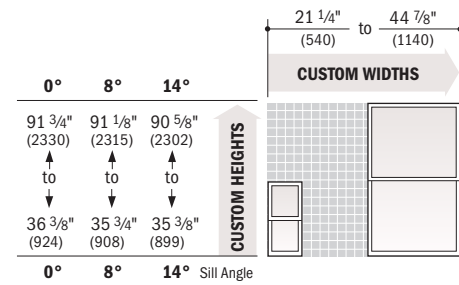


400 SERIES TILT-WASH DOUBLE-HUNG INSERT WINDOWS

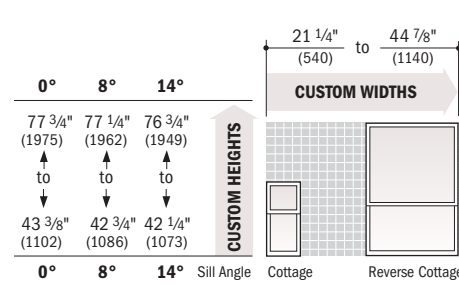


Tilt-Wash Double-Hung, Picture and Transom Insert Window Sizes

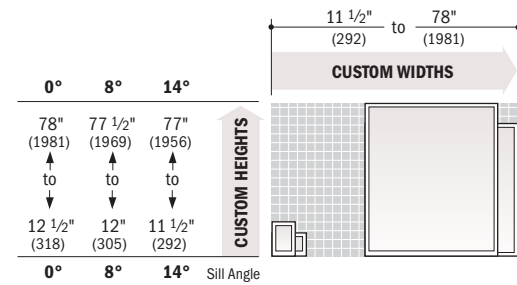
Double-Hung Equal Sash Ratio



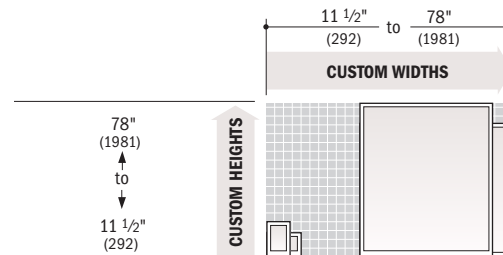
Double-Hung 2:3 Cottage and 3:2 Reverse Cottage Sash Ratio



Picture



Transom



Available in 1/8" (3) increments between minimum and maximum widths and heights. Height limits for double-hung and picture insert windows depend on new insert window sill angle.

For picture and transom insert windows, either height or width must be 68" (1727) or less, and height plus width cannot be less than 28" (711).

Measurement guide for customized windows can be found at andersenwindows.com/measure.

Tilt-Wash Double-Hung Insert Window Specification Formulas

Vent Opening	Width = window width - 3.798" (96)				
	Height = Depends on sash ratio and specific sill angle of insert window; see below.				
	sash ratio	clear opening height	sill angle deduction		
			14°	8°	0°
	1:1 Equal	= (window height ÷ 2) - sill angle deduction	3.602" (91)	3.836" (97)	4.138" (105)
	2:3 Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.879" (73)	3.066" (78)	3.308" (84)
	3:2 Reverse Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.083" (53)	2.270" (58)	2.512" (64)
Unobst. Glass	Width = window width - 6.219" (158)				
	Height = Depends on sash ratio and specific sill angle of insert window; see below.				
	sash ratio	unobstructed glass height	sill angle deduction		
			14°	8°	0°
	Equal Upper and Lower Sash	= (window height ÷ 2) - sill angle deduction	3.625 (92)	3.844 (98)	4.156 (106)
	Cottage Upper Sash or Reverse Cottage Lower Sash	= (window height x 2) ÷ 5 - sill angle deduction	2.891" (73)	3.078" (78)	3.328" (85)
	Cottage Lower Sash or Reverse Cottage Upper Sash	= (window height x 2) ÷ 5 - sill angle deduction	4.344" (110)	4.625" (117)	4.984" (127)

Optional Estate™ hardware will reduce vent opening height by 7/32" (6).

For clear opening specifications, contact your Andersen supplier.

Tilt-Wash Picture and Transom Insert Window Specification Formulas

Unobst. Glass	Picture Insert		Transom Insert		
	Width = window width - 6.0" (152)		Width = window width - 6.0" (152)		
	Height = Depends on sash ratio and specific sill angle of insert window; see below.		Height = window width - 6.0" (152)		
	unobstructed glass height	sill angle deductions			
		14°	8°	0°	
	= window height - sill angle deduction	5.816" (148)	6.285" (160)	6.890" (175)	

- Dimensions in parentheses are in millimeters.
- **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air.
- **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
- Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.