



## Superseal Vinyl Windows & Doors

# Thermal Product Performance Guide

Clear Insulating Glass and High-Performance Glazings

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Vinyl Product Performance Guide

Glazing Description		Air-Filled					Argon-Filled							
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	
Supersal 8000 / 8500 Casement	No GIAS or SDL	Insul Clear	0.42	2.38	0.50	0.52	44	None	-	-	-	-	-	None
		LowE Clear	0.31	3.23	0.26	0.45	56	None	0.28	3.57	0.25	0.45	59	N/C, S/C, S
		LowE Clear w/XL Edge Spcr	0.30	3.33	0.27	0.46	57	N/C	0.28	3.57	0.27	0.46	60	N/C
		LowE 366 w/Intercept Spacer	0.31	3.23	0.18	0.41	56	S	0.28	3.57	0.18	0.41	59	N/C, S/C, S
		LowE 366 W/XL Edge Spacer	0.30	3.33	0.18	0.41	57	N/C, S/C, S	0.27	3.70	0.18	0.41	61	All Zones
		LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.18	0.40	43	All Zones	0.25	4.00	0.18	0.40	47	All Zones
		LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.18	0.40	45	All Zones	0.24	4.17	0.18	0.40	48	All Zones
		LowE 180 (Passive Solar)	0.32	3.13	0.44	0.50	55	None	0.29	3.45	0.44	0.50	58	N
		LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.44	0.50	56	None	0.28	3.57	0.44	0.50	60	N
		LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.40	0.49	42	N, N/C	0.25	4.00	0.40	0.49	45	N, N/C
		LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.40	0.49	44	N, N/C	0.25	4.00	0.40	0.49	47	N, N/C
		LowE 340 W/XL Edge Spacer	0.30	3.33	0.13	0.25	57	N/C, S/C, S	0.27	3.70	0.12	0.25	61	All Zones
		LowE Laminated w/XL Edge Spacer	0.32	3.13	0.24	0.43	55	S	0.28	3.57	0.23	0.43	59	N/C, S/C, S
		LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.19	0.40	55	S	0.28	3.57	0.19	0.40	59	N/C, S/C, S
		w/ GIAS or SDL < 1"	Insul Clear	0.42	2.38	0.46	0.47	44	None	-	-	-	-	-
LowE Clear	0.31		3.23	0.23	0.41	56	S	0.28	3.57	0.23	0.41	59	N/C, S/C, S	
LowE Clear w/XL Edge Spcr	0.30		3.33	0.25	0.41	57	N/C, S/C, S	0.28	3.57	0.25	0.41	60	N/C, S/C, S	
LowE 366 w/Intercept Spacer	0.31		3.23	0.17	0.37	56	S	0.28	3.57	0.17	0.37	59	N/C, S/C, S	
LowE 366 W/XL Edge Spacer	0.30		3.33	0.17	0.37	57	N/C, S/C, S	0.27	3.70	0.17	0.37	61	All Zones	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27		3.70	0.16	0.36	43	All Zones	0.25	4.00	0.16	0.36	47	All Zones	
LowE 366 W/XL Edge Spacer	0.30		3.33	0.17	0.37	57	N/C, S/C, S	0.27	3.70	0.17	0.37	61	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26		3.85	0.16	0.36	45	All Zones	0.24	4.17	0.16	0.36	48	All Zones	
LowE 180 (Passive Solar)	0.32		3.13	0.40	0.45	55	None	0.29	3.45	0.40	0.45	58	N, N/C	
LowE 180 (Passive Solar) w/XL Edge Spacer	0.31		3.23	0.40	0.45	56	None	0.28	3.57	0.40	0.45	60	N, N/C	
LowE 180 w/189 <sup>3</sup>	0.27		3.70	0.36	0.44	42	N, N/C	0.25	4.00	0.37	0.44	45	N, N/C	
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27		3.70	0.36	0.44	44	N, N/C	0.25	4.00	0.37	0.44	47	N, N/C	
LowE 340 W/XL Edge Spacer	0.30		3.33	0.12	0.22	57	N/C, S/C, S	0.27	3.70	0.11	0.22	61	All Zones	
LowE Laminated w/XL Edge Spacer	0.33		3.03	0.21	0.39	55	S	0.30	3.33	0.21	0.39	59	N/C, S/C, S	
LowE 366 Laminated W/XL Edge Spacer	0.33		3.03	0.19	0.36	55	S	0.29	3.45	0.17	0.36	59	N/C, S/C, S	
w/ GIAS or SDL ≥ 1"	Insul Clear	0.42	2.38	0.41	0.42	44	None	-	-	-	-	-	None	
	LowE Clear	0.31	3.23	0.21	0.36	56	S	0.28	3.57	0.21	0.36	59	N/C, S/C, S	
	LowE Clear w/XL Edge Spacer	0.30	3.33	0.23	0.37	57	N/C, S/C, S	0.28	3.57	0.22	0.37	60	N/C, S/C, S	
	LowE 366 w/Intercept Spacer	0.31	3.23	0.15	0.33	56	S	0.28	3.57	0.15	0.33	59	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.30	3.33	0.15	0.33	57	N/C, S/C, S	0.27	3.70	0.15	0.33	61	All Zones	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.15	0.32	43	All Zones	0.25	4.00	0.15	0.32	47	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.15	0.32	45	All Zones	0.24	4.17	0.15	0.32	48	All Zones	
	LowE 180 (Passive Solar)	0.32	3.13	0.36	0.41	55	None	0.29	3.45	0.36	0.41	58	N/C	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.36	0.41	56	None	0.28	3.57	0.36	0.41	60	N, N/C	
	LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.33	0.40	42	N, N/C	0.25	4.00	0.33	0.40	45	N, N/C	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.33	0.40	44	N, N/C	0.25	4.00	0.33	0.40	47	N, N/C	
	LowE 340 W/XL Edge Spacer	0.30	3.33	0.11	0.20	57	N/C, S/C, S	0.27	3.70	0.10	0.20	61	All Zones	
	LowE Laminated w/XL Edge Spacer	0.33	3.03	0.20	0.35	55	S	0.30	3.33	0.19	0.35	59	N/C, S/C, S	
	LowE 366 Laminated W/XL Edge Spacer	0.33	3.03	0.16	0.33	55	S	0.29	3.45	0.16	0.33	59	N/C, S/C, S	

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

	Glazing Description	Air-Filled						Argon-Filled								
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating			
Superséal 8000 / 8500 Awning	No GIAS or SDL	Insul Clear	0.43	2.33	0.50	0.52	43	None	-	-	-	-	-	None		
		LowE Clear	0.31	3.23	0.26	0.45	54	None	0.28	3.57	0.25	0.45	58	N/C, S/C, S		
		LowE Clear w/XL Edge Spacer	0.31	3.23	0.27	0.46	55	None	0.28	3.57	0.27	0.46	59	N/C		
		LowE 366 w/Intercept Spacer	0.31	3.23	0.18	0.41	54	S	0.28	3.57	0.18	0.41	58	N/C, S/C, S		
		LowE 366 W/XL Edge Spacer	0.30	3.33	0.18	0.41	56	N/C, S/C, S	0.27	3.70	0.18	0.41	59	All Zones		
		LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.18	0.40	42	All Zones	0.25	4.00	0.18	0.40	45	All Zones		
		LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.18	0.40	44	All Zones	0.24	4.17	0.18	0.40	48	All Zones		
		LowE 180 (Passive Solar)	0.32	3.13	0.44	0.50	53	None	0.29	3.45	0.44	0.50	57	N		
		LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.44	0.50	55	None	0.28	3.57	0.44	0.50	59	N		
		LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.40	0.49	41	N, N/C	0.26	3.85	0.40	0.49	44	N, N/C		
		LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.40	0.49	42	N, N/C	0.25	4.00	0.40	0.49	46	N, N/C		
		LowE 340 W/XL Edge Spacer	0.30	3.33	0.13	0.25	55	N/C, S/C, S	0.27	3.70	0.12	0.25	59	All Zones		
		LowE Laminated w/XL Edge Spacer	0.32	3.13	0.24	0.43	53	S	0.28	3.57	0.23	0.43	57	N/C, S/C, S		
		LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.19	0.40	54	S	0.28	3.57	0.19	0.40	58	N/C, S/C, S		
		Superséal 8000 / 8500 Awning	w/ GIAS or SDL < 1"	Insul Clear	0.43	2.33	0.46	0.47	43	None	-	-	-	-	-	None
				LowE Clear	0.31	3.23	0.23	0.41	54	S	0.28	3.57	0.23	0.41	58	N/C, S/C, S
LowE Clear w/XL Edge Spacer	0.31			3.23	0.25	0.41	55	S	0.28	3.57	0.25	0.41	59	N/C, S/C, S		
LowE 366 w/Intercept Spacer	0.31			3.23	0.17	0.37	54	S	0.28	3.57	0.17	0.37	58	N/C, S/C, S		
LowE 366 W/XL Edge Spacer	0.30			3.33	0.17	0.37	56	N/C, S/C, S	0.27	3.70	0.17	0.37	59	All Zones		
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27			3.70	0.16	0.36	42	All Zones	0.25	4.00	0.16	0.36	45	All Zones		
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26			3.85	0.16	0.36	44	All Zones	0.24	4.17	0.16	0.36	48	All Zones		
LowE 180 (Passive Solar)	0.32			3.13	0.40	0.45	53	None	0.29	3.45	0.40	0.45	57	N, N/C		
LowE 180 (Passive Solar) w/XL Edge Spacer	0.31			3.23	0.40	0.45	55	None	0.28	3.57	0.40	0.45	59	N, N/C		
LowE 180 w/189 <sup>3</sup>	0.28			3.57	0.36	0.44	41	N, N/C	0.26	3.85	0.37	0.44	44	N, N/C		
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27			3.70	0.36	0.44	42	N, N/C	0.25	4.00	0.37	0.44	46	N, N/C		
LowE 340 W/XL Edge Spacer	0.30			3.33	0.12	0.22	55	N/C, S/C, S	0.27	3.70	0.11	0.22	59	All Zones		
LowE Laminated w/XL Edge Spacer	0.33			3.03	0.21	0.39	53	S	0.30	3.33	0.21	0.39	57	N/C, S/C, S		
LowE 366 Laminated W/XL Edge Spacer	0.33			3.03	0.18	0.36	54	S	0.29	3.45	0.17	0.36	58	N/C, S/C, S		
Superséal 8000 / 8500 Awning	w/ GIAS or SDL ≥ 1"			Insul Clear	0.43	2.33	0.41	0.42	43	None	-	-	-	-	-	None
				LowE Clear	0.31	3.23	0.21	0.36	54	S	0.28	3.57	0.21	0.36	58	N/C, S/C, S
		LowE Clear w/XL Edge Spcr	0.31	3.23	0.23	0.37	55	S	0.28	3.57	0.22	0.37	59	N/C, S/C, S		
		LowE 366 w/Intercept Spacer	0.31	3.23	0.15	0.33	54	S	0.28	3.57	0.15	0.33	58	N/C, S/C, S		
		LowE 366 W/XL Edge Spacer	0.30	3.33	0.15	0.33	56	N/C, S/C, S	0.27	3.70	0.15	0.33	59	All Zones		
		LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.15	0.32	42	All Zones	0.25	4.00	0.15	0.32	45	All Zones		
		LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.15	0.32	43	All Zones	0.24	4.17	0.15	0.32	47	All Zones		
		LowE 180 (Passive Solar)	0.32	3.13	0.36	0.41	53	None	0.29	3.45	0.36	0.41	57	N/C		
		LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.36	0.41	55	None	0.28	3.57	0.36	0.41	59	N, N/C		
		LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.33	0.40	41	N, N/C	0.26	3.85	0.33	0.40	44	N, N/C		
		LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.33	0.40	42	N, N/C	0.25	4.00	0.33	0.40	46	N, N/C		
		LowE 340 W/XL Edge Spacer	0.30	3.33	0.11	0.20	55	N/C, S/C, S	0.27	3.70	0.10	0.20	59	All Zones		
		LowE Laminated w/XL Edge Spacer	0.33	3.03	0.20	0.35	53	S	0.30	3.33	0.19	0.35	57	N/C, S/C, S		
		LowE 366 Laminated W/XL Edge Spacer	0.33	3.03	0.16	0.33	54	S	0.29	3.45	0.16	0.33	58	N/C, S/C, S		

<sup>3</sup>The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Supersal 8000 / 8500 Casement Fixed	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
No GIAS or SDL	Insul Clear	0.44	2.27	0.60	0.63	44	None	-	-	-	-	-	None
	LowE Clear	0.30	3.33	0.30	0.54	55	N/C	0.26	3.85	0.30	0.54	59	N, N/C
	LowE Clear w/XL Edge Spacer	0.30	3.33	0.32	0.55	56	N/C	0.26	3.85	0.32	0.55	60	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.22	0.49	55	N/C, S/C, S	0.26	3.85	0.21	0.49	59	All Zones
	LowE 366 W/XL Edge Spacer	0.29	3.45	0.22	0.49	57	N/C, S/C, S	0.26	3.85	0.21	0.49	61	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.21	0.48	43	All Zones	0.22	4.55	0.21	0.48	46	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.24	4.17	0.21	0.48	44	All Zones	0.22	4.55	0.21	0.48	48	All Zones
	LowE 180 (Passive Solar)	0.31	3.23	0.52	0.60	54	None	0.28	3.57	0.53	0.60	58	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.30	3.33	0.52	0.60	56	N	0.27	3.70	0.53	0.60	59	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.48	0.59	42	N	0.23	4.35	0.48	0.59	45	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.25	4.00	0.48	0.59	43	N	0.23	4.35	0.48	0.59	47	N
	LowE 340 W/XL Edge Spacer	0.29	3.45	0.15	0.30	57	N/C, S/C, S	0.26	3.85	0.14	0.30	60	All Zones
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.28	0.52	55	None	0.27	3.70	0.27	0.52	59	N, N/C
	LowE 366 Laminated W/XL Edge Spacer	0.31	3.23	0.23	0.48	55	S	0.27	3.70	0.22	0.48	59	All Zones
	w/ GIAS or SDL < 1"	Insul Clear	0.44	2.27	0.53	0.56	44	None	-	-	-	-	-
LowE Clear		0.30	3.33	0.27	0.48	55	N/C	0.26	3.85	0.27	0.48	59	N, N/C
LowE Clear w/XL Edge Spacer		0.30	3.33	0.29	0.49	56	N/C	0.26	3.85	0.29	0.49	60	N, N/C
LowE 366 w/Intercept Spacer		0.30	3.33	0.20	0.44	55	N/C, S/C, S	0.26	3.85	0.19	0.44	59	All Zones
LowE 366 W/XL Edge Spacer		0.29	3.45	0.20	0.44	57	N/C, S/C, S	0.26	3.85	0.19	0.44	61	All Zones
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.25	4.00	0.19	0.43	43	All Zones	0.22	4.55	0.19	0.43	46	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.24	4.17	0.19	0.43	44	All Zones	0.22	4.55	0.19	0.43	48	All Zones
LowE 180 (Passive Solar)		0.31	3.23	0.47	0.54	54	None	0.28	3.57	0.47	0.54	58	N
LowE 180 (Passive Solar) w/XL Edge Spacer		0.30	3.33	0.47	0.54	56	N	0.27	3.70	0.47	0.54	59	N
LowE 180 w/189 <sup>3</sup>		0.26	3.85	0.43	0.52	42	N	0.23	4.35	0.43	0.52	45	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.25	4.00	0.43	0.52	43	N	0.23	4.35	0.43	0.52	47	N
LowE 340 W/XL Edge Spacer		0.29	3.45	0.13	0.26	57	N/C, S/C, S	0.26	3.85	0.13	0.26	60	All Zones
LowE Laminated w/XL Edge Spacer		0.34	2.94	0.25	0.46	55	S	0.29	3.45	0.25	0.46	59	N/C, S/C, S
LowE 366 Laminated W/XL Edge Spacer		0.33	3.03	0.20	0.43	55	S	0.29	3.45	0.20	0.43	59	N/C, S/C, S
w/ GIAS or SDL ≥ 1"		Insul Clear	0.44	2.27	0.48	0.49	44	None	-	-	-	-	-
	LowE Clear	0.30	3.33	0.24	0.43	55	N/C, S/C, S	0.26	3.85	0.24	0.43	59	All Zones
	LowE Clear w/XL Edge Spacer	0.30	3.33	0.26	0.43	56	N/C	0.26	3.85	0.26	0.43	60	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.18	0.39	55	N/C, S/C, S	0.26	3.85	0.17	0.39	59	All Zones
	LowE 366 W/XL Edge Spacer	0.29	3.45	0.18	0.39	57	N/C, S/C, S	0.26	3.85	0.17	0.39	61	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.17	0.38	43	All Zones	0.22	4.55	0.17	0.38	46	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.24	4.17	0.17	0.38	44	All Zones	0.22	4.55	0.17	0.38	48	All Zones
	LowE 180 (Passive Solar)	0.31	3.23	0.42	0.48	54	None	0.28	3.57	0.42	0.48	58	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.30	3.33	0.42	0.48	56	N	0.27	3.70	0.42	0.48	59	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.38	0.46	42	N, N/C	0.23	4.35	0.38	0.46	45	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.25	4.00	0.38	0.46	43	N, N/C	0.23	4.35	0.38	0.46	47	N, N/C
	LowE 340 W/XL Edge Spacer	0.29	3.45	0.12	0.23	57	N/C, S/C, S	0.26	3.85	0.12	0.23	60	All Zones
	LowE Laminated w/XL Edge Spacer	0.34	2.94	0.22	0.41	55	S	0.29	3.45	0.22	0.41	59	N/C, S/C, S
	LowE 366 Laminated W/XL Edge Spacer	0.33	3.03	0.18	0.38	55	S	0.29	3.45	0.18	0.38	59	N/C, S/C, S

<sup>3</sup>The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superseal 8000 / 8500 Builders Series Single-Hung	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
No GIAS or SDL	Insul Clear	0.49	2.04	0.62	0.65	41	None	-	-	-	-	-	None
	LowE Clear	0.35	2.86	0.31	0.56	50	None	0.31	3.23	0.31	0.56	53	None
	LowE Clear w/XL Edge Spacer	0.34	2.94	0.33	0.57	54	None	0.30	3.33	0.33	0.57	57	N/C
	LowE 366 w/Intercept Spacer	0.34	2.94	0.22	0.51	50	S	0.31	3.23	0.22	0.51	53	S
	LowE 366 W/XL Edge Spacer	0.33	3.03	0.22	0.51	54	S	0.30	3.33	0.22	0.51	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.29	3.45	0.22	0.50	38	N/C, S/C, S	0.26	3.85	0.22	0.50	41	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.28	3.57	0.22	0.50	42	N/C, S/C, S	0.25	4.00	0.22	0.50	46	All Zones
	LowE 180 (Passive Solar)	0.36	2.78	0.55	0.63	49	None	0.32	3.13	0.55	0.63	52	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.55	0.63	53	None	0.31	3.23	0.55	0.63	57	None
	LowE 180 w/189 <sup>3</sup>	0.30	3.33	0.50	0.61	38	N	0.27	3.70	0.50	0.61	40	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.29	3.45	0.50	0.61	41	N	0.26	3.85	0.50	0.61	44	N
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.15	0.31	54	S	0.30	3.33	0.15	0.31	57	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.35	2.86	0.33	0.55	53	None	0.31	3.23	0.33	0.55	57	None
	w/ GIAS or SDL < 1"	Insul Clear	0.49	2.04	0.56	0.58	41	None	-	-	-	-	-
LowE Clear		0.35	2.86	0.28	0.50	50	None	0.31	3.23	0.28	0.50	53	None
LowE Clear w/XL Edge Spacer		0.34	2.94	0.30	0.51	54	None	0.30	3.33	0.30	0.51	57	N/C
LowE 366 w/Intercept Spacer		0.34	2.94	0.20	0.46	50	S	0.31	3.23	0.20	0.46	53	S
LowE 366 W/XL Edge Spacer		0.33	3.03	0.20	0.46	54	S	0.30	3.33	0.20	0.46	58	N/C, S/C, S
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.29	0.20	0.45	38.00		N	0.26	3.85	0.20	0.45	41	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.28	3.57	0.20	0.45	42	N/C, S/C, S	0.25	4.00	0.20	0.45	46	All Zones
LowE 180 (Passive Solar)		0.36	2.78	0.49	0.56	49	None	0.32	3.13	0.49	0.56	52	None
LowE 180 (Passive Solar) w/XL Edge Spacer		0.34	2.94	0.49	0.56	53	None	0.31	3.23	0.49	0.56	57	None
LowE 180 w/189 <sup>3</sup>		0.30	3.33	0.45	0.55	38	N	0.27	3.70	0.45	0.55	40	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.29	3.45	0.45	0.55	41	N	0.26	3.85	0.45	0.55	44	N
LowE 340 W/XL Edge Spacer		0.33	3.03	0.14	0.27	54	S	0.30	3.33	0.13	0.27	57	N/C, S/C, S
LowE Laminated w/XL Edge Spacer		0.37	2.70	0.31	0.49	53	None	0.32	3.13	0.29	0.49	57	None
w/ GIAS or SDL > 1"		Insul Clear	0.49	2.04	0.50	0.51	41	None	-	-	-	-	-
	LowE Clear	0.35	2.86	0.26	0.44	50	None	0.31	3.23	0.25	0.44	53	S
	LowE Clear w/XL Edge Spacer	0.34	2.94	0.27	0.45	54	None	0.30	3.33	0.27	0.45	57	N/C
	LowE 366 w/Intercept Spacer	0.34	2.94	0.18	0.40	50	S	0.31	3.23	0.18	0.40	53	S
	LowE 366 W/XL Edge Spacer	0.33	3.03	0.18	0.40	54	S	0.30	3.33	0.18	0.40	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.29	3.45	0.18	0.40	38	N/C, S/C, S	0.26	3.85	0.18	0.40	41	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.28	3.57	0.18	0.40	42	N/C, S/C, S	0.25	4.00	0.18	0.40	46	All Zones
	LowE 180 (Passive Solar)	0.36	2.78	0.44	0.50	49	None	0.32	3.13	0.44	0.50	52	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.44	0.50	53	None	0.31	3.23	0.44	0.50	57	None
	LowE 180 w/189 <sup>3</sup>	0.30	3.33	0.40	0.48	38	N/C	0.27	3.70	0.40	0.48	40	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.29	3.45	0.40	0.48	41	N, N/C	0.26	3.85	0.40	0.48	44	N, N/C
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.13	0.24	54	S	0.30	3.33	0.12	0.24	57	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.37	2.70	0.27	0.43	53	None	0.32	3.13	0.26	0.43	57	None

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superseal 8000 / 8500 Builders Series Sliding Window	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
No GIAS or SDL	Insul Clear	0.49	2.04	0.63	0.66	41	None	-	-	-	-	-	None
	LowE Clear	0.34	2.94	0.32	0.57	50	None	0.31	3.23	0.31	0.57	53	None
	LowE Clear w/XL Edge Spacer	0.34	2.94	0.34	0.57	54	None	0.30	3.33	0.33	0.57	57	N/C
	LowE 366 w/Intercept Spacer	0.34	2.94	0.23	0.52	50	S	0.31	3.23	0.22	0.52	53	S
	LowE 366 W/XL Edge Spacer	0.33	3.03	0.23	0.52	54	S	0.30	3.33	0.22	0.52	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.29	3.45	0.22	0.50	39	N/C, S/C, S	0.26	3.85	0.22	0.50	41	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.28	3.57	0.22	0.50	42	N/C, S/C, S	0.25	4.00	0.22	0.50	46	All Zones
	LowE 180 (Passive Solar)	0.36	2.78	0.55	0.63	50	None	0.32	3.13	0.56	0.63	52	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.55	0.63	54	None	0.31	3.23	0.56	0.63	57	None
	LowE 180 w/189 <sup>3</sup>	0.30	3.33	0.50	0.62	38	N	0.27	3.70	0.50	0.62	40	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.29	3.45	0.50	0.62	41	N	0.26	3.85	0.50	0.62	45	N
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.15	0.31	54	S	0.30	3.33	0.15	0.31	58	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.36	2.78	0.33	0.55	50	None	0.32	3.13	0.33	0.55	53	None
	w/ GIAS or SDL < 1"	Insul Clear	0.49	2.04	0.57	0.59	41	None	-	-	-	-	-
LowE Clear		0.34	2.94	0.29	0.51	50	None	0.31	3.23	0.28	0.51	53	None
LowE Clear w/XL Edge Spacer		0.34	2.94	0.30	0.51	54	None	0.30	3.33	0.30	0.51	57	N/C
LowE 366 w/Intercept Spacer		0.34	2.94	0.20	0.46	50	S	0.31	3.23	0.20	0.46	53	S
LowE 366 W/XL Edge Spacer		0.33	3.03	0.21	0.46	54	S	0.30	3.33	0.20	0.46	58	N/C, S/C, S
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.29	3.45	0.20	0.45	39	N/C, S/C, S	0.26	3.85	0.20	0.45	41	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.28	3.57	0.20	0.45	42	N/C, S/C, S	0.25	4.00	0.20	0.45	46	All Zones
LowE 180 (Passive Solar)		0.36	2.78	0.50	0.56	50	None	0.32	3.13	0.50	0.56	52	None
LowE 180 (Passive Solar) w/XL Edge Spacer		0.34	2.94	0.50	0.56	54	None	0.31	3.23	0.50	0.56	57	None
LowE 180 w/189 <sup>3</sup>		0.30	3.33	0.45	0.55	38	N	0.27	3.70	0.45	0.55	40	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.29	3.45	0.45	0.55	41	N	0.26	3.85	0.45	0.55	45	N
LowE 340 W/XL Edge Spacer		0.33	3.03	0.14	0.28	54	S	0.30	3.33	0.13	0.28	58	N/C, S/C, S
LowE Laminated w/XL Edge Spacer		0.37	2.70	0.30	0.49	50	None	0.33	3.03	0.30	0.49	53	None
w/ GIAS or SDL ≥ 1"		Insul Clear	0.49	2.04	0.50	0.52	41	None	-	-	-	-	-
	LowE Clear	0.34	2.94	0.26	0.45	50	None	0.31	3.23	0.25	0.45	53	S
	LowE Clear w/XL Edge Spacer	0.34	2.94	0.27	0.45	54	None	0.30	3.33	0.27	0.45	57	N/C
	LowE 366 w/Intercept Spacer	0.34	2.94	0.19	0.41	50	S	0.31	3.23	0.18	0.41	53	S
	LowE 366 W/XL Edge Spacer	0.33	3.03	0.19	0.41	54	S	0.30	3.33	0.18	0.41	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.29	3.45	0.18	0.40	39	N/C, S/C, S	0.26	3.85	0.18	0.40	41	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.28	3.57	0.18	0.40	42	N/C, S/C, S	0.25	4.00	0.18	0.40	46	All Zones
	LowE 180 (Passive Solar)	0.36	2.78	0.44	0.50	50	None	0.32	3.13	0.45	0.50	52	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.44	0.50	54	None	0.31	3.23	0.45	0.50	57	None
	LowE 180 w/189 <sup>3</sup>	0.30	3.33	0.40	0.49	38	N/C	0.27	3.70	0.40	0.49	40	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.29	3.45	0.40	0.49	41	N, N/C	0.26	3.85	0.40	0.49	45	N, N/C
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.13	0.25	54	S	0.30	3.33	0.12	0.25	58	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.37	2.70	0.27	0.44	50	None	0.33	3.03	0.27	0.44	53	None

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.



Superséal 8000 / 8500 Builders Series Fixed Window	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
No GIAS or SDL	Insul Clear	0.48	2.08	0.66	0.68	42	None	-	-	-	-	-	None
	LowE Clear	0.33	3.03	0.33	0.59	52	None	0.30	3.33	0.33	0.59	55	N/C
	LowE Clear w/XL Edge Spacer	0.33	3.03	0.35	0.60	55	None	0.29	3.45	0.35	0.60	58	N/C
	LowE 366 w/Intercept Spacer	0.33	3.03	0.24	0.54	54	S	0.29	3.45	0.23	0.54	57	N/C, S/C, S
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.24	0.54	52	S	0.29	3.45	0.23	0.54	59	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.23	0.53	41	All Zones	0.25	4.00	0.23	0.53	44	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.23	0.53	43	All Zones	0.24	4.17	0.23	0.53	46	All Zones
	LowE 180 (Passive Solar)	0.34	2.94	0.58	0.66	53	None	0.31	3.23	0.58	0.66	56	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.58	0.66	54	None	0.30	3.33	0.58	0.66	58	N
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.52	0.65	40	N	0.26	3.85	0.52	0.65	43	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.52	0.65	42	N	0.25	4.00	0.52	0.65	45	N
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.16	0.32	55	S	0.29	3.45	0.15	0.32	59	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.35	2.86	0.35	0.58	54	None	0.30	3.33	0.34	0.58	58	N/C
	w/ GIAS or SDL < 1"	Insul Clear	0.48	2.08	0.59	0.61	42	None	-	-	-	-	-
LowE Clear		0.33	3.03	0.30	0.53	52	None	0.30	3.33	0.30	0.53	55	N/C
LowE Clear w/XL Edge Spacer		0.33	3.03	0.32	0.54	55	None	0.29	3.45	0.32	0.54	58	N/C
LowE 366 w/Intercept Spacer		0.33	3.03	0.22	0.48	54	S	0.29	3.45	0.21	0.48	57	N/C, S/C, S
LowE 366 W/XL Edge Spacer		0.32	3.13	0.22	0.48	52	S	0.29	3.45	0.21	0.48	59	N/C, S/C, S
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.27	3.70	0.21	0.47	41	All Zones	0.25	4.00	0.21	0.47	44	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.27	3.70	0.21	0.47	43	All Zones	0.24	4.17	0.21	0.47	46	All Zones
LowE 180 (Passive Solar)		0.34	2.94	0.52	0.59	53	None	0.31	3.23	0.52	0.59	56	None
LowE 180 (Passive Solar) w/XL Edge Spacer		0.34	2.94	0.52	0.59	54	None	0.30	3.33	0.52	0.59	58	N
LowE 180 w/189 <sup>3</sup>		0.28	3.57	0.47	0.58	40	N	0.26	3.85	0.47	0.58	43	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.28	3.57	0.47	0.58	42	N	0.25	4.00	0.47	0.58	45	N
LowE 340 W/XL Edge Spacer		0.33	3.03	0.15	0.29	55	S	0.29	3.45	0.14	0.29	59	N/C, S/C, S
LowE Laminated w/XL Edge Spacer		0.35	2.86	0.31	0.52	54	None	0.30	3.33	0.31	0.52	58	N/C
w/ GIAS or SDL ≥ 1"		Insul Clear	0.48	2.08	0.53	0.54	42	None	-	-	-	-	-
	LowE Clear	0.33	3.03	0.27	0.47	52	None	0.30	3.33	0.27	0.47	55	N/C
	LowE Clear w/XL Edge Spacer	0.33	3.03	0.29	0.48	55	None	0.29	3.45	0.29	0.48	58	N/C
	LowE 366 w/Intercept Spacer	0.33	3.03	0.19	0.43	54	S	0.29	3.45	0.19	0.43	57	N/C, S/C, S
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.19	0.43	52	S	0.29	3.45	0.19	0.43	59	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.19	0.42	41	All Zones	0.25	4.00	0.19	0.42	44	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.19	0.42	43	All Zones	0.24	4.17	0.19	0.42	46	All Zones
	LowE 180 (Passive Solar)	0.34	2.94	0.47	0.52	53	None	0.31	3.23	0.47	0.52	56	None
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.34	2.94	0.47	0.52	54	None	0.30	3.33	0.47	0.52	58	N
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.42	0.51	40	N	0.26	3.85	0.42	0.51	43	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.42	0.51	42	N	0.25	4.00	0.42	0.51	45	N
	LowE 340 W/XL Edge Spacer	0.33	3.03	0.13	0.26	55	S	0.29	3.45	0.14	0.29	59	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.35	2.86	0.28	0.45	54	None	0.30	3.33	0.28	0.46	58	N/C

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superséal 8000 / 8500 Designers Single-Hung (Standard Reinforcement)	Glazing Description	Air-Filled						Argon-Filled						
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	
No GIAS or SDL	Insul Clear	0.46	2.17	0.61	0.64	42	None	-	-	-	-	-	None	
	LowE Clear	0.32	3.13	0.31	0.55	52	None	0.29	3.45	0.31	0.55	55	N/C	
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.33	0.56	53	None	0.29	3.45	0.33	0.56	57	N/C	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.22	0.51	52	S	0.29	3.45	0.22	0.51	55	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.22	0.51	54	S	0.28	3.57	0.22	0.51	57	N/C, S/C, S	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.22	0.49	40	All Zones	0.25	4.00	0.21	0.49	44	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.22	0.49	42	All Zones	0.24	4.17	0.21	0.49	45	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.54	0.62	51	None	0.30	3.33	0.54	0.62	54	N	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.54	0.62	53	None	0.30	3.33	0.54	0.62	56	N	
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.49	0.61	39	N	0.26	3.85	0.49	0.61	42	N	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.49	0.61	41	N	0.25	4.00	0.49	0.61	44	N	
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.15	0.30	53	S	0.28	3.57	0.14	0.30	57	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.34	2.94	0.33	0.55	52	None	0.30	3.33	0.32	0.55	55	N/C	
	LowE 366 Laminated W/XL Edge Spacer	0.34	2.94	0.23	0.50	52	S	0.29	3.45	0.22	0.50	55	N/C, S/C, S	
	w/ GIAS or SDL < 1"	Insul Clear	0.46	2.17	0.55	0.57	42	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.28	0.49	52	None	0.29	3.45	0.28	0.49	55	N/C
LowE Clear w/XL Edge Spacer		0.32	3.13	0.30	0.50	53	None	0.29	3.45	0.30	0.50	57	N/C	
LowE 366 w/Intercept Spacer		0.32	3.13	0.20	0.45	52	S	0.29	3.45	0.20	0.45	55	N/C, S/C, S	
LowE 366 W/XL Edge Spacer		0.32	3.13	0.20	0.45	54	S	0.28	3.57	0.20	0.45	57	N/C, S/C, S	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.27	3.70	0.19	0.44	40	All Zones	0.25	4.00	0.19	0.44	44	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.27	3.70	0.20	0.44	42	All Zones	0.24	4.17	0.19	0.44	45	All Zones	
LowE 180 (Passive Solar)		0.33	3.03	0.48	0.55	51	None	0.30	3.33	0.48	0.55	54	N	
LowE 180 (Passive Solar) w/XL Edge Spacer		0.33	3.03	0.48	0.55	53	None	0.30	3.33	0.48	0.55	56	N	
LowE 180 w/189 <sup>3</sup>		0.28	3.57	0.44	0.54	39	N	0.26	3.85	0.44	0.54	42	N	
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.27	3.70	0.44	0.54	41	N	0.25	4.00	0.44	0.54	44	N	
LowE 340 W/XL Edge Spacer		0.32	3.13	0.14	0.27	53	S	0.28	3.57	0.13	0.27	57	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer		0.36	2.78	0.29	0.49	52	None	0.32	3.13	0.29	0.49	55	None	
LowE 366 Laminated W/XL Edge Spacer		0.34	2.94	0.21	0.44	52	S	0.31	3.23	0.20	0.44	55	S	
w/ GIAS or SDL ≥ 1"		Insul Clear	0.46	2.17	0.49	0.51	42	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.25	0.44	52	S	0.29	3.45	0.25	0.44	55	N/C, S/C, S
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.27	0.44	53	None	0.29	3.45	0.26	0.44	57	N/C	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.18	0.40	52	S	0.29	3.45	0.18	0.40	55	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.18	0.40	54	S	0.28	3.57	0.18	0.40	57	N/C, S/C, S	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.18	0.39	40	All Zones	0.25	4.00	0.17	0.39	44	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.18	0.39	42	All Zones	0.24	4.17	0.17	0.39	45	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.43	0.49	51	None	0.30	3.33	0.43	0.49	54	N	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.43	0.49	53	None	0.30	3.33	0.43	0.49	56	N	
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.39	0.48	39	N, N/C	0.26	3.85	0.39	0.48	42	N, N/C	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.39	0.48	41	N, N/C	0.25	4.00	0.39	0.48	44	N, N/C	
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.12	0.24	53	S	0.28	3.57	0.12	0.24	57	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.36	2.78	0.26	0.44	52	None	0.32	3.13	0.26	0.44	55	None	
	LowE 366 Laminated W/XL Edge Spacer	0.36	2.78	0.19	0.39	52	S	0.31	3.23	0.18	0.39	55	S	

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superséal 8000 / 8500 Designers Sliding Window	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
		No GIAs or SDL											
Insul Clear	0.46	2.17	0.60	0.64	42	None	-	-	-	-	-	None	
LowE Clear	0.32	3.13	0.31	0.55	53	None	0.29	3.45	0.30	0.55	55	N/C	
LowE Clear w/XL Edge Spacer	0.32	3.13	0.33	0.56	54	None	0.29	3.45	0.32	0.56	57	N/C	
LowE 366 w/Intercept Spacer	0.32	3.13	0.22	0.50	53	S	0.29	3.45	0.21	0.50	56	N/C, S/C, S	
LowE 366 W/XL Edge Spacer	0.32	3.13	0.22	0.50	54	S	0.28	3.57	0.21	0.50	58	N/C, S/C, S	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.21	0.49	41	All Zones	0.25	4.00	0.21	0.49	44	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.21	0.49	42	All Zones	0.24	4.17	0.21	0.49	46	All Zones	
LowE 180 (Passive Solar)	0.33	3.03	0.53	0.61	52	None	0.30	3.33	0.53	0.61	55	N	
LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.53	0.61	54	None	0.29	3.45	0.53	0.61	57	N	
LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.48	0.60	40	N	0.26	3.85	0.48	0.60	43	N	
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.48	0.60	41	N	0.25	4.00	0.48	0.60	45	N	
LowE 340 W/XL Edge Spacer	0.32	3.13	0.15	0.30	54	S	0.28	3.57	0.14	0.30	58	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer	0.34	2.94	0.32	0.55	52	None	0.30	3.33	0.32	0.55	56	N/C	
LowE 366 Laminated W/XL Edge Spacer	0.34	2.94	0.23	0.49	53	S	0.29	3.45	0.22	0.49	56	N/C, S/C, S	
w/ GIAs or SDL < 1"													
Insul Clear	0.46	2.17	0.54	0.57	42	None	-	-	-	-	-	None	
LowE Clear	0.32	3.13	0.28	0.49	53	None	0.29	3.45	0.27	0.49	55	N/C	
LowE Clear w/XL Edge Spacer	0.32	3.13	0.29	0.50	54	None	0.29	3.45	0.29	0.50	57	N/C	
LowE 366 w/Intercept Spacer	0.32	3.13	0.20	0.45	53	S	0.29	3.45	0.19	0.45	56	N/C, S/C, S	
LowE 366 W/XL Edge Spacer	0.32	3.13	0.20	0.45	54	S	0.28	3.57	0.19	0.45	58	N/C, S/C, S	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.19	0.44	41	All Zones	0.25	4.00	0.19	0.44	44	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.19	0.44	42	All Zones	0.24	4.17	0.19	0.44	46	All Zones	
LowE 180 (Passive Solar)	0.33	3.03	0.48	0.55	52	None	0.30	3.33	0.48	0.55	55	N	
LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.48	0.55	54	None	0.29	3.45	0.48	0.55	57	N	
LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.43	0.53	40	N	0.26	3.85	0.44	0.53	43	N	
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.43	0.53	41	N	0.25	4.00	0.44	0.53	45	N	
LowE 340 W/XL Edge Spacer	0.32	3.13	0.13	0.27	54	S	0.28	3.57	0.13	0.27	58	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer	0.36	2.78	0.29	0.49	52	None	0.31	3.23	0.28	0.49	56	None	
LowE 366 Laminated W/XL Edge Spacer	0.35	2.86	0.21	0.44	53	S	0.31	3.23	0.20	0.44	56	S	
w/ GIAs or SDL ≥ 1"													
Insul Clear	0.46	2.17	0.48	0.50	42	None	-	-	-	-	-	None	
LowE Clear	0.32	3.13	0.25	0.43	53	S	0.29	3.45	0.24	0.43	55	N/C, S/C, S	
LowE Clear w/XL Edge Spacer	0.32	3.13	0.26	0.44	54	None	0.29	3.45	0.26	0.44	57	N/C	
LowE 366 w/Intercept Spacer	0.32	3.13	0.18	0.39	53	S	0.29	3.45	0.18	0.39	56	N/C, S/C, S	
LowE 366 W/XL Edge Spacer	0.32	3.13	0.18	0.39	54	S	0.28	3.57	0.18	0.39	58	N/C, S/C, S	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.27	3.70	0.17	0.39	41	All Zones	0.25	4.00	0.17	0.39	44	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.17	0.39	42	All Zones	0.24	4.17	0.17	0.39	46	All Zones	
LowE 180 (Passive Solar)	0.33	3.03	0.42	0.48	52	None	0.30	3.33	0.43	0.48	55	N	
LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.48	0.49	54	None	0.29	3.45	0.43	0.48	57	N	
LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.39	0.47	40	N, N/C	0.26	3.85	0.39	0.47	43	N, N/C	
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.39	0.47	41	N, N/C	0.25	4.00	0.39	0.47	45	N, N/C	
LowE 340 W/XL Edge Spacer	0.32	3.13	0.12	0.24	54	S	0.28	3.57	0.12	0.24	58	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer	0.36	2.78	0.26	0.43	52	None	0.31	3.23	0.26	0.43	56	None	
LowE 366 Laminated W/XL Edge Spacer	0.35	2.86	0.19	0.39	53	S	0.31	3.23	0.18	0.39	56	S	

<sup>3</sup>The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superséal 8000 / 8500 Designers Series Fixed Window	Glazing Description	Air-Filled						Argon-Filled						
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	
No GIAS or SDL	Insul Clear	0.46	2.17	0.63	0.67	43	None	-	-	-	-	-	None	
	LowE Clear	0.32	3.13	0.32	0.57	54	None	0.28	3.57	0.32	0.57	58	N, N/C	
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.34	0.58	56	None	0.28	3.57	0.34	0.58	59	N, N/C	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.23	0.52	55	S	0.28	3.57	0.23	0.52	58	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.31	3.23	0.23	0.52	56	S	0.27	3.70	0.23	0.52	60	All Zones	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.26	3.85	0.22	0.51	42	All Zones	0.24	4.17	0.22	0.51	45	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.22	0.51	43	All Zones	0.23	4.35	0.22	0.51	47	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.56	0.64	54	None	0.29	3.45	0.56	0.64	57	N	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.32	3.13	0.56	0.64	55	None	0.29	3.45	0.56	0.64	59	N	
	LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.51	0.63	41	N	0.25	4.00	0.51	0.63	44	N	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.51	0.63	42	N	0.24	4.17	0.51	0.63	45	N	
	LowE 340 W/XL Edge Spacer	0.31	3.23	0.15	0.31	56	S	0.28	3.57	0.15	0.31	59	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.34	2.94	0.34	0.57	54	None	0.29	3.45	0.33	0.57	58	N/C	
	LowE 366 Laminated W/XL Edge Spacer	0.33	3.03	0.24	0.51	54	S	0.28	3.57	0.23	0.51	58	N/C, S/C, S	
	w/ GIAS or SDL < 1"	Insul Clear	0.46	2.17	0.57	0.50	43	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.29	0.51	54	None	0.28	3.57	0.29	0.51	58	N/C
LowE Clear w/XL Edge Spacer		0.32	3.13	0.31	0.52	56	None	0.28	3.57	0.31	0.52	59	N/C	
LowE 366 w/Intercept Spacer		0.32	3.13	0.21	0.47	55	S	0.28	3.57	0.20	0.47	58	N/C, S/C, S	
LowE 366 W/XL Edge Spacer		0.31	3.23	0.21	0.47	56	S	0.27	3.70	0.20	0.47	60	All Zones	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.26	3.85	0.20	0.46	42	All Zones	0.24	4.17	0.20	0.46	45	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.26	3.85	0.20	0.46	43	All Zones	0.23	4.35	0.20	0.46	47	All Zones	
LowE 180 (Passive Solar)		0.33	3.03	0.50	0.57	54	None	0.29	3.45	0.50	0.57	57	N	
LowE 180 (Passive Solar) w/XL Edge Spacer		0.32	3.13	0.47	0.57	55	None	0.30	3.33	0.47	0.57	57	N	
LowE 180 w/189 <sup>3</sup>		0.27	3.70	0.46	0.56	41	N	0.25	4.00	0.46	0.56	44	N	
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.27	3.70	0.46	0.56	42	N	0.24	4.17	0.46	0.56	45	N	
LowE 340 W/XL Edge Spacer		0.31	3.23	0.14	0.28	56	S	0.28	3.57	0.14	0.28	59	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer		0.36	2.78	0.30	0.51	54	None	0.31	3.23	0.30	0.51	58	None	
LowE 366 Laminated W/XL Edge Spacer		0.35	2.86	0.22	0.46	54	S	0.31	3.23	0.21	0.46	58	S	
w/ GIAS or SDL ≥ 1"		Insul Clear	0.46	2.17	0.51	0.53	43	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.26	0.46	54	None	0.28	3.57	0.26	0.46	58	N/C
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.28	0.46	56	None	0.28	3.57	0.28	0.46	59	N/C	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.19	0.42	55	S	0.28	3.57	0.19	0.42	58	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.31	3.23	0.19	0.42	56	S	0.27	3.70	0.19	0.42	60	All Zones	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.26	3.85	0.18	0.41	42	All Zones	0.24	4.17	0.18	0.41	45	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.18	0.41	43	All Zones	0.23	4.35	0.18	0.41	47	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.45	0.51	54	None	0.29	3.45	0.45	0.51	57	N	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.32	3.13	0.45	0.51	55	None	0.29	3.45	0.45	0.51	59	N	
	LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.41	0.50	41	N	0.25	4.00	0.41	0.50	44	N	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.41	0.50	42	N	0.24	4.17	0.41	0.50	45	N	
	LowE 340 W/XL Edge Spacer	0.31	3.23	0.13	0.25	56	S	0.28	3.57	0.12	0.25	59	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.36	2.78	0.27	0.46	54	None	0.31	3.23	0.27	0.46	58	None	
	LowE 366 Laminated W/XL Edge Spacer	0.35	2.86	0.20	0.41	54	S	0.31	3.23	0.18	0.41	58	S	

<sup>3</sup>The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Supraseal 8000 / 8500 Premium Double-Hung (With or w/o Reinforcement)	Glazing Description	Air-Filled						Argon-Filled						
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	
No GIAS or SDL	Insul Clear	0.46	2.17	0.57	0.60	42	None	-	-	-	-	-	None	
	LowE Clear	0.32	3.13	0.29	0.52	52	None	0.29	3.45	0.29	0.52	55	N/C	
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.31	0.53	54	None	0.29	3.45	0.31	0.53	57	N/C	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.21	0.48	52	S	0.29	3.45	0.20	0.48	56	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.21	0.48	54	S	0.29	3.45	0.20	0.48	57	N/C, S/C, S	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.28	3.57	0.20	0.46	41	N/C, S/C, S	0.25	4.00	0.20	0.46	44	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.20	0.46	42	All Zones	0.25	4.00	0.20	0.46	46	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.50	0.58	52	None	0.30	3.33	0.51	0.58	55	N	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.50	0.58	53	None	0.30	3.33	0.51	0.58	56	N	
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.46	0.57	40	N	0.26	3.85	0.46	0.57	43	N	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.46	0.57	41	N	0.26	3.85	0.46	0.57	45	N	
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.14	0.29	54	S	0.29	3.45	0.13	0.29	57	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.26	0.50	54	None	0.29	3.45	0.26	0.50	58	N/C	
	LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.21	0.47	55	S	0.29	3.45	0.21	0.47	58	N/C, S/C, S	
	w/ GIAS or SDL < 1"	Insul Clear	0.46	2.17	0.51	0.54	42	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.26	0.46	52	None	0.29	3.45	0.26	0.46	55	N/C
LowE Clear w/XL Edge Spacer		0.32	3.13	0.28	0.47	54	None	0.29	3.45	0.28	0.47	57	N/C	
LowE 366 w/Intercept Spacer		0.32	3.13	0.19	0.42	52	S	0.29	3.45	0.18	0.42	56	N/C, S/C, S	
LowE 366 W/XL Edge Spacer		0.32	3.13	0.19	0.42	54	S	0.29	3.45	0.18	0.42	57	N/C, S/C, S	
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.28	3.57	0.18	0.41	41	N/C, S/C, S	0.25	4.00	0.18	0.41	44	All Zones	
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.27	3.70	0.18	0.41	42	All Zones	0.25	4.00	0.18	0.41	46	All Zones	
LowE 180 (Passive Solar)		0.33	3.03	0.45	0.52	52	None	0.30	3.33	0.45	0.52	55	N	
LowE 180 (Passive Solar) w/XL Edge Spacer		0.33	3.03	0.45	0.52	53	None	0.30	3.33	0.45	0.52	56	N	
LowE 180 w/189 <sup>3</sup>		0.28	3.57	0.41	0.51	40	N	0.26	3.85	0.41	0.51	43	N	
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.28	3.57	0.41	0.51	41	N	0.26	3.85	0.41	0.51	45	N	
LowE 340 W/XL Edge Spacer		0.32	3.13	0.13	0.25	54	S	0.29	3.45	0.12	0.25	57	N/C, S/C, S	
LowE Laminated w/XL Edge Spacer		0.32	3.13	0.24	0.44	54	S	0.29	3.45	0.23	0.44	58	N/C, S/C, S	
LowE 366 Laminated W/XL Edge Spacer		0.32	3.13	0.19	0.41	55	S	0.29	3.45	0.19	0.41	58	N/C, S/C, S	
w/ GIAS or SDL ≥ 1"		Insul Clear	0.46	2.17	0.46	0.47	42	None	-	-	-	-	-	None
		LowE Clear	0.32	3.13	0.23	0.41	52	S	0.29	3.45	0.23	0.41	55	N/C, S/C, S
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.25	0.41	54	S	0.29	3.45	0.25	0.41	57	N/C, S/C, S	
	LowE 366 w/Intercept Spacer	0.32	3.13	0.17	0.37	52	S	0.29	3.45	0.17	0.37	56	N/C, S/C, S	
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.17	0.37	54	S	0.29	3.45	0.17	0.37	57	N/C, S/C, S	
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.28	3.57	0.16	0.36	41	N/C, S/C, S	0.25	4.00	0.16	0.36	44	All Zones	
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.16	0.36	42	All Zones	0.25	4.00	0.16	0.36	46	All Zones	
	LowE 180 (Passive Solar)	0.33	3.03	0.40	0.46	52	None	0.30	3.33	0.40	0.46	55	N/C	
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.40	0.46	53	None	0.30	3.33	0.40	0.46	56	N/C	
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.37	0.45	40	N, N/C	0.26	3.85	0.37	0.45	43	N, N/C	
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.37	0.45	42	N, N/C	0.26	3.85	0.37	0.45	45	N, N/C	
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.12	0.22	54	S	0.29	3.45	0.11	0.22	57	N/C, S/C, S	
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.21	0.39	54	S	0.29	3.45	0.21	0.39	58	N/C, S/C, S	
	LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.17	0.37	55	S	0.29	3.45	0.17	0.37	58	N/C, S/C, S	
	TRIPLE IG	Triple IG LE/CL/CL w/XL Edge Spacer	0.30	3.33	0.29	0.48	60	N/C	0.27	3.70	0.29	0.48	63	N, N/C
		Triple IG LE/CL/CL SDL < 1" w/XL Edge Spacer	0.30	3.33	0.26	0.43	60	N/C	0.27	3.70	0.26	0.43	63	N, N/C
Triple IG LE/CL/CL SDL > 1" w/XL Edge Spacer		0.30	3.33	0.23	0.38	60	N/C, S/C, S	0.27	3.70	0.23	0.38	63	All Zones	
Triple IG LE/CL/LE w/XL Edge Spacer		0.26	3.85	0.26	0.42	63	N, N/C	0.23	4.35	0.26	0.42	66	N, N/C	
Triple IG LE/CL/LE SDL < 1" w/XL Edge Spacer		0.26	3.85	0.24	0.37	63	All Zones	0.23	4.35	0.24	0.37	66	All Zones	
Triple IG LE/CL/LE SDL > 1" w/XL Edge Spacer		0.26	3.85	0.21	0.33	63	All Zones	0.23	4.35	0.21	0.33	66	All Zones	

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Supers seal 8000 / 8500 Premium Double Sliding Window (With or W/O Reinforcement)	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
		No GIAS or SDL											
	Insul Clear	0.45	2.22	0.56	0.59	43	None	-	-	-	-	-	None
	LowE Clear	0.32	3.13	0.28	0.51	53	None	0.29	3.45	0.28	0.51	56	N/C
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.28	0.51	55	None	0.29	3.45	0.28	0.51	58	N/C
	LowE 366 w/Intercept Spacer	0.32	3.13	0.20	0.47	53	S	0.29	3.45	0.20	0.46	56	N/C, S/C, S
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.20	0.46	55	S	0.28	3.57	0.20	0.46	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.28	3.57	0.20	0.45	42	N/C, S/C, S	0.25	4.00	0.20	0.45	45	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.20	0.45	43	All Zones	0.25	4.00	0.20	0.45	46	All Zones
	LowE 180 (Passive Solar)	0.33	3.03	0.49	0.57	53	None	0.30	3.33	0.50	0.57	55	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.49	0.57	54	None	0.30	3.33	0.50	0.57	57	N
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.45	0.56	41	N	0.26	3.85	0.45	0.56	44	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.45	0.56	42	N	0.26	3.85	0.45	0.56	45	N
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.14	0.28	55	S	0.29	3.45	0.13	0.28	58	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.26	0.49	55	None	0.29	3.45	0.25	0.49	58	N/C, S/C, S
	LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.21	0.46	55	S	0.29	3.45	0.20	0.46	58	N/C, S/C, S
w/ GIAS or SDL < 1"													
	Insul Clear	0.45	2.22	0.50	0.52	43	None	-	-	-	-	-	None
	LowE Clear	0.32	3.13	0.26	0.45	53	None	0.29	3.45	0.25	0.45	56	N/C, S/C, S
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.26	0.45	55	None	0.28	3.57	0.25	0.45	58	N/C, S/C, S
	LowE 366 w/Intercept Spacer	0.33	3.03	0.18	0.41	53	S	0.29	3.45	0.18	0.41	56	N/C, S/C, S
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.18	0.41	55	S	0.28	3.57	0.18	0.41	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.28	3.57	0.18	0.40	42	N/C, S/C, S	0.25	4.00	0.18	0.40	45	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.18	0.40	43	All Zones	0.25	4.00	0.18	0.40	46	All Zones
	LowE 180 (Passive Solar)	0.33	3.03	0.44	0.50	53	None	0.30	3.33	0.44	0.51	55	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.44	0.50	54	None	0.30	3.33	0.44	0.50	57	N
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.40	0.49	41	N, N/C	0.26	3.85	0.40	0.49	44	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.40	0.49	42	N, N/C	0.26	3.85	0.40	0.49	45	N, N/C
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.12	0.25	55	S	0.29	3.45	0.12	0.25	58	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.23	0.43	55	S	0.29	3.45	0.23	0.43	58	N/C, S/C, S
	LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.19	0.40	55	S	0.29	3.45	0.18	0.40	58	N/C, S/C, S
w/ GIAS or SDL ≥ 1"													
	Insul Clear	0.45	2.22	0.44	0.46	43	None	-	0.00	-	-	-	0
	LowE Clear	0.32	3.13	0.23	0.4	53	S	0.29	3.45	0.23	0.40	56	N/C, S/C, S
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.23	0.40	55	S	0.29	3.45	0.23	0.40	58	N/C, S/C, S
	LowE 366 w/Intercept Spacer	0.32	3.13	0.16	0.36	53	S	0.29	3.45	0.16	0.36	56	N/C, S/C, S
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.16	0.36	55	S	0.28	3.57	0.16	0.36	58	N/C, S/C, S
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.28	3.57	0.16	0.35	42	N/C, S/C, S	0.25	4.00	0.16	0.35	45	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.27	3.70	0.16	0.35	43	All Zones	0.25	4.00	0.16	0.35	46	All Zones
	LowE 180 (Passive Solar)	0.33	3.03	0.39	0.44	53	None	0.3	3.33	0.39	0.44	55	N/C
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.33	3.03	0.39	0.44	54	None	0.30	3.33	0.39	0.44	57	N/C
	LowE 180 w/189 <sup>3</sup>	0.28	3.57	0.36	0.43	41	N, N/C	0.26	3.85	0.36	0.43	44	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.28	3.57	0.36	0.43	42	N, N/C	0.26	3.85	0.36	0.43	45	N, N/C
	LowE 340 W/XL Edge Spacer	0.32	3.13	0.11	0.22	55	S	0.29	3.45	0.11	0.22	58	N/C, S/C, S
	LowE Laminated w/XL Edge Spacer	0.32	3.13	0.21	0.38	55	S	0.29	3.45	0.2	0.38	58	N/C, S/C, S
	LowE 366 Laminated W/XL Edge Spacer	0.32	3.13	0.17	0.36	55	S	0.29	3.45	0.16	0.36	58	N/C, S/C, S
TRIPLE IG													
	Triple IG LE/CL/CL w/XL Edge Spacer	0.30	3.33	0.28	0.47	59	N/C, S/C	0.27	3.70	0.28	0.47	62	N, N/C
	Triple IG LE/CL/CL SDL < 1" w/XL Edge Spacer	0.30	3.33	0.25	0.42	59	N/C, S/C, S	0.27	3.70	0.25	0.42	62	All Zones
	Triple IG LE/CL/CL SDL > 1" w/XL Edge Spacer	0.30	3.33	0.23	0.37	59	N/C, S/C, S	0.27	3.70	0.22	0.37	62	S/C
	Triple IG LE/CL/LE w/XL Edge Spacer	0.26	3.85	0.26	0.41	63		0.23	4.35	0.26	0.41	66	N, N/C
	Triple IG LE/CL/LE SDL < 1" w/XL Edge Spacer	0.26	3.85	0.23	0.37	63	All Zones	0.23	4.35	0.23	0.37	66	All Zones
	Triple IG LE/CL/LE SDL > 1" w/XL Edge Spacer	0.26	3.85	0.21	0.32	63	All Zones	0.23	4.35	0.21	0.32	66	S/C

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Superséal 8000 / 8500 Premium Fixed Window	Glazing Description	Air-Filled						Argon-Filled					
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating
No GIAS or SDL	Insul Clear	0.45	2.22	0.60	0.63	45	None	-	-	-	-	-	None
	LowE Clear	0.31	3.23	0.30	0.55	56	None	0.27	3.70	0.30	0.55	60	N, N/C
	LowE Clear w/XL Edge Spacer	0.31	3.23	0.32	0.55	57	None	0.27	3.70	0.32	0.55	61	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.22	0.50	56	N/C, S/C, S	0.27	3.70	0.21	0.50	60	All Zones
	LowE 366 W/XL Edge Spacer	0.30	3.33	0.22	0.50	58	N/C, S/C, S	0.27	3.70	0.21	0.50	61	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.21	0.49	43	All Zones	0.23	4.35	0.21	0.49	47	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.25	4.00	0.21	0.49	44	All Zones	0.23	4.35	0.21	0.49	48	All Zones
	LowE 180 (Passive Solar)	0.32	3.13	0.53	0.61	56	None	0.28	3.57	0.53	0.61	59	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.53	0.61	57	None	0.28	3.57	0.53	0.61	60	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.48	0.60	42	N	0.24	4.17	0.48	0.60	45	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.26	3.85	0.48	0.60	43	N	0.24	4.17	0.48	0.60	47	N
	LowE 340 W/XL Edge Spacer	0.30	3.33	0.15	0.30	57	N/C, S/C, S	0.27	3.70	0.14	0.30	61	All Zones
	LowE Laminated w/XL Edge Spacer	0.31	3.23	0.27	10.52	59	None	0.27	3.70	0.27	0.52	62	N, N/C
	LowE 366 Laminated W/XL Edge Spacer	0.30	3.33	0.22	0.49	59	N/C, S/C, S	0.27	3.70	0.22	0.49	63	All Zones
	w/ GIAS or SDL < 1"	Insul Clear	0.45	2.22	0.54	0.56	45	None	-	-	-	-	-
LowE Clear		0.31	3.23	0.27	0.49	56	None	0.27	3.70	0.27	0.49	60	N, N/C
LowE Clear w/XL Edge Spacer		0.31	3.23	0.29	0.49	57	None	0.27	3.70	0.29	0.49	61	N, N/C
LowE 366 w/Intercept Spacer		0.30	3.33	0.20	0.44	56	N/C, S/C, S	0.27	3.70	0.19	0.44	60	All Zones
LowE 366 W/XL Edge Spacer		0.30	3.33	0.20	0.44	58	N/C, S/C, S	0.27	3.70	0.19		61	All Zones
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.25	4.00	0.19	0.43	43	All Zones	0.23	4.35	0.19	0.43	47	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.25	4.00	0.19	0.43	44	All Zones	0.23	4.35	0.19	0.43	48	All Zones
LowE 180 (Passive Solar)		0.32	3.13	0.47	0.54	56	None	0.28	3.57	0.48	0.54	59	N
LowE 180 (Passive Solar) w/XL Edge Spacer		0.31	3.23	0.47	0.54	57	None	0.28	3.57	0.48	0.54	60	N
LowE 180 w/189 <sup>3</sup>		0.26	3.85	0.43	0.53	42	N	0.24	4.17	0.43	0.53	45	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.26	3.85	0.43	0.53	43	N	0.24	4.17	0.43	0.53	47	N
LowE 340 W/XL Edge Spacer		0.30	3.33	0.13	0.27	57	N/C, S/C, S	0.27	3.70	0.13	0.27	61	All Zones
LowE Laminated w/XL Edge Spacer		0.31	3.23	0.25	0.47	59	S	0.27	3.70	0.24	0.47	62	All Zones
LowE 366 Laminated W/XL Edge Spacer		0.30	3.33	0.20	0.44	59	N/C, S/C, S	0.27	3.70	0.20	0.44	63	All Zones
w/ GIAS or SDL ≥ 1"		Insul Clear	0.45	2.22	0.48	0.50	45	None	-	-	-	-	-
	LowE Clear	0.31	3.23	0.25	0.43	56	S	0.27	3.70	0.24	0.43	60	All Zones
	LowE Clear w/XL Edge Spacer	0.31	3.23	0.26	0.44	57	None	0.27	3.70	0.26	0.44	61	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.18	0.39	56	N/C, S/C, S	0.27	3.70	0.17	0.39	60	All Zones
	LowE 366 W/XL Edge Spacer	0.30	3.33	0.18	0.39	58	N/C, S/C, S	0.27	3.70	0.17	0.39	61	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.17	0.38	43	All Zones	0.23	4.35	0.17	0.38	47	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.25	4.00	0.17	0.38	44	All Zones	0.23	4.35	0.17	0.38	48	All Zones
	LowE 180 (Passive Solar)	0.32	3.13	0.42	0.48	56	None	0.28	3.57	0.42	0.48	59	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.42	0.48	57	None	0.28	3.57	0.42	0.48	60	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.38	0.47	42	N, N/C	0.24	4.17	0.39	0.47	45	N, N/C
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.26	3.85	0.38	0.47	43	N, N/C	0.24	4.17	0.39	0.47	47	N, N/C
	LowE 340 W/XL Edge Spacer	0.30	3.33	0.12	0.24	57	N/C, S/C, S	0.27	3.70	0.12	0.24	61	All Zones
	LowE Laminated w/XL Edge Spacer	0.31	3.23	0.22	0.41	59	S	0.27	3.70	0.22	0.41	62	All Zones
	LowE 366 Laminated W/XL Edge Spacer	0.30	3.33	0.18	0.38	59	N/C, S/C, S	0.27	3.70	0.18	0.38	63	All Zones
	Triple IG	Triple IG LE/CL/CL w/XL Edge Spacer	0.28	3.57	0.30	0.51	63	N/C	0.25	4.00	0.30	0.51	67
Triple IG LE/CL/CL SDL < 1" w/XL Edge Spacer		0.28	3.57	0.27	0.45	63	N/C	0.25	4.00	0.27	0.45	67	N, N/C
Triple IG LE/CL/CL SDL > 1" w/XL Edge Spacer		0.28	3.57	0.24	0.40	63	N/C, S/C, S	0.25	4.00	0.24	0.40	67	All Zones
Triple IG LE/CL/LE w/XL Edge Spacer		0.24	4.17	0.28	0.44	67	N, N/C	0.21	4.76	0.27	0.44	69	N, N/C
Triple IG LE/CL/LE SDL < 1" w/XL Edge Spacer		0.24	4.17	0.25	0.39	67	All Zones	0.21	4.76	0.25	0.39	69	All Zones
Triple IG LE/CL/LE SDL > 1" w/XL Edge Spacer		0.24	4.17	0.22	0.35	67	All Zones	0.21	4.76	0.22	0.35	69	All Zones

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Glazing Description	Air-Filled						Argon-Filled						
	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	
	<b>Supriseal 7829 Vinyl Direct Set</b>												
No GIAS or SDL	Insul Clear	0.46	2.17	0.67	0.72	43	None	-	-	-	-	-	None
	LowE Clear	0.31	3.23	0.35	0.62	55	N/C	0.27	3.70	0.34	0.62	58	N, N/C
	LowE Clear w/XL Edge Spacer	0.31	3.23	0.37	0.63	56	N/C	0.27	3.70	0.37	0.63	60	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.25	0.57	55	N/C, S/C, S	0.26	3.85	0.24	0.57	58	All Zones
	LowE 366 W/XL Edge Spacer	0.30	3.33	0.25	0.57	56	N/C, S/C, S	0.26	3.85	0.24	0.57	60	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.24	0.56	42	All Zones	0.22	4.55	0.24	0.56	46	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.24	3.33	0.24	0.56	44	All Zones	0.21	4.76	0.24	0.56	48	All Zones
	LowE 180 (Passive Solar)	0.32	3.13	0.60	0.70	54	None	0.28	3.57	0.61	0.70	57	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.60	0.69	55	None	0.27	3.70	0.60	0.69	59	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.55	0.68	41	N	0.23	4.35	0.55	0.68	45	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.25	4.00	0.55	0.68	43	N	0.23	4.35	0.56	0.68	47	N
	LowE 340 W/XL Edge Spacer	0.30	3.33	0.17	0.34	57	N/C, S/C, S	0.26	3.85	0.16	0.34	60	All Zones
	LowE Laminated w/XL Edge Spacer	0.31	3.23	0.41	0.62	57	None	0.27	3.70	0.41	0.62	61	N
	w/ GIAS or SDL < 1"	Insul Clear	0.46	2.17	0.61	0.64	43	None	-	-	-	-	-
LowE Clear		0.31	3.23	0.31	0.56	55	N/C	0.27	3.70	0.31	0.56	58	N, N/C
LowE Clear w/XL Edge Spacer		0.31	3.23	0.33	0.57	56	N/C	0.27	3.85	0.33	0.57	60	N, N/C
LowE 366 w/Intercept Spacer		0.30	3.33	0.22	0.51	55	N/C, S/C, S	0.26	3.85	0.22	0.51	58	All Zones
LowE 366 W/XL Edge Spacer		0.30	3.33	0.22	0.51	56	N/C, S/C, S	0.26	3.85	0.22	0.51	60	All Zones
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>		0.25	4.00	0.22	0.50	42	All Zones	0.22	4.55	0.22	0.50	46	All Zones
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>		0.24	4.17	0.22	0.50	44	All Zones	0.21	4.76	0.22	0.50	48	All Zones
LowE 180 (Passive Solar)		0.32	3.13	0.54	0.63	54	None	0.28	3.57	0.55	0.63	57	N
LowE 180 (Passive Solar) w/XL Edge Spacer		0.31	3.23	0.54	0.62	55	None	0.27	3.70	0.54	0.62	59	N
LowE 180 w/189 <sup>3</sup>		0.26	3.85	0.50	0.61	41	N	0.23	4.35	0.50	0.61	45	N
LowE 180 w/189 w/XL Edge <sup>3</sup>		0.25	4.00	0.50	0.61	43	N	0.23	4.35	0.50	0.61	47	N
LowE 340 W/XL Edge Spacer		0.30	3.33	0.15	0.31	57	N/C, S/C, S	0.26	3.85	0.15	0.31	60	All Zones
LowE Laminated w/XL Edge Spacer		0.31	3.23	0.37	0.56	57	N/C	0.27	3.70	0.38	0.56	61	N, N/C
w/ GIAS or SDL ≥ 1"		Insul Clear	0.46	2.17	0.55	0.57	43	None	-	-	-	-	-
	LowE Clear	0.31	3.23	0.28	0.50	55	N/C, S/C	0.27	3.70	0.28	0.50	58	N, N/C
	LowE Clear w/XL Edge Spacer	0.31	3.23	0.30	0.51	56	N/C, S/C	0.27	3.70	0.30	0.51	60	N, N/C
	LowE 366 w/Intercept Spacer	0.30	3.33	0.20	0.46	55	N/C, S/C, S	0.26	3.85	0.20	0.46	58	All Zones
	LowE 366 W/XL Edge Spacer	0.30	3.33	0.20	0.45	56	N/C, S/C, S	0.26	3.85	0.20	0.45	60	All Zones
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.25	4.00	0.20	0.45	42	All Zones	0.22	4.55	0.20	0.45	46	All Zones
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.24	4.17	0.20	0.45	44	All Zones	0.21	4.76	0.20	0.45	48	All Zones
	LowE 180 (Passive Solar)	0.32	3.13	0.49	0.56	54	None	0.28	3.57	0.49	0.56	57	N
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.31	3.23	0.48	0.56	55	None	0.27	3.70	0.48	0.56	59	N
	LowE 180 w/189 <sup>3</sup>	0.26	3.85	0.45	0.55	41	N	0.23	4.35	0.45	0.55	45	N
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.25	4.00	0.45	0.55	43	N	0.23	4.35	0.45	0.55	47	N
	LowE 340 W/XL Edge Spacer	0.30	3.33	0.14	0.27	57	N/C, S/C, S	0.26	3.85	0.13	0.27	60	All Zones
	LowE Laminated w/XL Edge Spacer	0.31	3.23	0.34	0.50	57	N/C	0.27	3.70	0.34	0.50	61	N, N/C
	TRIPLE IG	Triple IG LE/CL/CL w/XL Edge Spacer	0.28	3.57	0.34	0.58	61	N, N/C	0.24	4.17	0.34	0.58	64
Triple IG LE/CL/CL SDL < 1" w/XL Edge Spacer		0.28	3.57	0.31	0.52	61	N/C	0.24	4.17	0.31	0.52	64	N, N/C
Triple IG LE/CL/CL SDL > 1" w/XL Edge Spacer		0.28	3.57	0.28	0.46	61	N/C	0.24	4.17	0.28	0.46	64	N, N/C
Triple IG LE/CL/LE w/XL Edge Spacer		0.23	4.35	0.31	0.51	65	N, N/C	0.19	5.26	0.31	0.51	69	N, N/C
Triple IG LE/CL/LE SDL < 1" w/XL Edge Spacer		0.23	4.35	0.28	0.45	65	N, N/C	0.19	5.26	0.28	0.45	69	N, N/C
Triple IG LE/CL/LE SDL > 1" w/XL Edge Spacer	0.23	4.35	0.26	0.40	65	N, N/C	0.19	5.26	0.26	0.40	69	N, N/C	

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.



	Glazing Description	Air-Filled						Argon-Filled							
		U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone Rating		
Superséal 8000 / 8500 Sliding Patio Door	No GIAS or SDL	Insul Clear	0.47	2.13	0.65	0.68	41	None	-	-	-	-	-	None	
		LowE Clear	0.32	3.13	0.33	0.59	53	None	0.28	3.57	0.32	0.59	56	N/C	
		LowE Clear w/XL Edge Spacer	0.32	3.13	0.35	0.60	53	None	0.28	3.57	0.35	0.60	56	N/C	
		LowE 366 w/Intercept Spacer	0.32	3.13	0.23	0.54	53	None	0.28	3.57	0.23	0.54	56	All Zones	
		LowE 366 W/XL Edge Spacer	0.32	3.13	0.23	0.54	54	None	0.29	3.45	0.23	0.54	57	All Zones	
		LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.26	3.85	0.23	0.52	42	All Zones	0.23	4.35	0.22	0.52	45	All Zones	
		LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.23	0.52	43	All Zones	0.23	4.35	0.22	0.52	47	All Zones	
		LowE 180 (Passive Solar)	0.33	3.03	0.57	0.66	52	None	0.29	3.45	0.57	0.66	55	None	
		LowE 180 (Passive Solar) w/XL Edge Spacer	0.32	3.13	0.57	0.66	54	None	0.29	3.45	0.57	0.66	57	None	
		LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.52	0.64	41	None	0.24	4.17	0.52	0.64	44	None	
		LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.52	0.64	42	None	0.24	4.17	0.52	0.64	45	None	
		LowE 340 W/XL Edge Spacer	0.31	3.23	0.15	0.32	55	None	0.28	3.57	0.15	0.32	58	All Zones	
		LowE Laminated w/XL Edge Spacer	0.31	3.23	0.34	0.57	54	None	0.28	3.57	0.34	0.58	57	N/C	
		w/ GIAS or SDL < 1"	Insul Clear	0.47	2.13	0.58	0.60	41	None	-	-	-	-	-	None
			LowE Clear	0.32	3.13	0.29	0.52	53	None	0.28	3.57	0.29	0.52	56	N/C
LowE Clear w/XL Edge Spacer	0.32		3.13	0.31	0.52	53	None	0.28	3.57	0.31	0.52	56	N/C		
LowE 366 w/Intercept Spacer	0.32		3.13	0.21	0.47	53	None	0.28	3.57	0.20	0.47	56	All Zones		
LowE 366 W/XL Edge Spacer	0.32		3.13	0.21	0.47	54	None	0.29	3.45	0.20	0.47	57	All Zones		
LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.26		3.85	0.20	0.46	42	All Zones	0.23	4.35	0.20	0.46	45	All Zones		
LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26		3.85	0.20	0.46	43	All Zones	0.23	4.35	0.20	0.46	47	All Zones		
LowE 180 (Passive Solar)	0.33		3.03	0.51	0.58	52	None	0.29	3.45	0.51	0.58	55	None		
LowE 180 (Passive Solar) w/XL Edge Spacer	0.32		3.13	0.51	0.58	54	None	0.29	3.45	0.51	0.58	57	None		
LowE 180 w/189 <sup>3</sup>	0.27		3.70	0.46	0.56	41	None	0.24	4.17	0.46	0.56	44	None		
LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27		3.70	0.46	0.56	42	None	0.24	4.17	0.46	0.56	45	None		
LowE 340 W/XL Edge Spacer	0.31		3.23	0.14	0.28	55	None	0.28	3.57	0.13	0.28	58	All Zones		
LowE Laminated w/XL Edge Spacer	0.31		3.23	0.30	0.50	54	None	0.28	3.57	0.30	0.51	57	N/C		
w/ GIAS or SDL > 1"	Insul Clear		0.47	2.13	0.51	0.52	41	None	-	-	-	-	-	None	
	LowE Clear		0.32	3.13	0.26	0.45	53	None	0.28	3.57	0.25	0.45	56	All Zones	
	LowE Clear w/XL Edge Spacer	0.32	3.13	0.27	0.46	53	None	0.28	3.57	0.27	0.46	56	N/C		
	LowE 366 w/Intercept Spacer	0.32	3.13	0.18	0.41	53	None	0.28	3.57	0.18	0.41	56	All Zones		
	LowE 366 W/XL Edge Spacer	0.32	3.13	0.18	0.41	54	None	0.29	3.45	0.18	0.41	57	All Zones		
	LowE 366 w/189 w/Intercept Spacer <sup>3</sup>	0.26	3.85	0.18	0.40	42	All Zones	0.23	4.35	0.18	0.40	45	All Zones		
	LowE 366 w/189 W/XL Edge Spacer <sup>3</sup>	0.26	3.85	0.18	0.40	43	All Zones	0.23	4.35	0.18	0.40	47	All Zones		
	LowE 180 (Passive Solar)	0.33	3.03	0.44	0.50	52	None	0.29	3.45	0.45	0.50	55	None		
	LowE 180 (Passive Solar) w/XL Edge Spacer	0.32	3.13	0.44	0.50	54	None	0.29	3.45	0.45	0.50	57	None		
	LowE 180 w/189 <sup>3</sup>	0.27	3.70	0.40	0.49	41	N/C	0.24	4.17	0.40	0.49	44	N/C		
	LowE 180 w/189 w/XL Edge <sup>3</sup>	0.27	3.70	0.40	0.49	42	N/C	0.24	4.17	0.40	0.49	45	N/C		
	LowE 340 W/XL Edge Spacer	0.31	3.23	0.13	0.25	55	None	0.28	3.57	0.12	0.25	58	All Zones		
	LowE Laminated w/XL Edge Spacer	0.31	3.23	0.27	0.44	54	None	0.28	3.57	0.27	0.44	57	N/C		
	TRIPLE IG	Triple IG LE/CL/CL w/XL Edge Spacer	0.29	3.45	0.29	0.53	58	N/C	0.29	3.45	0.29	0.53	58	N/C	
		Triple IG LE/CL/CL SDL < 1" w/XL Edge Spacer	0.31	3.23	0.26	0.47	58	None	0.30	3.33	0.26	0.47	58	N/C	
Triple IG LE/CL/CL SDL > 1" w/XL Edge Spacer		0.31	3.23	0.23	0.41	58	None	0.30	3.33	0.23	0.41	58	All Zones		
Triple IG LE/CL/LE w/XL Edge Spacer		0.25	4.00	0.26	0.45	61	N/C	0.21	4.76	0.26	0.45	65	N/C		
Triple IG LE/CL/LE SDL < 1" w/XL Edge Spacer		0.26	3.85	0.23	0.40	61	All Zones	0.22	4.55	0.23	0.40	65	All Zones		
Triple IG LE/CL/LE SDL > 1" w/XL Edge Spacer	0.26	3.85	0.21	0.35	61	All Zones	0.22	4.55	0.21	0.35	65	All Zones			

<sup>3</sup> The use of this glazing option creates a higher probability of roomside glass condensation in the winter.

Center Of Glass Data

Glass Type	Ext. Lite Color & Coating/ Int. Lite Color & Coating	U-Factor Btu / h-ft2 -F	Shading Coefficient (SC)	SHGC	Rel. Ht Gain Btu / h-ft2 - F	% Visible Light Trans
Insul	Clear/Clear	0.48	0.89	0.78	186	0.82
Low-E ( Air )	Gl 7138 LE/Clear	0.29	0.45	0.39	94	0.71
LowE 180 -- Passive Solar Glass (Air)	Card 180 LE/Clear	0.31	0.74	0.65	153	0.79
LowE 180 w/189 (Air)	Card 180 LE/Clear w/89	0.24	0.71	0.62	146	0.63
LowE 366 ( Air )	Card 366 LE/Clear	0.29	0.32	0.28	67	0.65
LowE 366 w/189 ( Air )	Card 366 LE/Clear w/189	0.23	0.31	0.27	65	0.63
LowE 340 (Air)	Card 340 LE /Clear	0.29	0.21	0.19	46	0.39
1/4" Laminated LowE (Air)	Card 1/4 LE Lami/Clear	0.32	0.54	0.47	112	0.71
LowE 180 -- Passive Solar Glass (Gas)	Card 180 LE/Clear	0.26	0.74	0.65	152	0.80
LowE 180 w/189 (Gas)	Card 180 LE/Clear w/89	0.21	0.72	0.62	146	0.77
LowE 366 ( Gas )	Card 366 LE/Clear	0.24	0.31	0.27	66	0.65
LowE 366 w/189 (Gas )	Card 366 LE/Clear w/189	0.24	0.31	0.27	64	0.63
LowE 340 (Gas)	Card 340 LE /Clear	0.24	0.21	0.18	44	0.39
1/4" Laminated LowE (Gas)	Card 1/4 LE Lami/Clear	0.26	0.54	0.47	111	0.71
Insul Bronze	Bronze/Clear	0.48	0.73	0.63	152	0.62
Low-E/Bronze (Air)	Bronze/LE	0.29	0.44	0.38	93	0.53
Low-E/Bronze (Gas)	Bronze/LE	0.24	0.44	0.38	91	0.53
Insul Gray	Gray/Clear	0.48	0.69	0.60	146	0.56
Low-E/Gray (Air)	Gray/LE	0.29	0.42	0.37	88	0.48
Low-E/Gray (Gas)	Gray/LE	0.24	0.42	0.36	87	0.48
Triple IG LE/CL/CL (Air)	LE/Clear/Clear	0.28	0.44	0.39	93	0.66
Triple IG LE/CL/LE (Air)	LE/Clear/Clear LE	0.23	0.41	0.36	85	0.57
Triple IG LE/CL/CL (Gas)	LE/Clear/Clear	0.23	0.44	0.39	92	0.66
Triple IG LE/CL/LE (Gas)	LE/Clear/Clear LE	0.18	0.41	0.35	84	0.58

**Energy Terminology:**

**U-VALUE** -- The heat flow rate through a given construction expressed in Btu/hr/ft<sup>2</sup>/F. Values are normally given for NFRC/ASHRAE winter conditions of 0 degrees outdoor temperature, 70 degrees indoor temperature, 15 mph wind and no solar load. U-values can be expressed in terms of the glass alone (U<sub>cog</sub>) or for the entire window (U<sub>window</sub>) which includes the effect of the frame and the spacer material. The lower the number the better the insulating value.

**SHADING COEFFICIENT (SC)** -- The ratio of solar heat gain through a glazing to the solar heat gain through a single lite of 1/8" (3.0mm) glass. Dimensionless and varying between 0 and 1, the smaller the number, the better the glazing is at preventing solar gain. The shading coefficient is specific to normal incidence angle and is being phased out in favor of the solar heat gain coefficient value. The lower the number, the less solar heat gain.

**SOLAR HEAT GAIN COEFFICIENT (SHGC)** -- The fraction of incident solar radiation which enters a building as heat. It is based on the sum of the solar energy transmittance + the inwardly flowing fraction of absorbed solar energy on all lites of the glazing. Note that the smaller the number, the better the glazing is at preventing solar heat gain. This value is preferred over the shading coefficient since it can be used for solar incidence angles other than normal to the glass surface. It can be expressed in terms of the glass alone (SHGC<sub>cog</sub>) or total unit value (SHGC<sub>window</sub>).

**RELATIVE-HEAT GAIN (RHG)** -- The total amount of heat gain through a glazing system at NFRC/ASHRAE specified summer conditions, incorporating the U-value and the Solar Heat Gain Coefficient. The conditions are 230 Btu/hr/ft<sup>2</sup>, outdoor temperature of 89 degrees F, indoor temperature of 75 degrees F, and 7.5 mph wind. This value is expressed in terms of Btu/hr/ft<sup>2</sup>. The lower the number, the less heat gain.

**VISIBLE LIGHT TRANSMITTANCE** -- In the visible spectrum (380 to 720 nanometers), the percentage of light that is transmitted through the glazing relative to the C.I.E. [Commission International de l'Eclairage (International Commission on Illumination)] standard observer. The higher the number, the more clarity of the glass.

For more information on performance characteristics of our products contact your local SPI-WI Dealer.

All performance level calculations done using sealed insulating glass with two panes unless noted as "triples".

**Rely on SPI-WI Performance**

All SPI-WI products are manufactured to some of the most exacting standards in the industry. And now, you have even more assurance that the SPI-WI products you select will perform to the standards you require. The reason? All SPI-WI windows and patio doors using SPI-WI's standard glazing options have been independently certified by the National Fenestration Rating Council (NFRC) and carry the NFRC label.

Sample NFRC Temporary Label



The testing and rating methods the NFRC has designed make window comparisons easy and accurate. Look for the NFRC labels on windows and doors. Use the U-factor rating to compare products, and to determine whether they meet your energy efficiency needs. U-factor is a thermal performance rating; the lower the U-factor, the better energy performance. SPI-WI is a founding member of the NFRC and supports work of the council on behalf of homeowners and the building industry.

- R-value is calculated as the reciprocal of the U-value (IE: 1 divided by U-factor = R-Value)
- Clear Insulated Units (Insul) are not gas filled

For more information on performance characteristics of our products contact your local SPI-WI Dealer.



**ENERGY STAR CRITERIA FOR WINDOWS**

<u>Climate/Region</u>	<u>U-Factor</u>	<u>SHGC</u>	<u>SHGC</u>
All Zones	.27 or lower	≤.25	.25 or lower
Northern	.27 or lower	Any	Any
Northern (Passive Solar Option #1)	.28 or lower	≥.32	.32 or higher
Northern (Passive Solar Option #2)	.29 or lower	≥.37	.37 or higher
Northern (Passive Solar Option #3)	.30 or lower	≥.42	.42 or higher
North/Central	.30 or lower	≤.40	.40 or lower
South/Central	.30 or lower	≤.25	.25 or lower
Southern	.40 or lower	≤.25	.25 or lower

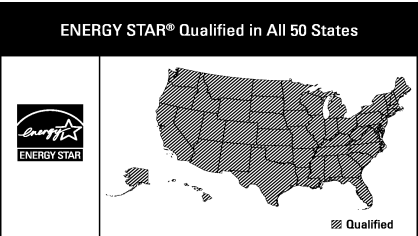
**ENERGY STAR CRITERIA FOR DOORS WITH GLAZING OF 1/2-LITE OR GREATER**

<u>Climate/Region</u>	<u>U-Factor</u>	<u>SHGC</u>	<u>SHGC</u>
All Zones	.30 or lower	≤.25	.25 or lower
Northern & North Central	.30 or lower	≤.40	.40 or lower
South Central & Southern	.30 or lower	≤.25	.25 or lower

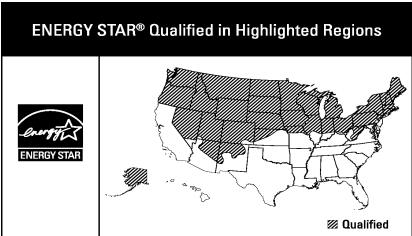
The Energy Star program was developed by the U.S. Department of Energy and the Environmental Protection Agency to assist consumers and businesses to identify products that shall help them save money and protect the environment. SPI is proud to be an Energy Star Partner. Please note that the Energy Star criteria was revised in January, 2016. Window criteria for the Northern Zone did change. Note the window criteria is different than door criteria as shown in the above tables.

Energy Star® Maps

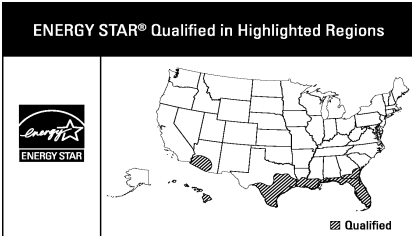
All Zones



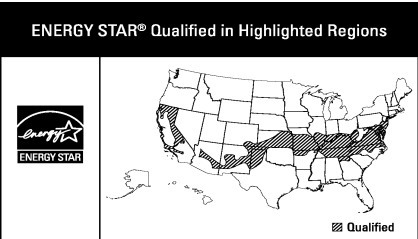
Northern Zone



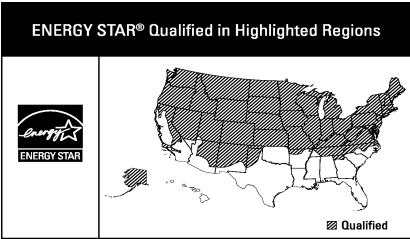
Southern Zone



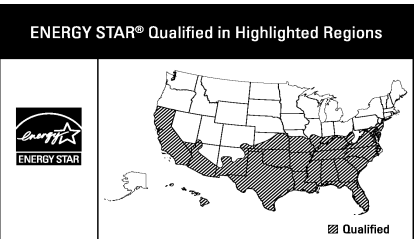
North Central Zone



Northern and North Central Zone



North Central/South Central/Southern Zone



South Central & Southern Zone

