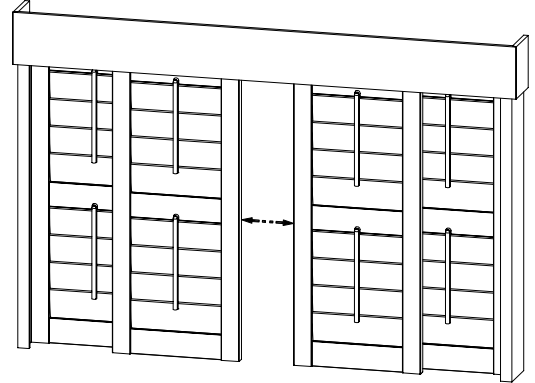
<u>Outside Mount</u>
Max frame-to-frame width: window width + 3"
Max frame-to-frame height: window height + 4½"

<u>Semi-Inside Mount</u>
Max frame-to-frame width: window width - $^1/_8$"
Max frame-to-frame height: window height + 1 $^3/_8$"

<u>Inside Mount</u>
Max frame-to-frame width: window width - $^1/_8$"
Max frame-to-frame height: window height - $^1/_8$"

The max frame-to-frame height measurement should be from the floor to the top of the fascia, and the width measurement should be from the left side frame to the right side frame.

- Tracks are pre-installed on the header; standard 2 tracks only.
- Wheel carrier bracket and bottom guide are pre-installed on the panel.
- Wheels and buffers will be installed in the track.
- Support L brackets are provided for OM boxout.

Track Shutters—Bypass

Closed Bypass
Panels with center stile (optional)
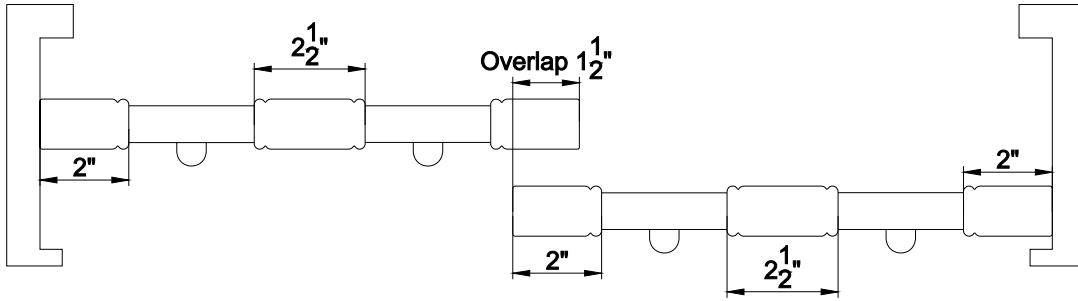
For shutters with 4 or more panels, please select "side open" or "center open".
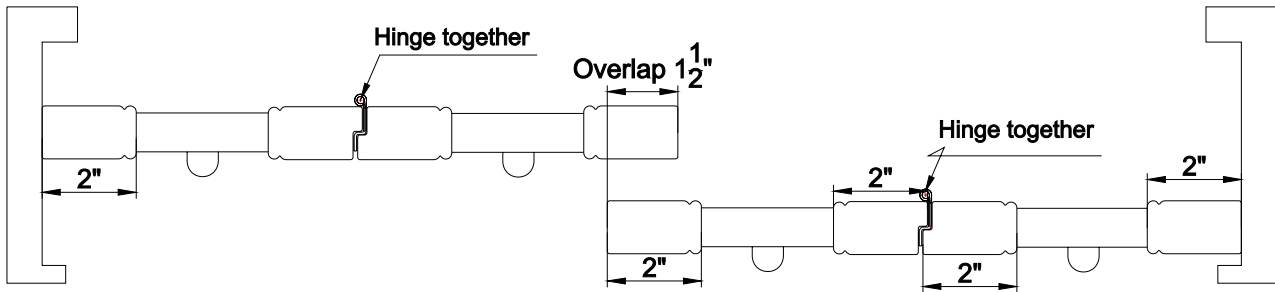
Side Open
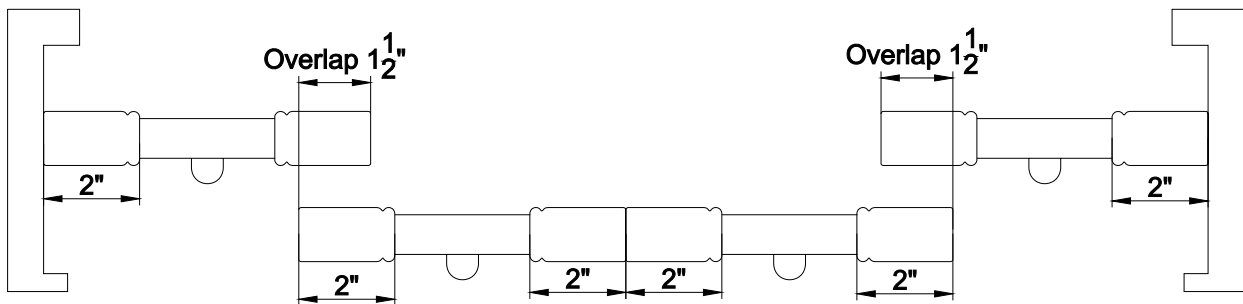
Center Open

Opened Bypass

Bypass panels with **Regular Tilt Rod**
 —for U shape/ interlocking bottom guide*

2 ½" Louver

3 ½" Louver
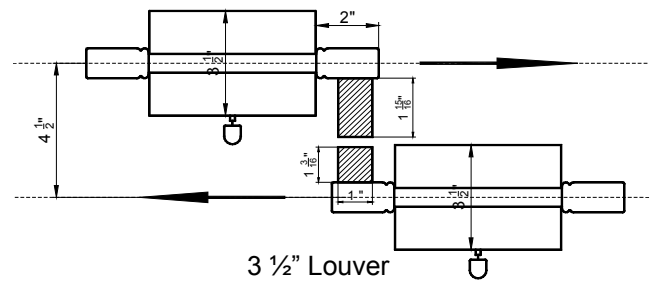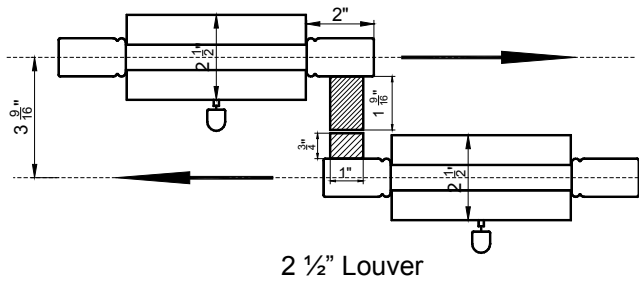
Bypass panels with **InvisibleTilt™**
 —for U shape bottom guide*

2 ½" Louver

3 ½" Louver
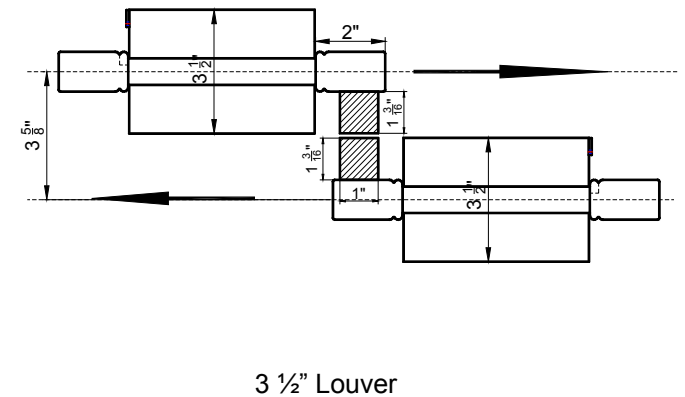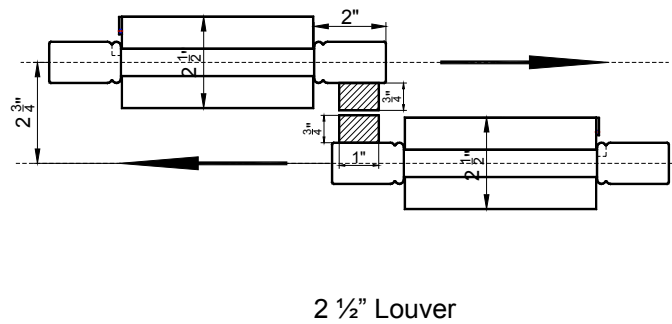
Bypass panels with **InvisibleTilt™**
 —for interlocking bottom guide*

2 ½" Louver

3 ½" Louver

Track Shutters—Bypass

Mounting Options (Closed Bypass)
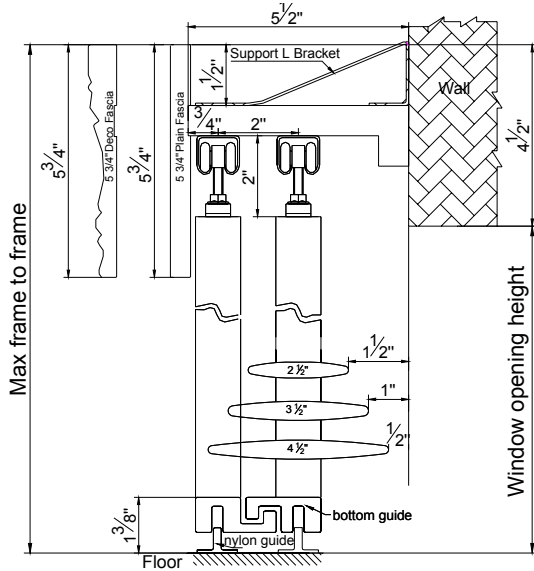
Outside Mount
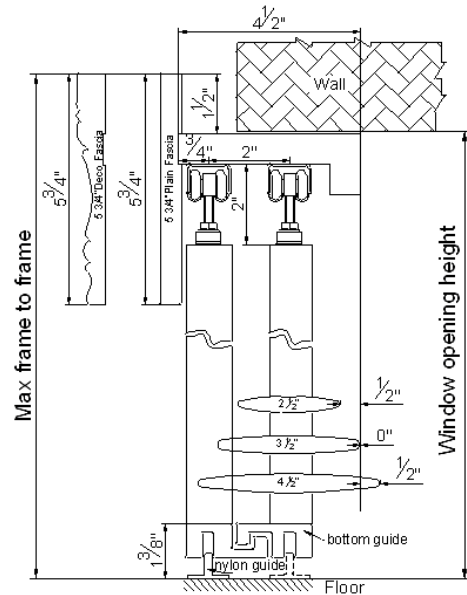
Semi-Inside Mount
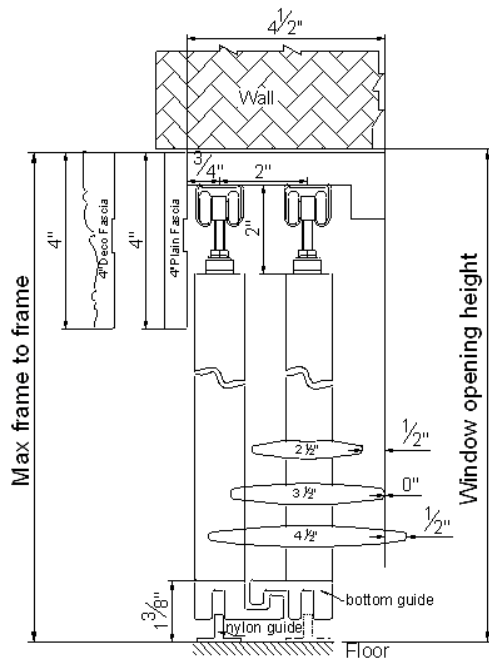
Inside Mount

Track Shutters—Bypass

Mounting Options (Opened Bypass)*

- Only available in 2 ½" and 3 ½" louver sizes

2 ½" Louver (Outside Mount)
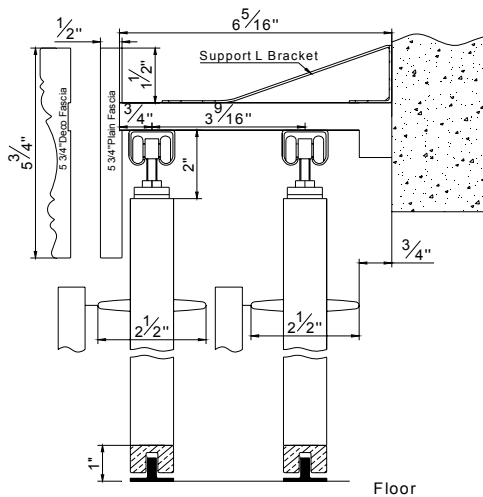
Default Bottom Guide
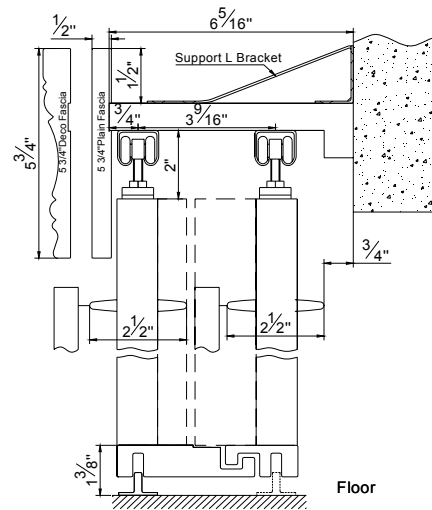
Optional Interlocking
Bottom Guide *

2 ½" Louver (Semi-Inside Mount)

Default Bottom Guide

Optional Interlocking
Bottom Guide *

Track Shutters—Bypass

Mounting Options (Opened Bypass)*

- Only available in 2 ½" and 3 ½" louver sizes

2 ½" Louver (Inside Mount)
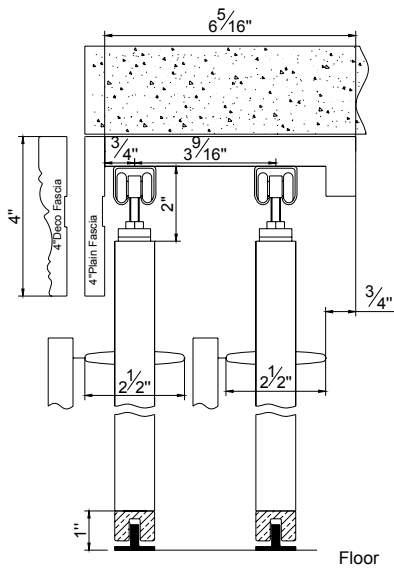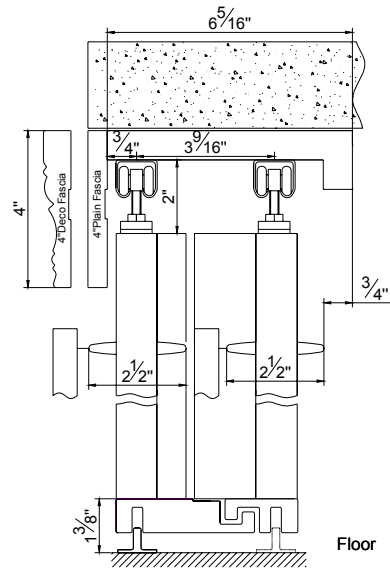
Default Bottom Guide

Optional Interlocking
Bottom Guide *

Track Shutters—Bypass

Mounting Options (Opened Bypass)*

• Only available in 2 ½" and 3 ½" louver sizes

3 ½" Louver (Outside Mount)
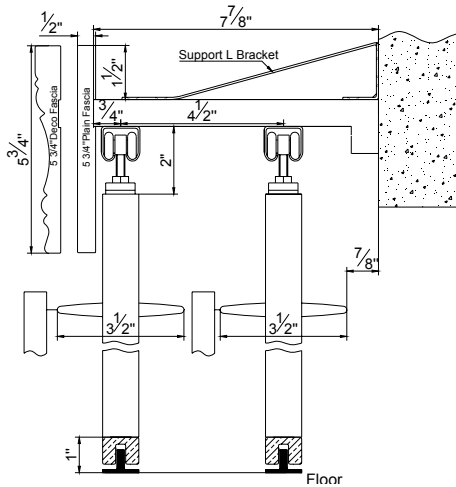
Default Bottom Guide
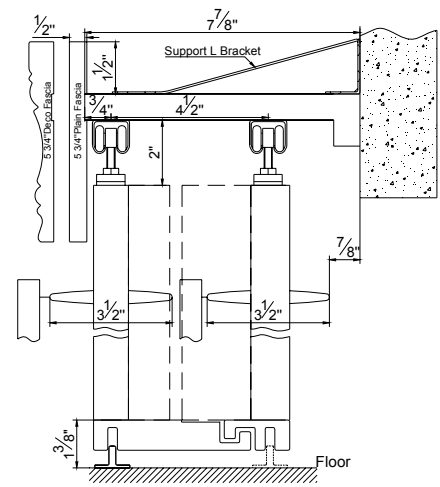
Optional Interlocking
Bottom Guide *

3 ½" Louver (Semi-Inside Mount)
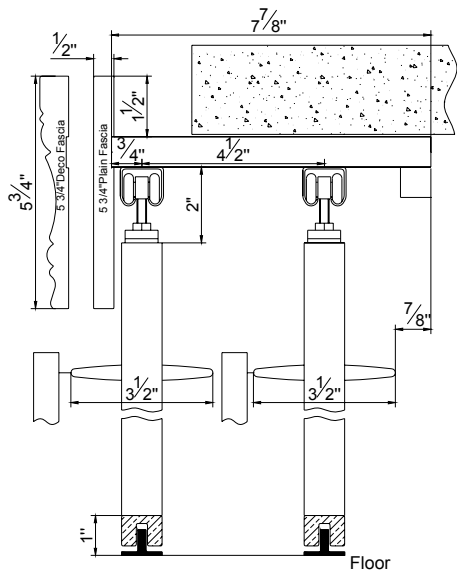
Default Bottom Guide
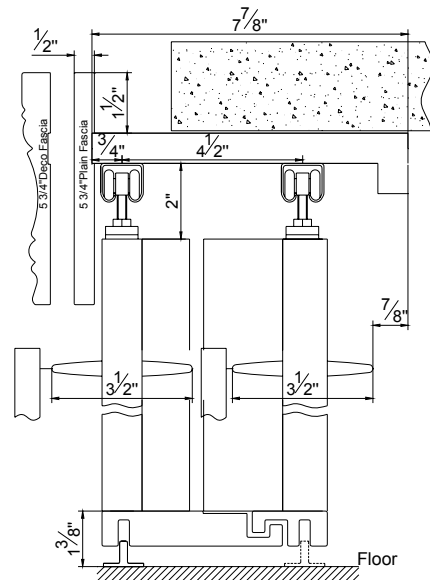
Optional Interlocking
Bottom Guide *

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

Track Shutters—Bypass

Mounting Options (Opened Bypass)*

• Only available in 2 ½" and 3 ½" louver sizes

3 ½" Louver (Inside Mount)

Default Bottom Guide

Optional Interlocking
Bottom Guide *

Track Shutters—Bypass

Closed Bypass
• Available in all louver sizes

Opened Bypass*
• Available in 2 ½" and 3 ½" louver

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

ND j-15

Track Shutters—Bypass

Bypass Framing Materials
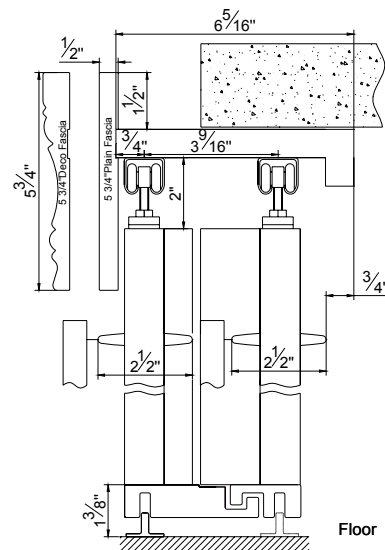**Track Shutters Framing Material**

Framing	Size			Pc(s)
L Shape Header	**Header (Closed Bypass)**	**Header (Opened Bypass)**	**Supporting Strip**	
(2 in 1)	¾" x 5½"* (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	¾" x 6¼"* (2½" Louver)	¾" x ¾"	1 pc
Header with Supporting Strip	¾" x 4½"* (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	¾" x 7¹³/₁₆"* (3½" Louver)		
	Custom * ≤ 8"	Custom * ≤ 8"		
U Shape Side Frame	**Side Frame (Closed Bypass)**	**Side Frame (Opened Bypass)**	**Supporting Strip**	**Side Fascia**
(3 in 1)	¾" x 5½"* (Default for Outside Mount; Optional for Semi-Inside and Inside Mount)	¾" x 6¼"* (2½" Louver)	¾" x ¾"	⅜" x 1¼ "
Side Frame with Supporting Strip & Side Fascia	¾" x 4½"* (Default for Semi-Inside and Inside Mount; Optional for Outside Mount)	¾" x 7¹³/₁₆"* (3½" Louver)		2 pcs
	Custom * ≤ 8"	Custom * ≤ 8"		
Top Fascia (Plain/Deco)	5¾" (Semi-inside and Outside Mount) ½" x 4(Inside Mount)			1 pc
Top Fascia Return	5¾" (Semi-inside and Outside Mount) N/A (Inside Mount)			2 pcs

* L Shape Headers and U Shape Side Frames are only available in 3½", 4½", 5½", 6 ¼ " and 7¹³/₁₆". For other sizes, these framing materials come in separate pieces.

* If framing material in separate pieces is preferred, please state clearly under the Special Instructions section of the order form.

Track Shutters—Bypass

Hardware Box

Hardware Box	
Part	**Qty**
Wrench	1
Nylon Guide	1 for each overlap (S+E shape bottom guide)
	1 for each bottom guide (U shape bottom guide)
3/4" screws for bottom pivot bracket	4 screw for each nylon guide
Touch up paint	1
Support L Bracket (based on the length of header)	Header Length: Less than 90"- 2 brackets included 60"~120"- 3 brackets included 120"~150"- 4 brackets included For header length 150" and above, 1 bracket will be added for each additional 30".
2 1/2" screws for support L bracket	4 screw for each support L bracket
3/4" screws for support L bracket	5 screws for each 4",5 1/4",7" support L bracket 4 screws for each 3" support L bracket

Special Options

Café Shutters[*]

- The top of the panel requires a special finish. Please indicate "café shutter" when placing orders.
- The shutter does not come with recessed magnet on top.
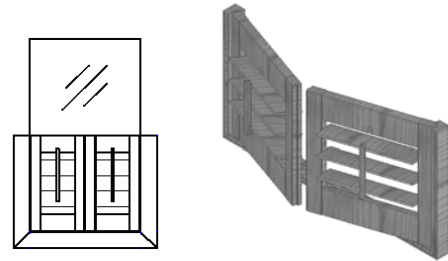
Double-Hung Shutters[*]

- For total number of panels, please include panels in both rows.
- For panel configuration, please provide panel fold for one row.
- The default location for the division point is the center unless specified otherwise.

- Horizontal T Post[*] can be added for increased structural integrity.
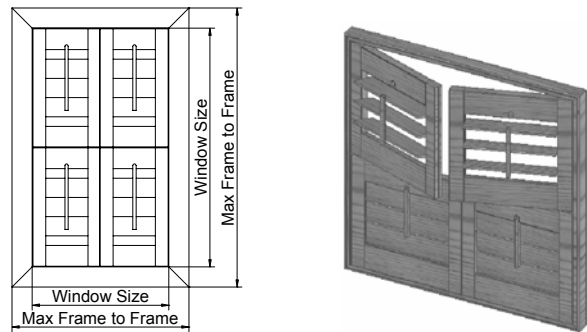
Window Size
Max Frame to Frame

Window Size
Max Frame to Frame

Fixed Louvers

Fixed Louvers ─── Closed (Default) ─── Dress Down / Dress Up

Opened ─── Dress Down / Dress Up

Front of panel / Back of panel	Front of panel / Back of panel	Front of panel / Back of panel	Front of panel / Back of panel
Closed, dressed down	Closed, dressed up	Opened, dressed down	Opened, dressed up
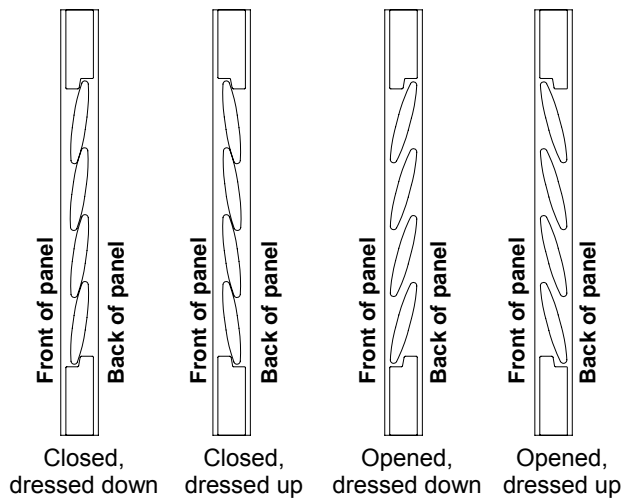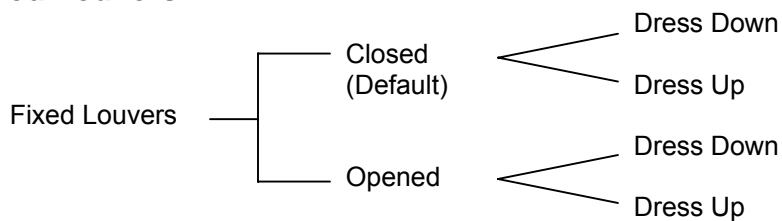
Special Options

French Door Contour Collection[*]

- Flush and offset cutout options are available in both curved and square French door cutout.
  ◊ Offset cutout is good option for French Door with molding around the glass.
- All French door cutouts are only available in L frame except Type E and F. The batten is placed behind the Type E/F panel to block light.
- For measurement details please refer to Form section.
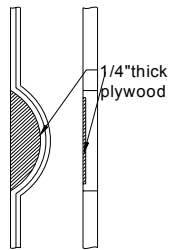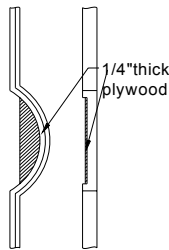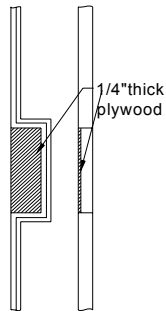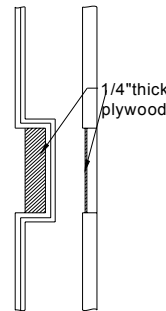
Type A   Type B   Type C   Type D
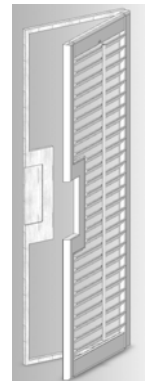
New PerfectTilt RF

The new PerfectTilt RF has many exciting features & benefits.

- Norman® is the only national brand that offers motorization on shutters
- No need to plug-in, no cords, no hardwiring
- Tilt multiple panels in sync or individually
- Includes InvisibleTilt™ system, a completely tilt-rod-free solution for a more streamlined view and improved energy efficiency
- Larger solar panels on solar modules absorb more energy than ever before
- Ergonomic remote includes 8 preset angles and can control unlimited number of shutters in range
- Utilizes RF signal, not traditional infrared: for precise reception, range up to 65 ft., no sensor holes, and no need to point remote directly at receiver
- Remote is equipped with a timer, allowing you to use your own computer from anywhere at any time with our proprietary web interface
- Whisper quiet, gear-driven system
- PerfectTilt® RF wires are concealed inside panel, completely hidden from view
- Extra battery packs can be installed as add-on for longer periods between recharges

Parts and Names:

This side face the window

Manual switch
Use a coin to release the clutch to switch to Manual mode

Module
NS98
Including controller and battery pack

Expansion Battery Pack
To apply more regular or rechargeable batteries

Solar Panel mounting base
Found on PerfectTilt® RF Solar only

Solar panel

Wires and power cables
Wires and power cables are stowed inside the panel

Solar Panels
more solar panels parallel linked for enhanced capacity

Remote Control
Model: NC85

Specialties

Specialty Shutters*

Specialty shutters are made of hardwood, 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
Quarter-Round Sunburst **Half Round Sunburst**	**Louvered Arch w/ Center Tilt Rod** **Circle Sunburst**
Elongated Eyebrow Sunburst **Eyebrow Sunburst**	**Hexagon Sunburst** **Triangle**

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

Pricing

1) By Max Frame-to-Frame Measurement:							
Regular Shutter							
Inside and Outside Mount		Width	x	Height	/ 144	x	$/sq ft
Track Shutter**							
Inside		Width	x	Height	/ 144	x	$/sq ft
Semi-Inside and Outside Mount		Width	x	(Height-1½")	/ 144	x	$/sq ft
2) By Net Panel Measurement:		Width	x	Height	/ 144	x	$/sq ft
3) By Window Size:							
2" Camber Deco Frame	4-sided	(Width+4")	x	(Height+4")	/ 144	x	$/sq ft
	3-sided with Designer Sill Cap	(Width+4")	x	(Height+8")	/ 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 Designer Sill Cap	(Width+4")	x	(Height+6")	/ 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" Crown Z Frame	4-sided	(Width+4 ½")	x	(Height+4½")	/ 144	x	$/sq ft
	3-sided with Designer Sill Cap	(Width+4 ½")	x	(Height+8¼")	/ 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 Designer Sill Cap	(Width+4 ½")	x	(Height+6")	/ 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

Normandy® Shutters

Pricing

2″ Bel Air Z Frame	4-sided	(Width+2 ½")	x	(Height+2½")	/ 144	x	$/sq ft
	3-sided with Designer Sill Cap	(Width+2 ½")	x	(Height+7¼")	/ 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 Designer Sill Cap	(Width+2 ½")	x	(Height+6")	/ 144	x	$/sq ft
	2-sided with Sill Plate	(Width+2 ½")	x	(Height+1¼")	/ 144	x	$/sq ft
	2-sided	(Width+2 ½")	x	(Height)	/ 144	x	$/sq ft
1 ½ " Bullnose Z Frame	4-sided	(Width+2")	x	(Height+2")	/ 144	x	$/sq ft
	3-sided with Designer Sill Cap	(Width+2")	x	(Height+7")	/ 144	x	$/sq ft
	3-sided with Sill Plate	(Width+2")	x	(Height+2")	/ 144	x	$/sq ft
	3-sided	(Width+2")	x	(Height+1")	/ 144	x	$/sq ft
	2-sided with Designer Sill Cap	(Width+2")	x	(Height+6")	/ 144	x	$/sq ft
	2-sided with Sill Plate	(Width+2")	x	(Height+1")	/ 144	x	$/sq ft
	2-sided	(Width+2")	x	(Height)	/ 144	x	$/sq ft
Vintage Hang Strip	Inside	Width	x	Height	/ 144	x	$/sq ft
	Outside 4-sided	(Width+3")	x	(Height+3")	/ 144	x	$/sq ft
	Outside 3-sided with Designer Sill Cap	(Width+3")	x	(Height+7½")	/ 144	x	$/sq ft
	Outside 3-sided	(Width+3")	x	(Height+1½")	/ 144	x	$/sq ft
	Outside 2-sided with Designer Sill Cap	(Width+3")	x	(Height+6")	/ 144	x	$/sq ft
	Outside 2-sided	(Width+3")	x	(Height)	/ 144	x	$/sq ft
Beaded L Frame/ Colonial L Frame/ Bullnose L Frame/ Vintage L Frame	Inside (max frame to frame measurement only)	Width	x	Height	/ 144	x	$/sq ft
	Outside 4-sided	(Width+3")	x	(Height+3")	/ 144	x	$/sq ft
	Outside 3-sided with Designer Sill Cap	(Width+3")	x	(Height+7½")	/ 144	x	$/sq ft
	Outside 3-sided	(Width+3")	x	(Height+1½")	/ 144	x	$/sq ft
	Outside 2-sided with Designer Sill Cap	(Width+3")	x	(Height+6")	/ 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

Options & Surcharges

Option	Surcharge	Remark
Beaded L Frame with ¼" Thick Light Block	No surcharge	
L Frame with ½" & 1" Buildout	5%	
Notch Out L Frame	12%	
Deco Frame with ½", 1" & 1½" Extension	5%	
Custom Extension	12%	Up to 2" for L Frames, Deco Frames and Hang Strip (OM)
		Up to 1" for Z Frames (not available for Tilt Out Z frame)
T Post	No surcharge	
T Post Extension	5%	Up tp 2"
Custom width T Post	6%	Up tp 7½"
90 degree Corner Post & 135 degree Bay Post	No surcharge	
Double Hung / Horizontal 1¾" T Post	10%	
Custom Angle/Depth Bay Post	6%	Up to 2" for custom depth
Extra Light Block	Charge per linear ft	Please contact your Customer Account Specialist for details
Scribe Trim	Charge per linear ft	Please contact your Customer Account Specialist for details
Center Tilt Rod	No surcharge	
Offset Tilt Rod	5%	
InvisibleTilt™	10%	Panels over 48" will have a split InvisibleTilt tilt rod. Not available in 1" louvers.
Optimal™ Antimicrobial Treatment	10%	
Café Shutters	30%	Surcharge applies when the frame exceeds 5" beyond the top of the panel.
Fixed Louver Panel	No surcharge	Please indicate fixed position: up/down and open/close
French Door Cutout	See specialty surcharge	Please contact your Customer Account Specialist for details
Track	See specialty surcharge	Please contact your Customer Account Specialist for details
Plain Boxout (Standard size)	30%	
Deco Boxout (Standard size)	35%	
Plain Boxout (Custom size)	40%	
Deco Boxout (Custom size)	45%	
Interlocking Bottom Guide (Opened Bypass)	5%	
Specialties	See specialty surcharge	Please contact your Customer Account Specialist for details
Stainless Steel Hinges	5%	
PerfectTilt (regular)	Per motor, per remote control	Please contact your Customer Account Specialist for details
PerfectTilt (solar)	Per motor, per remote control	Please contact your Customer Account Specialist for details
InvisibleHinge™	10%	

Normandy Shutters

Appendix

Color Coordination Chart

Code / Normandy Solid	Hinge Color
001 Pure White	Silk White
003 Silk White	Silk White
004 Bright White	Silk White
006 Pearl	Pearl
009 Creamy	Bisque
011 Cameo	Bisque
012 Crisp Linen	Bisque
013 Bisque	Bisque
030 Moondust	Bisque

Normandy Shutters

Code / Normandy Stain	Hinge Color
103 Maple Sugar	Antique Brass
105 Hermitage Green	Antique Brass
108 Rustic Gray	Antique Brass
110 Limed White	Antique Brass
205 Goldenrod	Antique Brass
206 Pecan	Antique Brass
211 Cherry	Antique Brass
214 Cocoa	Antique Brass
221 Black Walnut	Antique Brass
222 Light Pine	Antique Brass
224 Mellow Beech	Antique Brass
226 Chestnut	Antique Brass
227 Red Oak	Antique Brass
229 Rich Walnut	Antique Brass
230 Old Teak	Antique Brass
231 Spring Rose	Antique Brass
232 Red Mahogany	Antique Brass
233 Dark Mahogany	Antique Brass
237 Wenge	Antique Brass
242 Auburn	Antique Brass
249 Acorn	Antique Brass
250 Sumatra	Antique Brass

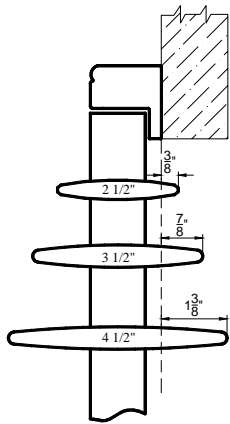# Louver Depth Clearance

Standard Tilt Rod
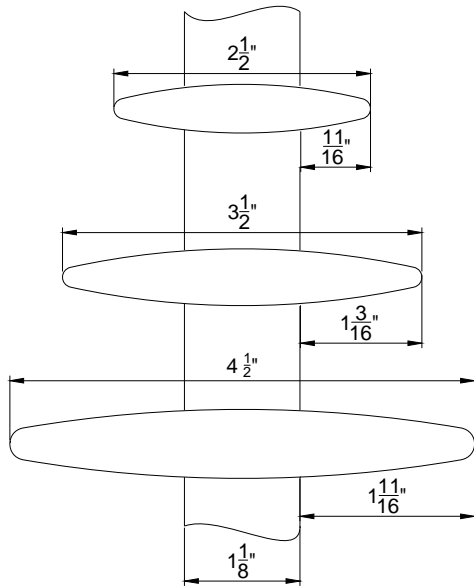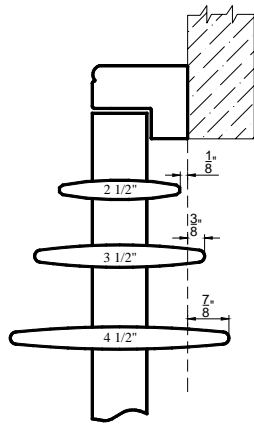
Offset Tilt Rod
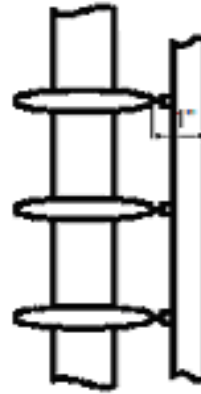
Louver Depth Clearance For Specific Frames
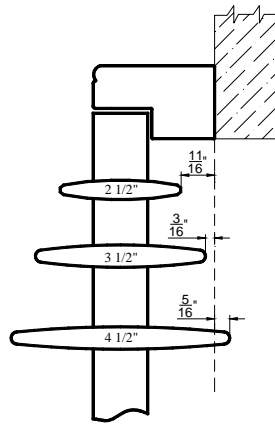
Louver Depth Clearance for
- Offset tilt rod, add 1" from the edge of the louvers

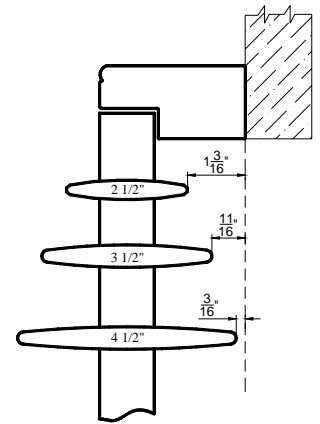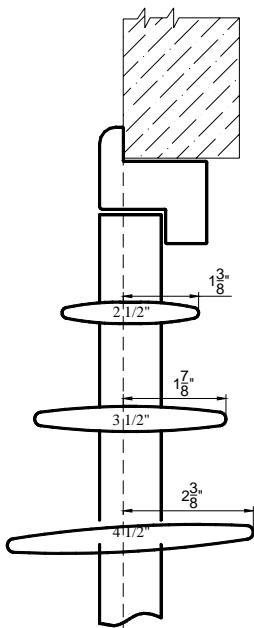**L Frame**
w/ ¼ " Light Block

2 1/2" $\frac{3}{8}$"

3 1/2" $\frac{7}{8}$"

4 1/2" $1\frac{3}{8}$"

L Frame

2 1/2" $\frac{1}{8}$"

3 1/2" $\frac{3}{8}$"

4 1/2" $\frac{7}{8}$"

L Frame
w/ ½ " Buildout

2 1/2" $\frac{11}{16}$"

3 1/2" $\frac{3}{16}$"

4 1/2" $\frac{5}{16}$"

L Frame
w/ 1" Buildout

2 1/2" $1\frac{3}{16}$"

3 1/2" $\frac{11}{16}$"

4 1/2" $\frac{3}{16}$"

1 ½" Bullnose Z Frame

2 1/2" $1\frac{3}{8}$"

3 1/2" $1\frac{7}{8}$"

4 1/2" $2\frac{3}{8}$"

2" Bel Air Z Frame

2 1/2" $1\frac{3}{8}$"

3 1/2" $1\frac{7}{8}$"

4 1/2" $2\frac{3}{8}$"

3" Crown Z Frame
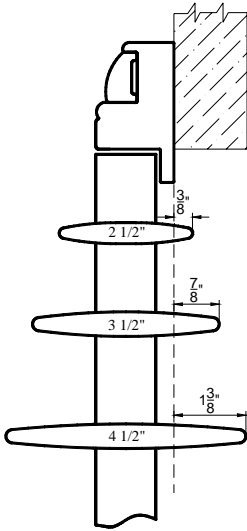
2 1/2" $1\frac{1}{4}$"

3 1/2" $1\frac{3}{4}$"
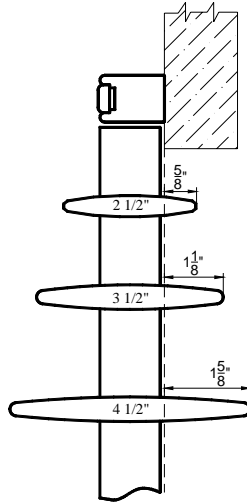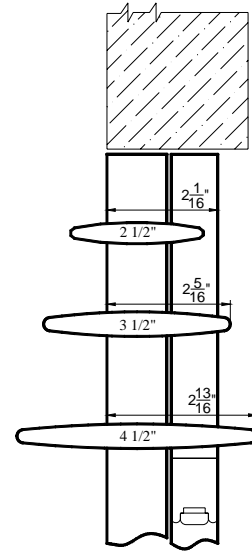
4 1/2" $2\frac{1}{4}$"

ND n-4
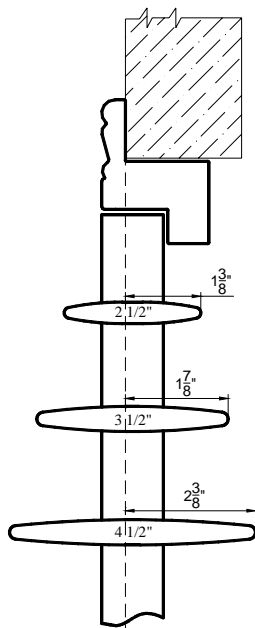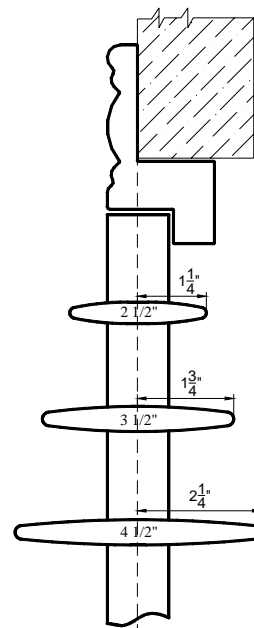
Louver Depth Clearance For Specific Frames

2" Camber Deco Frame

Hang Strip
(beside the panel)

Hang Strip
(behind the panel)