

Modern Multi Slide Door

Site Preparation

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ABSTRACT: Marvin Modern Multi-Slide door systems require proper site preparation to ensure optimal performance and operation after installation. This instruction will provide the necessary information to properly prepare the wall opening for ease of installation and operational integrity.

Site preparation begins with preparing the opening for the specified sill system. The selected sill and substrate must offer the door system support which spans the width and depth of the unit. The exterior sill liner must be completely supported. Several sill options are available for consideration. Regardless of sill type, the foundation must support the sill height variance requirement of 1/16" (2) maximum across the entire sill length.

In conjunction with the sill, the framing of the rough opening must be installed plumb, square, and true within 3/16"(5). Side jambs and pocket framing must be constructed of a continuous flat solid surface that is plumb.

IMPORTANT

Unfactored superimposed load (Live, Wind, or Snow) deflection over the entire length of the unsupported span cannot be greater than 1/8" (3) after natural sag of the beam and permanent loads are in place.

NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.

WARNING!

Always practice safety! Wear the appropriate eye, ear, and hand protection, especially when working with power tools.

Centor® Screen

To ensure proper integration with the Modern Multi-Slide door, the Centor Screen must be included in the door site preparation.

For instructions on how to install your Screen, please follow this link:

[Centor Screen Instructions](#)

To watch the installation video, follow this link:

[Installation Video](#)

To watch a video on the benefits and features of the screen, follow this link:

[Screen Benefits and Features](#)

Water Management System-Panning

We require a sill pan for all Multi-Slide door systems in accordance with ASTM E2112. A sill pan is installed across the bottom of the opening and integrated into the weather resistive barrier (WRB). The illustrations below show the basic requirements. Modification may be needed depending on your Rough Opening and alternative filed preparation.

Types of Pan Flashing Material (Based on ASTM E2112)		
Rigid Sheet	1 piece or multiple pieces	Type I
Rigid Sheet	Multiple pieces	Type II
Flexible Membrane	1 piece or multiple pieces	Type III
Combination System	Multiple Pieces	Type IV
Liquid Membrane	Continuous coating	Type V

- All pannings must have a rear leg that must be as high as the interior sill liner of the door.
- Any fasteners penetrating the sill panning must have sealant applied to the pre-drilled hole prior to fastening.
- All pannings must have a minimum of 4" (102) end dam.
- Pocket panning must have a minimum of 4" end dam on all sides of the pocket.

Flush and Performance Sill Panning

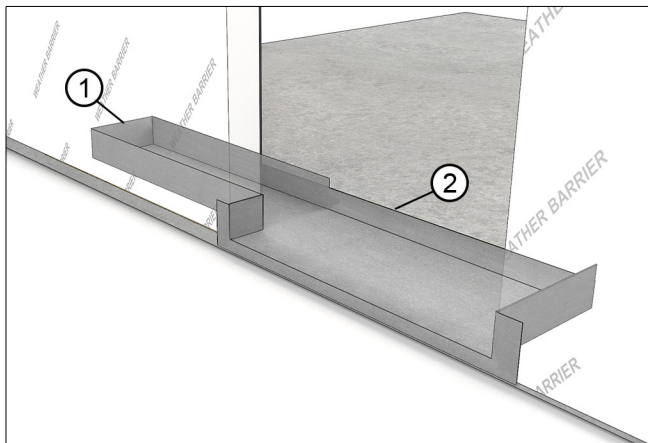


Figure 1 Pocket Panning for Performance or Flush sill

1	Minimum 4" height on all sides of pocket
2	Rear leg of panning as high as door sill liner.

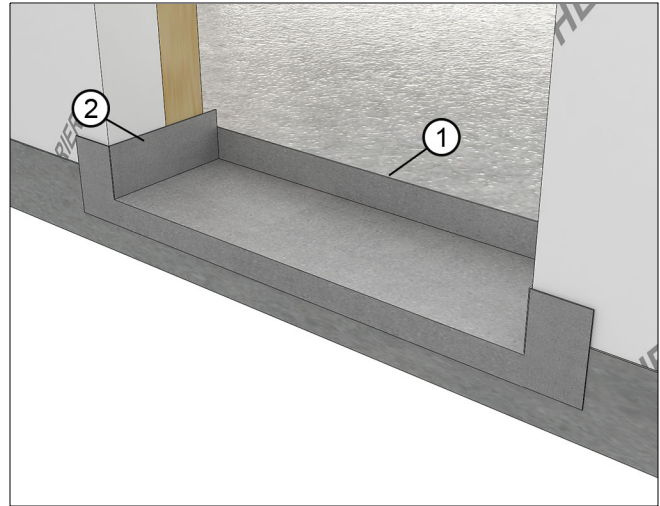


Figure 2 Stacked Panning for Performance or Flush sill

1	Interior end dam must be as high as the sill liner on the door.
2	Minimum 4" height on sides

High Performance Sill Panning

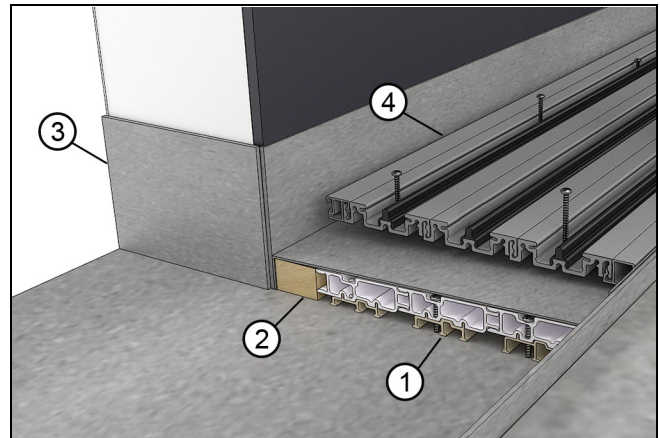


Figure 3 Pocket HP Cutaway

1	Sill slope (cut away)
2	Optional offset block (cut away, in pocket only)
3	Minimum 4" height on all sides of pocket
4	Door HP sill

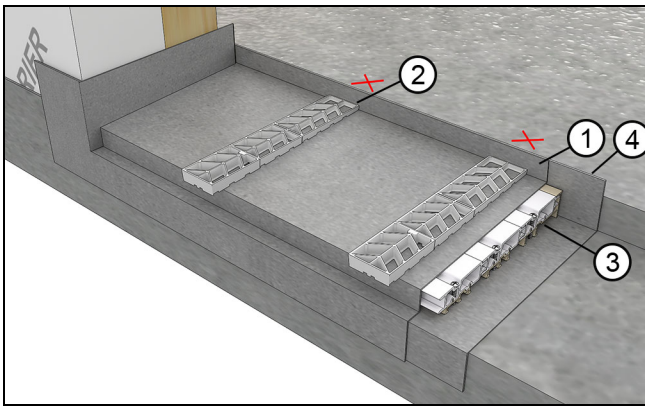


Figure 4 Stacked HP Panning

1	Panning
2	Countershims
3	Sill Slope
4	Optional pre-panning

Sill Systems

Performance Sill System

The sill system requires a maximum 1/16" (2) variance in height across the entire length of the sill. A laser level may be helpful in preparing the opening.

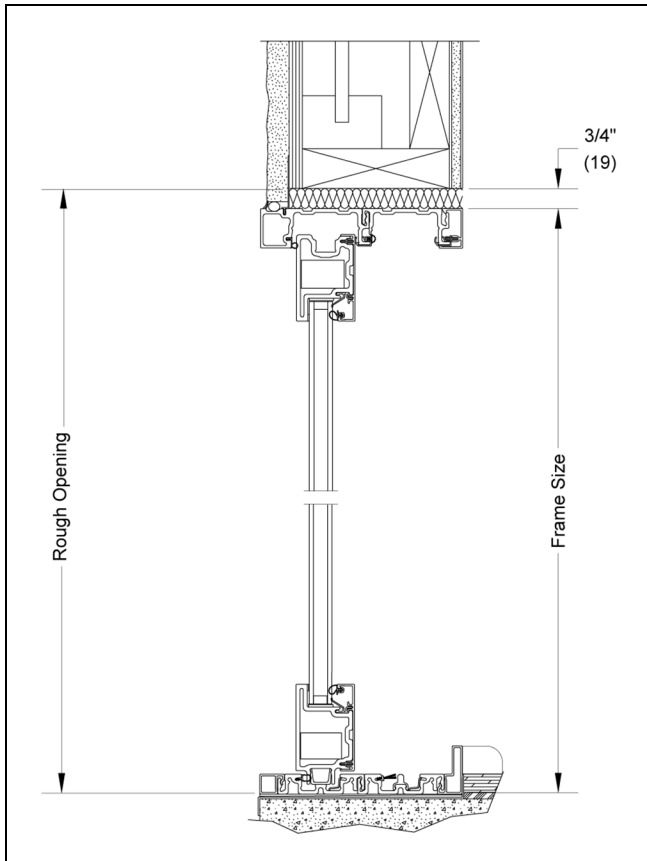


Figure 5

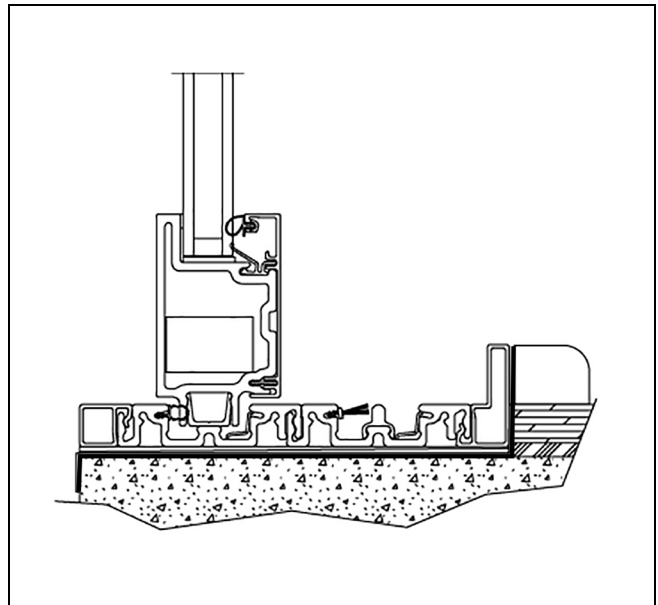


Figure 6 Performance Sill.

Flush Sill System

The sill system requires a maximum 1/16" (2) variance in height across the entire length of the sill. A laser level may be helpful in preparing the opening.

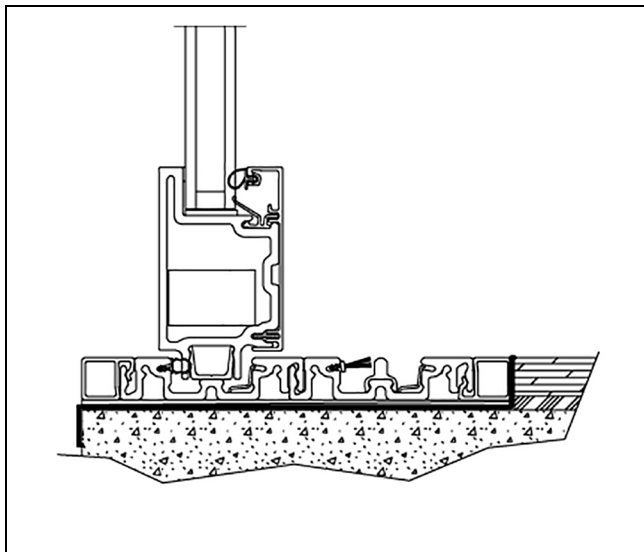
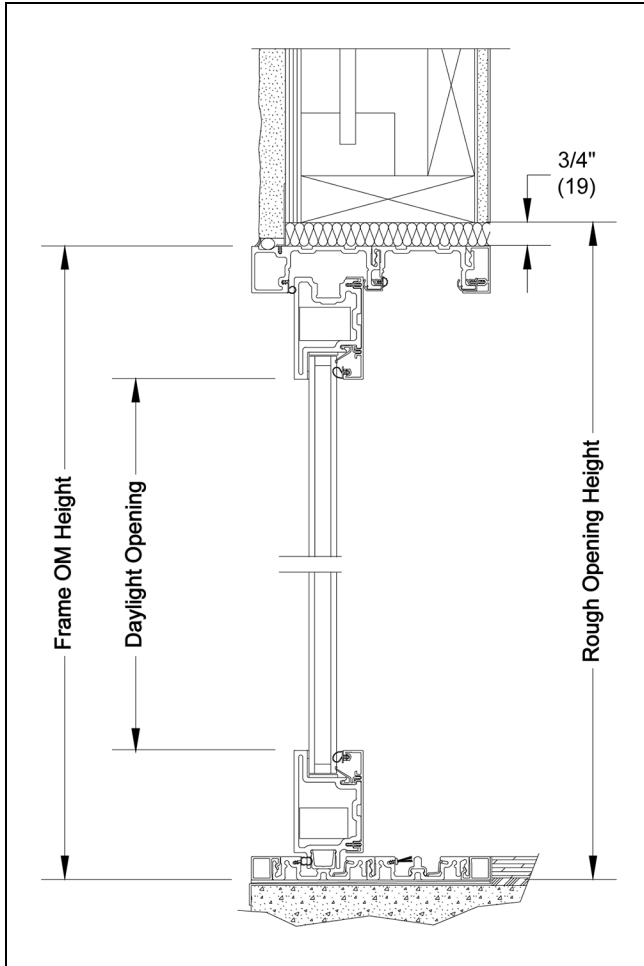


Figure 7 Flush Sill

High Performance Sill System

The sill system requires a maximum 1/16" (2) variance in height across the entire length of the sill. A laser level may be helpful in preparing the opening. For required slot size information refer to the table below. For a recessed sill, please refer to the floor thickness table.

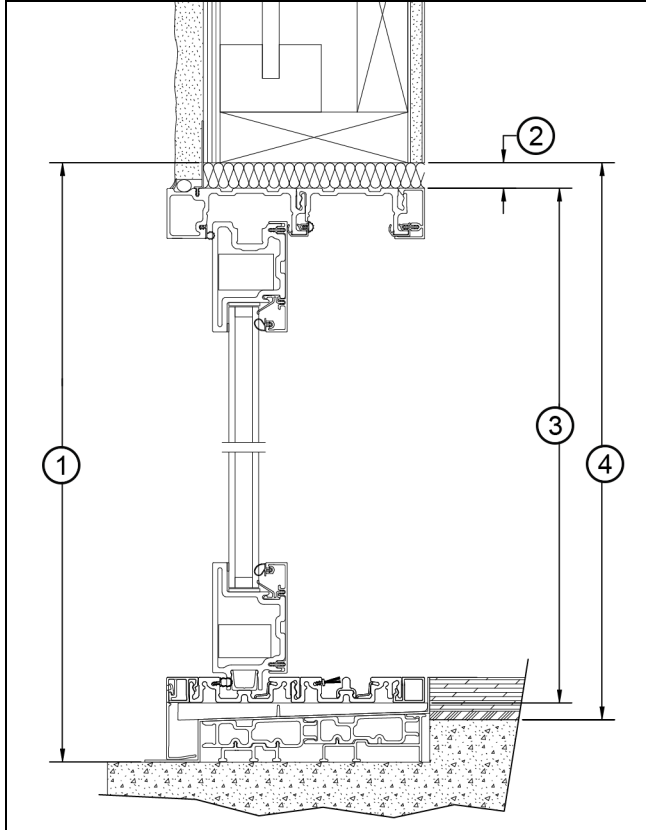


Figure 8

1	Total Rough Opening
2	Rough Opening Gap 3/4"
3	Frame Size
4	Rough Opening

The sill slope is oriented flush with the exterior nail fin plane or 1 1/16" from the exterior plane of the door.

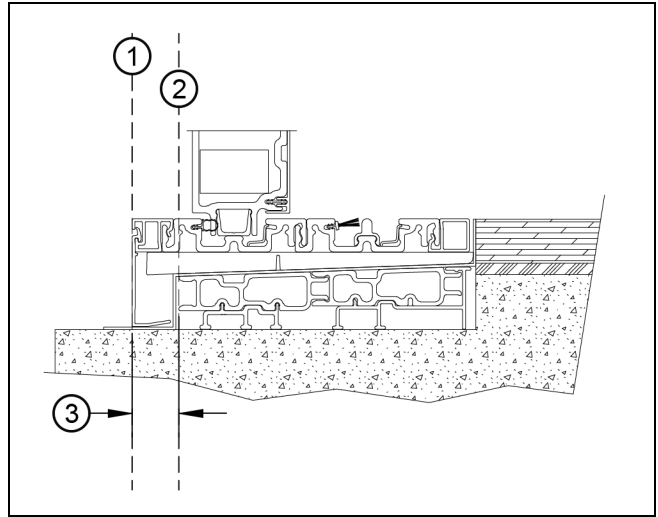


Figure 9

1	Exterior plane of door
2	Exterior nose of sill slope
3	1 1/16" (27)

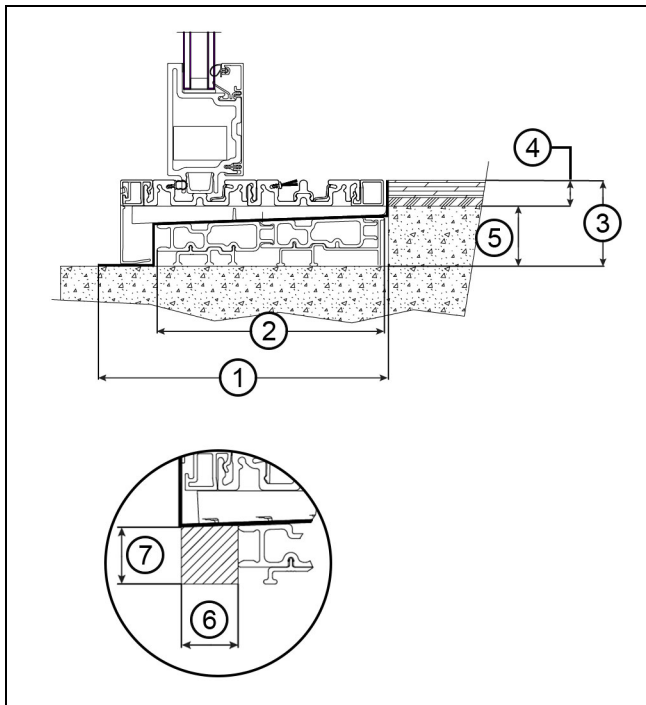


Figure 10 High Performance Sill details with pocket details inset.

1	Slot depth
2	Sill slope depth
3	Overall slot recess (Slot recess plus finished floor thickness)
4	Available floor height
5	Subfloor slot recess
6	Sill slope offset width
7	Sill slope offset height

Tracks	Slot Depth (1)	
	w/o Screen	with Screen
1 track	5 1/4" (134)	9 3/64" (230)
2 track	8 9/32" (210)	12 1/16" (307)
3 track	11 19/64" (287)	15 3/32" (383)
4 track	14 5/16" (364)	18 7/64" (460)
5 track	17 21/64" (440)	21 1/8" (537)
6 track	20 23/64" (517)	24 9/64" (613)

NOTE: The slot depth may include the exterior wall depth.

Tracks	HP Sill Slope Depth (2)
1 track	3 5/8" (92)
2 track	6 5/8" (168)
3 track	9 21/32" (245)
4 track	12 21/32" (322)
5 track	15 11/16" (399)
6 track	18 23/32" (475)

Available Floor Thickness (4)	Sub-Floor Slot Recess (5)
0"	2 1/2" (64)
1/4" (6)	2 1/4" (57)
1/2"(13)	2" (51)
3/4"(19)	1 3/4" (44)
1"(25)	1 1/2" (38)
1 1/4"(32)	1 1/4" (32)
1 1/2"(38)	1" (25)
1 3/4"(44)	3/4" (19)
2"(51)	1/2" (13)
2 1/4"(57)	1/4" (6)
2 1/2"(64)	0

Tracks	Pocket HP Sill Slope Offset (6&7)	
	Width (6)	Height (7)
1 track	1 1/16" (27)	1 19/64" (33)
2 track	1 1/16" (27)	1 3/16" (30)
3 track	1 1/16" (27)	1 3/32" (28)
4 track	1 1/16" (27)	25/64" (25)
5 track	1 1/16" (27)	7/8" (22)
6 track	1 1/16" (27)	25/32" (20)

Framing Considerations

Framing the opening at the header, side jambs, and pocket interlocks for a Multi-Panel Door system vary with both the number of sliding panels that stack at the jambs and the height and width of the panels. The frame must be plumb, square, and true within 3/16" (5). See [Figure 11](#) as a reference in all sections.

IMPORTANT

The construction details provided within represent only one example of framing for the Modern Multi-Slide Door. Your construction methods and framing requirements may differ from what is shown. Consult a structural engineer and/or architect for details about framing methods for your specific project. Follow all guidelines and restrictions detailed within the Site Prep and Installation Instructions.

IMPORTANT

Unfactored superimposed load (Live, Wind, or Snow) deflection over the entire length of the unsupported span cannot be greater than 1/8" (3) after natural sag of the beam and permanent loads are in place.

Head Jamb

The head jamb supplied with your door functions as a panel guide. The entire header opening requires a flat solid surface for installation of the head jamb mounting screws to the framing. The entire length of the mounting surface must be as wide as the head jamb.

NOTE: Hard to move panels can be the result of the structures' header sagging and restricting door operation. Excessive header sag may restrict door operation altogether.

Side Jambs

The side jamb rough framing must be within 1/8" plumb and true with a continuous flat solid surface the width of the supplied jamb in order to provide a secure mounting surface for installation hardware. A minimum of 3" substrate is required for fastening.

IMPORTANT

The side jamb framing rough opening height is determined from the sub-floor and must take into account the finished flooring thickness.

Stacked Frame Jamb Depth		
Tracks	Jamb Depth w/ Nail Fin	Jamb Depth w/o Nail Fin
2 Track	6 9/16" (167)	7 41/64" (194)
3 Track	9 37/64" (243)	10 21/32" (271)
4 Track	12 19/32" (320)	13 43/64" (347)
5 Track	15 5/8" (397)	16 45/64" (424)
6 Track	18 41/64" (473)	19 23/32" (501)

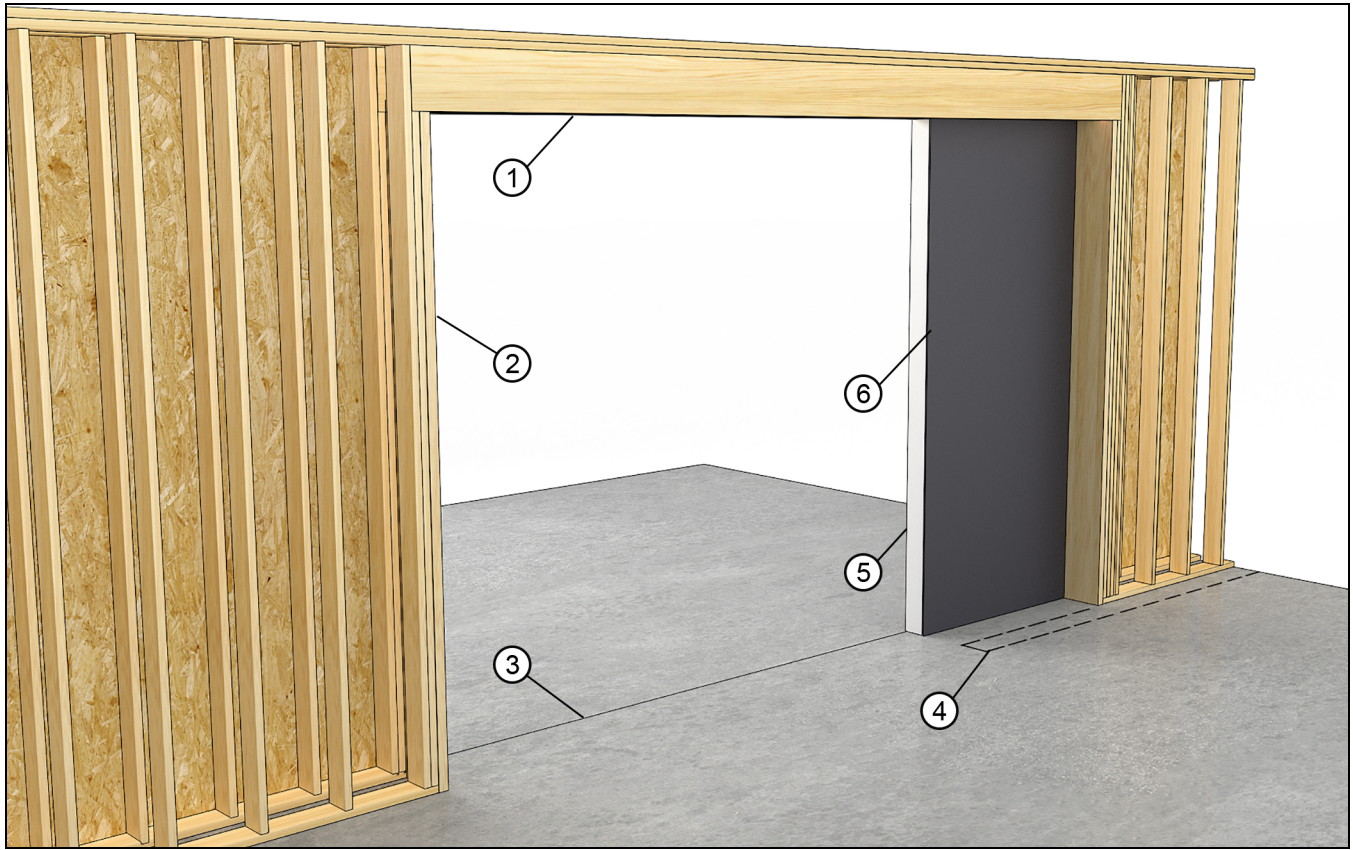


Figure 11 Pocket framing for flush and performance sill shown. (Interior pocket wall not shown) (Construction not typical)

1	Header deflection must be within 1/8" across span
2	Side jambs must be within 1/8" plumb and true
3	Sill height variance must not exceed 1/16"
4	Interior pocket wall location (after install)
5	Exterior wall
6	Blackout panel

Pockets

Construct the exterior wall to comply with local building codes. Painting the inner sheathing black before construction is recommended.

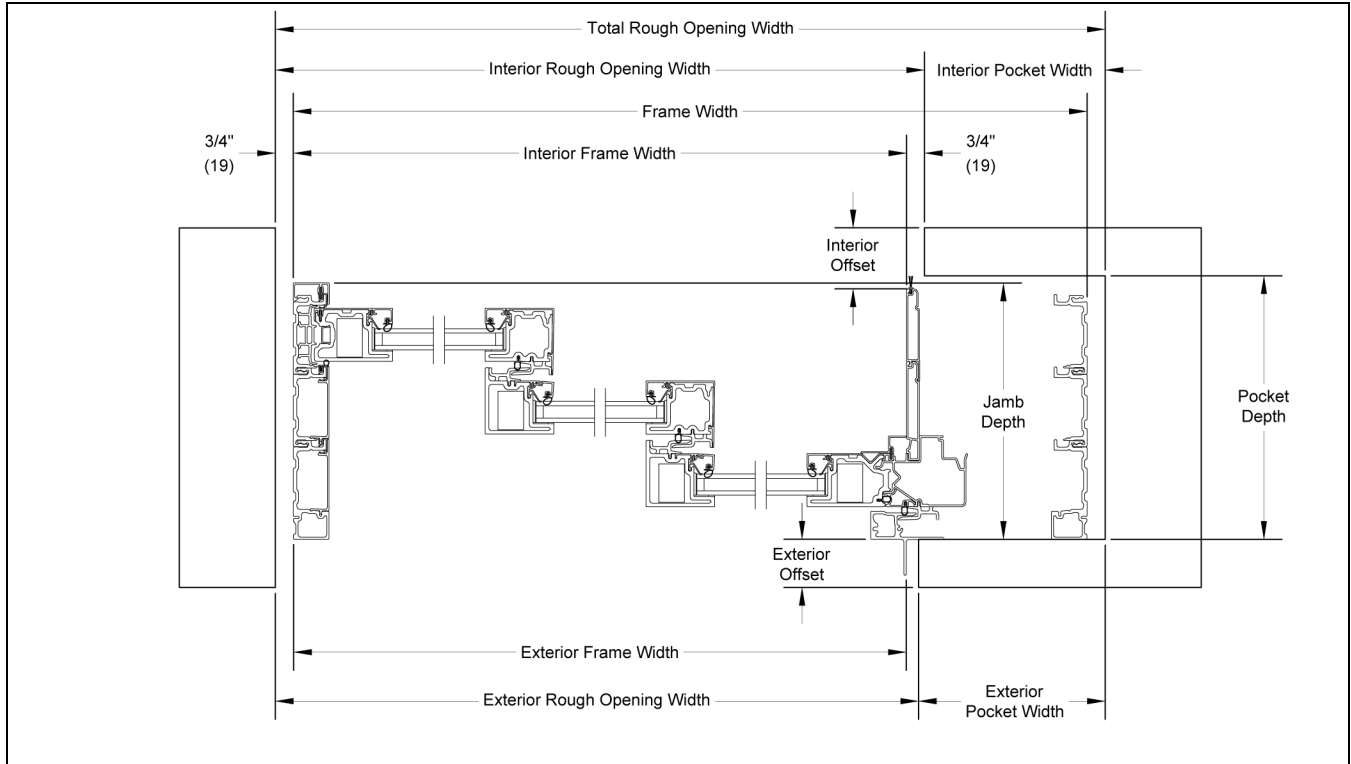


Figure 12

IMPORTANT

The interior walls must be framed after the door frame is installed.

Pocket Framing Definitions	
Exterior Offset	Distance from frame exterior to finished exterior wall
Exterior RO	Exterior wall framing width where interlock attaches to opposite end.
Interior Offset	Distance from frame interior to the finished interior wall.
Total Rough Opening	Frame width + 1 1/2" (38)
Pocket Depth	Jamb depth + approx 5/16" (8)
HP Sill Slope offset	See figure 8.

Pocket Frame Jamb and Pocket Depths		
Tracks	Pocket Depth	Jamb Depth
1 track	4 59/64" (125)	4 5/8" (117)
2 track	7 61/64" (202)	7 41/64" (194)
3 track	10 31/32" (279)	10 21/32" (271)
4 track	13 63/64" (355)	13 43/64" (347)
5 track	17" (432)	16 45/64" (424)
6 track	20 1/64" (509)	19 23/32" (501)

NOTE: Interior and exterior offsets are at the discretion of the customer.

Sliding Screen Details

NOTE: Sill panning does not continue under the screen sill. The upturn leg must be between the front of the screen sill and the interior sill liner of the door. The rough opening must be prepared with additional spacing to allow for the screen. Follow Installation instructions for fastening requirements (included with screen).

IMPORTANT

Calculations are based on the illustrations provided.

Screen Offsets-Vertical

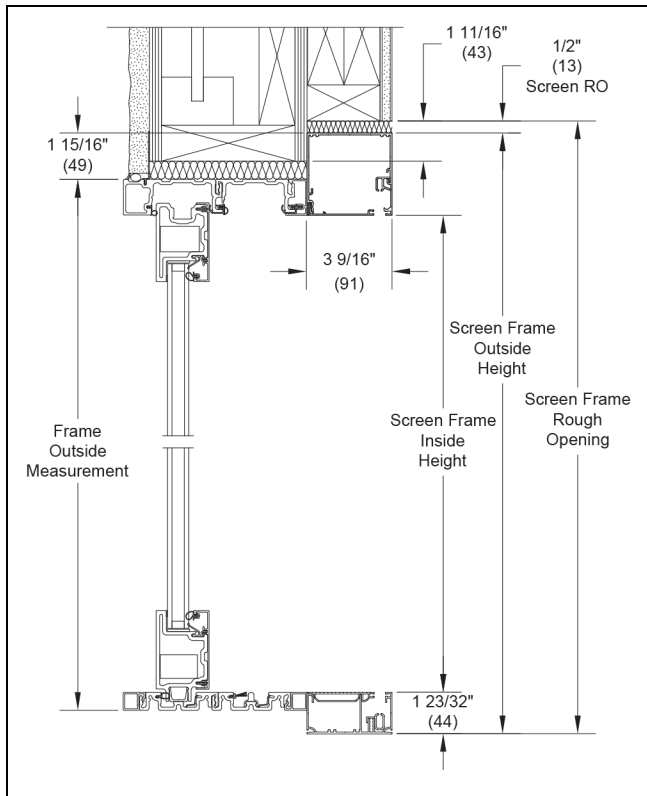


Figure 13 Flush Sill

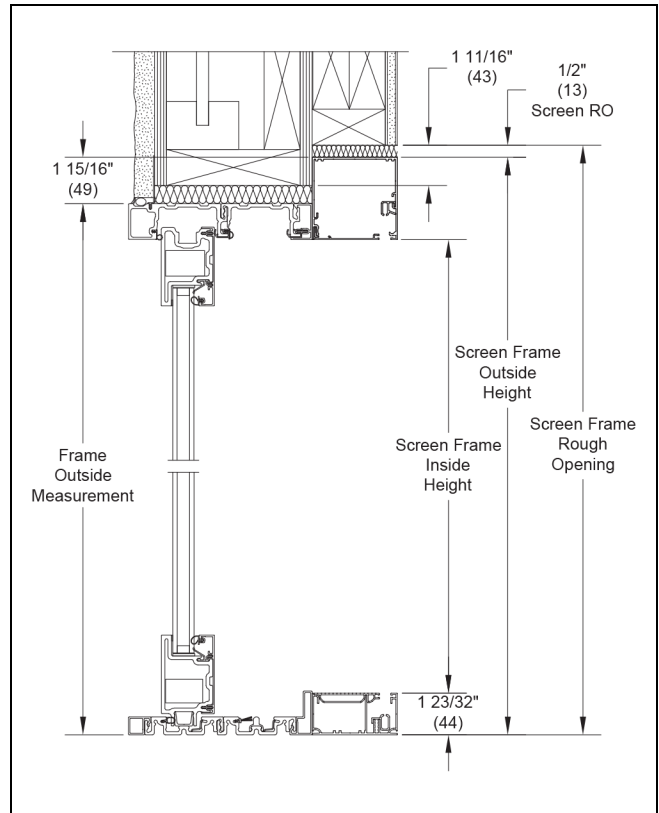


Figure 14 Performance Sill

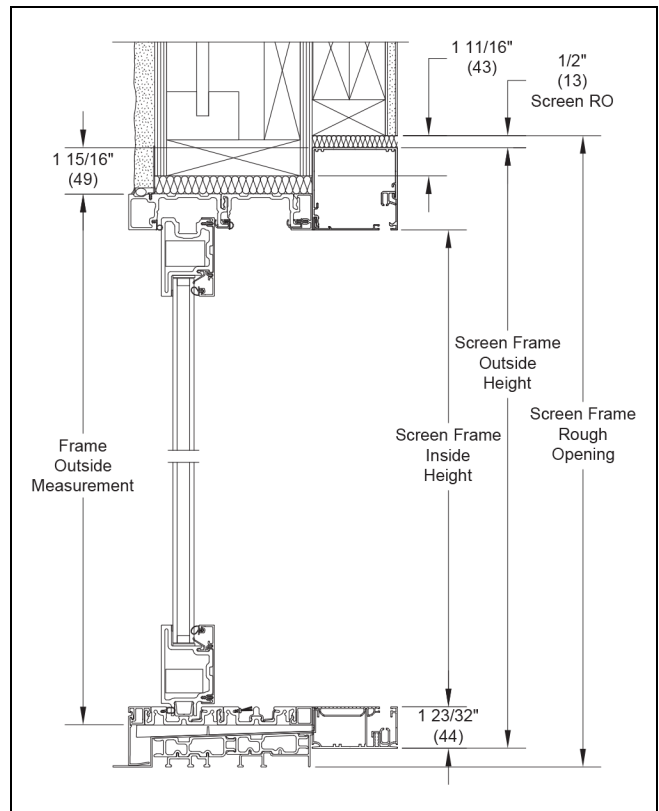


Figure 15 High Performance Sill

Screen Offsets-Jamb Details

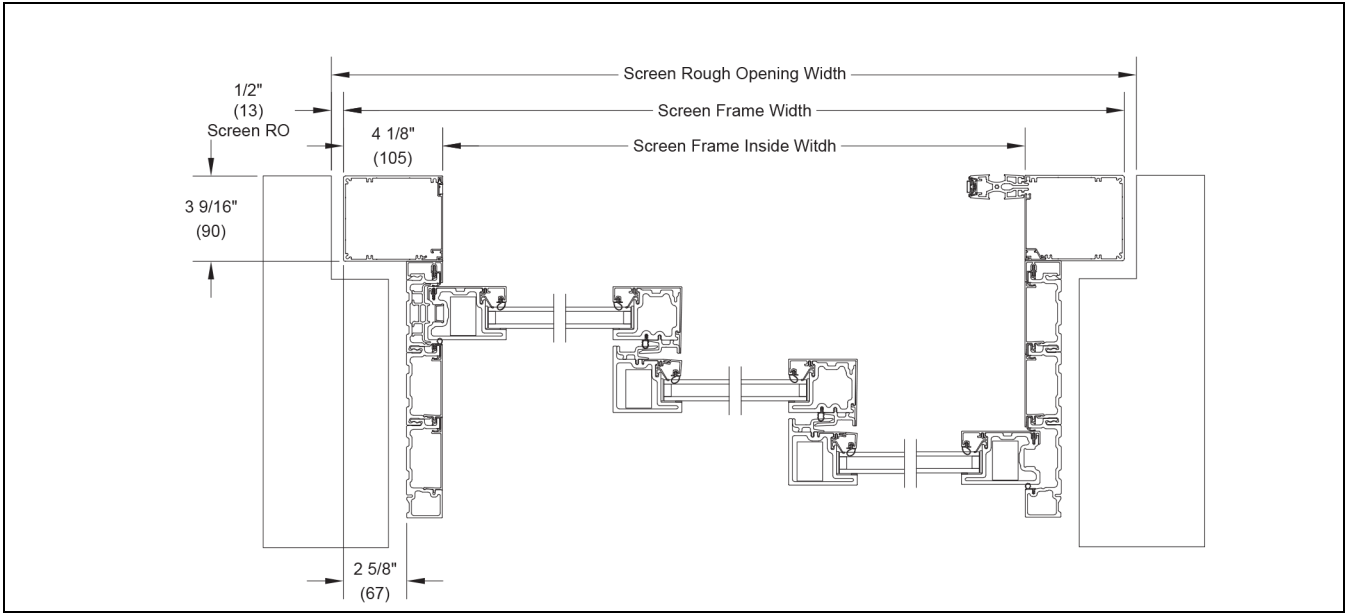


Figure 16 Uni-Directional XXO

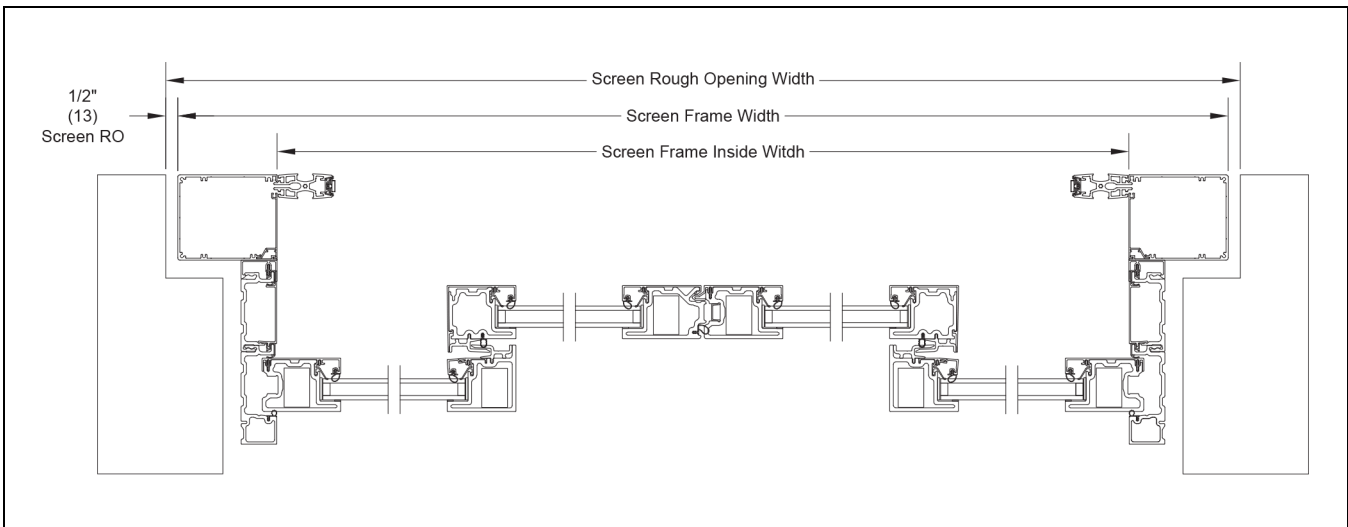


Figure 17 Bi-Parting OX-XO

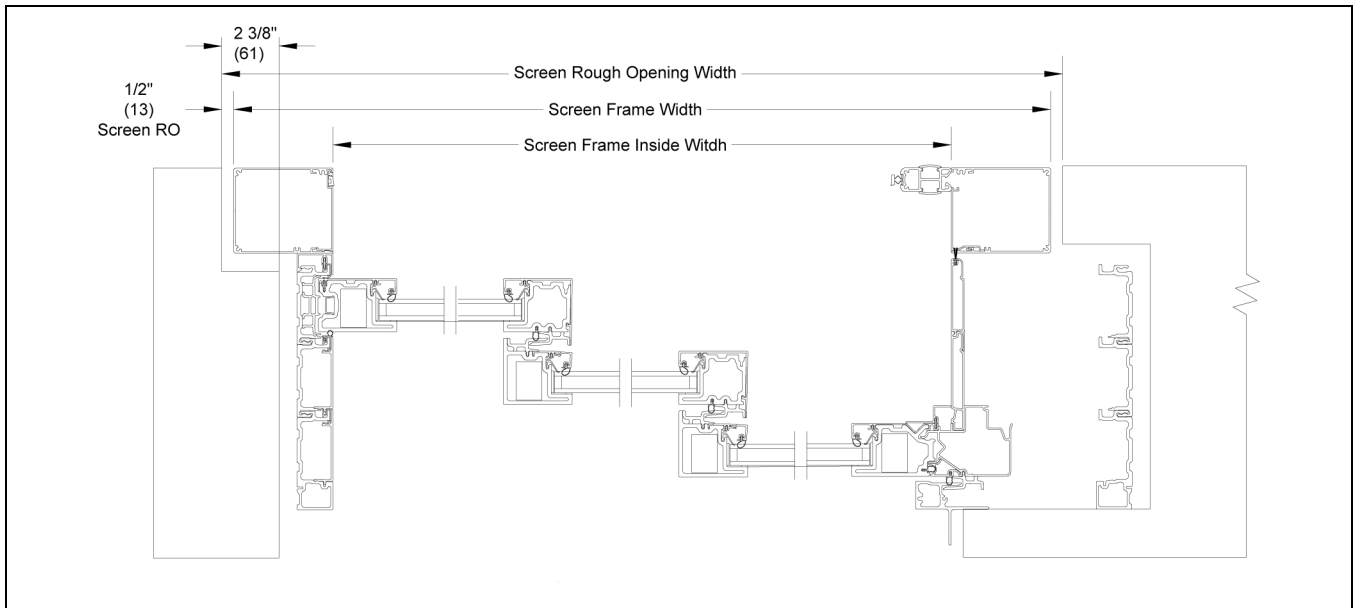


Figure 18 Uni-Directional Pocket

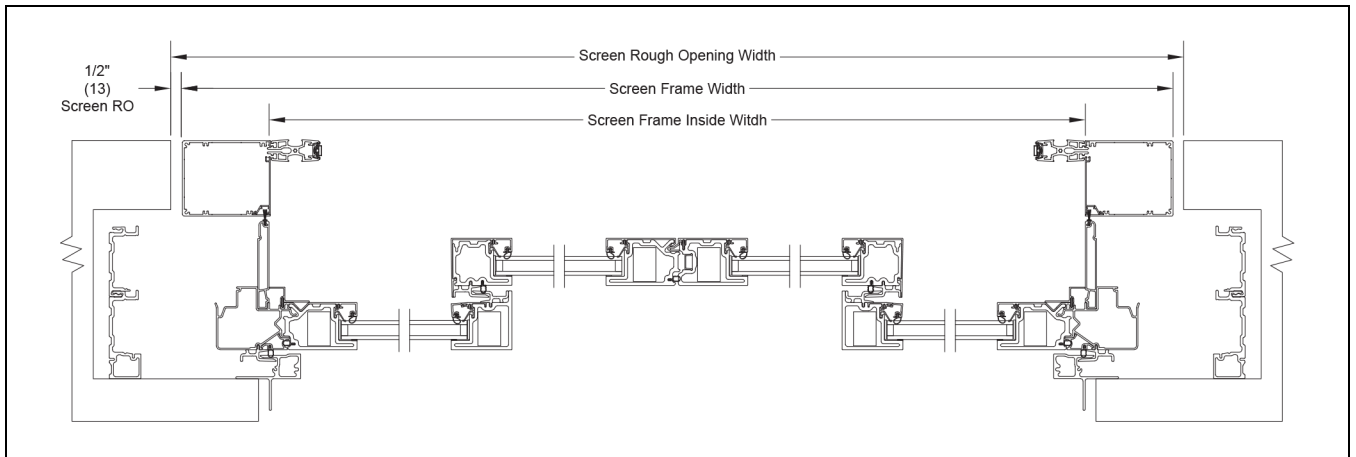


Figure 19 Bi-Parting Pocket