



# REFLECTIVE INSULATED W/PYROLYTIC LOW-E

## Versalux®

Versalux® Reflective Glass Performance Characteristics - Insulated Glass Pyrolytic Low Emissivity Coated Clear Glass is 1/4" (6mm) in Thickness. Emissivity of Coated Surface is .154 & Total Solar Reflectance is 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)	Coated Glass Surface	Exterior Appearance	Air Space Thickness Nominal Inch (mm)	Transmittance %				Outdoor Reflectance %		Indoor Reflectance % Visible	Customary System Values				Metric Values			
					Total Solar	Visible	Ultra Violet <sup>e</sup>	LSG Ratio ▽	Total Solar	Visible		U-Value <sup>a</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 2000R</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	10	14	3	0.74	28	35	16	0.33	0.33	0.22	0.19	48	1.86	1.85	150
		10			14	3	0.78	28	35	16	0.28	0.28	0.21	0.18	45	1.61	1.57	143	
		2	Blue, Low Reflectance		10	14	3	0.67	7	10	34	0.33	0.33	0.24	0.21	53	1.86	1.85	168
		2			10	14	3	0.70	7	10	34	0.28	0.28	0.23	0.20	50	1.61	1.57	159
<b>Versalux® Blue 2000T</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	16	24	7	0.96	26	35	18	0.33	0.33	0.29	0.25	62	1.86	1.85	196
		16			24	7	1.00	26	35	18	0.28	0.28	0.28	0.24	60	1.61	1.57	189	
		2**	Bright Blue Reflectance		16	25	7	0.93	10	13	34	0.33	0.33	0.31	0.27	67	1.86	1.85	211
		2**			16	25	7	0.96	10	13	34	0.28	0.28	0.30	0.26	64	1.61	1.57	203
	5/16" (8mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	11	19	4	0.95	26	35	16	0.33	0.32	0.23	0.20	51	1.85	1.84	161
		11			19	4	1.00	26	35	16	0.28	0.28	0.22	0.19	49	1.60	1.57	153	
		2	Bright Blue Reflectance		12	19	4	0.86	7	9	34	0.33	0.32	0.26	0.22	56	1.85	1.83	178
		2			12	19	4	0.90	7	9	34	0.28	0.28	0.25	0.21	53	1.60	1.57	168
<b>Versalux® Green 2000R</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	10	21	3	1.17	28	36	21	0.33	0.33	0.21	0.18	47	1.86	1.84	149
		10			21	3	1.17	28	36	21	0.28	0.28	0.20	0.18	45	1.61	1.57	141	
		2**	Green, Low Reflectance		10	22	3	1.05	8	16	35	0.33	0.33	0.24	0.21	53	1.86	1.85	166
		2**			10	22	3	1.10	8	16	35	0.28	0.28	0.23	0.20	49	1.61	1.57	156
	5/16" (8mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	8	19	2	1.19	28	35	19	0.33	0.32	0.18	0.16	41	1.84	1.84	129
		8			19	2	1.27	28	35	19	0.28	0.28	0.17	0.15	38	1.60	1.57	121	
		2	Green, Low Reflectance		8	19	2	1.06	7	14	34	0.33	0.32	0.21	0.18	47	1.85	1.84	147
		2			8	19	2	1.12	7	14	34	0.28	0.28	0.20	0.17	43	1.66	1.57	137
<b>Versalux® Green 2000T</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	17	39	6	1.50	24	35	23	0.33	0.33	0.30	0.26	64	1.86	1.85	203
		17			39	6	1.56	24	35	23	0.28	0.28	0.29	0.25	62	1.61	1.57	195	
		2	Green, Low Reflectance		18	39	6	1.39	11	22	33	0.33	0.33	0.32	0.28	68	1.86	1.85	215
		2			18	39	6	1.44	11	22	33	0.28	0.28	0.31	0.27	66	1.61	1.57	207
	5/16" (8mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	14	34	4	1.55	23	35	21	0.33	0.32	0.25	0.22	55	1.85	1.84	175
		14			34	4	1.62	23	35	21	0.28	0.28	0.25	0.21	53	1.60	1.57	167	
		2	Green, Low Reflectance		14	35	4	1.46	9	18	33	0.33	0.32	0.28	0.24	60	1.85	1.84	188
		2			14	35	4	1.52	9	18	33	0.28	0.28	0.26	0.23	57	1.60	1.57	179
<b>Versalux® Blue R</b>	1/4" (6mm)	1	Silver, High Reflectance	1/2" (12.7mm)	16	17	5	0.65	31	36	19	0.33	0.33	0.30	0.26	64	1.85	1.84	202
		16			17	5	0.68	31	36	19	0.28	0.28	0.29	0.25	62	1.61	1.57	196	
		2**	Blue, Medium Reflectance		16	18	5	0.64	12	13	35	0.33	0.33	0.33	0.28	70	1.85	1.84	220
		2**			16	18	5	0.67	12	13	35	0.28	0.28	0.32	0.27	67	1.61	1.57	213
<b>Versalux® Green R</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	15	25	5	1.04	28	36	23	0.33	0.33	0.28	0.24	61	1.86	1.85	191
		15			25	5	1.04	28	36	23	0.28	0.28	0.27	0.24	59	1.61	1.57	185	
		2**	Green, Low Reflectance		16	25	5	0.96	11	20	35	0.33	0.33	0.31	0.26	66	1.86	1.85	207
		2**			16	25	5	0.96	11	20	35	0.28	0.28	0.30	0.26	63	1.61	1.57	199
<b>Versalux® Grey R</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	16	15	5	0.58	29	35	17	0.33	0.33	0.30	0.26	64	1.86	1.85	202
		16			15	5	0.60	29	35	17	0.28	0.28	0.29	0.25	62	1.61	1.57	197	
		2**	Grey, Low Reflectance		16	15	5	0.54	10	10	34	0.33	0.33	0.33	0.28	70	1.86	1.85	220
		2**			16	15	5	0.56	10	10	34	0.28	0.28	0.32	0.27	67	1.61	1.57	212
<b>Versalux® Bronze R</b>	1/4" (6mm)	1	Subdued Silver Reflectance	1/2" (12.7mm)	17	17	4	0.63	29	35	18	0.33	0.33	0.31	0.27	67	1.86	1.85	213
		17			17	4	0.63	29	35	18	0.28	0.28	0.31	0.27	66	1.61	1.57	207	
		2**	Bronze, Low Reflectance		17	18	4	0.62	11	12	34	0.33	0.33	0.34	0.29	73	1.86	1.85	229
		2**			17	18	4	0.62	11	12	34	0.28	0.28	0.33	0.29	70	1.61	1.57	222



## 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 convected 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)*