

100 SERIES SINGLE-HUNG WINDOWS

Table of Twin and Triple Single-Hung Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	2'-11 1/2"	3'-11 1/2"	4'-11 1/2"	5'-11 1/2"	6'-11 1/2"	7'-11 1/2"	4'-5 1/2"	continued
	(902)	(1207)	(1511)	(1816)	(2121)	(2426)	(1359)	
Minimum Rough Opening	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	4'-6"	
	(914)	(1219)	(1524)	(1829)	(2134)	(2438)	(1372)	
Unobstructed Glass (width of single sash)	11 1/4"	17 1/4"	23 1/4"	29 1/4"	35 1/4"	41 1/4"	11 1/4"	
	(286)	(438)	(591)	(743)	(895)	(1048)	(286)	
CUSTOM WIDTHS TWIN – 35 1/2" to 95 1/2"								
CUSTOM HEIGHTS – 23 1/2" to 71 1/2"	11 1/2"							
	1'-5 1/2"	1616-2	2016-2	2616-2	3016-2	3616-2	4016-2	1616-3
	1'-11 1/2"	1620-2	2020-2	2620-2	3020-2	3620-2	4020-2	1620-3
	2'-5 1/2"							
	2'-11 1/2"	1630-2	2030-2	2630-2	3030-2	3630-2	4030-2	1630-3
	3'-5 1/2"	1636-2	2036-2	2636-2	3036-2	3636-2	4036-2	1636-3
	3'-11 1/2"	1640-2	2040-2	2640-2	3040-2	3640-2	4040-2	1640-3
	4'-5 1/2"	1646-2	2046-2	2646-2	3046-2	3646-2	4046-2	1646-3
	4'-11 1/2"	1650-2	2050-2	2650-2	3050-2 ⁰	3650-2 ⁰	4050-2 ⁰	1650-3
	5'-5 1/2"	1656-2	2056-2	2656-2	3056-2 ⁰	3656-2 ⁰	4056-2 ⁰	1656-3
	5'-11 1/2"	1660-2	2060-2	2660-2 ⁰	3060-2 ⁰	3660-2 ⁰	4060-2 ⁰	1660-3

* "Window Dimension" always refers to outside frame-to-frame dimension.

* "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.

* Dimensions in parentheses are in millimeters.

Ø Meets or exceed clear opening area of 5.7 sq. ft. 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).



Custom-size windows are available in 1/8" (3) increments.

Windows have one continuous outer frame. Twin and triple transoms are also shown.

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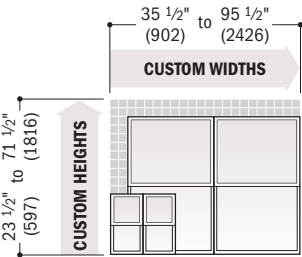


Custom Sizes and Specification Formulas



100 Series custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply.

Single-Hung Windows



Twin

Clear Opening 	$\text{Width} = (\text{window width} \div 2) - 3.750'' (95)$ $\text{Height} = (\text{window height} \div 2) - 3.711'' (94)$	Minimum R.O. 	$\text{Width} = \text{window width} + 1/2'' (13)$ $\text{Height} = \text{window height} + 1/2'' (13)$
Vent Opening 	Equal Sash Ratio $\text{Width} = \text{window width} - 3.500'' (89)$ $\text{Height} = (\text{window height} \div 2) - 3.711'' (94)$	Unobst. Glass 	$\text{Single Sash Width} = (\text{window width} \div 2) - 6.500'' (165)$ $\text{Total Sash Width} = \text{window width} - 13.000'' (330)$ $\text{Fixed Sash Height} = (\text{window height} \div 2) - 4.184'' (106)$ $\text{Venting Sash Height} = (\text{window height} \div 2) - 4.226'' (107)$ $\text{Total Sash Height} = \text{window height} - 8.410'' (214)$

• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
• Dimensions in parentheses are in millimeters.

100 SERIES SINGLE-HUNG WINDOWS

Table of Twin and Triple Single-Hung Window Sizes (continued)

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	5'-11 1/2"	7'-5 1/2"	8'-11 1/2"	10'-5 1/2"	11'-11 1/2"
	(1816)	(2273)	(2731)	(3188)	(3645)
Minimum Rough Opening	6'-0"	7'-6"	9'-0"	10'-6"	12'-0"
	(1829)	(2286)	(2743)	(3200)	(3658)
Unobstructed Glass (width of single sash)	17 1/4"	23 1/4"	29 1/4"	35 1/4"	41 1/4"
	(438)	(591)	(743)	(895)	(1048)

CUSTOM WIDTHS TRIPLE – 53 1/2" to 143 1/2"

11 1/2" (292)	1'-0" (305)	5 1/4" (133)	2010-3	2610-3	3010-3	3610-3	4010-3
1'-5 1/2" (445)	1'-6" (457)	11 1/4" (286)	2016-3	2616-3	3016-3	3616-3	4016-3
1'-11 1/2" (597)	2'-0" (610)	17 1/4" (438)	2020-3	2620-3	3020-3	3620-3	4020-3
1'-11 1/2" (597)	2'-0" (610)	7 9/16" (192)	2020-3	2620-3	3020-3	3620-3	4020-3
2'-5 1/2" (749)	2'-6" (762)	10 9/16" (268)	2026-3	2626-3	3026-3	3626-3	4026-3
2'-11 1/2" (902)	3'-0" (914)	13 9/16" (345)	2030-3	2630-3	3030-3	3630-3	4030-3
3'-5 1/2" (1054)	3'-6" (1067)	16 9/16" (421)	2036-3	2636-3	3036-3	3636-3	4036-3
3'-11 1/2" (1207)	4'-0" (1219)	19 9/16" (497)	2040-3	2640-3	3040-3	3640-3	4040-3
4'-5 1/2" (1359)	4'-6" (1372)	22 9/16" (573)	2046-3	2646-3	3046-3	3646-3	4040-3
4'-11 1/2" (1511)	5'-0" (1524)	25 9/16" (649)	2050-3	2650-3	3050-3 ^Ø	3650-3 ^Ø	4050-3 ^Ø
5'-5 1/2" (1664)	5'-6" (1676)	28 9/16" (726)	2056-3	2656-3	3056-3 ^Ø	3656-3 ^Ø	4056-3 ^Ø
5'-11 1/2" (1816)	6'-0" (1829)	31 9/16" (802)	2060-3	2660-3 ^Ø	3060-3 ^Ø	3660-3 ^Ø	4060-3 ^Ø

*"Window Dimension" always refers to outside frame-to-frame dimension.

**"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.

*Dimensions in parentheses are in millimeters.

ØMeets or exceed clear opening area of 5.7 sq. ft. 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).



Custom-size windows are available in 1/8" (3) increments.

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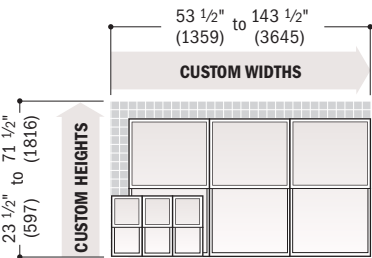


Custom Sizes and Specification Formulas



100 Series custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply.

Single-Hung Windows



Triple

Clear Opening	$\text{Width} = (\text{window width} \div 3) - 3.833" (97)$ $\text{Height} = (\text{window height} \div 2) - 3.711" (94)$	Minimum R.O.	$\text{Width} = \text{window width} + 1/2" (13)$ $\text{Height} = \text{window height} + 1/2" (13)$
Vent Opening	Equal Sash Ratio $\text{Width} = \text{window width} - 11.500" (292)$ $\text{Height} = (\text{window height} \div 2) - 3.711" (94)$	Unobst. Glass	$\text{Single Sash Width} = (\text{window width} \div 3) - 6.583" (167)$ $\text{Total Sash Width} = \text{window width} - 19.750" (502)$ $\text{Fixed Sash Height} = (\text{window height} \div 2) - 4.184" (106)$ $\text{Venting Sash Height} = (\text{window height} \div 2) - 4.226" (107)$ $\text{Total Sash Height} = \text{window height} - 8.410" (214)$

• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
 • Dimensions in parentheses are in millimeters.