



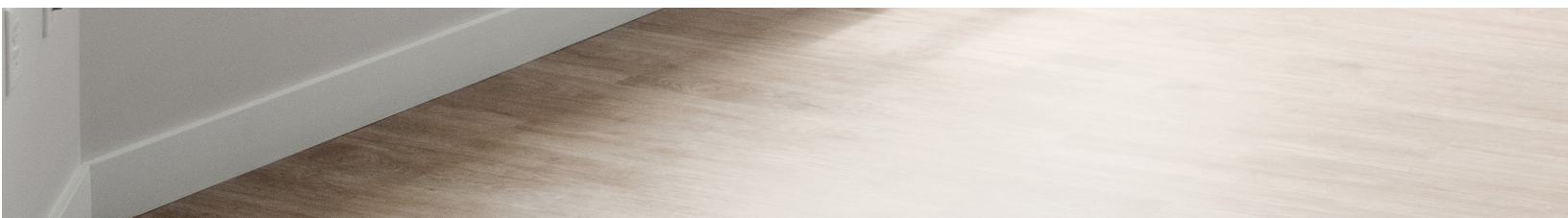
HARVEY

WINDOWS + DOORS



REFERENCE GUIDE:

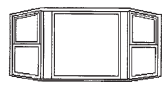
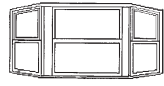
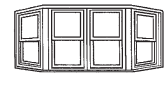
Call Sizes, Limitations, Thermal Data and Structural Specifications



VINYL UNIT LIMITATIONS

			MIN	MAX	MAX UI
DOUBLE HUNG AND SINGLE UNITS		Tribute	16-1/4" (w) x 26" (h)	48" (w) x 84" (h)	132"
		Classic	16-1/4" (w) x 24" (h)	48" (w) x 84" (h)	132"
		Slimline (DH & SH)	16-5/8" (w) x 26-1/4" (h)	54" (w) x 77" (h)	123"
CASEMENT		1-Lite Venting	16" (w) x 18" (h)	36" (w) x 80" (h)	116"
		2-Lite Venting	31-1/4" (w) x 18" (h)	71-1/4" (w) x 80" (h)	151"
		3-Lite Venting (EQUAL LITE ONLY)	46-1/2" (w) x 18" (h)	106-1/2" (w) x 80" (h)	180"
		4-Lite Venting	61-3/4" (w) x 18" (h)	141-3/4" (w) x 80" (h)	180"
AWNING		1-Lite Venting	20" (w) x 16" (h)	64" (w) x 58" (h)	106"
		2-Lite Venting	39-1/4" (w) x 24" (h)	48" (w) x 110" (h)	162"
		3-Lite Venting	58-1/2" (w) x 16" (h)	141-3/4" (w) x 42" (h)	180"
		AF1/AV1 Fixed Over Venting	20" (w) x 31-1/4" (h)	60" (w) x 121-1/4" (h)	180"
		2-Lite Venting Vertical	20" (w) x 31-1/4" (h)	60" (w) x 83-1/4" (h)	142"
		3-Lite Venting Vertical	20" (w) x 46-1/2" (h)	60" (w) x 124-1/2" (h)	180"
ROLLING WINDOW		2-Lite	26" (w) x 16-1/4" (h)	86-1/4 (w) x 62-1/2" (h)	140"
		3-Lite	37" (w) x 16-1/4" (h)	119-3/4" (w) x 62-1/2" (h)	180"
PICTURE WINDOW			12" (w) x 16" (h) or 16" (w) x 12" (h)	79-3/4" (w) x 79-3/4" (h)	144"
HOPPER			12" (w) x 16" (h) or 16" (w) x 12" (h)	42" (w) x 41-3/4" (h)	76"
PICTURE WINDOW CENTER BAY		30°	50-3/4"	135-3/4"	-
		45°	46-1/2"	128"	-
DOUBLE HUNG CENTER BAY		30°	50-3/4"	103"	-
		45°	46-1/2"	96"	-
TWIN DOUBLE HUNG BAY		30°	66"	144"	-
		45°	61-3/4"	144"	-
THREE LITE BAY		30°	52-3/4"	135-3/4"	-
		45°	48-1/2"	128"	
THREE LITE BOW		10°	52-3/4"	110"	-
FOUR LITE BAY		30°	68"	127"	-
		45°	63-3/4"	119-1/4"	
FOUR LITE BOW		10°	68-3/4"	143"	-
FIVE LITE BAY		30°	83-1/4"	143"	-
		45°	79"	143"	
FIVE LITE BOW		10°	84-1/2"	143"	-
SIX LITE BOW		10°	99"	143"	-
GARDEN WINDOW			24" (w) x 30" (h)	72" (w) x 48" (h)	-
DEADLITE			12" (w) x 18" (h) or 18" (w) x 12" (h)	80-1/4" (w) x 80-1/4" (h)	120"

MAJESTY UNIT LIMITATIONS

			MIN	MAX	MAX UI
DOUBLE HUNG			16-1/2" (w) x 29-3/4" (h)	48"(w) x 84" (h)	126"
CASEMENT		1-Lite Venting	16" (w) x 16" (h)	32" (w) x 72" (h)	104-1/2"
		2-Lite Venting	32" (w) x 16" (h)	64" (w) x 72" (h)	124"
		3-Lite Venting (EQUAL LITE ONLY)	48" (w) x 16" (h)	96" (w) x 72" (h)	155"
		4-Lite Venting	64" (w) x 16" (h)	106" (w) x 72" (h)	172"
AWNING		Single Vent	19" (w) x 16-1/4" (h)	48" (w) x 38" (h)	80"/unit
		Fixed Over Venting	19" (w) x 24" (h)	48" (w) x 110" (h)	158"/unit
GLIDING WINDOW		2-Lite	27-3/16" (w) x 22-3/4" (h)	71-3/16" (w) x 60-3/4" (h)	131"
		3-Lite	36-11/16" (w) x 22-3/4" (h)	104-11/16" (w) x 60-3/4" (h)	164"
PICTURE WINDOW		MATCHES DOUBLE HUNG FRAME	16" (w) x 23-1/2" (h)	78" (w) x 78" (h)	139"
		MATCHES CASEMENT FRAME	12" (w) x 12" (h)	60" (w) x 72" (h)	132"
		ONLY ONE DIMENSION (W OR H) CAN EXCEED 65"			
PICTURE WINDOW CENTER BAY		30°	52-3/4"	133-1/2"	-
		45°	49"	126-1/2"	-
DOUBLE HUNG CENTER BAY		30°	52-3/4"	103-1/2"	-
		45°	49"	96-1/2"	-
TWIN DOUBLE HUNG HUNG BAY		30°	68-3/4"	144"	-
		45°	65"	144"	-
THREE LITE BAY		30°	52-3/4"	120"	-
		45°	49"	120"	-
THREE LITE BOW		10°	59-1/2"	99-1/2"	-
FOUR LITE BAY		30°	69"	119-1/2"	-
		45°	65-1/4"	112-1/2"	-
FOUR LITE BOW		10°	68-1/4"	130-3/4"	-
FIVE LITE BAY		30°	84-3/4"	143"	-
		45°	81"	143"	
FIVE LITE BOW		10°	83-1/2"	143"	-

CUSTOM BAY/BOW, VINYL SHAPES LIMITATIONS

30° & 45° CUSTOM BAY WINDOWS SIZING INFORMATION

Using standard width flankers and a custom-sized center unit, they are available using either casement or Classic double hung windows.

	Angle	Flanker Width	Flanker Allowance	Projection
	30°	1'5"	36-3/4"	9-3/8"
		1'9"	43-5/8"	11-3/8"
		2'0"	48-7/8"	12-7/8"
		2'4"	55-3/4"	14-7/8"
	45°	1'5"	32-1/2"	13-5/8"
		1'9"	38-1/4"	16-7/16"
		2'0"	42-3/8"	18-9/16"
		2'4"	48-1/8"	21-3/8"

MEASURING

In most cases it will be necessary to remove the interior casing to obtain an accurate measurement. Opening size for custom-sized bay and bow windows should be a rough stud to rough stud dimension. Finished unit will allow approximately 1" on the width and approximately 1/2" on the height for clearance.

VINYL SHAPES

SHAPE		MIN	MAX
HALF ROUND		23-1/2" (w) x 11-3/4" (h)	76" (w) x 38" (h)
QUARTER ROUND		14" (w) x 14" (h)	75-3/8" (w) x 75-3/8" (h)
SEGMENTAL		39-3/8" (w) x 14" (h)	120" (w) x 120" (h)
ELLIPTICAL		39-1/8" (w) x 14-5/8" (h)	120" (w) x 36" (h)
EXT. HALF ROUND		23-1/2" (w) x 12" (h)	76" (w) x 112-1/4" (h)
EXT. QUARTER ROUND		14-1/4" (w) x 12" (h)	76" (w) x 120" (h)
EXT. SEGMENTAL		23-1/2" (w) x 12" (h)	112"(w) x 120-1/2" (h)
GEOMETRIC SHAPES		CALL FOR DETAILS	
ROUND		23-1/2" (w) x 23-1/2" (h)	75-3/8" (w) x 75-3/8" (h)
OVAL		25" (w) x 40" (h) 30" (w) x 48" (h) 38" (w) x 60" (h)	

VINYL PATIO DOORS

SHAPE	MIN	MAX
2-Panel	48" (w) x 60" (h)	96" (w) x 96" (h)
3-Panel	90" (w) x 60" (h)	144" (w) x 92" (h) 106 5/8" (w) x 95.5" (h)
4-Panel	115" (w) x 60" (h)	192" (w) x 92" (h) 139-3/4" (w) x 95.5" (h)

NOTES

STANDARD NEW CONSTRUCTION (W)

Double Hung			2-Wide Double Hung w/Common Jamb			3-Wide Equal Double Hung w/Common Jamb		
Default Grid Pattern	Rough Opening	Code	Default Grid Pattern	Rough Opening	Code	Default Grid Pattern	Rough Opening	Code
	1' 10" (w)			3' 5-3/4" (w)			5' 2-3/4" (w)	
	3' 1-1/2" (h)	W18210		3' 1-1/2" (h)	W18210-2		3' 1-1/2" (h)	W18210-3
	3' 5-1/2" (h)	W1832		3' 5-1/2" (h)	W1832-2		3' 5-1/2" (h)	W1832-3
	4' 1-1/2" (h)	W18310		4' 1-1/2" (h)	W18310-2		4' 1-1/2" (h)	W18310-3
	4' 5-1/2" (h)	W1842		4' 5-1/2" (h)	W1842-2		4' 5-1/2" (h)	W1842-3
	4' 9-1/2" (h)	W1846		4' 9-1/2" (h)	W1846-2		4' 9-1/2" (h)	W1846-3
	5' 1-1/2" (h)	W18410		5' 1-1/2" (h)	W18410-2		5' 1-1/2" (h)	W18410-3
	5' 5-1/2" (h)	W1852		5' 5-1/2" (h)	W1852-2		5' 5-1/2" (h)	W1852-3
5' 9-1/2" (h)	W1856	5' 9-1/2" (h)	W1856-2	5' 9-1/2" (h)	W1856-3			
	2' 2" (w)			4' 2-1/4" (w)			6' 2-3/4" (w)	
	3' 1-1/2" (h)	W20210		3' 1-1/2" (h)	W20210-2		3' 1-1/2" (h)	W20210-3
	3' 5-1/2" (h)	W2032		3' 5-1/2" (h)	W2032-2		3' 5-1/2" (h)	W2032-3
	4' 1-1/2" (h)	W20310		4' 1-1/2" (h)	W20310-2		4' 1-1/2" (h)	W20310-3
	4' 5-1/2" (h)	W2042		4' 5-1/2" (h)	W2042-2		4' 5-1/2" (h)	W2042-3
	4' 9-1/2" (h)	W2046		4' 9-1/2" (h)	W2046-2		4' 9-1/2" (h)	W2046-3
	5' 1-1/2" (h)	W20410		5' 1-1/2" (h)	W20410-2		5' 1-1/2" (h)	W20410-3
	5' 5-1/2" (h)	W2052		5' 5-1/2" (h)	W2052-2		5' 5-1/2" (h)	W2052-3
5' 9-1/2" (h)	W2056	5' 9-1/2" (h)	W2056-2	5' 9-1/2" (h)	W2056-3			
	2' 6" (w)			4' 10-1/4" (w)			7' 2-3/4" (w)	
	3' 1-1/2" (h)	W24210		3' 1-1/2" (h)	W24210-2		3' 1-1/2" (h)	W24210-3
	3' 5-1/2" (h)	W2432		3' 5-1/2" (h)	W2432-2		3' 5-1/2" (h)	W2432-3
	4' 1-1/2" (h)	W24310		4' 1-1/2" (h)	W24310-2		4' 1-1/2" (h)	W24310-3
	4' 5-1/2" (h)	W2442		4' 5-1/2" (h)	W2442-2		4' 5-1/2" (h)	W2442-3
	4' 9-1/2" (h)	W2446		4' 9-1/2" (h)	W2446-2		4' 9-1/2" (h)	W2446-3
	5' 1-1/2" (h)	W24410		5' 1-1/2" (h)	W24410-2		5' 1-1/2" (h)	W24410-3
	5' 5-1/2" (h)	W2452		5' 5-1/2" (h)	W2452-2		5' 5-1/2" (h)	W2452-3
5' 9-1/2" (h)	W2456	5' 9-1/2" (h)	W2456-2	5' 9-1/2" (h)	W2456-3			
	2' 10" (w)			5' 6-1/4" (w)			8' 2-3/4" (w)	
	3' 1-1/2" (h)	W28210		3' 1-1/2" (h)	W28210-2		3' 1-1/2" (h)	W28210-3
	3' 5-1/2" (h)	W2832		3' 5-1/2" (h)	W2832-2		3' 5-1/2" (h)	W2832-3
	4' 1-1/2" (h)	W28310		4' 1-1/2" (h)	W28310-2		4' 1-1/2" (h)	W28310-3
	4' 5-1/2" (h)	W2842		4' 5-1/2" (h)	W2842-2		4' 5-1/2" (h)	W2842-3
	4' 9-1/2" (h)	W2846		4' 9-1/2" (h)	W2846-2		4' 9-1/2" (h)	W2846-3
	5' 1-1/2" (h)	W28410		5' 1-1/2" (h)	W28410-2		5' 1-1/2" (h)	W28410-3
	5' 5-1/2" (h)	W2852		5' 5-1/2" (h)	W2852-2		5' 5-1/2" (h)	W2852-3
5' 9-1/2" (h)	W2856	5' 9-1/2" (h)	W2856-2	5' 9-1/2" (h)	W2856-3			
	2' 11-1/2" (w)			5' 9-1/4" (w)			8' 7-1/4" (w)	
	3' 1-1/2" (h)	W29210		3' 1-1/2" (h)	W29210-2		3' 1-1/2" (h)	W29210-3
	3' 5-1/2" (h)	W2932		3' 5-1/2" (h)	W2932-2		3' 5-1/2" (h)	W2932-3
	4' 1-1/2" (h)	W29310		4' 1-1/2" (h)	W29310-2		4' 1-1/2" (h)	W29310-3
	4' 5-1/2" (h)	W2942		4' 5-1/2" (h)	W2942-2		4' 5-1/2" (h)	W2942-3
	4' 9-1/2" (h)	W2946		4' 9-1/2" (h)	W2946-2		4' 9-1/2" (h)	W2946-3
	5' 1-1/2" (h)	W29410		5' 1-1/2" (h)	W29410-2		5' 1-1/2" (h)	W29410-3
	5' 5-1/2" (h)	W2952		5' 5-1/2" (h)	W2952-2		5' 5-1/2" (h)	W2952-3
5' 9-1/2" (h)	W2956	5' 9-1/2" (h)	W2956-2	5' 9-1/2" (h)	W2956-3			
	3' 2" (w)			6' 2-1/4" (w)			9' 2-3/4" (w)	
	3' 1-1/2" (h)	W30210		3' 1-1/2" (h)	W30210-2		3' 1-1/2" (h)	W30210-3
	3' 5-1/2" (h)	W3032		3' 5-1/2" (h)	W3032-2		3' 5-1/2" (h)	W3032-3
	4' 1-1/2" (h)	W30310		4' 1-1/2" (h)	W30310-2		4' 1-1/2" (h)	W30310-3
	4' 5-1/2" (h)	W3042		4' 5-1/2" (h)	W3042-2		4' 5-1/2" (h)	W3042-3
	4' 9-1/2" (h)	W3046		4' 9-1/2" (h)	W3046-2		4' 9-1/2" (h)	W3046-3
	5' 1-1/2" (h)	W30410		5' 1-1/2" (h)	W30410-2		5' 1-1/2" (h)	W30410-3
	5' 5-1/2" (h)	W3052		5' 5-1/2" (h)	W3052-2		5' 5-1/2" (h)	W3052-3
5' 9-1/2" (h)	W3056	5' 9-1/2" (h)	W3056-2	5' 9-1/2" (h)	W3056-3			

RO to UNIT DIMENSIONS	
Minus 1/2" from width	Minus 1/2" from height

RO to UNIT DIMENSIONS	
Minus 3/4" from width	Minus 1/2" from height

This guide contains two call size types for double-hung windows, since different markets use different call sizes. (W) indicates the size matches wood manufactured sizes and (V) indicates the size matches vinyl manufactured sizes. You can mix sizes in an order.

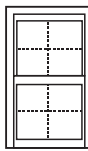
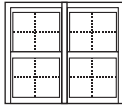
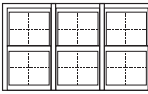
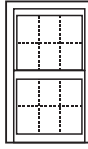
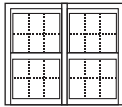
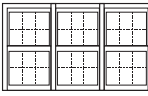
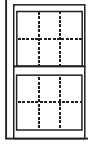
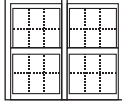
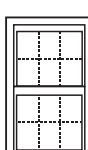
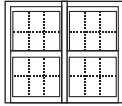
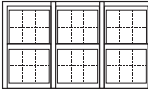
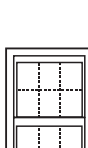
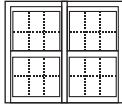
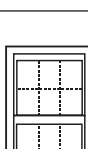
3-Wide w/ Picture Window & Common Jamb		
Default Grid Pattern	Rough Opening	Code
	7' 6-3/4" (w)	
	4' 1" (h)	W18-40310-18
	4' 5" (h)	W18-4042-18
	4' 9" (h)	W18-4046-18
	5' 5" (h)	W18-4052-18
	5' 9" (h)	W18-4056-18
	8' 2-3/4" (w)	
	4' 1" (h)	W20-40310-20
	4' 5" (h)	W20-4042-20
	4' 9" (h)	W20-4046-20
	5' 5" (h)	W20-4052-20
	5' 9" (h)	W20-4056-20
	8' 6-3/4" (w)	
	4' 1" (h)	W18-50310-18
	4' 5" (h)	W18-5042-18
	4' 9" (h)	W18-5046-18
	5' 5" (h)	W18-5052-18
	5' 9" (h)	W18-5056-18
	9' 2-3/4" (w)	
	4' 1" (h)	W20-50310-20
	4' 5" (h)	W20-5042-20
	4' 9" (h)	W20-5046-20
	5' 5" (h)	W20-5052-20
	5' 9" (h)	W20-5056-20
RO to UNIT DIMENSIONS		
Minus 3/4" from width	Minus 1/2" from height	

Casement		
Default Grid Pattern	Rough Opening	Code
	1' 9-1/2" (w)	
	3' 0" (h)	193
	3' 6" (h)	1936
	4' 0" (h)	194
	4' 6" (h)	1946
	5' 0" (h)	195
	6' 0" (h)	196
	2' 0-1/2" (w)	
	3' 0" (h)	203
	3' 6" (h)	2036
	4' 0" (h)	204
	4' 6" (h)	2046
	5' 0" (h)	205
	6' 0" (h)	206
	2' 5" (w)	
	3' 0" (h)	243
	3' 6" (h)	2436
	4' 0" (h)	244
	4' 6" (h)	2446
	5' 0" (h)	245
	6' 0" (h)	246
	2' 8" (w)	
	3' 0" (h)	283
	3' 6" (h)	2836
	4' 0" (h)	284
	4' 6" (h)	2846
	5' 0" (h)	285
	6' 0" (h)	286
	2' 9-3/4" (w)	
	3' 0" (h)	303-2
	3' 6" (h)	3036-2
	4' 0" (h)	304-2
	4' 6" (h)	3046-2
	5' 0" (h)	305-2
	6' 0" (h)	306-2
	3' 5-3/4" (w)	
	3' 0" (h)	363-2
	3' 6" (h)	3636-2
	4' 0" (h)	364-2
	4' 6" (h)	3646-2
	5' 0" (h)	365-2
	6' 0" (h)	366-2
	3' 11-3/4" (w)	
	3' 0" (h)	403-2
	3' 6" (h)	4036-2
	4' 0" (h)	404-2
	4' 6" (h)	4046-2
	5' 0" (h)	405-2
	6' 0" (h)	406-2
	4' 8-3/4" (w)	
	3' 0" (h)	483-2
	3' 6" (h)	4836-2
	4' 0" (h)	484-2
	4' 6" (h)	4846-2
	5' 0" (h)	485-2
	6' 0" (h)	486-2
	5' 11-1/4" (w)	
	3' 0" (h)	603-3
	3' 6" (h)	6036-3
	4' 0" (h)	604-3
	4' 6" (h)	6046-3
	5' 0" (h)	605-3
	6' 0" (h)	606-3

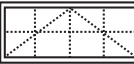
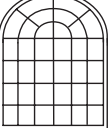
RO to UNIT DIMENSIONS
Minus 1/2" from width*
Minus 1/2" from height
*Minus 3/4" from width for 3

Sizes shaded in grey have a 5.70 sq. ft. clear opening or better. Check with your local building department for egress requirements.

STANDARD NEW CONSTRUCTION (V)

Double Hung			2-Wide Double Hung w/Common Jamb			3-Wide Double Hung w/Common Jamb		
Default Grid Pattern	Rough Opening	Code	Default Grid Pattern	Rough Opening	Code	Default Grid Pattern	Rough Opening	Code
	2' 0" (w)			3' 10-1/4" (w)			5' 8-1/2" (w)	
	3' 0" (h)	2030V		3' 0" (h)	2030-2V		3' 0" (h)	2030-3V
	3' 6" (h)	2036V		3' 6" (h)	2036-2V		3' 6" (h)	2036-3V
	4' 0" (h)	2040V		4' 0" (h)	2040-2V		4' 0" (h)	2040-3V
	4' 6" (h)	2046V		4' 6" (h)	2046-2V		4' 6" (h)	2046-3V
	5' 0" (h)	2050V		5' 0" (h)	2050-2V		5' 0" (h)	2050-3V
	5' 2" (h)	2052V		5' 2" (h)	2052-2V		5' 2" (h)	2052-3V
	5' 6" (h)	2056V		5' 6" (h)	2056-2V		5' 6" (h)	2056-3V
	6' 0" (h)	2060V	6' 0" (h)	2060-2V	6' 0" (h)	2060-3V		
	2' 4" (w)			4' 6-1/4" (w)			6' 8-1/2" (w)	
	3' 0" (h)	2430V		3' 0" (h)	2430-2V		3' 0" (h)	2430-3V
	3' 6" (h)	2436V		3' 6" (h)	2436-2V		3' 6" (h)	2436-3V
	4' 0" (h)	2440V		4' 0" (h)	2440-2V		4' 0" (h)	2440-3V
	4' 6" (h)	2446V		4' 6" (h)	2446-2V		4' 6" (h)	2446-3V
	5' 0" (h)	2450V		5' 0" (h)	2450-2V		5' 0" (h)	2450-3V
	5' 2" (h)	2452V		5' 2" (h)	2452-2V		5' 2" (h)	2452-3V
5' 6" (h)	2456V	5' 6" (h)		2456-2V	5' 6" (h)		2456-3V	
	6' 0" (h)	2460V	6' 0" (h)	2460-2V	6' 0" (h)	2460-3V		
	2' 6" (w)			4' 10-1/4" (w)			7' 2-1/2" (w)	
	3' 0" (h)	2630V		3' 0" (h)	2630-2V		3' 0" (h)	2630-3V
	3' 6" (h)	2636V		3' 6" (h)	2636-2V		3' 6" (h)	2636-3V
	4' 0" (h)	2640V		4' 0" (h)	2640-2V		4' 0" (h)	2640-3V
	4' 6" (h)	2646V		4' 6" (h)	2646-2V		4' 6" (h)	2646-3V
	5' 0" (h)	2650V		5' 0" (h)	2650-2V		5' 0" (h)	2650-3V
	5' 2" (h)	2652V		5' 2" (h)	2652-2V		5' 2" (h)	2652-3V
5' 4" (h)	2654V	5' 4" (h)		2654-2V	5' 4" (h)		2654-3V	
	5' 6" (h)	2656V	5' 6" (h)	2656-2V	5' 6" (h)	2656-3V		
	6' 0" (h)	2660V	6' 0" (h)	2660-2V	6' 0" (h)	2660-3V		
	2' 8" (w)			5' 2-1/4" (w)			7' 8-1/2" (w)	
	3' 0" (h)	2830V		3' 0" (h)	2830-2V		3' 0" (h)	2830-3V
	3' 2" (h)	2832V		3' 2" (h)	2832-2V		3' 2" (h)	2832-3V
	3' 6" (h)	2836V		3' 6" (h)	2836-2V		3' 6" (h)	2836-3V
	4' 0" (h)	2840V		4' 0" (h)	2840-2V		4' 0" (h)	2840-3V
	4' 6" (h)	2846V		4' 6" (h)	2846-2V		4' 6" (h)	2846-3V
5' 0" (h)	2850V	5' 0" (h)		2850-2V	5' 0" (h)		2850-3V	
5' 2" (h)	2852V	5' 2" (h)		2852-2V	5' 2" (h)		2852-3V	
	5' 4" (h)	2854V	5' 4" (h)	2854-2V	5' 4" (h)	2854-3V		
	5' 6" (h)	2856V	5' 6" (h)	2856-2V	5' 6" (h)	2856-3V		
	6' 0" (h)	2860V	6' 0" (h)	2860-2V	6' 0" (h)	2860-3V		
	3' 0" (w)			5' 10-1/4" (w)			8' 8-1/2" (w)	
	3' 0" (h)	3030V		3' 0" (h)	3030-2V		3' 0" (h)	3030-3V
	3' 2" (h)	3032V		3' 2" (h)	3032-2V		3' 2" (h)	3032-3V
	3' 6" (h)	3036V		3' 6" (h)	3036-2V		3' 6" (h)	3036-3V
	4' 0" (h)	3040V		4' 0" (h)	3040-2V		4' 0" (h)	3040-3V
4' 6" (h)	3046V	4' 6" (h)		3046-2V	4' 6" (h)		3046-3V	
5' 0" (h)	3050V	5' 0" (h)		3050-2V	5' 0" (h)		3050-3V	
5' 2" (h)	3052V	5' 2" (h)		3052-2V	5' 2" (h)		3052-3V	
	5' 4" (h)	3054V	5' 4" (h)	3054-2V	5' 4" (h)	3054-3V		
	5' 6" (h)	3056V	5' 6" (h)	3056-2V	5' 6" (h)	3056-3V		
	6' 0" (h)	3060V	6' 0" (h)	3060-2V	6' 0" (h)	3060-3V		
	3' 2" (w)			6' 2-1/4" (w)			9' 2-1/2" (w)	
	3' 0" (h)	3230V		3' 0" (h)	3230-2V		3' 0" (h)	3230-3V
	3' 6" (h)	3236V		3' 6" (h)	3236-2V		3' 6" (h)	3236-3V
	4' 0" (h)	3240V		4' 0" (h)	3240-2V		4' 0" (h)	3240-3V
	4' 6" (h)	3246V		4' 6" (h)	3246-2V		4' 6" (h)	3246-3V
5' 0" (h)	3250V	5' 0" (h)		3250-2V	5' 0" (h)		3250-3V	
5' 2" (h)	3252V	5' 2" (h)		3252-2V	5' 2" (h)		3252-3V	
5' 4" (h)	3254V	5' 4" (h)		3254-2V	5' 4" (h)		3254-3V	
	5' 6" (h)	3256V	5' 6" (h)	3256-2V	5' 6" (h)	3256-3V		
	6' 0" (h)	3260V	6' 0" (h)	3260-2V	6' 0" (h)	3260-3V		

VINYL STANDARD NEW CONSTRUCTION CALL SIZES

Rolling Vinyl Window			Vinyl Awning			Vinyl Shapes		
	Rough Opening	Code		Rough Opening	Code		Rough Opening	Code
	3' 6" (w) 3' 6" (h)	RW3636		2' 0-1/2" (w) 2' 0-1/2" (h)	AWN21		2' 10" (w) 1' 5-1/4" (h)	HRD28J
	4' 0" (w) 3' 6" (h)	RW4036		3' 0-1/2" (w) 2' 0-1/2" (h)	AWN31		2' 11-1/2" (w) 1' 5-3/4" (h)	HRD29J
				4' 0-1/2" (w) 2' 0-1/2" (h)	AWN41		3' 2" (w) 1' 7-1/4" (h)	HRD30J
							5' 5-3/4" (w) 2' 8-7/8" (h)	HRD28-2J
							5' 9-1/4" (w) 2' 10-7/8" (h)	HRD29-2
							3' 11-3/4" (w) 2' 0-1/8" (h)	HRC40
							5' 4-3/8" (w) 6' 3-1/2" (h)	EHR6475J
							6' 0-1/2" (w) 1' 5-3/4" (h)	ET6J

CLEAR OPENING SPECS MEASURING WINDOWS

MEASURING FOR REPLACEMENT WINDOWS

Verify the rough opening (RO) is sufficient size to fit the window. RO should measure 1/4" wider on width and 1/2" on the height (1/4" on both for Majesty) than the window it will receive.

Measuring Width:

Measure between the jambs at three locations: bottom, center, and top (Diagram A). Use the smallest dimension if the three vary.

Measuring Height:

Measure from highest point of the sloped sill to the highest point of header pocket (Diagram B).

Measuring Frame Depth:

Harvey vinyl and majesty windows are designed to fit a frame depth of 3-1/4". Compensation for other than 3-1/4" will have to be made on the job.

Adjustability for Vinyl Windows: The "U" channel vinyl head expander allows windows to be expanded up to 5/8" in height.

NOTE: The above measurements are rough opening sizes. You must deduct 1/4" off the width and 1/2" off the height, and round down to the nearest 1/4", to get your buck size (buck size is the size the window will be).

Width and height buck dimensions can only be ordered in 1/4", 1/2", 3/4", and full 1" sizes.

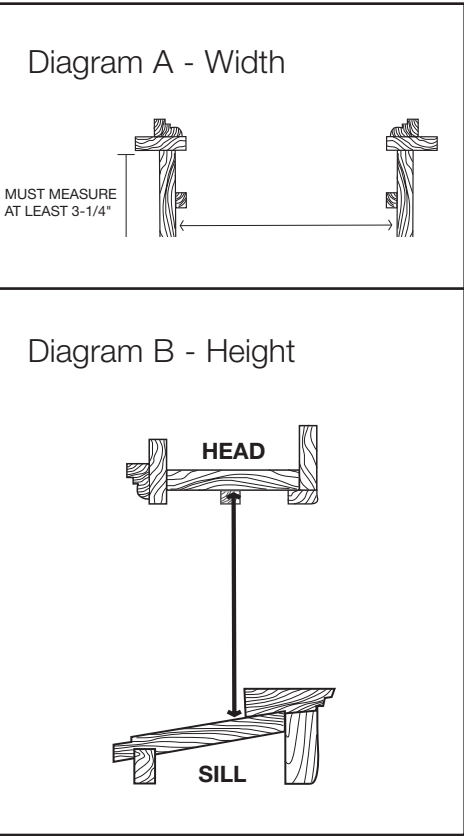
MEASURING FOR NEW CONSTRUCTION WINDOWS

Verify the rough opening (RO) to be plumb, level, square. RO should measure 1/2" larger than width and height of the window it will receive.

- Jamb depth of vinyl new construction windows is 2-1/4".

CLEAR OPENING MEASURING INSTRUCTIONS

In most states you must meet a clear opening requirement and a square foot requirement of 5.7 square feet total minimum clear opening. Consult your local building department for code requirements in your area.



Unit		Clear Opening Unit TTT	
		Width	Height
Tribute Double Hung	welded frame & sash	W - 5"	H/2 - 4-3/8"
Classic Double Hung	welded frame & sash	W - 5"	H/2 - 5-1/8"
Slimline DH/SH	welded frame & sash	W - 5-1/4"	H/2 - 4-7/16"
Vinyl Casement Window	Standard Hinge	W - 11-1/2"	H - 5-3/4"
Vinyl Casement Window	Egress Hinge	W - 7-1/4"	H - 5-3/4"
Vinyl Rolling Window	2-lite	W/2 - 5-3/16"	H - 4-5/8"
Vinyl Rolling Window	3-lite (qtr-half-qtr)	W/4 - 2-7/16"	H - 4-5/8"
Vinyl Rolling Window	3-lite (equal lite)	W/3 - 5"	H - 4-5/8"
Clear opening w/sill riser in place		Width	Height
Tribute Double Hung	welded frame & sash	W - 5"	H/2 - 4-15/16"
Classic Double Hung	welded frame & sash	W - 5"	H/2 - 5-11/16"
Slimline DH/SH	welded frame & sash	W - 5-1/4"	H/2 - 5"
Majesty Double Hung		W - 3-7/8"	H/2 - 6-1/4"
Majesty Casement		W - 8-1/2"	H - 4-3/4"

Typical egress requirements include 20" width and 24" height clear opening minimum dimensions and 5.7 square feet of total minimum clear opening.

Example (using Classic double hung with welded frame & sash):

If Unit Buck Size = 36" x 64"

Clear opening Width:

36" - 5" = 31" (31")
greater than 20"

Clear opening Height:

64"/2 = 32" - 5-1/4" = 26-3/4"
greater than 24"

Square footage of opening:

31" x 26-3/4" = 829"/144" = 5.75 sq.ft.
greater than 5.70 sq ft.

CLEAR OPENING SPECS STANDARD NC WINDOWS (W)

Slimline DH/SH			Classic DH/SH		Tribute DH	
Code	Clear Opening		Clear Opening		Clear Opening	
	SQ. FT	(W X H) INCHES	SQ. FT	(W X H) INCHES	SQ. FT	(W X H) INCHES
W18210	1.60	16-1/4 x 14-1/16	1.50	16-1/2 x 13-1/4	1.60	16-1/2 x 14-1/8
W1832	1.80	16-1/4 x 16-1/16	1.70	16-1/2 x 15-1/4	1.80	16-1/2 x 16-1/8
W18310	2.30	16-1/4 x 20-1/16	2.20	16-1/2 x 19-1/4	2.30	16-1/2 x 20-1/8
W1842	2.50	16-1/4 x 22-1/16	2.40	16-1/2 x 21-1/4	2.50	16-1/2 x 22-1/8
W1846	2.70	16-1/4 x 24-1/16	2.70	16-1/2 x 23-1/4	2.80	16-1/2 x 24-1/8
W18410	2.90	16-1/4 x 26-1/16	2.90	16-1/2 x 25-1/4	3.00	16-1/2 x 26-1/8
W1852	3.20	16-1/4 x 28-1/16	3.10	16-1/2 x 27-1/4	3.20	16-1/2 x 28-1/8
W1856	3.40	16-1/4 x 30-1/16	3.40	16-1/2 x 29-1/4	3.50	16-1/2 x 30-1/8
W1862	3.80	16-1/4 x 34-1/16	3.80	16-1/2 x 33-1/4	3.90	16-1/2 x 34-1/8
W20210	2.00	20-1/4 x 14-1/16	1.90	20-1/2 x 13-1/4	2.00	20-1/2 x 14-1/8
W2032	2.30	20-1/4 x 16-1/16	2.20	20-1/2 x 15-1/4	2.30	20-1/2 x 16-1/8
W20310	2.80	20-1/4 x 20-1/16	2.70	20-1/2 x 19-1/4	2.90	20-1/2 x 20-1/8
W2042	3.10	20-1/4 x 22-1/16	3.00	20-1/2 x 21-1/4	3.10	20-1/2 x 22-1/8
W2046	3.40	20-1/4 x 24-1/16	3.30	20-1/2 x 23-1/4	3.40	20-1/2 x 24-1/8
W20410	3.70	20-1/4 x 26-1/16	3.60	20-1/2 x 25-1/4	3.70	20-1/2 x 26-1/8
W2052	3.90	20-1/4 x 28-1/16	3.90	20-1/2 x 27-1/4	4.00	20-1/2 x 28-1/8
W2056	4.20	20-1/4 x 30-1/16	4.20	20-1/2 x 29-1/4	4.30	20-1/2 x 30-1/8
W2062	4.80	20-1/4 x 34-1/16	4.70	20-1/2 x 33-1/4	4.90	20-1/2 x 34-1/8
W24210	2.40	24-1/4 x 14-1/16	2.30	24-1/2 x 13-1/4	2.40	24-1/2 x 14-1/8
W2432	2.70	24-1/4 x 16-1/16	2.60	24-1/2 x 15-1/4	2.70	24-1/2 x 16-1/8
W24310	3.40	24-1/4 x 20-1/16	3.30	24-1/2 x 19-1/4	3.40	24-1/2 x 20-1/8
W2442	3.70	24-1/4 x 22-1/16	3.60	24-1/2 x 21-1/4	3.80	24-1/2 x 22-1/8
W2446	4.10	24-1/4 x 24-1/16	4.00	24-1/2 x 23-1/4	4.10	24-1/2 x 24-1/8
W24410	4.40	24-1/4 x 26-1/16	4.30	24-1/2 x 25-1/4	4.40	24-1/2 x 26-1/8
W2452	4.70	24-1/4 x 28-1/16	4.60	24-1/2 x 27-1/4	4.80	24-1/2 x 28-1/8
W2456	5.10	24-1/4 x 30-1/16	5.00	24-1/2 x 29-1/4	5.10	24-1/2 x 30-1/8
W2462	5.70	24-1/4 x 34-1/16	5.70	24-1/2 x 33-1/4	5.80	24-1/2 x 34-1/8
W28210	2.80	28-1/4 x 14-1/16	2.60	28-1/2 x 13-1/4	2.80	28-1/2 x 14-1/8
W2832	3.20	28-1/4 x 16-1/16	3.00	28-1/2 x 15-1/4	3.20	28-1/2 x 16-1/8
W28310	3.90	28-1/4 x 20-1/16	3.80	28-1/2 x 19-1/4	4.00	28-1/2 x 20-1/8
W2842	4.30	28-1/4 x 22-1/16	4.20	28-1/2 x 21-1/4	4.40	28-1/2 x 22-1/8
W2846	4.70	28-1/4 x 24-1/16	4.60	28-1/2 x 23-1/4	4.80	28-1/2 x 24-1/8
W28410	5.10	28-1/4 x 26-1/16	5.00	28-1/2 x 25-1/4	5.20	28-1/2 x 26-1/8
W2852	5.50	28-1/4 x 28-1/16	5.40	28-1/2 x 27-1/4	5.60	28-1/2 x 28-1/8
W2856	5.90	28-1/4 x 30-1/16	5.80	28-1/2 x 29-1/4	6.00	28-1/2 x 30-1/8
W29210	2.90	29-3/4 x 14-1/16	2.80	30 x 13-1/4	2.90	30 x 14-1/8
W2932	3.30	29-3/4 x 16-1/16	3.20	30 x 15-1/4	3.40	30 x 16-1/8
W29310	4.10	29-3/4 x 20-1/16	4.00	30 x 19-1/4	4.20	30 x 20-1/8
W2942	4.60	29-3/4 x 22-1/16	4.40	30 x 21-1/4	4.60	30 x 22-1/8
W2946	5.00	29-3/4 x 24-1/16	4.80	30 x 23-1/4	5.00	30 x 24-1/8
W29410	5.40	29-3/4 x 26-1/16	5.30	30 x 25-1/4	5.40	30 x 26-1/8
W2956	6.20	29-3/4 x 30-1/16	6.10	30 x 29-1/4	6.30	30 x 30-1/8
W2962	7.00	29-3/4 x 34-1/16	6.90	30 x 33-1/4	7.10	30 x 34-1/8
W30210	3.10	32-1/4 x 14-1/16	3.00	32-1/2 x 13-1/4	3.20	32-1/2 x 14-1/8
W3032	3.60	32-1/4 x 16-1/16	3.40	32-1/2 x 15-1/4	3.60	32-1/2 x 16-1/8
W30310	4.50	32-1/4 x 20-1/16	4.30	32-1/2 x 19-1/4	4.50	32-1/2 x 20-1/8
W3042	4.90	32-1/4 x 22-1/16	4.80	32-1/2 x 21-1/4	5.00	32-1/2 x 22-1/8
W3046	5.40	32-1/4 x 24-1/16	5.20	32-1/2 x 23-1/4	5.40	32-1/2 x 24-1/8
W30410	5.80	32-1/4 x 26-1/16	5.70	32-1/2 x 25-1/4	5.90	32-1/2 x 26-1/8
W3052	6.30	32-1/4 x 28-1/16	6.20	32-1/2 x 27-1/4	6.30	32-1/2 x 28-1/8
W3056	6.70	32-1/4 x 30-1/16	6.60	32-1/2 x 29-1/4	6.80	32-1/2 x 30-1/8

NOTES: These specs do not apply to oriel windows. Use of sill rise adaptor will result in a 9/16" reduction in clear opening height. This guide contains two call size types for double-hung windows, since different markets use different call sizes. (W) indicates the size matches wood manufactured sizes and (V) indicates the size matches vinyl manufactured sizes. You can mix sizes in an order.

CLEAR OPENING SPECS STANDARD NC WINDOWS (V)

Slimline DH/SH			Classic DH/SH		Tribute DH	
Code	Clear Opening		Clear Opening		Clear Opening	
	SQ. FT	(W X H) INCHES	SQ. FT	(W X H) INCHES	SQ. FT	(W X H) INCHES
2030V	1.69	18-1/4 x 13-5/16	1.62	18-1/2 x 12-5/8	1.72	18-1/2 x 13-3/8
2036V	2.07	18-1/4 x 16-5/16	2.01	18-1/2 x 15-5/8	2.10	18-1/2 x 16-3/8
2040V	2.45	18-1/4 x 19-5/16	2.39	18-1/2 x 18-5/8	2.49	18-1/2 x 19-3/8
2046V	2.83	18-1/4 x 22-5/16	2.78	18-1/2 x 21-5/8	2.83	18-1/2 x 22-3/8
2050V	3.21	18-1/4 x 25-5/16	3.16	18-1/2 x 24-5/8	3.26	18-1/2 x 25-3/8
2052V	3.33	18-1/4 x 26-5/16	3.29	18-1/2 x 25-5/8	3.39	18-1/2 x 26-3/8
2056V	3.59	18-1/4 x 28-5/16	3.55	18-1/2 x 27-5/8	3.65	18-1/2 x 28-3/8
2060V	3.97	18-1/4 x 31-5/16	3.93	18-1/2 x 30-5/8	4.03	18-1/2 x 31-3/8
2430V	2.06	22-1/4 x 13-5/16	1.97	22-1/2 x 12-5/8	2.09	22-1/2 x 13-3/8
2436V	2.52	22-1/4 x 16-5/16	2.44	22-1/2 x 15-5/8	2.56	22-1/2 x 16-3/8
2440V	2.98	22-1/4 x 19-5/16	2.91	22-1/2 x 18-5/8	3.03	22-1/2 x 19-3/8
2446V	3.45	22-1/4 x 22-5/16	3.38	22-1/2 x 22-5/8	3.50	22-1/2 x 22-3/8
2450V	3.91	22-1/4 x 25-5/16	3.85	22-1/2 x 24-5/8	3.96	22-1/2 x 25-3/8
2452V	4.07	22-1/4 x 26-5/16	4.0	22-1/2 x 25-5/8	4.12	22-1/2 x 26-3/8
2456V	4.37	22-1/4 x 28-5/16	4.32	22-1/2 x 27-5/8	4.43	22-1/2 x 28-3/8
2460V	4.84	22-1/4 x 31-5/16	4.79	22-1/2 x 30-5/8	4.90	22-1/2 x 31-3/8
2830V	2.43	26-1/4 x 13-5/16	2.32	26-1/2 x 12-5/8	2.46	26-1/2 x 13-3/8
2836V	2.97	26-1/4 x 16-5/16	2.88	26-1/2 x 15-5/8	3.01	26-1/2 x 16-3/8
2840V	3.52	26-1/4 x 19-5/16	3.43	26-1/2 x 18-5/8	3.57	26-1/2 x 19-3/8
2846V	4.07	26-1/4 x 22-5/16	3.98	26-1/2 x 22-5/8	4.12	26-1/2 x 22-3/8
2850V	4.61	26-1/4 x 25-5/16	4.53	26-1/2 x 24-5/8	4.67	26-1/2 x 25-3/8
2852V	4.80	26-1/4 x 26-5/16	4.72	26-1/2 x 25-5/8	4.85	26-1/2 x 26-3/8
2856V	5.16	26-1/4 x 28-5/16	5.08	26-1/2 x 27-5/8	5.22	26-1/2 x 28-3/8
2860V	5.71	26-1/4 x 31-5/16	5.64	26-1/2 x 30-5/8	5.77	26-1/2 x 31-3/8
3030V	2.80	30-1/4 x 13-5/16	2.67	30-1/2 x 12-5/8	2.83	30-1/2 x 13-3/8
3036V	3.43	30-1/4 x 16-5/16	3.31	30-1/2 x 15-5/8	3.47	30-1/2 x 16-3/8
3040V	4.06	30-1/4 x 19-5/16	3.94	30-1/2 x 18-5/8	4.10	30-1/2 x 19-3/8
3046V	4.69	30-1/4 x 22-5/16	4.58	30-1/2 x 22-5/8	4.74	30-1/2 x 22-3/8
3050V	5.32	30-1/4 x 25-5/16	5.22	30-1/2 x 24-5/8	5.37	30-1/2 x 25-3/8
3052V	5.53	30-1/4 x 26-5/16	5.43	30-1/2 x 25-5/8	5.59	30-1/2 x 26-3/8
3056V	5.95	30-1/4 x 28-5/16	5.85	30-1/2 x 27-5/8	6.01	30-1/2 x 28-3/8
3060V	6.58	30-1/4 x 31-5/16	6.49	30-1/2 x 30-5/8	6.65	30-1/2 x 31-3/8
3240V	4.33	32-1/4 x 19-5/16	4.2	32-1/2 x 18-5/8	4.37	32-1/2 x 19-3/8
3246V	5.00	32-1/4 x 22-5/16	4.88	32-1/2 x 22-5/8	5.05	32-1/222-3/8
3250V	5.67	32-1/4 x 25-5/16	5.56	32-1/2 x 24-5/8	5.73	32-1/2 x 25-3/8
3252V	5.89	32-1/4 x 26-5/16	5.78	32-1/2 x 25-5/8	5.95	32-1/2 x 26-3/8

Sizes shaded in grey have a 5.70 sq. ft. clear opening or better. Check with your local building department for egress requirements.

THERMAL PERFORMANCE DATA

VINYL

Product Line	Glazing Description	NO GRIDS						WITH GRIDS					
		Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance			Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance		
Tribute Double Hung	 1" ThermaLock 3X TG RS Low-E FOAM	0.19	0.24	0.44	N	NC		0.19	0.21	0.39	N	NC	SC S
	ThermaLock 3X TG RS Low-E FOAM	0.21	0.24	0.44	N	NC		0.22	0.21	0.39	N	NC	SC S
	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.46	0.57	N26			0.26	0.42	0.50	N26		
	ThermaLock RS DG 2X Low-E	0.25	0.27	0.50		NC		0.25	0.24	0.44		NC	
	SunShield PLUS DG SC RS Low-E	0.25	0.20	0.46		NC	SC S	0.25	0.18	0.41		NC	SC S
	SunShield DG SC	0.29	0.20	0.47			S	0.29	0.18	0.42			S
Tribute Double Hung Reinforced Sashes	ThermaLock 3X TG RS Low-E FOAM	0.24	0.24	0.44		NC		0.24	0.21	0.39		NC	SC S
	SunShield PLUS DG SC RS Low-E	0.26	0.20	0.46			SC S	0.26	0.18	0.41			SC S
	SunShield DG SC	0.30	0.20	0.47			S	0.30	0.18	0.42			S
Classic Double Hung	 1" ThermaLock 3X TG RS Low-E FOAM	0.20	0.25	0.46	N	NC		0.20	0.22	0.41	N	NC	SC S
	ThermaLock 3X TG RS Low-E FOAM	0.21	0.25	0.46	N	NC		0.22	0.22	0.41	N	NC	SC S
	SunGain PLUS DG RS Low-E HIGH SHGC	0.25	0.48	0.59	N25			0.25	0.43	0.53	N25		
	ThermaLock RS DG 2X Low-E	0.24	0.30	0.54		NC		0.24	0.27	0.48		NC	
	SunShield PLUS DG SC RS Low-E	0.24	0.21	0.48		NC	SC S	0.24	0.19	0.43		NC	SC S
	SunShield DG SC	0.28	0.21	0.49			SC S	0.28	0.19	0.44			SC S
Slimline Double Hung & Single Hung	SunGain PLUS DG RS Low-E	0.25	0.49	0.60	N25			0.25	0.44	0.54	N25		
	ThermaLock RS DG 2X Low-E	0.25	0.28	0.53		NC		0.25	0.26	0.48		NC	
	SunShield PLUS DG SC RS Low-E	0.24	0.21	0.49		NC	SC S	0.24	0.19	0.44		NC	SC S
	SunShield DG SC	0.28	0.21	0.51			SC S	0.28	0.19	0.45			SC S
Casement (Fixed lite values may differ)	ThermaLock 3X TG Low-E	0.21	0.21	0.39	N	NC	SC S	0.21	0.20	0.35	N	NC	SC S
	SunGain PLUS DG RS Low-E	0.23	0.42	0.50	N23			0.23	0.38	0.45	N23	NC	
	ThermaLock RS DG 2X Low-E	0.23	0.24	0.45		NC		0.23	0.22	0.40		NC	
	SunShield PLUS DG SC RS Low-E	0.23	0.18	0.41		NC	SC S	0.23	0.16	0.37		NC	SC S
	SunShield DG SC	0.26	0.18	0.42			SC S	0.26	0.17	0.38			SC S
	ThermaLock DG 2X Low-E	0.26	0.23	0.39				0.26	0.21	0.35			SC S
Awning (Fixed lite values may differ)	ThermaLock 3X TG Low-E	0.22	0.21	0.39	N	NC	SC S	0.22	0.20	0.35	N	NC	SC S
	SunGain PLUS DG RS Low-E	0.25	0.42	0.50	N25			0.24	0.38	0.45	N24	NC	
	ThermaLock RS DG 2X Low-E	0.24	0.24	0.45		NC		0.24	0.22	0.40		NC	
	SunShield PLUS DG SC RS Low-E	0.24	0.18	0.41		NC	SC S	0.24	0.16	0.37		NC	SC S
	SunShield DG SC	0.27	0.18	0.42			SC S	0.27	0.17	0.38			SC S
	ThermaLock DG 2X Low-E	0.27	0.23	0.39				0.27	0.21	0.35			SC S
Rolling Window	ThermaLock 3X TG RS Low-E	0.23	0.25	0.46		NC		0.23	0.22	0.41		NC	SC S
	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.48	0.59	N26			0.26	0.43	0.53	N26		
	ThermaLock RS DG 2X Low-E	0.25	0.28	0.52		NC		0.25	0.25	0.47		NC	
	SunShield PLUS DG SC RS Low-E	0.25	0.21	0.48		NC	SC S	0.25	0.19	0.43		NC	SC S
	SunShield DG SC	0.28	0.21	0.50			S	0.28	0.19	0.44			S
Picture Window	 1" ThermaLock 3X TG RS Low-E	0.17	0.26	0.49	N	NC		0.17	0.24	0.43	N	NC	
	ThermaLock 3X TG RS Low-E	0.19	0.26	0.49	N	NC		0.20	0.24	0.43	N	NC	
	SunGain PLUS DG RS Low-E HIGH SHGC	0.23	0.51	0.63	N23			0.23	0.46	0.56	N23		
	ThermaLock RS DG 2X Low-E	0.22	0.29	0.55	N	NC		0.22	0.27	0.49	N	NC	
	SunShield PLUS DG SC RS Low-E	0.22	0.22	0.51	N	NC	SC S	0.22	0.20	0.46	N	NC	SC S
	ThermaLock DG 2X Low-E	0.25	0.22	0.52		NC	SC S	0.25	0.20	0.47		NC	SC S
	SunShield DG SC	0.25	0.27	0.48		NC		0.25	0.25	0.43		NC	

Chart represents thermal values for replacement/Integral J frame windows with Argon gas fill.



THERMAL PERFORMANCE DATA

VINYL (CONT.)

Product Line	Glazing Description	NO GRIDS						WITH GRIDS					
		Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance			Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance		
Hopper Window	ThermaLock 3X TG RS Low-E	0.23	0.23	0.42		NC	SC S	0.24	0.21	0.38		NC	SC S
	SunShield PLUS SC RS Low-E	0.26	0.19	0.44			SC S	0.26	0.18	0.40			SC S
	SunShield DG SC	0.29	0.19	0.45			S	0.29	0.18	0.41			S
Designer Shapes	SunGain PLUS RS Low-E SHGC	0.23	0.55	0.68	N23			0.23	0.49	0.61	N23		
	ThermaLock RS DG 2X Low-E	0.23	0.32	0.60		NC		0.23	0.29	0.54		NC	
	SunShield PLUS SC RS Low-E	0.22	0.23	0.55	N	NC	SC S	0.22	0.21	0.50	N	NC	SC S
	SunShield	0.27	0.24	0.57				0.27	0.22	0.51			SC S
Vinyl DeadLite	ThermaLock 3X TG RS Low-E	0.21	0.29	0.53	N	NC		0.22	0.26	0.48	N	NC	
	SunGain PLUS RS Low-E SHGC	0.25	0.56	0.68	N25			0.25	0.50	0.61	N25		
	ThermaLock RS DG 2X Low-E	0.24	0.32	0.60		NC		0.24	0.29	0.54		NC	
	SunShield PLUS SC RS Low-E	0.24	0.24	0.56		NC		0.24	0.22	0.50			SC S

High Solar Heat Gain (SHGc) glazing is designed for use in the Northern ENERGY STAR® climate zone only. Windows glazed with High SHGc glass are ideal for passive solar applications where a reduction in thermal performance (U-Factor) is allowed for a gain in solar heat performance. High SHGc glazing can qualify for the Northern ENERGY STAR® climate zone by meeting either of the three Equivalent Energy Performance (EEP) criteria shown below.

PATIO DOOR

Product Line	Glazing Description	NO GRIDS						WITH GRIDS					
		Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance			Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance		
Vinyl Patio Door	ThermaLock RS DG Low-E	0.25	0.26	0.49	N	NC		0.25	0.23	0.43	N	NC	SC S
	SunShield PLUS SC RS Low-E	0.25	0.20	0.46	N	NC	SC S	0.25	0.17	0.40	N	NC	SC S
	ThermaLock DG 2X Low-E	0.28	0.25	0.43				0.28	0.22	0.37			SC S
	Blinds Between Glass ** DG 2X Low-E	0.29	0.25	0.46	-	-	- -	-	-	-	-	-	-
Non-Impact DP50	ThermaGuard DG Low-E	0.30	0.29	0.50	-	-	- -	0.30	0.26	0.44	-	-	- -
	SunShield DG SC	0.29	0.20	0.45	-	-	- -	0.29	0.17	0.39	-	-	- -
PD180 Patio Door	ThermaGuard DG Low-E	0.28	0.31	0.56	-	-	- -	0.28	0.27	0.49	-	-	- -

** Note: Blinds Between Glass are available on Standard Size 2, 3 & 4 Lite doors that use a 3' panel width (6068, 9068 & 12068 door sizes). Custom sizes are available as special order only.

Legend

RS	Roomside
DG	Dual-Glazed Glass - 2 panes
TG	Triple-Glazed Glass - 3 panes
SC	Solar Control
HIGH SHGC	High Solar Heat Gain Package
2X	2 Low-E Coatings



Ratings depend on size tested. Our products are tested for performance regularly. Test results subject to change.

THERMAL PERFORMANCE DATA

VINYL

Product Line	Glazing Description	NO GRIDS						WITH GRIDS					
		Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance			Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance		
Classic Double Hung STC34	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.45	0.57	N26			0.26	0.40	0.51	N26		
	ThermaLock RS DG Low-E	0.25	0.27	0.51		NC		0.25	0.24	0.45		NC	
	SunShield DG SC	0.28	0.21	0.48			SC S	0.28	0.19	0.43			SC S
	ThermaLock DG 2X Low-E	0.28	0.25	0.44				0.28	0.23	0.39			SC S
Slimline Double Hung STC34	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.46	0.59	N26			0.26	0.41	0.52	N26		
	SunShield PLUS DG SC RS Low-E	0.26	0.21	0.48			SC S	0.26	0.19	0.43			SC S
	SunShield DG SC	0.29	0.21	0.49			S	0.29	0.19	0.44			S
Casement STC34	SunGain PLUS DG RS Low-E HIGH SHGC	0.25	0.38	0.49		NC		0.25	0.35	0.44		NC	
	ThermaLock RS DG Low-E	0.25	0.23	0.43		NC	SC S	0.25	0.21	0.39		NC	SC S
	SunShield DG SC	0.28	0.18	0.41			SC S	0.28	0.17	0.37			SC S
Awning STC34	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.38	0.49				0.26	0.35	0.44			
	ThermaLock RS DG Low-E	0.25	0.23	0.43		NC	SC S	0.25	0.21	0.39		NC	SC S
	SunShield DG SC	0.28	0.18	0.41			SC S	0.28	0.17	0.37			SC S
Fixed Casement/Awning STC34	SunGain PLUS DG RS Low-E HIGH SHGC	0.24	0.45	0.58	N24			0.24	0.41	0.52	N24		
	ThermaLock RS DG Low-E	0.23	0.27	0.51		NC		0.23	0.25	0.46		NC	
	SunShield DG SC	0.26	0.21	0.49			SC S	0.26	0.19	0.44			SC S
Picture Window STC32	SunGain PLUS DG RS Low-E HIGH SHGC	0.22	0.47	0.61	N			0.22	0.42	0.54	N		
	ThermaLock RS DG Low-E	0.22	0.28	0.54	N	NC		0.21	0.25	0.48	N	NC	
	SunShield DG SC	0.25	0.22	0.51		NC	SC S	0.25	0.20	0.46		NC	SC S
Hopper STC33	SunGain PLUS DG RS Low-E HIGH SHGC	0.26	0.41	0.53	N26			0.26	0.37	0.48			
	ThermaLock RS DG Low-E	0.26	0.25	0.46				0.26	0.23	0.42			SC S
	SunShield DG SC	0.28	0.20	0.44			SC S	0.28	0.18	0.4			SC S
	SunShield PLUS DG SC RS Low-E Argon	0.26	0.21	0.47			SC S	0.26	0.19	0.42			SC S
	SunShield DG SC	0.29	0.21	0.48			S	0.29	0.19	0.43			S

Chart represents thermal values for replacement/Integral J frame windows with Argon gas fill.

THERMAL PERFORMANCE DATA

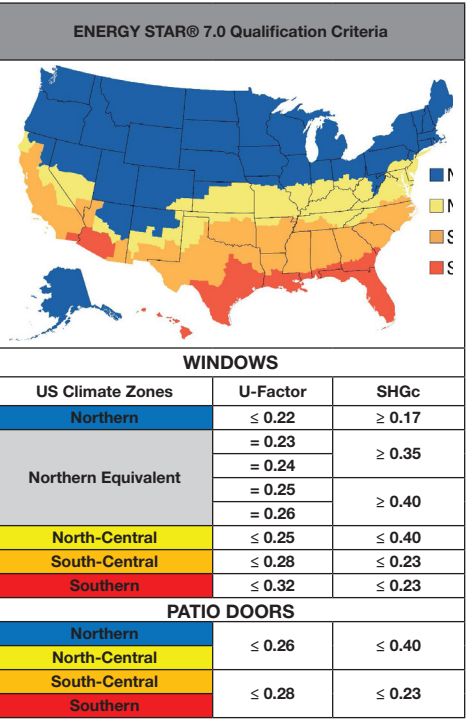
WOOD WINDOWS

Product Line	Glazing Description	NO GRIDS						WITH GRIDS					
		Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance			Thermal Performance U SHGc VT			ENERGY STAR® 7.0 Zone Compliance		
Majesty Double Hung	SunShield PLUS DG SC RS Low-E	0.27	0.20	0.45			SC S	0.27	0.18	0.40			SC S
	SunShield DG SC	0.30	0.20	0.46			S	0.30	0.18	0.41			S
	ThermaLock RS TG 2X Low-E	0.30	0.25	0.43				0.30	0.22	0.38			S
Majesty Picture Window (Matches DH)	ThermaLock RS DG 2X Low-E	0.25	0.27	0.51		NC		0.25	0.25	0.46		NC	
	SunShield PLUS DG SC RS Low-E	0.25	0.20	0.47		NC	SC S	0.25	0.18	0.42		NC	SC S
	SunShield DG SC	0.28	0.21	0.49			SC S	0.28	0.19	0.43			SC S
	ThermaLock TG 2X Low-E	0.28	0.26	0.45				0.28	0.23	0.40			SC S
Majesty Casement	ThermaLock 3X TG RS Low-E	0.27	0.23	0.43			SC S	0.27	0.21	0.38			SC S
	ThermaLock TG RS Low-E	0.28	0.23	0.38			SC S	0.29	0.21	0.35			S
	SunShield PLUS DG SC RS Low-E	0.31	0.19	0.44			S	0.31	0.18	0.40			S
Majesty Awning	ThermaLock 3X TG RS Low-E	0.27	0.23	0.43			SC S	0.27	0.21	0.38			SC S
	ThermaLock TG RS Low-E	0.28	0.23	0.38			SC S	0.28	0.21	0.35			SC S
	SunShield PLUS DG SC RS Low-E	0.31	0.19	0.44			S	0.31	0.18	0.40			S
Majesty Fixed Lite (Matches Casement)	ThermaLock TG RS Low-E	0.22	0.26	0.49	N	NC		0.23	0.24	0.44	N	NC	
	ThermaLock RS DG 2X Low-E	0.24	0.26	0.44		NC		0.24	0.23	0.40		NC	SC S
	SunShield PLUS* DG SC RS Low-E	0.26	0.22	0.51			SC S	0.26	0.20	0.46			SC S
	SunShield* DG SC	0.31	0.22	0.52			S	0.31	0.20	0.47			S
Majesty Gliding Window	ThermaLock RS DG 2X Low-E	0.28	0.44	0.54	-	-	- -	0.28	0.40	0.48	-	-	- -

* Packages Coming Soon

WOOD PATIO DOORS

Majesty Gliding	ThermaLock DG RS 2X Low-E	0.29	0.32	0.54	-	-	- -	0.29	0.28	0.47	-	-	- -
Majesty Outswing	ThermaLock DG 2X Low-E	0.29	0.36	0.43	-	-	- -	0.29	0.31	0.37	-	-	- -
Majesty Inswing	SunGain PLUS RS Low-E HIGH SHGC	0.28	0.35	0.43	-	-	- -	0.28	0.3	0.36	-	-	- -



Notes:
U-Factor in accordance with NFRC-100 and based on whole window values.
Performance values shown are for "Single Strength" glass, unless otherwise noted.
Performance with "Double Strength" glass, different reinforcement levels, may vary.
Performance with 1" grids may vary.
Select glass types shown - others are available subject to special inquiry.
Tempered Low-E and Bronze Tint glass will affect U-Factor, SHGc and VT values.
Obscured glass is treated as Clear glass and shares the same thermal data.
All Patio Door Glazing Options are Tempered Glass only.



Ratings depend on size tested.
Our products are tested for performance regularly.
Test results subject to change.

STRUCTURAL PERFORMANCE DATA

VINYL WINDOWS AND PATIO DOORS

Product Line	Unit Size W x H	Configuration	Air Infiltration cfm/ft²	Water Resistance psf	Structural Test Pressure psf	DP Rating	Structural Rating
Tribute Double Hung	54" x 91"†	Single	0.06	5.43	52.63	DP35	H-LC35
	48" x 84"	Single	0.01	5.43	52.63	DP35	H-LC35
	42" x 77"†**^	Single	0.01	7.52	74.24	DP50	H-LC50
	85-1/2" x 75"	2-Wide CJ	0.06	5.43	52.63	DP35	H-LC35
Classic Double Hung	48" x 84"	Single	0.01	6.06	60.15	DP40	H-LC40
	42" x 77"†^	Single	0.03	7.52	75.24	DP50	H-LC50
	72" x 72"	2-Wide CJ	0.14	6.90	67.70	DP45	H-LC45
	110" x 72"	DH-PW-DH CJ	0.03	5.43	52.63	DP35	H-LC35
	110" x 72"	3-Wide CJ	0.17	5.43	52.63	DP35	H-LC35
Slimline Double Hung & Single Hung	46" x 77"	Single	0.01	4.59	45.11	DP30	H-LC30
	54" x 77"	Single	0.26	6.06	37.59	DP25	H-LC25
	40" x 63"†**^	Single	0.01	7.52	75.19	DP50	H-LC50
	37" x 72"†**^	Single	0.01	7.52	75.19	DP50	H-LC50
	72" x 72"	2-Wide CJ	0.07	5.43	52.63	DP35	H-LC35
Vinyl Awning	48" x 58"	Single	0.01	8.35	60.15	DP40	AP-LC40
	64" x 32"†	Single	0.01	7.52	75.19	DP50	AP-LC50
	60" x 42"	Single	0.01	6.06	60.19	DP40	AP-C40
	41-7/8" x 42"	Single	0.01	9.19	70.18	DP60	AP-C60
Vinyl Casement	36" x 80"	Single	0.01	8.35	82.71	DP55	C-C55
	71-1/4" x 80"	2-Wide CJ	0.04	5.43	52.63	DP35	C-C35
	60" x 72"	2-Wide CJ	0.04	7.52	75.19	DP55	C-C55
Fixed Vinyl Casement / Awning	60" x 80"	Single	0.01	7.52	60.19	DP40	F-C40
	64" x 56"	Single	0.02	7.52	75.19	DP50	F-C50
	36" x 72"	Single	0.01	8.35	82.71	DP55	F-C55
Venting Vinyl Awning over Fixed w/Mull & CJ	65" x 77"†	Stacked CJ-Mull	0.01	7.52	75.19	DP50	AP-LC50
Fixed Vinyl Casement over Venting Awning	64" x 78"†	Stacked CJ	0.03	7.52	75.19	DP50	AP-LC50
Vinyl PW mulled over Venting Awning	64" x 78"†	Stacked Mull	0.01	7.52	75.19	DP50	AP-LC50
Vinyl PW mulled over Venting Awning CJ-2	72" x 103"†	Stacked Mull	0.07	7.52	75.19	DP50	AP-LC50
Vinyl Picture Window	72" x 72"	Single	0.01	8.35	82.71	DP55	F-C55
	110" x 72"	2-Wide CJ	0.01	4.59	45.11	DP30	F-LC30
	108" x 48"	2-Wide CJ	0.01	7.52	75.19	DP50	F-LC50
Vinyl Designer Shape	78" x 85-1/4"	Single	0.01	7.52	75.19	DP50	F-C50
	64" x 64"	Single	0.01	7.52	75.19	DP50	F-C50
Welded Vinyl Rolling Window	72" x 62-1/2"	2-Lite	0.01	5.43	52.63	DP35	HS-LC35
	120" x 62-1/2"	3-Lite	0.07	3.76	37.59	DP25	HS-LC25
Vinyl Hopper Window	48" x 32"	Single	0.06	2.92	22.57	DP15	AP-R15
Vinyl Patio Door (with or without Transom)	96" x 80" (8068)	2-Lite	0.13	5.43	52.63	DP35	SD-R35
	96" x 96" (8080)	2-Lite	0.05	5.43	37.59	DP25	SD-R25
	144" x 80" (12068)	3-Lite OXO	0.01	5.43	52.63	DP35	SD-R35
	139-3/4" x 95-1/2" (12080)	4-Lite OXXO	0.05	3.76	37.59	DP25	SD-R25

STRUCTURAL PERFORMANCE DATA

WOOD WINDOWS

Product Line	Unit Size W x H	Configuration	Air Infiltration cfm/ft²	Water Resistance psf	Structural Test Pressure psf	DP Rating	Structural Rating
Majesty Double Hung	44" x 75"	Single	0.07	5.43	52.66	DP35	H-R35
Majesty Picture Window	54" x 54"	Single	0.01	3.76	37.59	DP35	F-LC25
Majesty Casement	32" x 72"	Single	0.01	3.76	37.59	DP25	C-LC25
Majesty Fixed Casement	60" x 72"	Single	0.01	4.59	30.08	DP30	F-R30
Majesty Awning	48" x 39"	Single	0.01	5.43	52.63	DP35	AP-C35
Majesty Gliding Window	72" x 61"	2-Lite	0.26	3.75	37.59	DP25	HS-R25
Majesty Gliding Patio Door	72" x 108"	2-Lite	0.24	4.59	45.11	DP30	SD-R30
	96" x 96"	2-Lite	0.19	6.90	60.15	DP40	SD-LC40
	192" x 82"	4-Lite	0.21	5.43	52.63	DP35	SD-R35
	192" x 96"	4-Lite	0.18	3.75	37.59	DP25	SD-LC25
Majesty Hinged Patio Door In-swing Multi Point	64" x 82"	2-Lite	0.08	6.90	60.15	DP40	SHD-R40
	64" x 96"	2-Lite	0.10	6.90	60.15	DP40	SHD-R40
	72" x 96"	2-Lite	0.10	7.52	75.19	DP50	SHD-R50
	72" x 108"	2-Lite	0.08	4.59	45.11	DP30	SHD-R30
Majesty Hinged Patio Door Out-swing Multi Point	64" x 82"	2-Lite	0.20	6.90	60.15	DP40	SHD-R40
	64" x 96"	2-Lite	0.10	6.90	60.15	DP40	SHD-R40
	72" x 96"	2-Lite	0.10	7.52	75.19	DP50	SHD-LC50
	72" x 108"	2-Lite	0.04	4.59	45.11	DP30	SHD-R30

Notes:

† Reinforced sash
** Sill Rise Extender will reduce clear opening height by 9/16"
^ DP50 Package Required

Legend:

Product Line	Describes that product line of windows and doors and provides the Name for that line.
Unit Size	Shows the overall size of the window tested to achieve the results listed.
Configuration	Indicates the window or door configuration, number of units and/or shape tested
Air Infiltration	A measure of a windows air flow passing through the window taken at 1.57 psf. (25 mph equivalent).
Water Resistance	A measure of a windows water performance or resistance to water entry expressed in psf.
Structural Test Pressure	Overload pressure used during testing (1.5 x Design Pressure)
Design Pressure (DP Rating)	Overall structural performance rating for the subject window based on Air, Water and Structural performance
psf	Pressure measurement = Pounds per square foot (Lbs./ft²)
cfm/ft²	Air Infiltration measurement expressed in Cubic Feet / Minute / Square Foot of window
Single	Indicates a single unit was tested to achieve the results
2-Wide CJ	Indicates window is a 2-Wide unit made in a Common Jamb configuration
3-Wide CJ	Indicates window is a 3-Wide unit made in a Common Jamb configuration
2-Lite	Indicates a 2-Lite window configuration on windows that can be 2 or 3 lites
3-Lite	Indicates a 3-Lite window configuration on windows that can be 2 or 3 lites

Performance Class:

R = Residential	≥DP15
LC = Light Commercial	≥DP25
CW = Commercial	≥DP30

Product Type:

H = Single or Double Hung window
AP = Awning Projected Window
C = Casement Window
F = Fixed Window
HS = Horizontal Slider Window
DAW = Dual Action Window
SD = Sliding Door
SHD = Side Hinged Door



Ratings depend on size tested.
Our products are tested for performance regularly.
Test results subject to change.

