

Select Casement	Size Tested			NAFS Ratings			
	38"x78"			AAMA/WDMA/CSA/1.S.2-A440-11&17:R-PG50-C			
	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	18	2.3	0.41	0.51	0.53	45	N
Clear w Grills	15	2.3	0.41	0.46	0.48	45	N
LoE/Argon	31	1.6	0.28	0.46	0.52	60	N
LoE/Argon w Grills	28	1.6	0.28	0.41	0.47	60	N
Energlass	34	1.5	0.26	0.46	0.52	61	Y
Energlass w Grills	32	1.5	0.26	0.42	0.47	61	N
LoE/Argon-LSG	21	1.5	0.27	0.25	0.45	61	N
LoE/Argon-LSG w Grills	19	1.5	0.27	0.23	0.41	61	N
Energlass-LSG	22	1.5	0.26	0.25	0.45	63	N
Energlass-LSG w Grills	20	1.5	0.26	0.23	0.41	63	N
Triple Clear	31	1.6	0.28	0.46	0.49	62	N
Triple w Grills	29	1.6	0.28	0.42	0.44	62	N
Triple LoE/Argon x 1 LSG	27	1.2	0.21	0.23	0.41	71	Y
Triple LoE/Argon x 1 LSG w Grills	26	1.2	0.21	0.21	0.37	71	Y
Energlass Plus Argon LSG	32	0.9	0.16	0.22	0.35	80	Y
Energlass Plus Argon LSG w Grills	31	0.9	0.16	0.20	0.32	80	Y
Triple LoE/Argon x 1	38	1.2	0.21	0.42	0.47	72	Y
Triple LoE/Argon x 1 w Grills	35	1.2	0.21	0.38	0.43	72	Y
Energlass Plus Argon	42	1.0	0.17	0.40	0.46	79	Y
Energlass Plus Argon w Grills	39	1.0	0.17	0.36	0.42	79	Y

Select Awning	Size Tested			NAFS Ratings			
	48"x40"			AAMA/WDMA/CSA/1.S.2-/A440-11&17: LC-PG40-AP			
	38"x78"			AAMA/WDMA/CSA/1.S.2-/A440-11&17: R-PG55-AP			
	38"x78"			AAMA/WDMA/CSA/1.S.2-/A440-11&17: CW-PG35-AP			
Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016	
Clear	17	2.4	0.42	0.51	0.53	44	N
Clear w Grills	14	2.4	0.42	0.46	0.48	44	N
LoE/Argon	30	1.6	0.29	0.46	0.52	59	N
LoE/Argon w Grills	27	1.6	0.29	0.41	0.47	59	N
Energlass	34	1.5	0.26	0.46	0.52	60	Y
Energlass w Grills	32	1.5	0.26	0.42	0.47	60	N
LoE/Argon-LSG	21	1.5	0.27	0.25	0.45	60	N
LoE/Argon-LSG w Grills	19	1.5	0.27	0.23	0.41	60	N
Energlass-LSG	22	1.5	0.26	0.25	0.45	62	N
Energlass-LSG w Grills	20	1.5	0.26	0.23	0.41	62	N
Triple Clear	30	1.6	0.29	0.46	0.49	61	N
Triple w Grills	28	1.6	0.29	0.42	0.44	61	N
Triple LoE/Argon x 1 LSG	27	1.2	0.21	0.23	0.41	72	Y
Triple LoE/Argon x 1 LSG w Grills	26	1.2	0.21	0.21	0.37	72	Y
Energlass Plus Argon LSG	32	0.9	0.16	0.22	0.35	79	Y
Energlass Plus Argon LSG w Grills	31	0.9	0.16	0.20	0.32	79	Y
Triple LoE/Argon x 1	38	1.2	0.21	0.42	0.47	70	Y
Triple LoE/Argon x 1 w Grills	35	1.2	0.21	0.38	0.43	70	Y
Energlass Plus Argon	42	1.0	0.17	0.40	0.46	78	Y
Energlass Plus Argon w Grills	39	1.0	0.17	0.36	0.42	78	Y

Select Casement Fixed Sash	Size Tested			NAFS Ratings			
	60"x78"			AAMA/WDMA/CSA/1.S.2-A440-17:CW-PG35-FW			
	46"x78"			AAMA/WDMA/CSA/1.S.2-A440-11&17:R-PG55-FW			
Glass Option	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	22	2.4	0.43	0.61	0.63	45	N
Clear w Grills	18	2.4	0.43	0.54	0.56	54	N
LoE/Argon	36	1.6	0.28	0.54	0.62	59	Y
LoE/Argon w Grills	33	1.6	0.28	0.49	0.55	59	N
Energlass	39	1.5	0.26	0.55	0.62	60	Y
Energlass w Grills	36	1.5	0.26	0.49	0.55	60	Y
LoE/Argon-LSG	25	1.5	0.26	0.30	0.54	61	N
LoE/Argon-LSG w Grills	23	1.5	0.26	0.27	0.48	61	N
Energlass-LSG	26	1.4	0.25	0.30	0.54	63	N
Energlass-LSG w Grills	24	1.4	0.25	0.27	0.48	63	N
Triple Clear	35	1.6	0.29	0.55	0.58	61	Y
Triple w Grills	32	1.6	0.29	0.49	0.52	61	N
Triple LoE/Argon x 1 LSG	30	1.1	0.20	0.27	0.49	71	Y
Triple LoE/Argon x 1 LSG w Grills	29	1.1	0.20	0.25	0.44	71	Y
Energlass Plus Argon LSG	36	0.9	0.15	0.25	0.42	80	Y
Energlass Plus Argon LSG w Grills	34	0.9	0.15	0.23	0.37	80	Y
Triple LoE/Argon x 1	43	1.1	0.20	0.49	0.56	71	Y
Triple LoE/Argon x 1 w Grills	40	1.1	0.20	0.44	0.50	71	Y
Energlass Plus Argon	47	0.9	0.16	0.47	0.55	79	Y
Energlass Plus Argon w Grills	44	0.9	0.16	0.42	0.49	79	Y

Select Narrow Picture Window	Size Tested			NAFS Ratings			
	79"x79"			AAMA/WDMA/CSA/1.S.2-/A440-08:CW-PG80-FW			
	Glass Option	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance
Clear	22	2.6	0.46	0.68	0.71	44	N
Clear w Grills	18	2.6	0.46	0.61	0.64	44	N
LoE/Argon	39	1.6	0.29	0.61	0.70	54	Y
LoE/Argon w Grills	35	1.6	0.29	0.55	0.63	54	Y
Energlass	42	1.5	0.27	0.62	0.69	56	Y
Energlass w Grills	38	1.5	0.27	0.55	0.62	56	Y
LoE/Argon-LSG	25	1.5	0.27	0.33	0.61	59	N
LoE/Argon-LSG w Grills	24	1.5	0.27	0.30	0.54	59	N
Energlass-LSG	26	1.5	0.26	0.33	0.61	61	N
Energlass-LSG w Grills	25	1.5	0.26	0.30	0.54	61	N
Triple	37	1.8	0.31	0.62	0.65	61	Y
Triple w Grills	34	1.8	0.31	0.56	0.58	61	Y
Triple LoE/Argon x 1	46	1.2	0.21	0.55	0.64	70	Y
Triple LoE/Argon x 1 w Grills	43	1.2	0.21	0.50	0.57	70	Y
Triple LoE/Argon x 1 LSG	32	1.2	0.21	0.31	0.55	71	Y
Triple LoE/Argon x 1 LSG w Grills	30	1.2	0.21	0.28	0.50	71	Y
Energlass Plus Argon	50	0.9	0.16	0.53	0.62	76	Y
Energlass Plus Argon w Grills	48	0.9	0.16	0.48	0.56	76	Y
Energlass Plus Argon LSG	36	0.9	0.15	0.26	0.47	78	Y
Energlass Plus Argon LSG w Grills	35	0.9	0.15	0.24	0.42	78	Y

Select Wide Picture Window	Size Tested			NAFS Ratings			
	60"x96"			AAMA/WDMA/CSA/I.S.2-A440-11:LC-PG45-FW			
Glass Option	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	20	2.5	0.44	0.61	0.63	45	N
Clear w Grills	17	2.5	0.44	0.55	0.56	45	N
LoE/Argon	36	1.6	0.28	0.54	0.62	59	Y
LoE/Argon w Grills	33	1.6	0.28	0.49	0.55	61	N
Energlass	39	1.5	0.26	0.55	0.62	60	Y
Energlass w Grills	36	1.5	0.26	0.49	0.55	60	Y
LoE/Argon-LSG	25	1.5	0.26	0.30	0.54	61	N
LoE/Argon-LSG w Grills	23	1.5	0.26	0.27	0.48	63	N
Energlass-LSG	26	1.4	0.25	0.30	0.54	63	N
Energlass-LSG w Grills	24	1.4	0.25	0.27	0.48	63	N
Triple Clear	35	1.6	0.29	0.55	0.58	61	Y
Triple w Grills	32	1.6	0.29	0.49	0.52	61	N
Triple LoE/Argon x 1 LSG	31	1.1	0.20	0.28	0.49	71	Y
Triple LoE/Argon x 1 LSG w Grills	29	1.1	0.20	0.25	0.44	71	Y
Energlass Plus Argon LSG	36	0.9	0.15	0.26	0.42	80	Y
Energlass Plus Argon LSG w Grills	34	0.9	0.15	0.23	0.37	80	Y
Triple LoE/Argon x 1	43	1.1	0.20	0.49	0.56	71	Y
Triple LoE/Argon x 1 w Grills	40	1.1	0.20	0.44	0.50	71	Y
Energlass Plus Argon	47	0.9	0.16	0.47	0.55	79	Y
Energlass Plus Argon w Grills	45	0.9	0.16	0.43	0.49	79	Y

Select Single Hung	Size Tested			NAFS Ratings			
	40"x63"			AAMA/WDMA/CSA/I.S.2-A440-08:R-PG60-H			
	44"x77"			AAMA/WDMA/CSA/I.S.2-A440-08:LC-PG50-H			
Glass Options	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	15	2.7	0.48	0.62	0.65	42	N
Clear w Grills	12	2.7	0.48	0.56	0.58	42	N
LoE/Argon	32	1.8	0.32	0.65	0.63	54	N
LoE/Argon w Grills	28	1.8	0.32	0.50	0.56	54	N
Energlass	34	1.7	0.30	0.56	0.63	57	Y
Energlass w Grills	31	1.7	0.30	0.50	0.56	57	N
LoE/Argon-LSG	19	1.7	0.30	0.30	0.55	55	N
LoE/Argon-LSG w Grills	18	1.7	0.30	0.27	0.49	55	N
Energlass-LSG	20	1.6	0.29	0.30	0.55	58	N
Energlass-LSG w Grills	19	1.6	0.29	0.27	0.49	58	N

Select Single Glider	Size Tested			NAFS Ratings			
	63"x44"			AAMA/WDMA/CSA/I.S.2-A440-08:R-PG50-HS			
	72"x60"			AAMA/WDMA/CSA/I.S.2-A440-08:LC-PG30-HS			
Glass Options	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	15	2.7	0.48	0.62	0.62	42	N
Clear w Grills	12	2.7	0.48	0.55	0.56	42	N
LoE/Argon	32	1.8	0.32	0.56	0.63	54	N
LoE/Argon w Grills	28	1.8	0.32	0.50	0.56	54	N
Energlass	34	1.7	0.30	0.56	0.63	57	Y
Energlass w Grills	31	1.7	0.30	0.50	0.56	57	N
LoE/Argon-LSG	19	1.7	0.30	0.30	0.55	55	N
LoE/Argon-LSG w Grills	18	1.7	0.30	0.27	0.49	55	N
Energlass-LSG	20	1.6	0.29	0.30	0.55	58	N
Energlass-LSG w Grills	19	1.6	0.29	0.27	0.49	58	N

N

Select Single Hung Picture Window	Size Tested			NAFS Ratings			
	50"x100"			AAMA/WDMA/CSA/I.S.2-A440-08:R-PG40-FW			
	72"x80"			AAMA/WDMA/CSA/I.S.2-A440-08:CW-PG55-FW			
Glass Options	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	20	2.6	0.46	0.65	0.68	43	N
Clear w Grills	16	2.6	0.46	0.58	0.61	43	N
LoE/Argon	36	1.6	0.29	0.59	0.66	57	Y
LoE/Argon w Grills	34	1.6	0.29	0.53	0.59	57	Y
Energlass	39	1.6	0.28	0.59	0.66	59	Y
Energlass w Grills	36	1.6	0.28	0.53	0.59	59	Y
LoE/Argon-LSG	23	1.6	0.28	0.32	0.58	58	N
LoE/Argon-LSG w Grills	22	1.6	0.28	0.29	0.52	58	N
Energlass-LSG	25	1.5	0.27	0.32	0.58	60	N
Energlass-LSG w Grills	23	1.5	0.27	0.29	0.52	60	N

Select Double Hung	Size Tested			NAFS Ratings			
	48"x72"			AAMA/WDMA/CSA/1.S.2-A440-08:R-PG35-H			
Glass Options	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	16	2.7	0.47	0.62	0.64	42	N
Clear w Grills	12	2.7	0.47	0.55	0.57	42	N
LoE/Argon	32	1.8	0.31	0.56	0.63	54	N
LoE/Argon w Grills	29	1.8	0.31	0.50	0.56	54	N
Energlass IU	34	1.7	0.30	0.56	0.63	57	Y
Energlass IU w Grills	30	1.7	0.30	0.50	0.56	57	N
Energlass SS	34	1.7	0.30	0.56	0.63	57	Y
Energlass SS w Grills	30	1.7	0.30	0.50	0.56	57	N
LoE/Argon-LSG	19	1.7	0.30	0.30	0.55	55	N
LoE/Argon-LSG w Grills	17	1.7	0.30	0.27	0.49	55	N
Energlass IU-LSG	20	1.6	0.29	0.30	0.55	58	N
Energlass IU-LSG w Grills	18	1.6	0.29	0.27	0.49	58	N
Energlass SS-LSG	20	1.6	0.29	0.30	0.55	58	N
Energlass SS-LSG w Grills	18	1.6	0.29	0.27	0.49	58	N

Select Double Hung Picture Window	Size Tested			NAFS Ratings			
	50"x100"			AAMA/WDMA/CSA/1.S.2-A440-08:R-PG40-FW			
	72"x80"			AAMA/WDMA/CSA/1.S.2-A440-08:CW-PG45-FW			
Glass Options	Energy Rating	U-value (metric)	U-value (imperial)	Solar Heat Gain Coefficient	Visible Transmittance	Condensation Resistance	Energy Star Zones 2016
Clear	20	2.6	0.46	0.65	0.68	43	N
Clear w Grills	16	2.6	0.46	0.58	0.61	43	N
LoE/Argon	36	1.6	0.29	0.59	0.66	57	Y
LoE/Argon w Grills	34	1.6	0.29	0.53	0.59	57	Y
Energlass	39	1.6	0.28	0.59	0.66	59	Y
Energlass w Grills	36	1.6	0.28	0.53	0.59	59	Y
LoE/Argon-LSG	23	1.6	0.28	0.32	0.58	58	N
LoE/Argon-LSG w Grills	22	1.6	0.28	0.29	0.52	58	N
Energlass-LSG	25	1.5	0.27	0.32	0.58	60	N
Energlass-LSG w Grills	23	1.5	0.27	0.29	0.52	60	N