

IG Thickness	Exterior Glass	Spacer	Interior Glass	Gas Fill	STC	No Grids					Flat or Sculptured Grids				
						U-Value	SHGC	VL	Energy Star 7.0	Title 24	U-Value	SHGC	VL	Energy Star 7.0	Title 24
Horizontal Slider (HM160)															
3/4"	270 Low-E	Intercept	Clear	Air	28	0.32	0.30	0.55	-	-	0.32	0.27	0.49	-	-
3/4"	270 Low-E	Intercept	Clear	Argon	28	0.28	0.29	0.55	-	-	0.28	0.26	0.49	-	-
3/4"	366 Low-E	Intercept	Clear	Air	28	0.31	0.22	0.51	S	-	0.31	0.20	0.46	S	-
3/4"	366 Low-E	Intercept	Clear	Argon	28	0.28	0.22	0.51	SC, S	Y	0.28	0.20	0.46	SC, S	Y
3/4"	340 Low-E	Intercept	Clear	Air	28	0.32	0.15	0.31	S	-	0.32	0.14	0.27	S	-
3/4"	340 Low-E	Intercept	Clear	Argon	28	0.28	0.14	0.31	SC, S	Y	0.28	0.13	0.27	SC, S	Y
3/4"	366 Low-E	Foam	4th Surface	Argon	30	0.23	0.21	0.50	NC, SC, S	Y	0.23	0.19	0.44	NC, SC, S	Y
3/4"	366 Low-E "CA-T24"	Foam	Clear	Air	30	0.30	0.22	0.51	S	Y	0.30	0.20	0.46	S	Y
3/4"	366 Low-E "TMAX"	Foam	Clear	Argon	30	0.27	0.22	0.51	SC, S	Y	0.27	0.20	0.46	SC, S	Y
1-1/8"	270 Low-E (3/16")	Foam	Clear	Air	35	0.32	0.29	0.54	-	-	0.32	0.26	0.49	-	-
1-1/8"	366 Low-E (3/16")	Foam	Clear	Air	35	0.31	0.22	0.51	S	-	0.31	0.20	0.45	S	-
1-1/8"	340 Low-E (3/16")	Foam	Clear	Air	35	0.32	0.15	0.30	S	-	0.32	0.14	0.27	S	-
1-1/8"	270 Low-E (1/4")	SS Box	Clear	Air	36	0.33	0.29	0.54	-	-	0.33	0.26	0.48	-	-
1-1/8"	366 Low-E (1/4")	SS Box	Clear	Air	36	0.32	0.22	0.50	S	-	0.32	0.20	0.45	S	-
1-1/8"	340 Low-E (1/4")	SS Box	Clear	Air	36	0.33	0.15	0.30	-	-	0.33	0.14	0.27	-	-
1-1/8"	270 Low-E (1/4")	SS Box	2.7 Lami	Air	39	0.32	0.28	0.53	-	-	0.32	0.29	0.48	-	-
1-1/8"	366 Low-E (1/4")	SS Box	2.7 Lami	Air	39	0.32	0.22	0.50	S	-	0.32	0.20	0.44	S	-
1-1/8"	340 Low-E (1/4")	SS Box	2.7 Lami	Air	39	0.32	0.15	0.30	S	-	0.32	0.14	0.27	S	-
Single Hung (HM150)															
3/4"	270 Low-E	Intercept	Clear	Air	28	0.32	0.30	0.55	-	-	0.32	0.27	0.49	-	-
3/4"	270 Low-E	Intercept	Clear	Argon	28	0.28	0.29	0.55	-	-	0.28	0.26	0.49	-	-
3/4"	366 Low-E	Intercept	Clear	Air	28	0.31	0.22	0.51	S	-	0.31	0.20	0.46	S	-
3/4"	366 Low-E	Intercept	Clear	Argon	28	0.28	0.22	0.51	SC, S	Y	0.28	0.20	0.46	SC, S	Y
3/4"	340 Low-E	Intercept	Clear	Air	28	0.32	0.15	0.31	S	-	0.32	0.14	0.27	S	-
3/4"	340 Low-E	Intercept	Clear	Argon	28	0.28	0.14	0.31	SC, S	Y	0.28	0.13	0.27	SC, S	Y
3/4"	366 Low-E	Foam	4th Surface	Argon	30	0.23	0.21	0.50	NC, SC, S	Y	0.23	0.19	0.44	NC, SC, S	Y
3/4"	366 Low-E "CA-T24"	Foam	Clear	Air	30	0.30	0.22	0.51	S	Y	0.30	0.20	0.46	S	Y
3/4"	366 Low-E "TMAX"	Foam	Clear	Argon	30	0.27	0.22	0.51	SC, S	Y	0.27	0.20	0.46	SC, S	Y
1-1/8"	270 Low-E (3/16")	Foam	Clear	Air	35	0.32	0.29	0.54	-	-	0.32	0.26	0.49	-	-
1-1/8"	366 Low-E (3/16")	Foam	Clear	Air	35	0.31	0.22	0.51	S	-	0.31	0.20	0.45	S	-
1-1/8"	340 Low-E (3/16")	Foam	Clear	Air	35	0.32	0.15	0.30	S	-	0.32	0.14	0.27	S	-
1-1/8"	270 Low-E (1/4")	SS Box	Clear	Air	37	0.33	0.29	0.54	-	-	0.33	0.26	0.48	-	-
1-1/8"	366 Low-E (1/4")	SS Box	Clear	Air	37	0.32	0.22	0.50	S	-	0.32	0.20	0.45	S	-
1-1/8"	340 Low-E (1/4")	SS Box	Clear	Air	37	0.33	0.15	0.30	-	-	0.33	0.14	0.27	-	-
1-1/8"	270 Low-E (1/4")	SS Box	2.7 Lami	Air	40	0.32	0.28	0.53	-	-	0.32	0.26	0.48	-	-
1-1/8"	366 Low-E (1/4")	SS Box	2.7 Lami	Air	40	0.32	0.22	0.50	S	-	0.32	0.20	0.44	S	-
1-1/8"	340 Low-E (1/4")	SS Box	2.7 Lami	Air	40	0.32	0.15	0.30	S	-	0.32	0.14	0.27	S	-
Picture Window (HM155)															
3/4"	270 Low-E	Intercept	Clear	Air	29	0.30	0.32	0.59	-	-	0.30	0.29	0.53	-	-
3/4"	270 Low-E	Intercept	Clear	Argon	29	0.27	0.31	0.59	-	-	0.27	0.28	0.53	-	-
3/4"	366 Low-E	Intercept	Clear	Air	29	0.30	0.24	0.55	S	-	0.30	0.22	0.49	S	Y
3/4"	366 Low-E	Intercept	Clear	Argon	29	0.26	0.23	0.55	SC, S	Y	0.26	0.21	0.49	SC, S	Y
3/4"	340 Low-E	Intercept	Clear	Air	29	0.30	0.16	0.33	S	Y	0.30	0.15	0.29	S	Y
3/4"	340 Low-E	Intercept	Clear	Argon	29	0.27	0.15	0.33	SC, S	Y	0.27	0.14	0.29	SC, S	Y
3/4"	366 Low-E	Foam	4th Surface	Argon	29	0.21	0.23	0.53	N, NC, SC, S	Y	0.21	0.21	0.48	N, NC, SC, S	Y
3/4"	366 Low-E "CA-T24"	Foam	Clear	Air	29	0.29	0.24	0.55	-	-	0.29	0.22	0.49	S	Y
3/4"	366 Low-E "TMAX"	Foam	Clear	Argon	29	0.25	0.23	0.55	NC, SC, S	Y	0.25	0.21	0.49	NC, SC, S	Y
1-1/8"	270 Low-E (3/16")	Foam	Clear	Air	33	0.31	0.31	0.58	-	-	0.31	0.28	0.52	-	-
1-1/8"	366 Low-E (3/16")	Foam	Clear	Air	33	0.30	0.24	0.54	-	-	0.30	0.21	0.49	S	Y
1-1/8"	340 Low-E (3/16")	Foam	Clear	Air	33	0.31	0.16	0.33	S	Y	0.31	0.15	0.29	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	Clear	Air	36	0.31	0.31	0.58	-	-	0.31	0.28	0.52	-	-
1-1/8"	366 Low-E (1/4")	SS Box	Clear	Air	36	0.31	0.24	0.54	-	-	0.31	0.21	0.48	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	Clear	Air	36	0.31	0.16	0.32	S	Y	0.31	0.15	0.29	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	2.7 Lami	Air	42	0.31	0.30	0.57	-	-	0.31	0.27	0.51	-	-
1-1/8"	366 Low-E (1/4")	SS Box	2.7 Lami	Air	42	0.30	0.23	0.53	S	Y	0.30	0.21	0.47	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	2.7 Lami	Air	42	0.30	0.16	0.32	S	Y	0.30	0.14	0.28	S	Y
Casement (HM147)															
3/4"	270 Low-E	Intercept	Clear	Air	30	0.30	0.24	0.44	-	-	0.30	0.22	0.40	S	Y
3/4"	270 Low-E	Intercept	Clear	Argon	30	0.27	0.24	0.44	-	-	0.27	0.22	0.40	SC, S	Y
3/4"	366 Low-E	Intercept	Clear	Air	30	0.30	0.18	0.41	S	Y	0.30	0.17	0.37	S	Y
3/4"	366 Low-E	Intercept	Clear	Argon	30	0.27	0.18	0.41	SC, S	Y	0.27	0.16	0.37	SC, S	Y
3/4"	340 Low-E	Intercept	Clear	Air	30	0.30	0.12	0.25	S	Y	0.30	0.11	0.22	S	Y
3/4"	340 Low-E	Intercept	Clear	Argon	30	0.27	0.12	0.25	SC, S	Y	0.27	0.11	0.22	SC, S	Y
3/4"	366 Low-E	Foam	4th Surface	Argon	31	0.23	0.18	0.40	NC, SC, S	Y	0.23	0.16	0.36	NC, SC, S	Y
3/4"	366 Low-E "CA-T24"	Foam	Clear	Air	31	0.28	0.18	0.41	SC, S	Y	0.28	0.17	0.37	SC, S	Y
3/4"	366 Low-E "TMAX"	Foam	Clear	Argon	31	0.26	0.18	0.41	SC, S	Y	0.26	0.16	0.37	SC, S	Y
1-1/8"	270 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.24	0.44	-	-	0.29	0.22	0.40	S	Y
1-1/8"	366 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.18	0.41	S	Y	0.29	0.17	0.37	S	Y
1-1/8"	340 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.12	0.24	S	Y	0.29	0.12	0.22	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	Clear	Air	37	0.31	0.23	0.44	S	-	0.31	0.21	0.39	S	-
1-1/8"	366 Low-E (1/4")	SS Box	Clear	Air	37	0.30	0.18	0.40	S	Y	0.30	0.17	0.36	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	Clear	Air	37	0.30	0.13	0.24	S	Y	0.30	0.12	0.22	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.30	0.23	0.43	S	Y	0.30	0.21	0.38	S	Y
1-1/8"	366 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.30	0.18	0.40	S	Y	0.30	0.16	0.36	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.30	0.12	0.24	S	Y	0.30	0.11	0.21	S	Y

IG Thickness	Exterior Glass	Spacer	Interior Glass	Gas Fill	STC	No Grids					Flat or Sculptured Grids				
						U-Value	SHGC	VLT	Energy Star 7.0	Title 24	U-Value	SHGC	VLT	Energy Star 7.0	Title 24
Awning															
3/4"	270 Low-E	Intercept	Clear	Air	30	0.30	0.24	0.44	S	-	0.30	0.22	0.40	S	Y
3/4"	270 Low-E	Intercept	Clear	Argon	30	0.27	0.24	0.44	-	-	0.27	0.22	0.40	SC, S	Y
3/4"	366 Low-E	Intercept	Clear	Air	30	0.29	0.18	0.41	S	Y	0.29	0.17	0.37	S	Y
3/4"	366 Low-E	Intercept	Clear	Argon	30	0.27	0.18	0.41	SC, S	Y	0.27	0.16	0.37	SC, S	Y
3/4"	340 Low-E	Intercept	Clear	Air	30	0.30	0.12	0.25	S	Y	0.30	0.11	0.22	S	Y
3/4"	340 Low-E	Intercept	Clear	Argon	30	0.27	0.12	0.25	SC, S	Y	0.27	0.11	0.22	SC, S	Y
3/4"	366 Low-E	Foam	4th Surface	Argon	31	0.22	0.18	0.40	N, NC, SC, S	Y	0.22	0.16	0.36	NC, SC, S	Y
3/4"	366 Low-E "CA-T24"	Foam	Clear	Air	31	0.28	0.18	0.41	SC, S	Y	0.28	0.17	0.37	SC, S	Y
3/4"	366 Low-E "TMAX"	Foam	Clear	Argon	31	0.25	0.18	0.41	NC, SC, S	Y	0.25	0.16	0.37	NC, SC, S	Y
1-1/8"	270 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.24	0.44	-	-	0.29	0.22	0.40	S	Y
1-1/8"	366 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.18	0.41	S	Y	0.29	0.17	0.37	S	Y
1-1/8"	340 Low-E (3/16")	Foam	Clear	Air	34	0.29	0.12	0.24	S	Y	0.29	0.11	0.22	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	Clear	Air	37	0.30	0.23	0.44	S	Y	0.30	0.21	0.39	S	Y
1-1/8"	366 Low-E (1/4")	SS Box	Clear	Air	37	0.30	0.18	0.40	S	Y	0.30	0.17	0.36	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	Clear	Air	37	0.30	0.12	0.24	S	Y	0.30	0.12	0.22	S	Y
1-1/8"	270 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.30	0.23	0.43	S	Y	0.30	0.21	0.38	S	Y
1-1/8"	366 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.29	0.18	0.40	S	Y	0.29	0.16	0.36	S	Y
1-1/8"	340 Low-E (1/4")	SS Box	2.7 Lami	Air	41	0.29	0.12	0.24	S	Y	0.29	0.11	0.21	S	Y
Sliding Patio Door (390/V350)															
1"	366 Low-E	Intercept	Clear	Air	30	0.33	0.23	0.54	-	-	0.33	0.21	0.47	-	-
1"	366 Low-E	Intercept	Clear	Argon	30	0.29	0.23	0.54	-	Y	0.29	0.20	0.47	-	Y
1"	340 Low-E	Intercept	Clear (3/16")	Air	33	0.33	0.15	0.32	-	-	0.33	0.14	0.28	-	-
1"	340 Low-E	Intercept	Clear (3/16")	Argon	33	0.29	0.15	0.32	-	Y	0.29	0.13	0.28	-	Y
1"	366 Low-E "CA-T24"	Ultra	Clear	Air	30	0.32	0.23	0.54	-	-	0.32	0.21	0.47	-	-
1"	366 Low-E "TMAX"	Ultra	Clear	Argon	30	0.28	0.23	0.54	SC, S	Y	0.28	0.20	0.47	SC, S	Y
1"	366 Low-E (3/16")	Ultra	Clear (3/16")	Air	33	0.32	0.23	0.53	-	-	0.32	0.21	0.46	-	-
1"	366 Low-E	Foam	Clear (3/16")	Air	33	0.32	0.23	0.53	-	-	0.32	0.21	0.47	-	-
1"	366 Low-E (3/16")	Foam	Clear (3/16")	Air	33	0.31	0.23	0.53	-	-	0.31	0.21	0.46	-	-
1"	366 Low-E	Foam	2.7 Lami	Air	34	0.31	0.23	0.53	-	-	0.31	0.21	0.47	-	-
1"	366 Low-E (3/16")	Foam	2.7 Lami	Air	35	0.31	0.23	0.53	-	-	0.31	0.21	0.46	-	-
Sliding Patio Door (290/V450)															
13/16"	366 Low-E (5/32")	Intercept	Clear	Air	30	0.31	0.21	0.48	-	-	0.31	0.19	0.42	-	-
13/16"	340 Low-E (5/32")	Intercept	Clear	Air	30	0.31	0.14	0.29	-	-	0.31	0.13	0.25	-	-
13/16"	366 Low-E "TMAX"	Foam	Clear	Argon	3	0.27	0.21	0.48	SC, S	Y	0.27	0.19	0.42	SC, S	Y