



Performance Data
S-Series/Builders Choice - New Construction Windows

STANDARD Glass Package Thermal Data

Glazing	Window Style	Individual Unit Size	Total Unit U-Value ¹	Visible Light Transmittance ²		Daylight Transmittance ³	Tdw-ISO ⁴	SHGC ⁵		Condensation Resistance ⁶
				Grids	No Grids			Grids	No Grids	
Standard	SS Double-hung	47-1/4" x 59"	0.29	0.41	0.46	64%	0.559	0.18	0.20	57
High-Performance	BC Double-hung	47-1/4" x 59"	0.28	0.43	0.49	64%	0.568	0.19	0.21	59
Glass Package with low-e, low-conductance spacer, and argon fill.	SS Single-hung	47-1/4" x 59"	0.28	0.41	0.46	64%	0.559	0.18	0.20	56
	BC Single-hung	47-1/4" x 59"	0.28	0.43	0.49	64%	0.568	0.19	0.21	59
	Picture	47-1/4" x 59"	0.26	0.45	0.51	64%	0.559	0.20	0.22	61
	Geometric	47-1/4" x 59"	0.25	0.48	0.54	64%	0.559	0.21	0.23	62
	Casement	23-3/4" x 59"	0.28	0.38	0.42	64%	0.559	0.17	0.19	59
	Casement Picture	23-3/4" x 59"	0.26	0.44	0.50	64%	0.559	0.19	0.21	59
	Awning	23-1/4" x 59"	0.29	0.38	0.42	64%	0.559	0.17	0.19	55
	Slider	59" x 47-1/4"	0.28	0.41	0.46	64%	0.559	0.18	0.20	60
	Vinyl Sill Patio Door	79" x 78-3/4"	0.31	0.39	0.45	64%	0.559	0.17	0.20	56
	Aluminum Sill Patio Door	79" x 78-3/4"	0.32	0.39	0.45	64%	0.559	0.17	0.20	52

NORTHERN ZONE Glass Package Thermal Data

Glazing	Window Style	Individual Unit Size	Total Unit U-Value ¹	Visible Light Transmittance ²		Daylight Transmittance ³	Tdw-ISO ⁴	SHGC ⁵		Condensation Resistance ⁶
				Grids	No Grids			Grids	No Grids	
Standard	SS Double-hung	47-1/4" x 59"	0.29	0.46	0.52	71%	0.559	0.38	0.42	57
High-Performance	BC Double-hung	47-1/4" x 59"	0.29	0.48	0.54	71%	0.568	0.40	0.44	59
Glass Package with low-e, low-conductance spacer, and argon fill.	SS Single-hung	47-1/4" x 59"	0.30 no grids 0.29 w/grids	0.45	0.51	71%	0.559	0.38	0.42	56
	BC Single-hung	47-1/4" x 59"	0.29	0.48	0.54	71%	0.568	0.40	0.44	59
	Picture	47-1/4" x 59"	0.27	0.50	0.56	71%	0.559	0.42	0.46	61
	Geometric	47-1/4" x 59"	0.26	0.55	0.61	71%	0.559	0.30	0.33	62
	Casement	23-3/4" x 59"	0.29	0.42	0.47	71%	0.559	0.37	0.39	59
	Casement Picture	23-3/4" x 59"	0.26	0.50	0.56	71%	0.559	0.27	0.30	59
	Awning	23-1/4" x 59"	0.29	0.42	0.47	71%	0.559	0.37	0.39	55
	Slider	59" x 47-1/4"	0.29	0.43	0.49	71%	0.559	0.37	0.40	60
	Vinyl Sill Patio Door	79" x 78-3/4"	0.31	0.43	0.50	71%	0.559	0.36	0.41	56
	Aluminum Sill Patio Door	79" x 78-3/4"	0.33	0.43	0.50	71%	0.559	0.36	0.41	52

All thermal and sound testing is done in accordance with required NFRC sizing.

Sound Transmission

Window Style	Unit Size	IG Unit	Glazing	STC	OITC
SS Double-hung	47-1/4" x 59"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	27	22
BC Double-hung	47-1/4" x 59"	3/4"	1/8" annealed, 1/2" argon, 1/8" annealed	28	22
SS Single-hung	47-1/4" x 59"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	27	22
BC Single-hung	47-1/4" x 59"	3/4"	1/8" annealed, 1/2" argon, 1/8" annealed	27	23
Picture	47-1/4" x 59"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	31	25
Geometric	47-1/4" x 59"	7/8"	1/8" annealed, 11/16" argon, 1/8" annealed	31	25
Casement	23-3/4" x 59"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	28	21
Awning	23-3/4" x 59"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	28	21
Slider	59" x 47-1/4"	15/16"	1/8" annealed, 11/16" argon, 1/8" annealed	27	22
Patio door	78-3/4" x 78-3/4"	1"	1/8" tempered, 3/4" argon, 1/8" tempered	29	23

Modifications: none. STC rating was calculated in accordance with ASTM E 413.





Performance Data
S-Series/Builders Choice - New Construction Windows

Air, Water and Structural Performance

Window Style	Individual Unit Size	Mulled Unit Size	Test Method	Total Unit Air Infiltration @25MPH	Water (PSF)	Structural Rating	Overall Grade Rating
SS Double-hung	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	50	R50
SS Double-hung	52" x 80"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	8.36	45	R45
BC Double-hung	36" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.18 CFM	7.52	40	R40
BC Double-hung	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.18 CFM	7.52	30	R30
SS Single-hung	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.07 CFM	8.36	55	R55
S Single-hung	52" x 80"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.07 CFM	8.36	45	R45
BC Single-hung	36" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.13 CFM	6.06	40	R40
BC Single-hung	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.13 CFM	6.06	35	R35
Double-hung Oriel	36" x 66"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.06 CFM	7.52	70	R50
Double-hung Oriel	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.06 CFM	7.52	40	R40
Double-hung Oriel	52" x 80"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.06 CFM	7.52	30	R30
Double-hung Reverse Oriel	52" x 80"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	35	R35
Double-hung Reverse Oriel	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	50	R50
Single-hung Oriel	36" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.05 CFM	7.52	50	R50
Single-hung Oriel	52" x 66"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.05 CFM	7.52	40	R40
Single-hung Reverse Oriel	40" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.03 CFM	6.06	40	R40
Single-hung Reverse Oriel	48" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.03 CFM	6.06	30	R30
Single-hung Reverse Oriel	36" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.03 CFM	6.06	40	R40
Twin Double-hung	52" x 80"	104" x 80"	AAMA/WDMA/CSA 101/IS2/A440-05	0.11 CFM	7.52	40	R40
Twin Double-hung	47-3/4" x 80"	96" x 80"	AAMA/WDMA/CSA 101/IS2/A440-11	0.11 CFM	10.65	50	R50
Triple Double-hung	52" x 80"	157" x 80"	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	40	R40
Triple Double-hung	48" x 72"	145" x 72"	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	50	R50
Casement	36" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.01 CFM	12.11	65	R65
Casement Picture	72" x 72"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.01 CFM	12.12	50	R50
Awning	60" x 36"	—	AAMA/WDMA/CSA 101/I.S.2/A440-08	0.01 CFM	12.11	75	R75
Geometric	72" x 84"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.02 CFM	12.11	75	R75
Geometric	96" x 48"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.01 CFM	12.12	60	R60
Picture	72" x 84"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.01 CFM	12.12	55	R55
Picture	96" x 48"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.01 CFM	12.12	70	R70
2-Lite Slider (DP50 with T-Bolt)	72" x 60"	—	AAMA/WDMA/CSA 101/I.S.2/A440-11	0.14 CFM	7.52	50	R50
2-Lite Slider	96" x 48"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.15 CFM	9.20	45	R45
2-Lite Slider (DP45 with T-Bolt)	96" x 48"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.10 CFM	9.20	45	R45
2-Lite Slider	96" x 60"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.15 CFM	9.20	30	R30
3-Lite Slider (1/4-1/2-1/4)	138" x 60"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.08 CFM	8.36	25	R25
3-Lite Slider (1/3-1/3-1/3)	138" x 60"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	8.36	30	R30
2-Panel Patio Door with Vinyl Sill	96" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.11 CFM	7.52	50	R50
2-Panel Patio Door with Aluminum Sill	96" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50
3-Panel Patio Door with Vinyl Sill	108" x 82"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50
3-Panel Patio Door with Aluminum Sill	108" x 82"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50
3-Panel Patio Door with Vinyl Sill	108" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.50	50	R50
3-Panel Patio Door with Aluminum Sill	108" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50
3-Panel Patio Door with Vinyl Sill*	144" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.50	50	R50
3-Panel Patio Door with Aluminum Sill*	144" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50
4-Panel Patio Door with Vinyl Sill	144" x 82"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.27 CFM	7.50	50	R50
4-Panel Patio Door with Aluminum Sill	144" x 82"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	45	R50
4-Panel Patio Door with Vinyl Sill*	192" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.27 CFM	7.50	50	R50
4-Panel Patio Door with Aluminum Sill*	192" x 96"	—	AAMA/WDMA/CSA 101/I.S.2/A440-05	0.12 CFM	7.52	50	R50

All patio doors are available as a KD

*ONLY AVAILABLE AS KD

- 1 Windows tested per NFRC 100. Data applies to double-paned insulating glass units using double-strength glass with an 11/16" air space, except patio door with a 3/4" air space.
- 2 Tested using GED's Intercept® ULTRA low-conductance warm-edge spacer system. Calculations provided by Lawrence Berkeley Laboratory Window 5.2® and Optics5 software based on a 15/16" IG window unit and a 1" IG patio door unit.
- 3 Daylight Transmittance measures the performance of the glass only.
- 4 International Standards Organization Damage Weighted Transmission Rating (Tdw-ISO)

calculations performed by Lawrence Berkeley Laboratory Windows 5.2® software and is weighted using recommended International Commission on Illumination (CIE) standards.

- 5 Solar Heat Gain Coefficient (SHGC) tested in accordance with NFRC 200. This value varies by style, glazing system, and grids.
- 6 Condensation Resistance is tested in accordance with NFRC 500.

BC = Builders Choice
SS = S-Series

