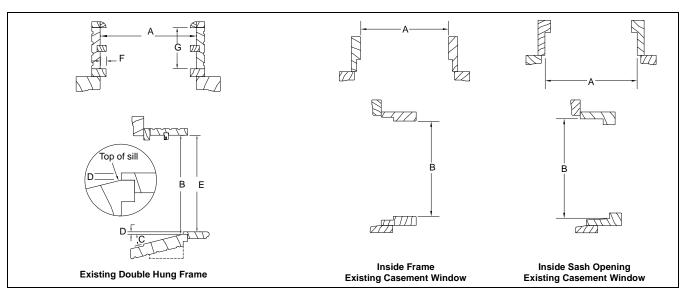


Before You Begin

- These measuring instructions cover the following product types: Marvin Ultimate Replacement Casement/Awning windows; and Marvin Insert Double Hung windows.
- Be sure to inspect the exterior around the existing window unit for rot or deterioration. If there is damage to the exterior, a full frame unit installation may be a better choice.
- It may be necessary to cover the resulting gap with trim after installation.
- Products are manufactured by rough opening.
 3/8" (10) narrower in width and 1/4" (6) smaller in height than inside opening (IO) measurement specified.

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

You will need to supply:	
Angle finder	Tape measure



Required Measurements

NOTE: To calculate the exact frame size, refer to the standard sizing charts and/or measurement conversions in the Marvin ADM.

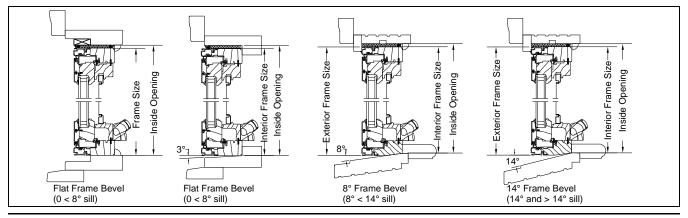
NOTE: Measurement is from wood surface to wood surface. Do not measure width from parting stops, blind stops, hardware, or weather strip.

- 1. Inside Opening Width (A): Measure inside of frame at three locations: the sill, center of jambs, and head jamb. Record the *narrowest* measurement.
- 2. Inside Opening Height (B): Measure from the top of the sill to the bottom of the head jamb. (or use Measurement D + Measurement E)
- 3. Sill Angle (C): Use an angle finder to determine the sill angle to the nearest degree.
- 4. Stool Height (D): Use a measuring tape to determine the stool height.

Recommended Measurements

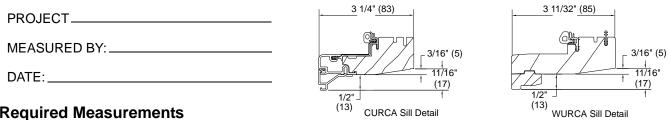
- 5. Measure the width of the blind stops from the inside opening to the edge of the blind stop (F). If width exceeds 1/2" (13), modification to the blind stop or an exterior installation may be necessary.
- 6. Measure Jamb pocket depth **(G)**. If depth is less than 3 1/4" (83), modification to the pocket may be necessary. (Exterior installation is recommended for pocket depths less than 3 1/4".)

Ultimate Replacement Casement



IMPORTANT

The 8 and 14 degree frame bevel option max stool height (F) is 3/4" (19). See illustration 1. For the flat frame option the max stool height is 15/16" (24). It may be necessary to shim under the replacement unit to reduce the stool height. This will decrease the Inside Opening Height (B) measurement for the replacement unit. This specification is required for proper operation of the Ultimate Replacement Casement crank handle.



Required Measurements

NOTE: Follow the steps on the previous page to fill in this worksheet.

Measurement A: Inside opening Width (narrowest width) Measurement B: Inside Opening Height (narrowest height) Measurement C: Sill Angle Measurement D: Stool Height

IMPORTANT

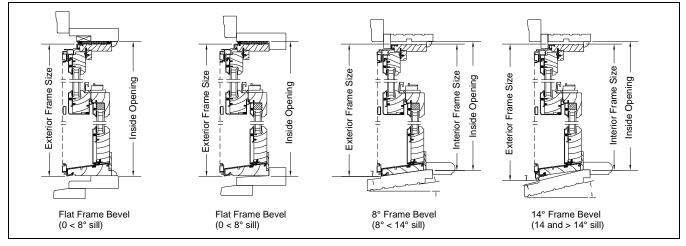
Units ordered by Inside Opening (IO) will be manufactured 3/8" (10) smaller in width and 1/4" (6) smaller in height than the IO measurement specified.

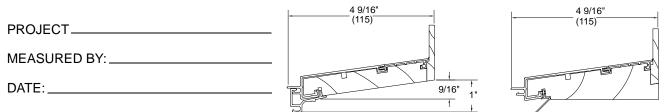
Interior Frame Size to Frame Size (exterior)						
Frame Bevel	Height Conversions					
0°	0					
8°	+ 3/16" (5)					
14°	+ 11/16" (17)					

Measuring Information				Ordering Information				
						Inside Op	0°*	
			Required N	<i>l</i> easuremen	ts	Frame Siz	8° 14°	
Window	Product	IO Width						
Location	Description	A	IO Height B	Sill Angle C	Stool Height F	Width	Height	Frame Bevel

* Default frame bevel

Ultimate Insert Double Hung





Required Measurements

NOTE: Follow the steps on the first page to fill in this worksheet.Interior Frame Size to Frame Size (exterior)Measurement A: Inside opening Width (narrowest width)
Measurement B: Inside Opening Height (narrowest height)
Measurement C: Sill AngleFrame BevelHeight Conversions0°08°+ 9/16 (14)14°+ 1" (25)

IMPORTANT

Units ordered by Inside Opening (IO) will be manufactured 3/8" (10) smaller in width and 1/4" (6) smaller in height than the IO measurement specified.

Measuring Information				Ordering Information				
			Required N	<i>l</i> easuremen	ts	Inside Opening		0°* 8° 14°
Window Location	Product Description	IO Width A	IO Height B	Sill Angle C	Stool Height D	Width	Height	Frame Bevel

* Default frame bevel