100 SERIES DOUBLE-HUNG WINDOWS
SPECIFICATION GUIDE FOR PROFESSIONALS

100 Series double-hung windows are available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

CONTENTS

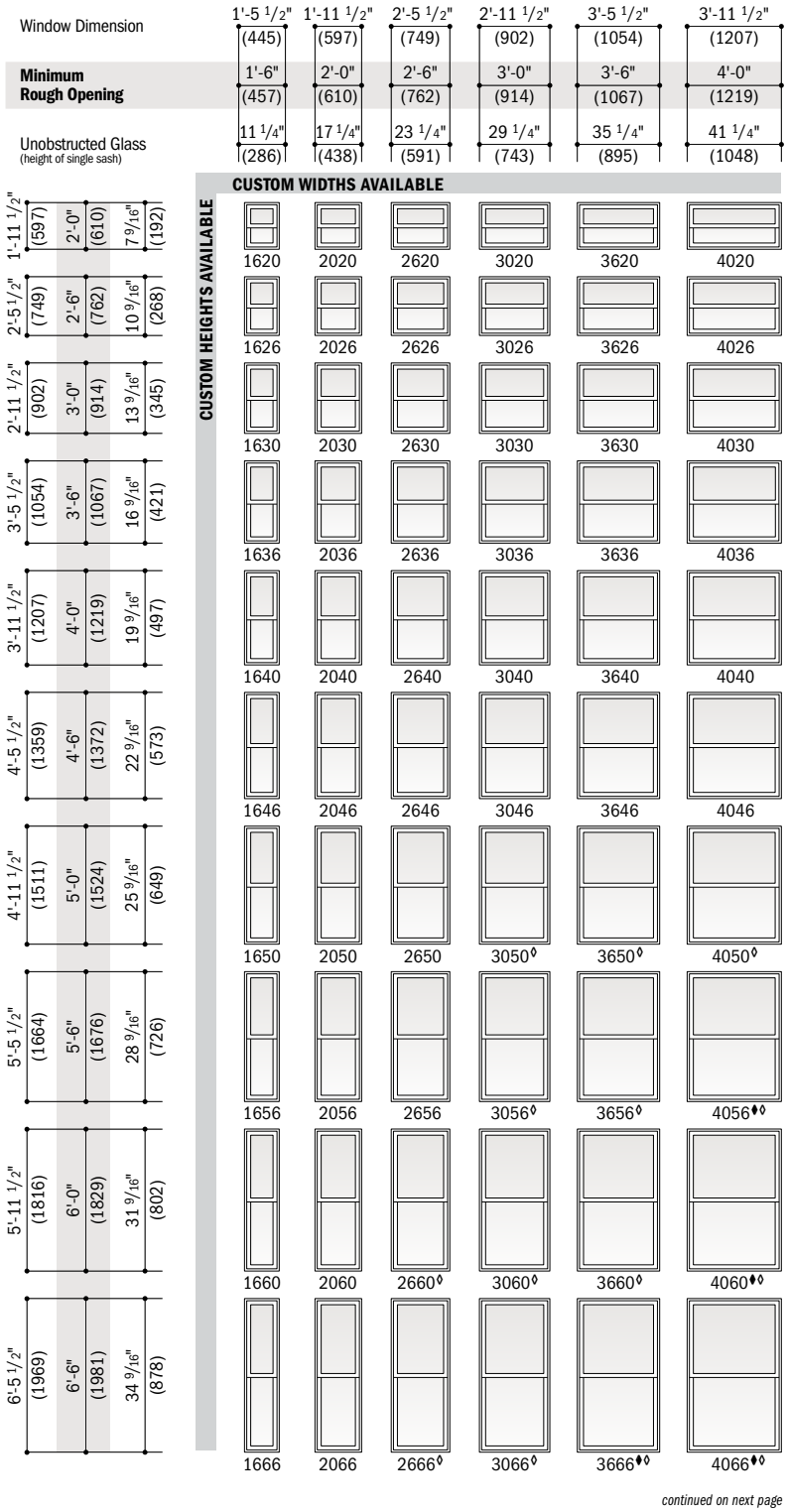
For warranty information, visit **andersenwindows.com/warranty**.

Visit **andersenwindows.com/100seriesdouble-hung** for more information on 100 Series double-hung windows. See the 100 Series Product Guide for Professionals, at **andersenwindows.com/productguides**, for features, options and accessories for 100 Series windows and patio door products.

04/2026

Table of Sizes for Double-Hung Windows

Scale 1/8" (3) = 1'-0" (305) – 1:96



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

See the next page for custom sizes and specifications.

Two locks are standard for 36XX and 40XX widths.

Two locks are optional for 20XX, 26XX and 30XX widths.

Grille patterns shown on page 2.

Details shown on pages 10-11.

- 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.
- Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.

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

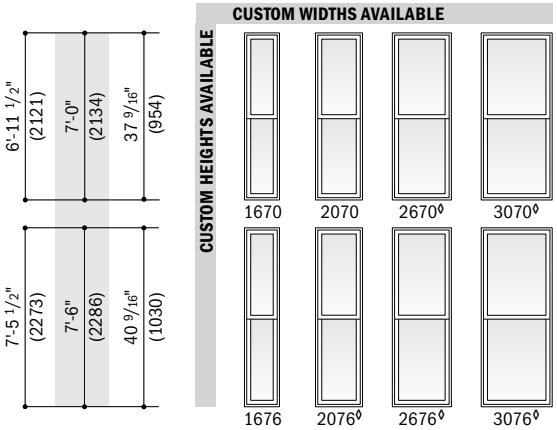
⧫ Windows with tempered glass may have limited sash travel.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

Table of Double-Hung Window Sizes *(continued)*

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-5 1/2" (445)	1'-11 1/2" (597)	2'-5 1/2" (749)	2'-11 1/2" (902)
Minimum Rough Opening	1'-6" (457)	2'-0" (610)	2'-6" (762)	3'-0" (914)
Unobstructed Glass	11 1/4" (286)	17 1/4" (438)	23 1/4" (591)	29 1/4" (743)



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

See the below for custom sizes and specifications.

Two locks are standard for 36XX and 40XX widths.

Two locks are optional for 20XX, 26XX and 30XX widths.

Grille patterns shown below.

Details shown on pages 10-11.

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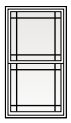
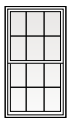
◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

Grilles

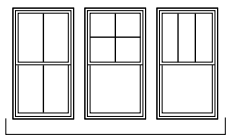
Finelight™ Grilles-Between-the-Glass

Installed between the glass panes and feature a contoured profile in a 3/4" (19) width.

Grille Patterns

	Prairie A	Colonial	Short Fractional
Double-Hung			

Double-hung window patterns are also available in Upper Sash Only (USO) configurations. **Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes.** Specified equal light patterns are also available. For specified equal light, specify number of same-size rectangles across or down. For more grille options, visit **andersenwindows.com/grilles**.



Specified Equal Light Examples

ANDERSEN WINDOWS & DOORS

Table of Sizes for Double-Hung Windows With 2:3 Cottage Sash Ratio

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-5 1/2" (445)	1'-11 1/2" (597)	2'-5 1/2" (749)	2'-11 1/2" (902)	3'-5 1/2" (1054)	3'-11 1/2" (1207)
Minimum Rough Opening	1'-6" (457)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)
Unobstructed Glass	11 1/4" (286)	17 1/4" (438)	23 1/4" (591)	29 1/4" (743)	35 1/4" (895)	41 1/4" (1048)

CUSTOM WIDTHS AVAILABLE

CUSTOM HEIGHTS AVAILABLE

	1626	2026	2626	3026	3626	4026
2'-5 1/2" (749)	1630	2030	2630	3030	3630	4030
2'-11 1/2" (902)	1636	2036	2636	3036	3636	4036
3'-5 1/2" (1054)	1640	2040	2640	3040	3640	4040
3'-11 1/2" (1207)	1646	2046	2646	3046	3646	4046
4'-5 1/2" (1359)	1650	2050	2650	3050	3650	4050
4'-11 1/2" (1511)	1656	2056	2656	3056	3656	4056
5'-5 1/2" (1664)	1660	2060	2660	3060◊		
5'-11 1/2" (1816)						

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

See the next page for custom sizes and specifications.

Two locks are standard for 36XX and 40XX widths.

Two locks are optional for 20XX, 26XX and 30XX widths.

Grille patterns shown on page 2.

Details shown on pages 10-11.

- 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.
- Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.

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

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ANDERSEN WINDOWS & DOORS

Table of Sizes for Double-Hung Windows With 3:2 Reverse Cottage Sash Ratio

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-5 1/2" (445)	1'-11 1/2" (597)	2'-5 1/2" (749)	2'-11 1/2" (902)	3'-5 1/2" (1054)	3'-11 1/2" (1207)
Minimum Rough Opening	1'-6" (457)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)
Unobstructed Glass	11 1/4" (286)	17 1/4" (438)	23 1/4" (591)	29 1/4" (743)	35 1/4" (895)	41 1/4" (1048)

CUSTOM WIDTHS AVAILABLE

CUSTOM HEIGHTS AVAILABLE

	1626	2026	2626	3026	3626	4026
2'-5 1/2" (749) / 2'-6" (762) / 12 7/8" (328) / 8 1/4" (209)						
	1630	2030	2630	3030	3630	4030
2'-11 1/2" (902) / 3'-0" (914) / 16 1/2" (419) / 10 5/8" (270)						
	1636	2036	2636	3036	3636	4036
3'-5 1/2" (1054) / 3'-6" (1067) / 20 1/8" (511) / 13" (331)						
	1640	2040	2640	3040	3640	4040
3'-11 1/2" (1207) / 4'-0" (1219) / 23 11/16" (602) / 15 7/16" (392)						
	1646	2046	2646	3046	3646	4046
4'-5 1/2" (1359) / 4'-6" (1372) / 27 5/16" (693) / 17 13/16" (453)						
	1650	2050	2650	3050	3650	4050
4'-11 1/2" (1511) / 5'-0" (1524) / 30 7/8" (785) / 20 1/4" (514)						
	1656	2056	2656	3056	3656	4056
5'-5 1/2" (1664) / 5'-6" (1676) / 34 1/2" (876) / 22 5/8" (575)						
	1660	2060	2660	3060		
5'-11 1/2" (1816) / 6'-0" (1829) / 38 1/8" (968) / 25" (636)						

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

See the next page for custom sizes and specifications.

Two locks are standard for 36XX and 40XX widths.

Two locks are optional for 20XX, 26XX and 30XX widths.

Grille patterns shown on page 2.

Details shown on pages 10-11.

Double-Hung Windows

- Window Dimension always refers to outside frame-to-frame dimension.
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- Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.

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

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ANDERSEN WINDOWS & DOORS

Opening and Area Specifications for Double-Hung Windows

Window Number	Clear Opening Area Sq. Ft./(m²)	Clear Opening in Full Open Position Width Inches/(mm)	Clear Opening in Full Open Position Height Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m²)	Top of Subfloor to Top of Inside Sill Stop Inches/(mm)	Overall Window Area Sq. Ft./(m²)
1620	0.78 (0.07)	14" (356)	8 1/16" (204)	1.18 (0.11)	0.81 (0.08)	60 1/2" (1537)	2.86 (0.27)
1626	1.07 (0.10)	14" (356)	11 1/16" (280)	1.65 (0.15)	1.10 (0.10)	54 1/2" (1384)	3.59 (0.33)
1630	1.36 (0.13)	14" (356)	14 1/16" (357)	2.12 (0.20)	1.39 (0.13)	48 1/2" (1232)	4.31 (0.40)
1636	1.65 (0.15)	14" (356)	17 1/16" (433)	2.59 (0.24)	1.68 (0.16)	42 1/2" (1080)	5.04 (0.47)
1640	1.94 (0.18)	14" (356)	20 1/16" (509)	3.05 (0.28)	1.98 (0.18)	36 1/2" (927)	5.77 (0.54)
1646	2.24 (0.21)	14" (356)	23 1/16" (585)	3.52 (0.33)	2.27 (0.21)	30 1/2" (775)	6.50 (0.60)
1650	2.53 (0.23)	14" (356)	26 1/16" (661)	3.99 (0.37)	2.56 (0.24)	24 1/2" (622)	7.23 (0.67)
1656	2.82 (0.26)	14" (356)	29 1/16" (738)	4.46 (0.41)	2.85 (0.27)	18 1/2" (470)	7.96 (0.74)
1660	3.11 (0.29)	14" (356)	32 1/16" (814)	4.93 (0.46)	3.15 (0.29)	12 1/2" (318)	8.69 (0.81)
1666	3.41 (0.32)	14" (356)	35 1/16" (890)	5.40 (0.50)	3.44 (0.32)	6 1/2" (165)	9.42 (0.88)
1670	3.70 (0.34)	14" (356)	38 1/16" (967)	6.64 (0.62)	3.73 (0.35)	14" (356)	10.50 (0.98)
1676	3.99 (0.37	14" (356)	41 1/16" (1043)	7.15 (0.66)	4.02 (0.37)	8" (203)	11.25 (1.05)
2020	1.11 (0.10)	20" (508)	8 1/16" (204)	1.81 (0.17)	1.15 (0.11)	60 1/2" (1537)	3.84 (0.36)
2026	1.52 (0.14)	20" (508)	11 1/16" (280)	2.53 (0.23)	1.57 (0.15)	54 1/2" (1384)	4.81 (0.45)
2030	1.94 (0.18)	20" (508)	14 1/16" (357)	3.25 (0.30)	1.99 (0.18)	48 1/2" (1232)	5.79 (0.54)
2036	2.36 (0.22)	20" (508)	17 1/16" (433)	3.96 (0.37)	2.40 (0.22)	42 1/2" (1080)	6.77 (0.63)
2040	2.78 (0.26)	20" (508)	20 1/16" (509)	4.68 (0.44)	2.82 (0.26)	36 1/2" (927)	7.75 (0.72)
2046	3.19 (0.30)	20" (508)	23 1/16" (585)	5.40 (0.50)	3.24 (0.30)	30 1/2" (775)	8.73 (0.81)
2050	3.61 (0.34)	20" (508)	26 1/16" (661)	6.12 (0.57)	3.66 (0.34)	24 1/2" (622)	9.71 (0.90)
2056	4.03 (0.37)	20" (508)	29 1/16" (738)	6.84 (0.64)	4.07 (0.38)	18 1/2" (470)	10.69 (0.99)
2060	4.45 (0.41)	20" (508)	32 1/16" (814)	7.56 (0.70)	4.49 (0.42)	12 1/2" (318)	11.67 (1.08)
2066	4.86 (0.45)	20" (508)	35 1/16" (890)	8.28 (0.77)	4.91 (0.46)	6 1/2" (165)	12.65 (1.18)
2070	5.28 (0.49)	20" (508)	38 1/16" (967)	9.86 (0.92)	5.33 (0.50)	14" (356)	14.00 (1.30)
2076◊	5.70 (0.53)	20" (508)	41 1/16" (1043)	10.62 (0.99)	5.74 (0.53)	8" (203)	15.00 (1.39)
2620	1.44 (0.13)	26" (660)	8 1/16" (204)	2.44 (0.23)	1.50 (0.14)	60 1/2" (1537)	4.81 (0.45)
2626	1.98 (0.18)	26" (660)	11 1/16" (280)	3.41 (0.32)	2.04 (0.19)	54 1/2" (1384)	6.04 (0.56)
2630	2.52 (0.23)	26" (660)	14 1/16" (357)	4.37 (0.41)	2.58 (0.24)	48 1/2" (1232)	7.27 (0.68)
2636	3.07 (0.28)	26" (660)	17 1/16" (433)	5.34 (0.50)	3.13 (0.29)	42 1/2" (1080)	8.50 (0.79)
2640	3.61 (0.34)	26" (660)	20 1/16" (509)	6.31 (0.59)	3.67 (0.34)	36 1/2" (927)	9.73 (0.90)
2646	4.15 (0.39)	26" (660)	23 1/16" (585)	7.28 (0.68)	4.21 (0.39)	30 1/2" (775)	10.96 (1.02)
2650	4.69 (0.44)	26" (660)	26 1/16" (661)	8.25 (0.77)	4.75 (0.44)	24 1/2" (622)	12.19 (1.13)
2656	5.23 (0.49)	26" (660)	29 1/16" (738)	9.22 (0.86)	5.29 (0.49)	18 1/2" (470)	13.42 (1.25)
2660◊	5.78 (0.54)	26" (660)	32 1/16" (814)	10.19 (0.95)	5.84 (0.54)	12 1/2" (318)	14.65 (1.36)
2666◊	6.32 (0.59)	26" (660)	35 1/16" (890)	11.16 (1.04)	6.38 (0.59)	6 1/2" (165)	15.88 (1.48)
2670◊	6.86 (0.64)	26" (660)	38 1/16" (967)	13.08 (1.22)	6.92 (0.64)	14" (356)	17.50 (1.63)
2676◊	7.40 (0.69)	26" (660)	41 1/16" (1043)	14.09 (1.31)	7.76 (0.72)	8" (203)	18.75 (1.74)
3020	1.77 (0.16)	32" (813)	8 1/16" (204)	3.07 (0.28)	1.84 (0.17)	60 1/2" (1537)	5.79 (0.54)
3026	2.44 (0.23)	32" (813)	11 1/16" (280)	4.28 (0.40)	2.51 (0.23)	54 1/2" (1384)	7.27 (0.68)
3030	3.11 (0.29)	32" (813)	14 1/16" (357)	5.50 (0.51)	3.18 (0.30)	48 1/2" (1232)	8.75 (0.81)
3036	3.77 (0.35)	32" (813)	17 1/16" (433)	6.72 (0.62)	3.85 (0.36)	42 1/2" (1080)	10.23 (0.95)
3040	4.44 (0.41)	32" (813)	20 1/16" (509)	7.94 (0.74)	4.51 (0.42)	36 1/2" (927)	11.71 (1.09)
3046	5.11 (0.47)	32" (813)	23 1/16" (585)	9.16 (0.85)	5.18 (0.48)	30 1/2" (775)	13.19 (1.23)
3050◊	5.77 (0.54)	32" (813)	26 1/16" (661)	10.38 (0.96)	5.85 (0.54)	24 1/2" (622)	14.67 (1.36)
3056◊	6.44 (0.60)	32" (813)	29 1/16" (738)	11.60 (1.08)	6.51 (0.61)	18 1/2" (470)	16.15 (1.50)
3060◊	7.11 (0.66)	32" (813)	32 1/16" (814)	12.82 (1.19)	7.18 (0.67)	12 1/2" (318)	17.63 (1.64)
3066◊	7.78 (0.72)	32" (813)	35 1/16" (890)	14.03 (1.30)	7.85 (0.73)	6 1/2" (165)	19.11 (1.78)
3070◊	8.44 (0.78)	32" (813)	38 1/16" (967)	15.25 (1.40)	8.52 (0.79)	14" (356)	21.00 (1.95)
3076◊	9.11 (0.85)	32" (813)	41 1/16" (1043)	16.47 (1.50)	9.19 (0.85)	8" (203)	22.50 (2.09)
3620	2.10 (0.20)	38" (965)	8 1/16" (204)	3.69 (0.34)	2.19 (0.20)	60 1/2" (1537)	6.77 (0.63)
3626	2.89 (0.27)	38" (965)	11 1/16" (280)	5.16 (0.48)	2.98 (0.28)	54 1/2" (1384)	8.50 (0.79)
3630	3.69 (0.34)	38" (965)	14 1/16" (357)	6.63 (0.62)	3.77 (0.35)	48 1/2" (1232)	10.23 (0.95)
3636	4.48 (0.42)	38" (965)	17 1/16" (433)	8.10 (0.75)	4.57 (0.42)	42 1/2" (1080)	11.96 (1.11)
3640	5.27 (0.49)	38" (965)	20 1/16" (509)	9.57 (0.89)	5.36 (0.50)	36 1/2" (927)	13.69 (1.27)
3646	6.06 (0.56)	38" (965)	23 1/16" (585)	11.04 (1.03)	6.15 (0.57)	30 1/2" (775)	15.42 (1.43)
3650◊	6.86 (0.64)	38" (965)	26 1/16" (661)	12.51 (1.16)	6.94 (0.64)	24 1/2" (622)	17.15 (1.59)
3656◊	7.65 (0.71)	38" (965)	29 1/16" (738)	13.98 (1.30)	7.73 (0.72)	18 1/2" (470)	18.88 (1.75)
3660◊	8.44 (0.78)	38" (965)	32 1/16" (814)	15.44 (1.43)	8.53 (0.79)	12 1/2" (318)	20.61 (1.91)
3666◊⧫	9.23 (0.86)	38" (965)	35 1/16" (890)	16.91 (1.57)	9.32 (0.87)	6 1/2" (165)	22.34 (2.08)
4020	2.43 (0.23)	44" (1118)	8 1/16" (204)	4.32 (0.40)	2.53 (0.24)	60 1/2" (1537)	7.75 (0.72)

continued on next page

- Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX70 and XX76 heights which are calculated using a header height of 8'-0" (2438).
- Dimensions in parentheses are in millimeters or square meters.
- **Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide.** Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.

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

⧫ Windows with tempered glass may have limited sash travel.

ANDERSEN WINDOWS & DOORS

Opening and Area Specifications for Double-Hung Windows *(continued)*

Window Number	Clear Opening Area Sq. Ft./(m²)		Clear Opening in Full Open Position Width Inches/(mm)		Height Inches/(mm)		Glass Area Sq. Ft./(m²)		Vent Area Sq. Ft./(m²)		Top of Subfloor to Top of Inside Sill Stop Inches/(mm)		Overall Window Area Sq. Ft./(m²)	
4026	3.35	(0.31)	44"	(1118)	11 1/16"	(280)	6.04	(0.56)	3.45	(0.32)	54 1/2"	(1384)	9.73	(0.90)
4030	4.27	(0.40)	44"	(1118)	14 1/16"	(357)	7.76	(0.72)	4.37	(0.41)	48 1/2"	(1232)	11.71	(1.09)
4036	5.19	(0.48)	44"	(1118)	17 1/16"	(433)	9.48	(0.88)	5.29	(0.49)	42 1/2"	(1080)	13.69	(1.27)
4040	6.10	(0.57)	44"	(1118)	20 1/16"	(509)	11.20	(1.04)	6.20	(0.58)	36 1/2"	(927)	15.67	(1.46)
4046	7.02	(0.65)	44"	(1118)	23 1/16"	(585)	12.92	(1.20)	7.12	(0.66)	30 1/2"	(775)	17.65	(1.64)
4050◊	7.94	(0.74)	44"	(1118)	26 1/16"	(661)	14.64	(1.36)	8.04	(0.75)	24 1/2"	(622)	19.63	(1.82)
4056◊⧫	8.85	(0.82)	44"	(1118)	29 1/16"	(738)	16.35	(1.52)	8.96	(0.83)	18 1/2"	(470)	21.61	(2.01)
4060◊⧫	9.77	(0.91)	44"	(1118)	32 1/16"	(814)	18.07	(1.68)	9.87	(0.92)	12 1/2"	(318)	23.59	(2.19)
4066◊⧫	10.69	(0.99)	44"	(1118)	35 1/16"	(890)	19.79	(1.84)	10.79	(1.00)	6 1/2"	(165)	25.56	(2.38)

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX70 and XX76 heights which are calculated using a header height of 8'-0" (2438).
• Dimensions in parentheses are in millimeters or square meters.
• Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.
◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).
⧫ Windows with tempered glass may have limited sash travel.

Opening and Area Specifications for Double-Hung Windows With 2:3 Cottage Sash Ratio

Window Number	Clear Opening Area Sq. Ft./(m²)		Clear Opening in Full Open Position Width Inches/(mm)		Height Inches/(mm)		Glass Area Sq. Ft./(m²)		Vent Area Sq. Ft./(m²)		Top of Subfloor to Top of Inside Sill Stop Inches/(mm)		Overall Window Area Sq. Ft./(m²)	
1626	0.86	(0.08)	14"	(356)	8 7/8"	(225)	2.00	(0.81)	0.89	(0.92)	54 1/2"	(1384)	3.59	(0.33)
1630	1.10	(0.10)	14"	(356)	11 1/4"	(286)	2.52	(0.77)	1.13	(0.90)	48 1/2"	(1232)	4.31	(0.40)
1636	1.33	(0.12)	14"	(356)	13 5/8"	(347)	3.03	(0.72)	1.36	(0.87)	42 1/2"	(1080)	5.04	(0.47)
1640	1.56	(0.15)	14"	(356)	16 1/16"	(408)	3.55	(0.67)	1.60	(0.85)	36 1/2"	(927)	5.77	(0.54)
1646	1.80	(0.17)	14"	(356)	18 7/16"	(469)	4.06	(0.62)	1.83	(0.83)	30 1/2"	(775)	6.50	(0.60)
1650	2.03	(0.19)	14"	(356)	20 7/8"	(530)	4.58	(0.58)	2.06	(0.81)	24 1/2"	(622)	7.23	(0.67)
1656	2.27	(0.21)	14"	(356)	23 1/4"	(591)	5.09	(0.53)	2.30	(0.79)	18 1/2"	(470)	7.96	(0.74)
1660	2.50	(0.23)	14"	(356)	25 5/8"	(652)	5.61	(0.48)	2.53	(0.76)	12 1/2"	(318)	8.69	(0.81)
2026	1.23	(0.11)	20"	(508)	8 7/8"	(225)	2.97	(0.72)	1.28	(0.88)	54 1/2"	(1384)	4.81	(0.45)
2030	1.57	(0.15)	20"	(508)	11 1/4"	(286)	3.74	(0.65)	1.61	(0.85)	48 1/2"	(1232)	5.79	(0.54)
2036	1.90	(0.18)	20"	(508)	13 5/8"	(347)	4.50	(0.58)	1.94	(0.82)	42 1/2"	(1080)	6.77	(0.63)
2040	2.23	(0.21)	20"	(508)	16 1/16"	(408)	5.27	(0.51)	2.28	(0.79)	36 1/2"	(927)	7.75	(0.72)
2046	2.57	(0.24)	20"	(508)	18 7/16"	(469)	6.03	(0.44)	2.61	(0.76)	30 1/2"	(775)	8.73	(0.81)
2050	2.90	(0.27)	20"	(508)	20 7/8"	(530)	6.80	(0.37)	2.95	(0.73)	24 1/2"	(622)	9.71	(0.90)
2056	3.23	(0.30)	20"	(508)	23 1/4"	(591)	7.56	(0.30)	3.28	(0.70)	18 1/2"	(470)	10.69	(0.99)
2060	3.57	(0.33)	20"	(508)	25 5/8"	(652)	8.33	(0.23)	3.61	(0.66)	12 1/2"	(318)	11.67	(1.08)
2626	1.60	(0.15)	26"	(660)	8 7/8"	(225)	3.94	(0.63)	1.66	(0.85)	54 1/2"	(1384)	6.04	(0.56)
2630	2.03	(0.19)	26"	(660)	11 1/4"	(286)	4.96	(0.54)	2.09	(0.81)	48 1/2"	(1232)	7.27	(0.68)
2636	2.47	(0.23)	26"	(660)	13 5/8"	(347)	5.97	(0.45)	2.53	(0.77)	42 1/2"	(1080)	8.50	(0.79)
2640	2.90	(0.27)	26"	(660)	16 1/16"	(408)	6.99	(0.35)	2.96	(0.72)	36 1/2"	(927)	9.73	(0.90)
2646	3.34	(0.31)	26"	(660)	18 7/16"	(469)	8.00	(0.26)	3.40	(0.68)	30 1/2"	(775)	10.96	(1.02)
2650	3.77	(0.35)	26"	(660)	20 7/8"	(530)	9.02	(0.16)	3.83	(0.64)	24 1/2"	(622)	12.19	(1.13)
2656	4.20	(0.39)	26"	(660)	23 1/4"	(591)	10.03	(0.07)	4.26	(0.60)	18 1/2"	(470)	13.42	(1.25)
2660	4.64	(0.43)	26"	(660)	25 5/8"	(652)	11.05	(0.03	4.70	(0.56)	12 1/2"	(318)	14.65	(1.36)
3026	1.97	(0.18)	32"	(813)	8 7/8"	(225)	4.92	(0.54)	2.04	(0.81)	54 1/2"	(1384)	7.27	(0.68)
3030	2.50	(0.23)	32"	(813)	11 1/4"	(286)	6.18	(0.43)	2.58	(0.76)	48 1/2"	(1232)	8.75	(0.81)
3036	3.04	(0.28)	32"	(813)	13 5/8"	(347)	7.45	(0.31)	3.11	(0.71)	42 1/2"	(1080)	10.23	(0.95)
3040	3.57	(0.33)	32"	(813)	16 1/16"	(408)	8.71	(0.19)	3.64	(0.66)	36 1/2"	(927)	11.71	(1.09)
3046	4.10	(0.38)	32"	(813)	18 7/16"	(469)	9.98	(0.07)	4.18	(0.61)	30 1/2"	(775)	13.19	(1.23)
3050	4.64	(0.43)	32"	(813)	20 7/8"	(530)	11.24	(0.04)	4.71	(0.56)	24 1/2"	(622)	14.67	(1.36)
3056	5.17	(0.48)	32"	(813)	23 1/4"	(591)	12.51	(0.16)	5.25	(0.51)	18 1/2"	(470)	16.15	(1.50)
3060◊	5.71	(0.53)	32"	(813)	25 5/8"	(652)	13.77	(0.28)	5.77	(0.46)	12 1/2"	(318)	17.63	(1.64)
3626	2.34	(0.22)	38"	(965)	8 7/8"	(225)	5.89	(0.45)	2.42	(0.77)	54 1/2"	(1384)	8.50	(0.79)
3630	2.97	(0.28)	38"	(965)	11 1/4"	(286)	7.40	(0.31)	3.06	(0.72)	48 1/2"	(1232)	10.23	(0.95)
3636	3.61	(0.33)	38"	(965)	13 5/8"	(347)	8.92	(0.17)	3.69	(0.66)	42 1/2"	(1080)	11.96	(1.11)
3640	4.24	(0.39)	38"	(965)	16 1/16"	(408)	10.43	(0.03)	4.33	(0.60)	36 1/2"	(927)	13.69	(1.27)
3646	4.87	(0.45)	38"	(965)	18 7/16"	(469)	11.95	(0.11)	4.96	(0.54)	30 1/2"	(775)	15.42	(1.43)
3650	5.51	(0.51)	38"	(965)	20 7/8"	(530)	13.46	(0.25)	5.59	(0.48)	24 1/2"	(622)	17.15	(1.59)
3656	6.14	(0.57)	38"	(965)	23 1/4"	(591)	14.98	(0.39)	6.23	(0.42)	18 1/2"	(470)	18.88	(1.75)
4026	2.71	(0.25)	44"	(1118)	8 7/8"	(225)	6.86	(0.36)	2.81	(0.74)	54 1/2"	(1384)	9.73	(0.90)
4030	3.44	(0.32)	44"	(1118)	11 1/4"	(286)	8.62	(0.20)	3.54	(0.67)	48 1/2"	(1232)	11.71	(1.09)
4036	4.17	(0.39)	44"	(1118)	13 5/8"	(347)	10.39	(0.04)	4.27	(0.60)	42 1/2"	(1080)	13.69	(1.27)
4040	4.91	(0.46)	44"	(1118)	16 1/16"	(408)	12.15	(0.13)	5.01	(0.53)	36 1/2"	(927)	15.67	(1.46)
4046	5.64	(0.52)	44"	(1118)	18 7/16"	(469)	13.92	(0.29)	5.74	(0.47)	30 1/2"	(775)	17.65	(1.64)
4050	6.38	(0.59)	44"	(1118)	20 7/8"	(530)	15.68	(0.46)	6.48	(0.40)	24 1/2"	(622)	19.63	(1.82)
4056	7.11	(0.66)	44"	(1118)	23 1/4"	(591)	17.45	(0.62)	7.21	(0.33)	18 1/2"	(470)	21.61	(2.01)

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).
• Dimensions in parentheses are in millimeters or square meters.
• Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.
◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

ANDERSEN WINDOWS & DOORS

Opening and Area Specifications for Double-Hung Windows With 3:2 Reverse Cottage Sash Ratio

Window Number	Clear Opening Area Sq. Ft./(m²)		Clear Opening in Full Open Position Width Inches/(mm)		Height Inches/(mm)		Glass Area Sq. Ft./(m²)		Vent Area Sq. Ft./(m²)		Top of Subfloor to Top of Inside Sill Stop Inches/(mm)		Overall Window Area Sq. Ft./(m²)	
1626	0.70	(0.06)	14"	(356)	7 1/8"	(181)	2.00	(0.19)	0.62	(0.06)	54 1/2"	(1384)	3.59	(0.33)
1630	0.93	(0.09)	14"	(356)	9 9/16"	(242)	2.52	(0.23)	0.85	(0.08)	48 1/2"	(1232)	4.31	(0.40)
1636	1.16	(0.11)	14"	(356)	11 15/16"	(303)	3.03	(0.28)	1.08	(0.10)	42 1/2"	(1080)	5.04	(0.47)
1640	1.40	(0.13)	14"	(356)	14 5/16"	(364)	3.55	(0.33)	1.32	(0.12)	36 1/2"	(927)	5.77	(0.54)
1646	1.63	(0.15)	14"	(356)	16 3/4"	(425)	4.06	(0.38)	1.55	(0.14)	30 1/2"	(775)	6.50	(0.60)
1650	1.86	(0.17)	14"	(356)	19 1/8"	(486)	4.58	(0.43)	1.79	(0.17)	24 1/2"	(622)	7.23	(0.67)
1656	2.10	(0.19)	14"	(356)	21 9/16"	(547)	5.09	(0.47)	2.02	(0.19)	18 1/2"	(470)	7.96	(0.74)
1660	2.33	(0.22)	14"	(356)	23 15/16"	(608)	5.61	(0.52)	2.25	(0.21)	12 1/2"	(318)	8.69	(0.81)
2026	0.99	(0.09)	20"	(508)	7 1/8"	(181)	2.97	(0.28)	0.88	(0.08)	54 1/2"	(1384)	4.81	(0.45)
2030	1.33	(0.12)	20"	(508)	9 9/16"	(242)	3.74	(0.35)	1.21	(0.11)	48 1/2"	(1232)	5.79	(0.54)
2036	1.66	(0.15)	20"	(508)	11 15/16"	(303)	4.50	(0.42)	1.55	(0.14)	42 1/2"	(1080)	6.77	(0.63)
2040	1.99	(0.19)	20"	(508)	14 5/16"	(364)	5.27	(0.49)	1.88	(0.17)	36 1/2"	(927)	7.75	(0.72)
2046	2.33	(0.22)	20"	(508)	16 3/4"	(425)	6.03	(0.56)	2.22	(0.21)	30 1/2"	(775)	8.73	(0.81)
2050	2.66	(0.25)	20"	(508)	19 1/8"	(486)	6.80	(0.63)	2.55	(0.24)	24 1/2"	(622)	9.71	(0.90)
2056	3.00	(0.28)	20"	(508)	21 9/16"	(547)	7.56	(0.70)	2.88	(0.27)	18 1/2"	(470)	10.69	(0.99)
2060	3.33	(0.31)	20"	(508)	23 15/16"	(608)	8.33	(0.77)	3.22	(0.30)	12 1/2"	(318)	11.67	(1.08)
2626	1.29	(0.12)	26"	(660)	7 1/8"	(181)	3.94	(0.37)	1.14	(0.11)	54 1/2"	(1384)	6.04	(0.56)
2630	1.72	(0.16)	26"	(660)	9 9/16"	(242)	4.96	(0.46)	1.58	(0.15)	48 1/2"	(1232)	7.27	(0.68)
2636	2.16	(0.20)	26"	(660)	11 15/16"	(303)	5.97	(0.55)	2.01	(0.19)	42 1/2"	(1080)	8.50	(0.79)
2640	2.59	(0.24)	26"	(660)	14 5/16"	(364)	6.99	(0.65)	2.45	(0.23)	36 1/2"	(927)	9.73	(0.90)
2646	3.03	(0.28)	26"	(660)	16 3/4"	(425)	8.00	(0.74)	2.88	(0.27)	30 1/2"	(775)	10.96	(1.02)
2650	3.46	(0.32)	26"	(660)	19 1/8"	(486)	9.02	(0.84)	3.31	(0.31)	24 1/2"	(622)	12.19	(1.13)
2656	3.89	(0.36)	26"	(660)	21 9/16"	(547)	10.03	(0.93)	3.75	(0.35)	18 1/2"	(470)	13.42	(1.25)
2660	4.33	(0.40)	26"	(660)	23 15/16"	(608)	11.05	(1.03)	4.18	(0.39)	12 1/2"	(318)	14.65	(1.36)
3026	1.59	(0.15)	32"	(813)	7 1/8"	(181)	4.92	(0.46)	1.41	(0.13)	54 1/2"	(1384)	7.27	(0.68)
3030	2.12	(0.20)	32"	(813)	9 9/16"	(242)	6.18	(0.57)	1.94	(0.18)	48 1/2"	(1232)	8.75	(0.81)
3036	2.66	(0.25)	32"	(813)	11 15/16"	(303)	7.45	(0.69)	2.48	(0.23)	42 1/2"	(1080)	10.23	(0.95)
3040	3.19	(0.30)	32"	(813)	14 5/16"	(364)	8.71	(0.81)	3.01	(0.28)	36 1/2"	(927)	11.71	(1.09)
3046	3.72	(0.35)	32"	(813)	16 3/4"	(425)	9.98	(0.93)	3.54	(0.33)	30 1/2"	(775)	13.19	(1.23)
3050	4.26	(0.40)	32"	(813)	19 1/8"	(486)	11.24	(1.04)	4.08	(0.38)	24 1/2"	(622)	14.67	(1.36)
3056	4.79	(0.45)	32"	(813)	21 9/16"	(547)	12.51	(1.16)	4.61	(0.43)	18 1/2"	(470)	16.15	(1.50)
3060	5.32	(0.49)	32"	(813)	23 15/16"	(608)	13.77	(1.28)	5.15	(0.48)	12 1/2"	(318)	17.63	(1.64)
3626	1.89	(0.18)	38"	(965)	7 1/8"	(181)	5.89	(0.55)	1.67	(0.16)	54 1/2"	(1384)	8.50	(0.79)
3630	2.52	(0.23)	38"	(965)	9 9/16"	(242)	7.40	(0.69)	2.31	(0.21)	48 1/2"	(1232)	10.23	(0.95)
3636	3.15	(0.29)	38"	(965)	11 15/16"	(303)	8.92	(0.83)	2.94	(0.27)	42 1/2"	(1080)	11.96	(1.11)
3640	3.79	(0.35)	38"	(965)	14 5/16"	(364)	10.43	(0.97)	3.57	(0.33)	36 1/2"	(927)	13.69	(1.27)
3646	4.42	(0.41)	38"	(965)	16 3/4"	(425)	11.95	(1.11)	4.21	(0.39)	30 1/2"	(775)	15.42	(1.43)
3650	5.05	(0.47)	38"	(965)	19 1/8"	(486)	13.46	(1.25)	4.84	(0.45)	24 1/2"	(622)	17.15	(1.59)
3656	5.69	(0.53)	38"	(965)	21 9/16"	(547)	14.98	(1.39)	5.47	(0.51)	18 1/2"	(470)	18.88	(1.75)
4026	2.18	(0.20)	44"	(1118)	7 1/8"	(181)	6.86	(0.64)	1.94	(0.18)	54 1/2"	(1384)	9.73	(0.90)
4030	2.92	(0.27)	44"	(1118)	9 9/16"	(242)	8.62	(0.80)	2.67	(0.25)	48 1/2"	(1232)	11.71	(1.09)
4036	3.65	(0.34)	44"	(1118)	11 15/16"	(303)	10.39	(0.96)	3.40	(0.32)	42 1/2"	(1080)	13.69	(1.27)
4040	4.38	(0.41)	44"	(1118)	14 5/16"	(364)	12.15	(1.13)	4.14	(0.38)	36 1/2"	(927)	15.67	(1.46)
4046	5.12	(0.48)	44"	(1118)	16 3/4"	(425)	13.92	(1.29)	4.87	(0.45)	30 1/2"	(775)	17.65	(1.64)
4050	5.85	(0.54)	44"	(1118)	19 1/8"	(486)	15.68	(1.46)	5.60	(0.52)	24 1/2"	(622)	19.63	(1.82)
4056	6.59	(0.61)	44"	(1118)	21 9/16"	(547)	17.45	(1.62)	6.34	(0.59)	18 1/2"	(470)	21.61	(2.01)

- Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).
- Dimensions in parentheses are in millimeters or square meters.
- **Two locks are standard for 36XX and 40XX widths or windows equal to or greater than 3'-5 1/2" (1054) wide.** Two locks are optional for 20XX, 26XX and 30XX widths or windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054) wide.

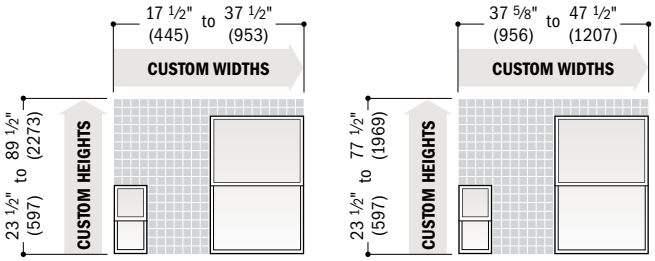
ANDERSEN WINDOWS & DOORS

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.

Double-Hung Windows

Equal Sash Ratio

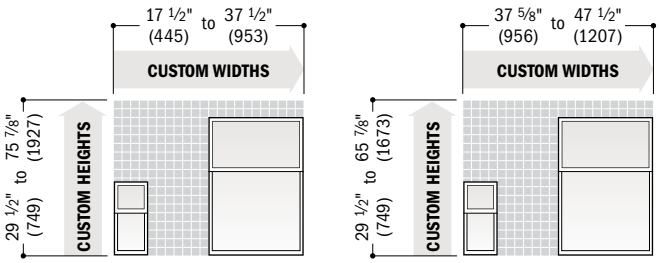


Two locks are standard for windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054).

Clear Opening*	**Width** = window width − 3.470" (88) **Height** = (window height ÷ 2) − 3.790" (96)	**Minimum R.O.**	**Width** = window width + 1/2" (13) **Height** = window height + 1/2" (13)
Vent Opening	**Width** = window width − 3.470" (88) **Height** = (window height ÷ 2) − 3.711" (94)	**Unobst. Glass**	**Width** = window width − 6.250" (159) **Upper Sash Height** = (window height ÷ 2) − 4.205" (107) **Lower Sash Height** = (window height ÷ 2) − 4.205" (107) **Total Sash Height** = window height − 8.410" (214)

*Windows with tempered glass may have limited sash travel. Contact your Andersen supplier.

2:3 Cottage Sash Ratio



Two locks are standard for windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054).

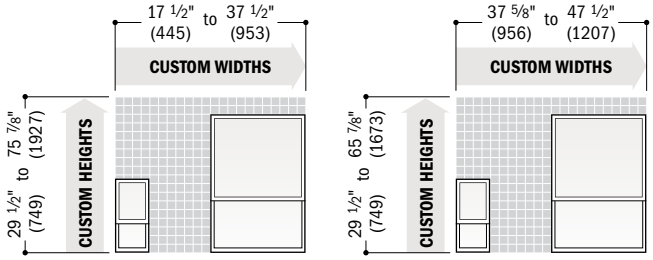
Clear Opening*	**Width** = window width − 3.470" (88) **Height** = window height x 0.4 − 2.949" (75)	**Minimum R.O.**	**Width** = window width + 1/2" (13) **Height** = window height + 1/2" (13)
Vent Opening	**Width** = window width − 3.470" (88) **Height** = window height x 0.4 − 2.621" (57)	**Unobst. Glass**	**Width** = window width − 6.250" (159) **Upper Sash Height** = window height x 0.4 − 3.364" (85) **Lower Sash Height** = window height x 0.6 − 5.046" (128) **Total Sash Height** = 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.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

Double-Hung Windows *(continued)*

3:2 Reverse Cottage Sash Ratio



Two locks are standard for windows equal to or greater than 3'-5 1/2" (1054) wide. Two locks are optional for windows equal to or greater than 1'-11 1/2" (597) wide and less than 3'-5 1/2" (1054).

Clear Opening* 	**Width** = window width − 3.470" (88) **Height** = window height x 0.4 − 4.862" (123)	**Minimum R.O.** 	**Width** = window width + 1/2" (13) **Height** = window height + 1/2" (13)
Vent Opening 	**Width** = window width − 3.470" (88) **Height** = window height x 0.4 − 5.669" (144)	**Unobst. Glass** 	**Width** = window width − 6.250" (159) **Upper Sash Height** = window height x 0.6 − 5.046" (128) **Lower Sash Height** = window height x 0.4 − 3.364" (85) **Total Sash Height** = window height − 8.410" (214)

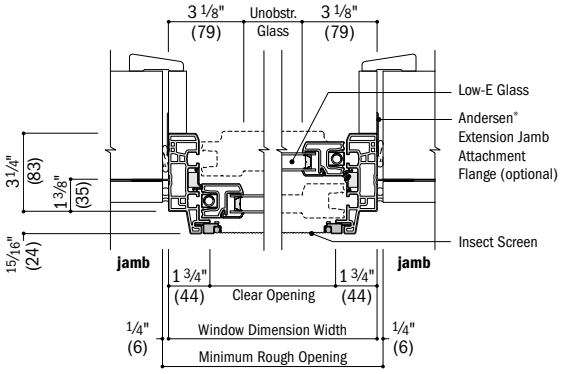
• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst.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

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

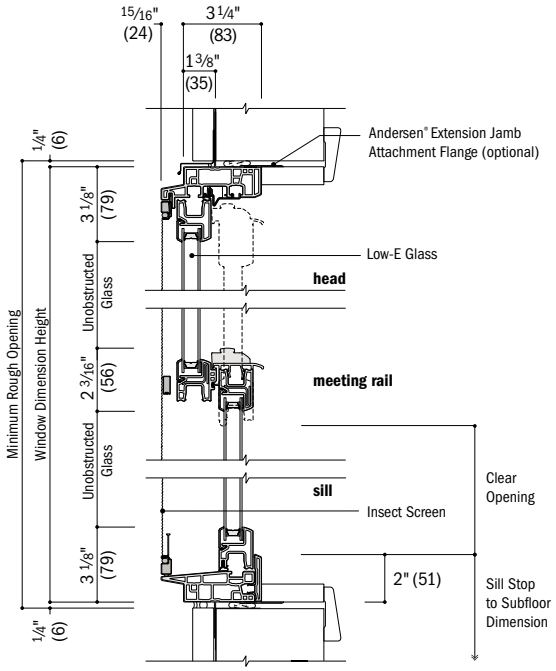
Details for Double-Hung Windows – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

1 3/8" Flange Setback



Horizontal Section



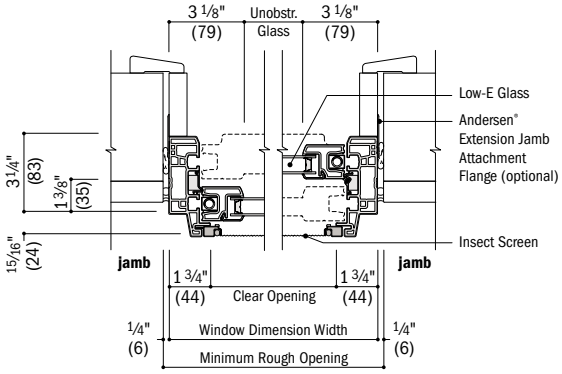
Vertical Section

Double-Hung Windows

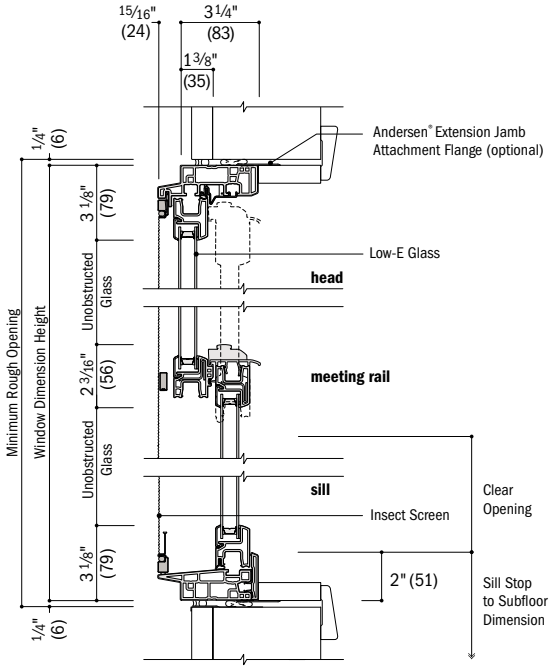
Details for Double-Hung Windows – Replacement

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

No Flange



Horizontal Section
Existing Framed Opening



Vertical Section
Existing Framed Opening

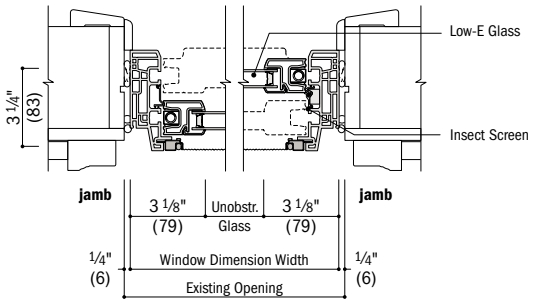
continued on next page

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

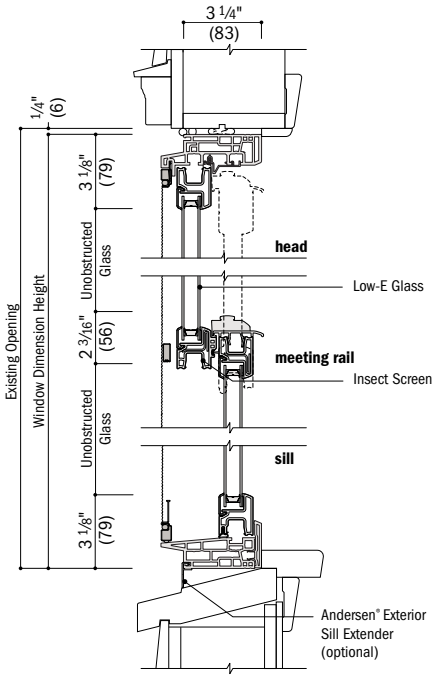
Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

Details for Double-Hung Windows – Replacement *(continued)*

Scale 1 ½" (38) = 1'-0" (305) – 1:8



Horizontal Section
Existing Window Opening



Vertical Section
Existing Window Opening

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

Vertical (ribbon) Fiberglass Joining Details – Non-Reinforced

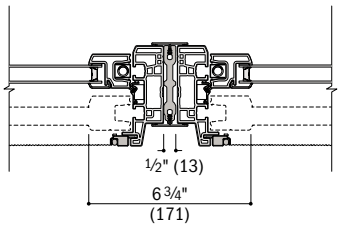
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Width – Sum of individual window widths plus 1/2" (13) per join.

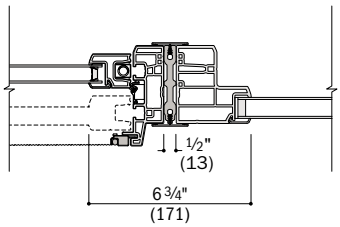
Overall Minimum Rough Opening Width – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension.

FRAME TYPES: 1 3/8" Flange Setback, No Flange and Insert



Double-Hung to Double-Hung



Double-Hung to Picture

Horizontal (stack) Fiberglass Joining Details – Non-Reinforced

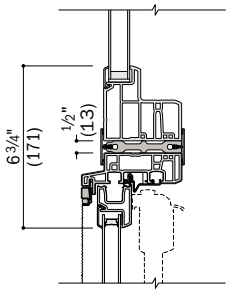
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Width – Sum of individual window heights plus 1/2" (13) per join.

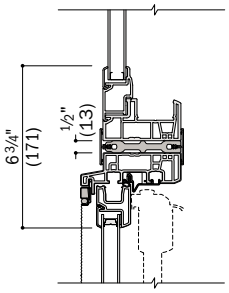
Overall Minimum Rough Opening Width – Overall window dimension height plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension.

FRAME TYPES: 1 3/8" Flange Setback, No Flange and Insert



Picture/Transom or Specialty Over Double-Hung



Transom Over Double-Hung

For more information on joining, refer to pages 14-15.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- Dimensions in parentheses are in millimeters.

Vertical (ribbon) Easy Connect Fiberglass Joining Details – Reinforced

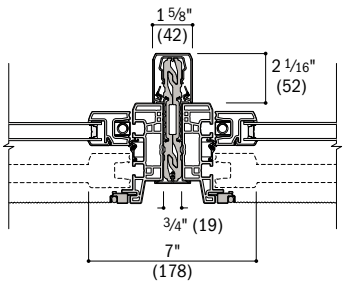
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Width – Sum of individual window widths plus 3/4" (19) per join.

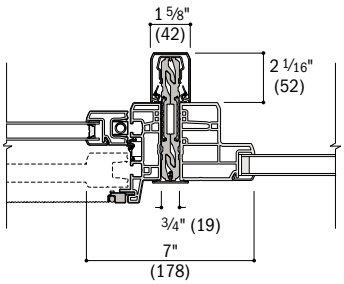
Overall Minimum Rough Opening Width – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension.

FRAME TYPES: 1 3/8" Flange Setback and No Flange



Double-Hung to Double-Hung



Double-Hung to Picture

Horizontal (stack) Easy Connect Fiberglass Joining Details – Reinforced

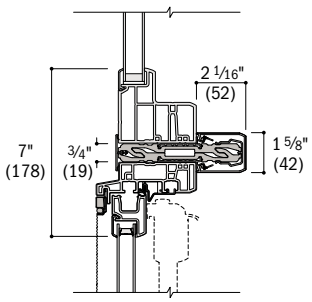
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Width – Sum of individual window heights plus 3/4" (19) per join.

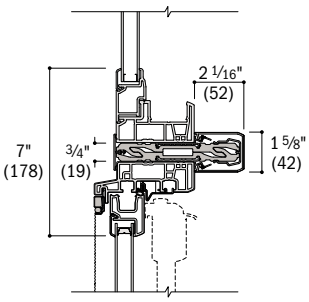
Overall Minimum Rough Opening Width – Overall window dimension height plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension.

FRAME TYPES: 1 3/8" Flange Setback and No Flange



Picture/Specialty Over Double-Hung



Transom Over Double-Hung

For more information on joining, refer to pages 14-15.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- Dimensions in parentheses are in millimeters.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

Combination Types

Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure. Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure. One-way configurations or two-way configurations are used in combination designs.

Two-way combinations exist when multiple vertical stacks and horizontal ribbons are joined together. Unlike one-way combinations, the adjacent sides (head and sill, or both side jambs) of individual units are not necessarily fastened directly to the building structure. Two-way combinations are joined with both vertical and horizontal joining material, and may require reinforced joining materials and brackets depending on the local building code requirement for design wind load (measured in pounds per square foot, psf).

Determining Design Wind Load Performance

Proper combination design in conformance with local wind load requirements is vital to the success of your project. To make sure a combination is safe and that it complies with local building codes, the combination design wind load performance capacity must be determined. Correctly determining this performance capacity involves the following three steps:

STEP 1: Determine Building Code Requirement

Make sure you have the proper local codes and have identified specified compliance values. This calculated value (psf) will be used to determine if the combination will be acceptable (STEP 3).

STEP 2: Determine Product Performance

Compare product Design Pressure Rating data to the local building code (psf) requirement. This will show whether the individual units in a combination design are acceptable.

STEP 3: Determine Combination Performance

This step helps determine whether a given product, size, configuration and joining material type will meet the local building code design wind load requirement. Compare the local building code design wind load requirement to the design wind load tables below.

Andersen Joining Material

For a successful installation, one engineered to provide the required design pressure, it is important Andersen joining materials and installation accessories be specified by a project architect or contractor. For one-way combinations, Andersen offers a non-reinforced fiberglass joining system that meets specified performance requirements and enhances the look of Andersen products without sacrificing performance.

The addition of joining materials will affect the overall rough opening dimension. **Read and follow product joining and installation instructions in their entirety. For instructions, visit andersenwindows.com.**

Exterior trim strips and trim strip end caps are included with each kit for finishing the exterior join. Interior trim is included with each joining kit for finishing the join on the interior. Check with your Andersen supplier for more information.

Reinforced joining material is used to create product alignment, positive joining and load transfer between Andersen windows and doors and the rough opening. They provide added strength capable of withstanding a greater range of wind load pressures. Non-reinforced joining material is used to create alignment and positive joining between windows. Joining materials are not connected to the rough opening structure. The structural performance of any combination is only as high as the lowest structural performance rating of any individual unit or joining material in the combination.

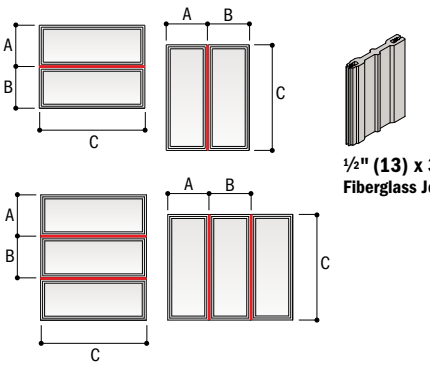
Contact your Andersen supplier for specific performance and product recommendations.

1-Way Non-Reinforced Fiberglass Joining

100 Series Windows: Double-Hung with Casement, Awning, Single-Hung, Double-Hung, Gliding, and Picture Windows

Applicable for flanged or flangeless installations into wood or metal. Ratings for windows installed into concrete or masonry are lower.

Average Adjacent Window Dimension	50	50	43	37	32	29	26
(A + B) ÷ 2 = **6'-0"** (1829)	50	50	43	37	32	29	26
(A + B) ÷ 2 = **5'-6"** (1676)	50	50	44	38	33	30	27
(A + B) ÷ 2 = **5'-0"** (1524)	50	50	45	39	35	31	28
(A + B) ÷ 2 = **4'-6"** (1372)	50	50	46	41	36	33	30
(A + B) ÷ 2 = **4'-0"** (1219)	50	50	49	43	39	35	32
(A + B) ÷ 2 = **3'-6"** (1067)	50	50	50	47	42	39	36
(A + B) ÷ 2 = **3'-0"** (914)	50	50	50	50	47	43	40
(A + B) ÷ 2 = **2'-6"** (762)	50	50	50	50	50	50	46
(A + B) ÷ 2 = **2'-0"** (610)	50	50	50	50	50	50	50
C = (length of join)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)	**8'-0"** (2438)



½" (13) x 3 ¼" (83)
Fiberglass Joining Material

- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.
- Andersen® products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
- Transom windows use picture frame type. Integral transom windows use single-hung frame type. Combination performance should be determined accordingly.

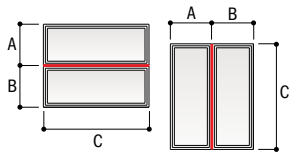
Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

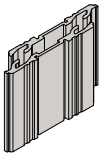
ANDERSEN WINDOWS & DOORS

1-Way Reinforced Easy Connect Fiberglass Joining

100 Series Windows: Casement, Awning, Single-Hung, Double-Hung, Gliding, Picture

Applicable for flanged or flangeless installations into wood, metal, concrete or masonry.





¾" (19) x 5 ⅛" (130) Fiberglass Joining Material
For wall depths ≥ 4 9/16" (116).

Average Adjacent Window Dimension	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)
(A + B) ÷ 2 = **8'-0"** (2438)		50	50	50	50	50	50	50	50	50	50	50										
(A + B) ÷ 2 = **7'-6"** (2286)		50	50	50	50	50	50	50	50	50	50	50										
(A + B) ÷ 2 = **7'-0"** (2134)		50	50	50	50	50	50	50	50	50	50	50										
(A + B) ÷ 2 = **6'-6"** (1981)		50	50	50	50	50	50	50	50	50	50	50										
(A + B) ÷ 2 = **6'-0"** (1829)		50	50	50	50	50	50	50	50	50	50	50	50	50								
(A + B) ÷ 2 = **5'-6"** (1676)		50	50	50	50	50	50	50	50	50	50	50	50	50								
(A + B) ÷ 2 = **5'-0"** (1524)		50	50	50	50	50	50	50	50	50	50	50	50	50								
(A + B) ÷ 2 = **4'-6"** (1372)		50	50	50	50	50	50	50	50	50	50	50	50	50								
(A + B) ÷ 2 = **4'-0"** (1219)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	37	35	28	27
(A + B) ÷ 2 = **3'-9"** (1372)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	42	40	30	28
(A + B) ÷ 2 = **3'-6"** (1067)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	44	42	32	30
(A + B) ÷ 2 = **3'-0"** (914)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	48	36	34
(A + B) ÷ 2 = **2'-6"** (762)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	42	40
(A + B) ÷ 2 = **2'-0"** (610)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(A + B) ÷ 2 = **1'-6"** (457)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50

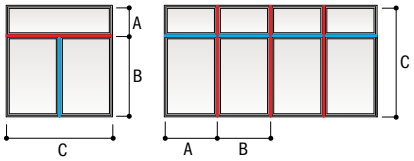
2-Way Reinforced Easy Connect Fiberglass Joining*

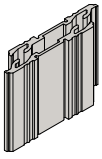
100 Series Windows: Casement, Awning, Single-Hung, Double-Hung, Gliding, Picture

Applicable for flanged or flangeless installations into wood, metal, concrete or masonry.

Average Adjacent Window Dimension	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)
(A + B) ÷ 2 = **6'-0"** (1829)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	44	40	26	23	21	20
(A + B) ÷ 2 = **5'-6"** (1676)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	48	43	28	26	23	21
(A + B) ÷ 2 = **5'-0"** (1524)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	48	32	30	26	24
(A + B) ÷ 2 = **4'-6"** (1372)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	36	33	27	25
(A + B) ÷ 2 = **4'-0"** (1219)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	41	37	30	28
(A + B) ÷ 2 = **3'-9"** (1372)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	43	40	32	30
(A + B) ÷ 2 = **3'-6"** (1067)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	47	42	35	32
(A + B) ÷ 2 = **3'-0"** (914)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	40	37
(A + B) ÷ 2 = **2'-6"** (762)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	43	40
(A + B) ÷ 2 = **2'-0"** (610)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(A + B) ÷ 2 = **1'-6"** (457)		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50

Red lines represent reinforced joins.
Blue lines represent non-reinforced joins.





¾" (19) x 5 ⅛" (130) Fiberglass Joining Material
For wall depths ≥ 4 9/16" (116).

- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.
- Andersen® products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
- Transom windows use picture frame type. Integral transom windows use single-hung frame type. Combination performance should be determined accordingly.
- Performance of two-way combinations may be limited by non-reinforced joins 6' (1829) or greater in length. Verify performance of non-reinforced joins within two-way combinations using the appropriate non-reinforced joining table.

*All two-way joining requires both non-reinforced and reinforced elements. Intersecting reinforced or non-reinforced joins are not available.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

PERFORMANCE STANDARDS

The Window and Door Manufacturers Association (WDMA), the American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) jointly release the North American Fenestration Standard/Specification for Windows, Doors and Skylights (NAFS). NAFS is also referred to as AAMA/WDMA/CSA 101/I.S.2/A440, which is how the International Code Council (ICC) lists this standard in the International Residential Code (IRC) and International Building Code (IBC) as the means to indicate the window, door or skylights design pressure rating used to determine compliance to the job site design pressure requirements.

A product only achieves a "Performance Grade" or "PG" rating when it complies with all of the NAFS performance requirements such as ease of operation, air infiltration resistance, resistance to water penetration and resistance to forced entry, etc. A "Design Pressure Rating" or "DP" rating only depicts the design and structural load performance.

Performance Classes

The NAFS Standard/Specification defines requirements for four performance classes. Performance classes are designated R, LC, CW and AW. This classification system provides for several levels of performance. Product selection is always based on the performance and building code requirements of the particular project.

Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) and applicable material/component tests (not shown here) for the applicable product type and desired performance class:

(a) Operating force (if applicable): Maximum operating force varies by product type and performance class.

(b) Air leakage resistance: Tested in accordance with ASTM E283 at a test pressure of 1.57 psf. Allowable air infiltration for R, LC and CW class designations is 0.3 cubic feet per minute per square foot of frame (cfm/ft^2).

(c) Water penetration resistance: Tested in accordance with ASTM E547 with the specified test pressure applied per NAFS. Test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. Water spray shall be uniformly applied at a constant rate of 5 U.S. gal/ft^2 · hr.

(d) Uniform load deflection test: Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS) with the load maintained for a period of 10 seconds. The test specimen shall be evaluated for deflection during each load for permanent damage after each load and for any effects on the normal operation of the specimen. *Starting with the 2008 version of NAFS, design pressure (DP) will only represent the "uniform load deflection test."*

(e) Uniform load structural test: Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS) with the load maintained for a period of 10 seconds. After loads are removed, there shall be no permanent deformation in excess of 0.4% of its span and no damage to the unit, which would make it inoperable.

(f) Forced-entry resistance (if applicable): Tested in accordance with ASTM F588 (windows), F476 (swinging doors) and F842 (sliding doors) at a performance level 10 rating.

Performance Grades (PG) and Corresponding Test Pressures (psf)

Performance Class/ Performance Grade		Air Infiltration Test Pressure		Maximum Allowable Air Infiltration/ Exfiltration Rate		Water Penetration Resistance Test Pressure		Design Pressure		Structural Test Pressure	
R	LC	Pa	psf	L/s·m^2	cfm/ft^2	Pa	psf	Pa	psf	Pa	psf
15	-	75	1.57	1.5	0.30	140	2.92	720	15.04	1080	22.56
20	-	75	1.57	1.5	0.30	150	3.13	960	20.05	1440	30.08
25	25	75	1.57	1.5	0.30	180	3.76	1200	25.06	1800	37.59
30	30	75	1.57	1.5	0.30	220	4.59	1440	30.08	2160	45.11
35	35	75	1.57	1.5	0.30	260	5.43	1680	35.09	2520	52.63
40	40	75	1.57	1.5	0.30	290	6.06	1920	40.10	2880	60.15
45	45	75	1.57	1.5	0.30	330	6.89	2160	45.11	3240	67.67
50	50	75	1.57	1.5	0.30	360	7.52	2400	50.13	3600	75.19
55	55	75	1.57	1.5	0.30	400	8.35	2640	55.14	3960	82.71
60	60	75	1.57	1.5	0.30	440	9.19	2880	60.15	4320	90.23
65	65	75	1.57	1.5	0.30	470	9.82	3120	65.16	4680	97.74
70	70	75	1.57	1.5	0.30	510	10.65	3360	70.18	5040	105.26
75	75	75	1.57	1.5	0.30	540	11.28	3600	75.19	5400	112.78
80	80	75	1.57	1.5	0.30	580	12.11	3840	80.20	5760	120.30
85	85	75	1.57	1.5	0.30	620	12.94	4080	85.21	6120	127.82
90	90	75	1.57	1.5	0.30	660	13.78	4320	90.23	6480	135.34
95	95	75	1.57	1.5	0.30	682	14.25	4560	95.24	6840	142.86
100	100	75	1.57	1.5	0.30	718	15.00	4800	100.25	7200	150.38

HALLMARK CERTIFICATION

The Window and Door Manufacturers Association (WDMA)-sponsored Hallmark Certification Program provides manufacturers with certification to the AAMA/WDMA/CSA 101/I.S.2/A440 Standard and is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured and tested in accordance with NAFS (AAMA/WDMA/CSA 101/I.S.2/A440) industry standards and other applicable performance standards. Conformance is determined by periodic in-plant inspections by a third-party administrator. Inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by an independent testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on their certification label as a means of identifying products and their performance ratings.

Products successfully obtaining Hallmark Certification will be labeled with a three-part code, which includes performance class, performance grade and size tested. In addition to this mandatory requirement, you are allowed to list the design pressure on a separate line.

WINDOW & DOOR MANUFACTURERS ASSOCIATION WDMA Hallmark Certified www.wdma.com	Andersen Corporation 100 SERIES DOUBLE-HUNG WINDOW Manufacturer stipulates certification as indicated below.
STANDARD	RATING
AAMA/WDMA/CSA 101/I.S.2/A440-22	Class LC(1) – PG30(2) – Size Tested 47.5 x 77.5 in.(3) DP+30/-30(4)
AAMA/WDMA/CSA 101/I.S.2/A440-17	Class LC(1) – PG30(2) – Size Tested 47.5 x 77.5 in.(3) DP+30/-30(4)

(1) – Performance Class

(2) – Performance Grade

(3) – Size Tested

(4) – Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 30 pounds per square foot (psf) and the size tested is 47.5" x 77.5". What this means to the specifier is, based on the performance grade chart, the laboratory-tested air infiltration was less than 0.3 cfm/ft^2 (test pressure is always 1.57 psf and the allowable airflow is 0.3 cfm/ft^2), the product tested successfully resisted a laboratory water penetration test at a test pressure of 4.5 psf, the product tested successfully withstood a laboratory positive test pressure of 45 psf and a laboratory negative test pressure of 45 psf, and the product tested passed the laboratory requirements for operational force and forced-entry resistance. Based on this test, all products of the same design that are smaller than the tested size can be labeled with this product performance rating.

IMPORTANT

Building codes prescribe design pressure based on a variety of criteria (i.e., windspeed zone, building height, building type, job site exposure, etc.). Design pressures derived from Performance Grade (PG) test requirements should be used to determine compliance to building code required design pressures. Structural test pressures, which are tested at 1.5 times the design pressure, should **not** be used for determining design pressure code compliance. In the example above, a PG 30 performance grade rating, which passes a 30 psf design pressure, should be used for determining code compliance, not the structural test pressure of 45 psf.

If you need further details about how Andersen® products perform to this standard, contact your Andersen supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440 standard or the Hallmark Certification Program, please contact: WDMA, 2001 K Street NW, 3rd Floor North, Washington, D.C. 20006. Phone: 202-367-1157 Website: **wdma.com**

Where designated, Andersen products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

Performance Grade and Air Infiltration Ratings

For current performance information, please visit **andersenwindows.com**.

Andersen® 100 Series Product	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
Double-Hung Windows			
Double-Hung	Class LC-PG30 Size Tested 47.5" x 77.5"	30/30	< 0.2

- Performance Grade (PG) ratings may vary from tested performance rating for larger or smaller units of a particular type.
- This data is accurate as of October 2025.

Due to ongoing product changes, updated test results or new industry standards, this data may change over time.

- Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.
- Contact your Andersen supplier for more information.

Sound Transmission Ratings

For current performance information, please visit **andersenwindows.com**.

	STANDARD GLASS		STC UPGRADE GLASS	
Andersen® 100 Series Product	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Double-Hung Windows	28	23	†	†

- Sound Transmission Class (STC) and Outdoor/Indoor Transmission Class (OITC) ratings are for individual units based on independent tests and represent entire unit.
- This data is accurate as of October 2025. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.
- Contact your Andersen supplier for more information.

†Data not available.

Altitude Limits

The chart below gives the altitude limit in feet for 100 Series products with dual-pane glass in this guide. If the installation of a given product is at an altitude greater than that shown in this chart, a capillary breather tube must be ordered. Be aware that the use of a capillary breather tube eliminates argon gas blend fill and will result in a slightly lower thermal performance (approximately 0.02 increase in unit U-Factor). For NFRC certified total unit performance on units with capillary breather tubes for higher altitude applications, see your Andersen supplier.

The use of dual-pane insulating glass without capillary breather tubes at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk of seal failure. Smaller units are most affected by altitude changes. An increase in altitude results in a decrease in atmospheric pressure. A sealed insulating glass unit attempts to combat this change by increasing its volume to reduce its pressure. One way to increase its volume is by glass deflection. A smaller unit is stiffer and does not deflect as much as a larger unit therefore, it cannot relieve the pressure as readily. Thus, the load applied to the glass is greater, resulting in a greater risk for breakage. Another way the unit tries to increase its volume is by increasing the edge area; i.e., the seal area. The increased pressure applied to the edge seal load for a smaller unit is therefore greater, increasing the chance for seal failure.

Andersen® Product	3,000		4,000			5,000		6,000		7,000	8,000	9,000	10,000
100 Series Double-Hung Windows	1620	3026	1630	1666	3030	2040	2076	2646	3046	3050	3056	3660	3666
	1626	3620	1636	1670	3036	2046	2640	2650	3646	3650	3060	4060	4066
	2020	3626	1640	1676	3630	2050	3040	2656	4040	4050	3066		
	2026	4020	1646	2030	4030	2056	3636	2660	4046		3070		
	2620	4026	1650	2036		2060	3640	2666			3076		
	2626		1656	2630		2066	4036	2670			3656		
	3020		1660	2636		2070		2676			4056		

- Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows at higher altitudes without capillary breather tubes, some interference may occur, affecting operation.
- Contact your Andersen supplier for altitude limits for custom-sized windows.

ANDERSEN WINDOWS & DOORS

Center of Glass Performance Data

For current performance information, please visit **andersenwindows.com**.

Andersen® 100 Series Product	VT[1]	SC[2]	SHGC[3]	RHG[4]	Fading Tuv[5]	Fading Tdw[6]	%RH @ center[7]	IGST[8]
Low-E								
Double-Hung Windows	72%	0.48	0.41	98	16%	33%	61%	56°F
Low-E With HeatLock® Technology								
Double-Hung Windows	70%	0.47	0.41	96	16%	33%	44%	47°F
Low-E SmartSun™								
Double-Hung Windows	65%	0.31	0.27	66	5%	21%	62%	56°F
Low-E SmartSun With HeatLock Technology								
Double-Hung Windows	63%	0.31	0.27	64	5%	21%	46%	48°F
Sun								
Double-Hung Windows	40%	0.29	0.25	61	16%	24%	60%	55°F
Low-E PassiveSun®								
Double-Hung Windows	79%	0.79	0.69	161	29%	42%	60%	55°F
Low-E PassiveSun With HeatLock Technology								
Double-Hung Windows	77%	0.72	0.62	146	27%	40%	42%	46°F
Clear Dual-Pane								
Double-Hung Windows	82%	0.89	0.78	186	58%	61%	39%	44°F

• Based on NFRC testing/simulation conditions using Windows v7.8.74.0 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind. 1) Visible Transmittance (VT) measures how much light comes through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum. 2) Shading Coefficient (SC) defines the amount of heat gain through the glass compared to a single lite of clear 1/8" (3) glass. 3) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 4) Relative Heat Gain (RHG) is the amount of heat gain through a glazing incorporating U-Factor and Solar Heat Gain Coefficient. 5) Transmission Ultra-Violet Energy (Tuv). The transmission of short-wave energy in the 300-380 nanometer portion of the solar spectrum. The energy can cause fabric fading. 6) Transmission Damage Function (Tdw). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can cause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower the Damage Function rating, the less transmission of short-wave energy through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential. 7) Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature. 8) Inside glass surface temperatures are taken at the center of glass.
• This data is accurate as of October 2025. Due to ongoing product changes, updated test results or new industry standards, this data may change over time. Contact your Andersen supplier for current performance information or upgrade options.
• Contact your Andersen supplier for center of glass performance data on windows with patterned glass, tempered glass and products ordered with capillary breather tubes.

NFRC Certified Total Unit Performance for Products With Dual-Pane Glass

This information is for reference only. Performance values vary based on unit size, configurations and options. Contact your Andersen supplier for specific unit data.

Andersen® Product	High-Performance Dual-Pane Glass Type		U-Factor[1]	SHGC[2]	VT[3]
100 Series Double-Hung Windows AND-N-80 2.2 mm glass	Low-E	Without Grilles	0.30	0.31	0.53
		Simulated Divided Light Grilles	-	-	-
		Finelight™ Grilles	0.30	0.28	0.47
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Low-E w/HeatLock®	Without Grilles	0.26	0.30	0.52
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.26	0.27	0.46
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Low-E SmartSun™	Without Grilles	0.29	0.20	0.48
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.29	0.18	0.43
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Low-E SmartSun w/HeatLock	Without Grilles	0.25	0.20	0.47
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.25	0.18	0.42
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Low-E Sun	Without Grilles	0.30	0.19	0.30
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.30	0.17	0.26
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Low-E PassiveSun®	Without Grilles	0.31	0.52	0.59
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.31	0.46	0.52
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-
	Clear Dual-Pane	Without Grilles	0.46	0.59	0.61
		Simulated Divided Light Grilles	-	-	-
		Finelight Grilles	0.46	0.52	0.54
		Finelight With Exterior Applied Grilles	-	-	-
		Full Divided Light Grilles	-	-	-

• "Low-E," "Low-E SmartSun," "Low-E Sun," "Low-E PassiveSun®" and "HeatLock®" are Andersen trademarks for "Low-E" glass.
1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See nfrc.org for specific performance values. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible light transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.
• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.
• This data is accurate as of October 2025. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on unit size, use of tempered glass, different grille options, glass for high altitudes, etc.
• Values are for single units with given pane thickness and 3/4" (19 mm) grilles.

Available at select locations in Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin.

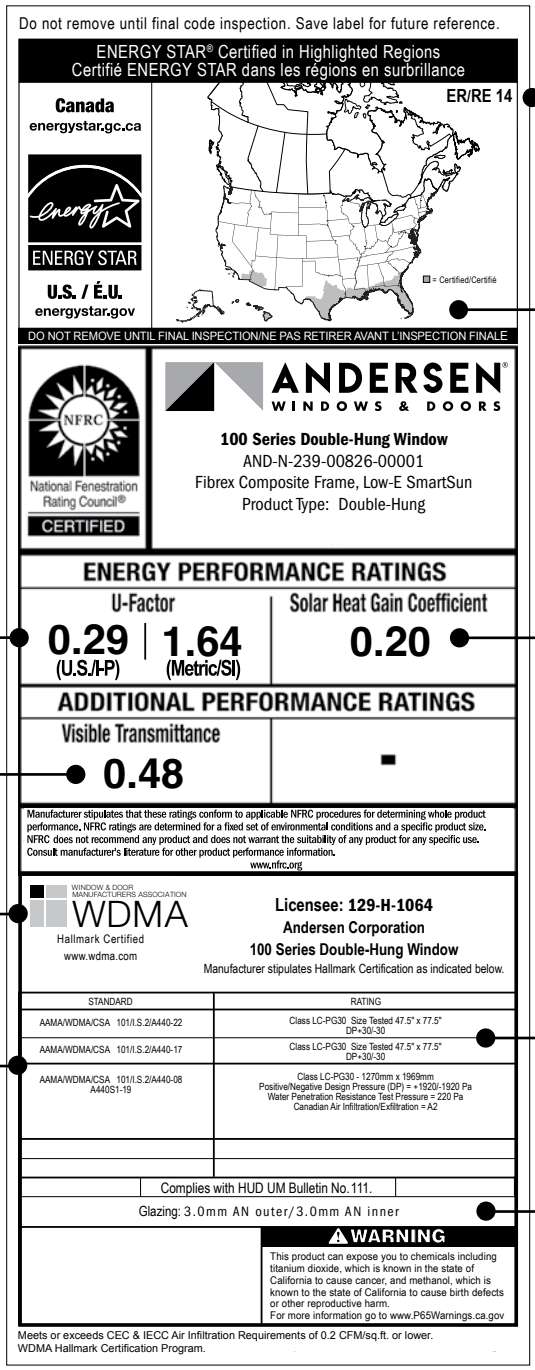
About the Label

Look for this certification label on every window and patio door you buy. The NFRC section was designed by the National Fenestration Rating Council to provide accurate information that helps you promote the energy efficiency of the homes you build. These ratings allow you – and your customers – to measure and compare the energy performance of similar products. If the product does not have this label, the NFRC has not verified its claims.

About the NFRC

The National Fenestration Rating Council (NFRC) is a nonpartisan coalition of professionals whose purpose is to provide fair, accurate and credible energy performance ratings for fenestration products. NFRC's membership includes manufacturers, suppliers, designers, specifiers, utility companies, government agencies and other building industry representatives.

Andersen Corporation is a founding member of the NFRC and continues to support its work by providing fair, accurate and credible energy performance ratings to consumers and the building industry. If you have any questions about the NFRC, its program or energy performance ratings, write them at: NFRC, 6305 Ivy Lane, Suite 410, Greenbelt, MD 20770. Phone: 301-589-1776. Website: **nfrc.org**



Energy Rating (ER) represents "Energy Rating" and is a rating used in Canada for product comparison purposes (the higher the ER number, the more energy saved during the heating season).

ENERGY STAR® Climate Zone Map is based on U-Factor and solar heat gain coefficient criteria for specific ENERGY STAR climate zones within the United States and Canada. The shading of the map shows which climate zone(s) a particular product and glass type is ENERGY STAR Version 7.0 certified in. Visit **andersenwindows.com/energystar** for more details.

U-Factor indicates how well a product prevents heat from escaping (the lower the number, the better).

Solar Heat Gain Coefficient measures how well a product blocks heat caused by sunlight (the lower the number, the more it will help reduce the use of air conditioning and as a result, reduce electrical bills and energy use).

Visible Transmittance refers to how much visible light comes through a product (the closer to 1.0, the more light is transmitted).

WDMA Hallmark Certification verifies the performance ratings of this product were tested by an independent testing laboratory and verified by a third-party certification program.

Test Standards

Performance Grade (PG) and **Design Pressure (DP) Ratings**

Glass Construction used with this product type.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.
• "ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

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