



# Versalux® TINTED INSULATED W/PYROLYTIC LOW-E

**Versalux® Performance Characteristics - Tinted Insulated Glass Pyrolytic Low Emissivity Glass in Identical Thickness to the Tinted Substrate (Except 5/16" (8mm) has 1/4" (6mm) Low E Coated Glass.) Emissivity of Coated Surface is .155 - .158 & Total Solar Reflectance of 11% - 12%. Low Emissivity Coating on 3rd Glass Surface From Building Exterior. CALCULATED BY LBNL WINDOW 5.2 v5.2.12 COMPUTER PROGRAM**

PRODUCT	Glass Thickness Nominal Inch (mm)	Air Space Thickness Nominal Inch (mm)	Transmittance %			LSG Ratio ▽	Outdoor Reflectance %		Indoor Reflectance % Visible	Customary System Values					Metric Values		
			Total Solar	Visible	Ultra Violet <sup>a</sup>		Total Solar	Visible		U-Value <sup>a</sup>		Shading Coefficient <sup>b</sup>	Solar Heat Gain Coefficient <sup>c</sup>	Relative Heat Gain <sup>d</sup> BTU Ft <sup>2</sup>	K-Value <sup>a</sup>		Relative Heat Gain <sup>d</sup> W/m <sup>2</sup>
										Winter Nighttime	Summer Daytime				Winter Nighttime	Summer Daytime	
<b>Versalux® Blue 2000</b>	1/4" (6mm)	1/2" (12.7mm)	21	35	9	1.09	6	7	14	0.33	0.33	0.37	0.32	79	1.86	1.85	250
	5/16" (8mm)	1/2" (12.7mm)	21	35	9	1.09	6	7	14	0.28	0.28	0.36	0.32	77	1.61	1.57	242
			15	27	6	1.04	5	6	13	0.33	0.32	0.30	0.26	65	1.85	1.84	205
<b>Versalux® Green 2000</b>	1/8" (3mm)	1/4" (6.5mm)	35	63	19	1.37	9	14	16	0.43	0.44	0.53	0.46	112	2.45	2.51	355
	3/16" (5mm)	1/2" (12.7mm)	35	63	19	1.40	9	14	16	0.36	0.37	0.52	0.45	110	2.03	2.12	347
			28	58	13	1.53	8	12	15	0.33	0.33	0.44	0.38	92	1.87	1.85	291
	1/4" (6mm)	1/2" (12.7mm)	24	55	10	1.57	7	11	14	0.33	0.33	0.40	0.35	84	1.86	1.85	266
	5/16" (8mm)	1/2" (12.7mm)	24	55	10	1.62	7	11	14	0.28	0.28	0.39	0.34	82	1.61	1.57	258
<b>Versalux® Grey 2000</b>	1/8" (3mm)	1/4" (6.5mm)	13	19	3	0.73	5	5	14	0.43	0.44	0.30	0.26	67	2.45	2.51	212
	3/16" (5mm)	1/2" (12.7mm)	13	19	3	0.76	5	5	14	0.36	0.37	0.29	0.25	63	2.03	2.12	198
			7	10	1	0.59	4	5	14	0.33	0.33	0.20	0.17	44	1.87	1.86	140
	1/4" (6mm)	1/2" (12.7mm)	7	10	1	0.63	4	5	14	0.29	0.28	0.19	0.16	41	1.61	1.58	129
<b>Versalux® Blue</b>	1/4" (6mm)	1/2" (12.7mm)	4	7	0	0.47	4	4	13	0.33	0.33	0.17	0.15	39	1.86	1.83	122
	5/16" (8mm)	1/2" (12.7mm)	4	7	0	0.54	4	4	13	0.28	0.28	0.16	0.13	35	1.60	1.57	111
			32	47	21	1.07	8	9	14	0.33	0.33	0.51	0.44	107	1.86	1.85	336
<b>Versalux® Green</b>	1/4" (6mm)	1/2" (12.7mm)	32	47	21	1.07	8	9	14	0.28	0.28	0.51	0.44	105	1.61	1.57	331
	5/16" (8mm)	1/2" (12.7mm)	26	40	17	1.05	7	8	14	0.33	0.32	0.44	0.38	92	1.85	1.84	289
			26	40	17	1.08	7	8	14	0.28	0.28	0.43	0.37	90	1.61	1.57	282
	1/8" (3mm)	1/4" (6.5mm)	43	69	27	1.25	11	15	16	0.43	0.44	0.63	0.55	133	2.45	2.51	419
	5/32" (4mm)	1/4" (6.5mm)	43	69	27	1.25	11	15	16	0.36	0.37	0.63	0.55	131	2.02	2.12	414
40			67	24	1.29	10	15	15	0.33	0.33	0.60	0.52	124	1.86	1.85	390	
<b>Versalux® Grey</b>	3/16" (5mm)	1/2" (12.7mm)	37	66	21	1.38	10	14	16	0.33	0.33	0.56	0.48	116	1.87	1.86	365
	1/4" (6mm)	1/2" (12.7mm)	37	66	21	1.38	10	14	16	0.29	0.28	0.55	0.48	114	1.62	1.58	360
			33	63	17	1.40	9	13	15	0.33	0.33	0.52	0.45	108	1.86	1.85	340
	33	63	17	1.43	9	13	15	0.29	0.28	0.51	0.44	106	1.61	1.57	334		
<b>Versalux® Bronze</b>	1/8" (3mm)	1/4" (6.5mm)	42	52	26	0.95	11	11	15	0.43	0.44	0.63	0.55	132	2.45	2.50	417
	5/32" (4mm)	1/4" (6.5mm)	42	52	26	0.95	11	11	15	0.36	0.37	0.63	0.55	131	2.03	2.12	413
			38	48	22	0.94	10	10	14	0.33	0.33	0.59	0.51	122	1.86	1.85	386
	3/16" (5mm)	1/2" (12.7mm)	38	48	22	0.94	10	10	14	0.28	0.28	0.59	0.51	121	1.61	1.57	383
	1/4" (6mm)	1/2" (12.7mm)	35	43	19	0.91	9	9	15	0.33	0.33	0.54	0.47	113	1.87	1.86	357
35	43	19	0.91	9	9	15	0.29	0.28	0.54	0.47	112	1.62	1.58	353			
<b>Versalux® Blue 2000</b>	1/8" (3mm)	1/4" (6.5mm)	30	38	15	0.88	8	8	14	0.33	0.33	0.50	0.43	103	1.86	1.85	326
	5/16" (8mm)	1/2" (12.7mm)	30	38	15	0.90	8	8	14	0.28	0.28	0.49	0.42	102	1.61	1.57	321
			44	56	25	1.00	11	12	15	0.43	0.44	0.65	0.56	136	2.45	2.51	430
	5/32" (4mm)	1/2" (12.7mm)	44	56	25	1.00	11	12	15	0.36	0.37	0.65	0.56	135	2.03	2.12	427
			41	52	21	0.98	10	11	15	0.33	0.33	0.61	0.53	127	1.87	1.85	402
3/16" (5mm)	1/2" (12.7mm)	41	52	21	0.98	10	11	15	0.28	0.29	0.61	0.53	126	1.61	1.57	399	
1/4" (6mm)	1/2" (12.7mm)	37	49	18	1.00	9	10	15	0.33	0.32	0.57	0.49	119	1.87	1.86	374	
		37	49	18	1.00	9	10	15	0.29	0.28	0.57	0.49	117	1.62	1.58	370	
33	44	15	0.98	8	9	14	0.33	0.33	0.52	0.45	109	1.86	1.85	345			
33	44	15	0.98	8	9	14	0.28	0.28	0.52	0.45	108	1.61	1.57	340			



## Footnotes Apply to Tinted and Reflective Versalux® Monolithic, Insulated with Clear and Insulated with Low-E

<sup>1</sup> Pyrolytically Applied Low Emissivity Coating on Clear Float Glass. Coated Surface Emissivity .154 and Total Solar Reflectance 12 - 13%

<sup>2</sup> MSVD (sputter) Applied Low Emissivity Coating on Clear Glass. Coated Surface Emissivity .043 and Total Solar Reflectance 43%

▽ Light to Solar Gain Ratio (LSG) is Visible Light Transmittance ÷ Solar Heat Gain Coefficient. (*Spectrally Selective Glazing has VLT of ≥ 40% & LSG ratio of ≥ 1.25 as outlined in Federal Technology Alert DOE/EE-0173, Federal Energy Management Program.*)

@ Air Space Filling: Dark Bands Argon Filled – Light Bands Air Filled

▴ It is recommended these products be heat treated (heat strengthened or fully tempered) to withstand solar induced thermal stresses.

\*\* These products may require heat treating to withstand solar induced thermal stresses when the reflective coating is glazed towards the building's interior. (See pages 11-15).

**a** The Winter Nighttime U/R Values (K Values) are based on an outdoor temperature of 0°F (-17.8°C) an indoor temperature of 70°F (21°C) 15 mph (24km/h) outdoor air speed and no sun. The Summer Daytime U/R Values (K Value) are based on an outdoor temperature of 89°F (32°C), an indoor temperature of 75°F (24°C), a 7.5 mph (12km/h) outdoor air speed and a solar intensity of 248 BTU/Hr. per Ft<sup>2</sup> (790 w/m<sup>2</sup>).

**b** Shading Coefficient is the ratio of solar heat gain through a glass/or glass and shading combination compared to that of unshaded 1/8" (3.0mm) clear float glass at normal incidence. The shading coefficient of 1/8" (3.0mm) clear float glass is 1.00.

**c** Solar Heat Gain Coefficient is the solar heat gain through glass relative to the incident solar radiation. SHGC is equal to approximately 86% of the shading coefficient.

**d** Relative Heat Gain is the combination of solar heat gain (transmitted and that amount of absorbed energy that is conducted or conveccted to the interior) and heat transfer due to the indoor/outdoor temperature differential. (Based on an ASHRAE solar heat gain factor of 200 BTU/Hr. per Ft<sup>2</sup>. (637 w/m<sup>2</sup>) and outdoor air 14°F (7.8°C) warmer than indoor air with no shading devices.)

**e** From LBNL Window 5.2 v5.2.12 Computer Analysis (300-380 nanometers.) Environmental conditions assumed: NFRC 100-2001 summer and NFRC 100-2001 winter.

Performance data represents center of glass values calculated under the guidelines of LBNL Window 5.2 v5.2.12 computer analysis, assuming an air mass of 1.5.

*For values calculated under Window 4.1, visit our website at [www.visteon.com/floatglass](http://www.visteon.com/floatglass)*