

CARDINAL GLASS INDUSTRIES
INSULATING GLASS PERFORMANCE COMPARISON

(3mm/12.7/3mm)

Exterior Glass	Interior Glass	Visible Light			SHGC	SC	Center of Glass U-factor (Btu/ hr/ ft ² / °F)		Comfort Indoor Glass Temp (°F)		UV Trans 310-380 nm
		Trans. %	Reflectance				Air	Argon	Winter	Summer	
			% Out	% In							
Clear	Clear	82%	15%	15%	0.78	0.89	0.48	0.46	45	90	58%
LoE-179 (#2)	Clear	79%	12%	13%	0.53	0.61	0.30	0.25	56	85	31%
LoE ² -272 (#2)	Clear	72%	11%	12%	0.41	0.47	0.30	0.25	56	84	16%
LoE ² -270 (#2)	Clear	70%	12%	13%	0.37	0.42	0.29	0.25	56	83	14%
LoE ² -366 (#2)	Clear	65%	11%	12%	0.27	0.31	0.29	0.24	56	83	5%
LoE ² -240 (#2)	Clear	40%	14%	10%	0.25	0.29	0.30	0.26	55	86	16%
Clear	LoE-179 (#3)	79%	13%	12%	0.57	0.66	0.30	0.25	56	92	31%
Clear	LoE ² -272 (#3)	72%	12%	11%	0.50	0.57	0.30	0.25	56	98	16%
Clear	LoE ² -270 (#3)	70%	13%	12%	0.46	0.53	0.29	0.25	56	99	14%
Clear	LoE ² -366 (#3)	65%	12%	11%	0.39	0.45	0.29	0.24	56	101	5%
Clear	LoE ² -240 (#3)	40%	10%	14%	0.51	0.59	0.30	0.26	55	124	16%
Green	Clear	75%	13%	14%	0.60	0.69	0.48	0.45	45	99	34%
Green	LoE-179 (#3)	72%	11%	11%	0.46	0.53	0.30	0.25	56	92	20%
Green	LoE ² -272 (#3)	66%	10%	10%	0.42	0.48	0.30	0.25	56	97	11%
Green	LoE ² -270 (#3)	64%	11%	12%	0.69	0.45	0.29	0.24	56	97	10%
Green	LoE ² -366 (#3)	59%	10%	10%	0.35	0.40	0.29	0.24	56	100	3%
Green	LoE ² -240 (#3)	37%	9%	14%	0.42	0.48	0.30	0.26	55	117	10%
Gray	Clear	57%	9%	13%	0.60	0.70	0.48	0.45	45	95	32%
Gray	LoE-179 (#3)	54%	8%	10%	0.43	0.49	0.30	0.25	56	92	19%
Gray	LoE ² -272 (#3)	50%	8%	9%	0.38	0.43	0.30	0.25	56	96	10%
Gray	LoE ² -270 (#3)	48%	8%	11%	0.35	0.40	0.29	0.25	56	97	9%
Gray	LoE ² -366 (#3)	45%	8%	10%	0.29	0.34	0.29	0.24	56	99	3%
Gray	LoE ² -240 (#3)	28%	7%	14%	0.38	0.44	0.30	0.26	55	116	9%
Bronze	Clear	61%	10%	13%	0.62	0.72	0.48	0.45	45	94	31%
Bronze	LoE-179 (#3)	59%	9%	10%	0.44	0.51	0.30	0.25	56	92	18%
Bronze	LoE ² -272 (#3)	54%	8%	10%	0.39	0.45	0.30	0.25	56	96	10%
Bronze	LoE ² -270 (#3)	52%	9%	11%	0.36	0.42	0.29	0.25	56	97	9%
Bronze	LoE ² -366 (#3)	48%	8%	10%	0.31	0.35	0.29	0.24	56	99	3%
Bronze	LoE ² -240 (#3)	30%	8%	14%	0.40	0.46	0.30	0.26	55	117	9%

NOTES:

- (1) Data was calculated using Window 5.2 computer program.
- (2) Calculations based on 12.7mm (1/2") gap, with 3mm (1/8") glass.
- (3) Comfort Indoor Glass Temperatures are for the center portion of the glass. NFRC 100-2002 environmental conditions used for calculations.
- (4) Tinted substrates listed above are generic and do not include selective substrates i.e. Azurite, Evergreen, Blue Green, and GreyLite etc. For properties of other tinted substrates and LoE coatings, contact Cardinal Technical Services.