

**Heat and Light Control Characteristics of Insulating Glass Units
Containing a Clear Exterior Lite Laminated with Butacite® Interlayer**

IG Unit Glass Assembly	Inside Glass	Outside Laminate	Butacite® Thickness	Argon Space (mm)	Visible Light Transmittance	Solar Transmittance	Shading Coefficient	Relative Instantaneous Heat Gain		Glazing U-values IP: BTU/hr/ft ² /°F SI: W/m ² /°C			
										Summer		Winter	
								BTU/h r/ft ²	W/m ²	IP	SI	IP	SI
Clear Exterior Laminate, Clear	¼" (6 mm)	¼" (6 mm)	0.030" (0.76 mm)	6.4	74%	45%	0.66	136	429	0.38	2.16	0.34	1.93
				9.5	74%	45%	0.66	136	429	0.31	1.72	0.27	1.53
				12.7	74%	45%	0.66	136	429	0.27	1.53	0.26	1.48
				19.1	74%	45%	0.66	135	426	0.22	1.25	0.27	1.53
Low-E Glass: Coating on #3 Surface	¼" (6 mm)	¼" (6 mm)	0.060" (1.52 mm)	6.4	75%	44%	0.65	135	426	0.38	2.16	0.34	1.93
				9.5	75%	44%	0.66	135	426	0.27	1.53	0.26	1.48
				12.7	75%	44%	0.66	135	426	0.27	1.53	0.26	1.48
				19.1	75%	44%	0.66	134	423	0.22	1.25	0.27	1.53
Clear Exterior Laminate, Bronze	¼" (6 mm)	¼" (6 mm)	0.030" (0.76 mm)	6.4	44%	27%	0.61	128	404	0.40	2.27	0.34	1.93
				9.5	44%	27%	0.63	131	413	0.33	1.87	0.27	1.53
				12.7	44%	27%	0.64	132	416	0.28	1.59	0.26	1.48
				19.1	44%	27%	0.64	132	416	0.25	1.42	0.27	1.53
Low-E Glass: Coating on #3 Surface	¼" (6 mm)	¼" (6 mm)	0.060" (1.52 mm)	6.4	44%	27%	0.61	128	404	0.40	2.27	0.34	1.93
				9.5	44%	27%	0.63	130	410	0.28	1.59	0.26	1.48
				12.7	44%	27%	0.63	130	410	0.28	1.59	0.26	1.48
				19.1	44%	27%	0.64	132	416	0.25	1.42	0.27	1.53
Clear Exterior Laminate, Green	¼" (6 mm)	¼" (6 mm)	0.030" (0.76 mm)	6.4	35%	22%	0.59	123	388	0.39	2.22	0.34	1.93
				9.5	35%	22%	0.61	126	397	0.31	1.76	0.27	1.53
				12.7	35%	22%	0.61	126	397	0.27	1.53	0.25	1.42
				19.1	35%	22%	0.61	126	397	0.25	1.42	0.26	1.48
Low-E Glass: Coating on #3 Surface	¼" (6 mm)	¼" (6 mm)	0.060" (1.52 mm)	6.4	35%	22%	0.59	123	388	0.39	2.22	0.34	1.87
				9.5	35%	22%	0.61	126	397	0.31	1.76	0.26	1.48
				12.7	35%	22%	0.61	126	397	0.27	1.53	0.25	1.42
				19.1	35%	22%	0.61	125	394	0.24	1.36	0.26	1.48

PVB interlayers
DuPont™ Butacite®

All units contain exterior pane clear Butacite® in clear glass.
Interior pane is monolithic glass with low-E coating on #3 surface.
Clear IG unit calculated by WINDOW 3.1 for generic clear low-E glass.
Bronze IG unit calculated by WINDOW 3.1 for generic bronze low-E glass.
Green IG unit calculated by WINDOW 4.0 for generic green low-E glass.

Glass source, type, color and thickness affect light transmission. For close color matching, examine sample of desired construction.
Minimum and maximum thickness tolerances are defined by ASTM C 1172. Overall unit thickness estimates sum nominal metric glass lite, PVB and argon space.
Nominal total visible light transmittance measured as CIE standard illuminate C. Actual values may vary.
Shading Coefficients (SC) and summer U-values based on ASHRAE standard summer conditions where outdoor temperature is 89°F, indoor temperature is 75°F, incident solar radiation is 248 BTU/hr/ft², and outdoor wind velocity is 7.5 mph; calculated per guidelines in 1985 ASHRAE Fundamentals Handbook, Chapter 27.
Relative total instantaneous heat gain is: $SC * SHGF + U\text{-value} * (T_o - T_i)$ Based on a Solar Heat Gain Factor (SHGF) of 200 BTU/hr/ft² and an outdoor temperature 14°F higher than indoor (T_o-T_i).