



# Heat & Light Control Characteristics

3 Saflex Laminated Glass Interlayer Heat and Light Control Characteristics							
Color Description	Solar Transmittance (%)	Visible Light Transmittance (%)	Visible Light Reflectance (%)	Shading Coefficient (SC)	Solar Heat Gain Coefficient (SHGC)	U-Factor BTU/hr-ft <sup>2</sup> -F	Reflective Heat Gain (RHG) BTU/hr-ft <sup>2</sup>
0.015 inch Clear Saflex	73	89	8	0.91	0.78	1.07	197
0.030 inch Clear Saflex	72	88	8	0.90	0.77	1.06	194
0.045 inch Clear Saflex	69	88	8	0.88	0.75	1.05	190
0.060 inch Clear Saflex	70	88	8	0.88	0.76	1.04	190
0.090 inch Clear Saflex	67	88	8	0.86	0.74	1.02	185
0.100 inch Clear Saflex HP	66	87	8	0.85	0.73	1.01	184
0828 Blue-Gray	37	30	5	0.62	0.53	1.07	139
0855 Light Blue-Gray	51	52	6	0.73	0.62	1.07	160
3609 Dark Neutral Brown	15	9	5	0.44	0.38	1.07	103
3628 Neutral Medium Brown	32	29	5	0.58	0.50	1.07	131
3655 Neutral Light Brown	52	56	6	0.73	0.63	1.07	162
3773 Light Blue-Green*	62	71	7	0.82	0.70	1.06	178
5538 Light Bronze**	40	38	5	0.64	0.55	1.06	142
5558 Light Bronze	50	52	6	0.72	0.62	1.07	183
6376 Cool Blue	65	74	7	0.84	0.72	1.07	183
6428 Medium Bronze	34	28	5	0.59	0.51	1.07	134
6452 Light Bronze*	49	52	6	0.71	0.61	1.06	157
6544 Gray*	47	43	5	0.69	0.60	1.06	154
7558 Sky Blue	57	53	6	0.78	0.67	1.07	171

Information provided by Solutia Inc. The data and information set forth above are based on samples tested and are not guaranteed for all samples or applications. All data calculated using Lawrence Berkeley Laboratory Window 4.1 Program; NFRC/ASHRAE Conditions; center of glass values; US Standard and Metric units.  
 Tinted laminates composed of 0.38 mm (0.015 in.) Saflex Interlayer unless marked with (\*) which indicates 0.76 mm (0.030 in.) Solutia Interlayer. (\*\*) indicates interlayer only available in 0.76 mm (0.030 in.) thickness.  
 Laminates constructed with 3 mm (0.125 in.) Clear Glass (Saflex Interlayer) 3 mm (0.125 in.) Clear Glass.

**5 Typical Heat and Light Control Characteristics of Laminated Glass with Vanceva Solar Interlayer**

Glass-1 <sup>1</sup>	Glass-2 <sup>2</sup>	PVB	Tv%	Ts%	Rs%	SHGC <sup>3</sup>	SC <sup>3</sup>
		Nonsolar Clear or Vanceva Solar (VS) Color					
Clear	Clear	RB41 Clear	87.9	65.4	6.5	0.73	0.85
		VS-Green	68.8	42.6	5.7	0.57	0.66
		VS-Blue	48.1	33.2	5.8	0.50	0.58
		VS-Gray	46.6	30.4	5.3	0.48	0.56
Tinted Green	Clear	RB41 Clear	65.0	30.2	5.3	0.48	0.55
		VS-Green	51.9	21.9	5.2	0.42	0.48
		VS-Blue	37.8	17.3	4.9	0.38	0.45
		VS-Gray	35.2	15.6	4.5	0.37	0.43
Tinted Blue	Clear	RB41 Clear	67.3	29.5	5.3	0.47	0.55
		VS-Green	54.3	22.1	4.7	0.42	0.49
		VS-Blue	40.3	17.6	4.6	0.39	0.45
		VS-Gray	38.6	15.5	4.5	0.37	0.43
Tinted Gray	Clear	RB41 Clear	43.1	34.4	5.0	0.51	0.59
		VS-Green	34.3	22.9	4.8	0.42	0.49
		VS-Blue	24.9	18.7	4.6	0.39	0.46
		VS-Gray	23.3	16.5	4.4	0.38	0.44
Pyrolytic Hard Coat Low E Glass	Clear	RB41 Clear	75.0	53.0	7.3	0.58	0.68
		VS-Green	64.9	38.3	7.3	0.46	0.54
		VS-Blue	42.1	26.7	6.3	0.37	0.43
		VS-Gray	40.1	24.1	6.6	0.34	0.40
Pyrolytic Hard Coat Low E Glass	Tinted Green	RB41 Clear	60.5	27.3	4.7	0.38	0.44
		VS-Green	48.2	19.4	5.6	0.31	0.36
		VS-Blue	31.9	13.6	4.8	0.27	0.31
		VS-Gray	31.3	13.0	4.8	0.26	0.30
Pyrolytic Hard Coat Low E Glass	Tinted Blue	RB41 Clear	62.1	26.7	5.0	0.37	0.43
		VS-Green	50.2	19.7	5.1	0.31	0.36
		VS-Blue	33.3	13.8	4.8	0.27	0.31
		VS-Gray	30.4	13.0	4.8	0.25	0.29
Pyrolytic Hard Coat Low E Glass	Tinted Gray	RB41 Clear	39.7	30.0	4.9	0.40	0.46
		VS-Green	31.6	19.2	5.3	0.31	0.36
		VS-Blue	20.5	13.3	4.9	0.26	0.30
		VS-Gray	19.7	12.3	5.0	0.25	0.29

NOTES:

Ts, Rs calculated using ISO 9050 Air mass 1.

3 mm clear glass, 6 mm tinted glass and 3 mm pyrolytic hard coat LowE glass used in above examples

1. Glass 1 is facing the interior of the building with the coated side on surface #4

2. Glass 2 is facing the sun

3. SHGC (Solar Heat Gain Coefficient) and SC (Shading Coefficient) are calculated using published emissivity of specific pyrolytic hard coat LowE glass

\* concept car



# Vanceva Color Interlayer Solar Property Data

## SOLAR PROPERTIES DATA

Vanceva Layer Code	Color Name	Number of Vanceva Layers <sup>2</sup> ; (Interlayer Thickness)	Interlayer Designation	Solar Transmittance	Visible Light Transmittance	Visible Reflectance (front)	Absorbed Solar	Transmitted UV	U-Factor BTU/h·ft <sup>2</sup> ·F	Shading Coefficient (SC)	Solar Coefficient Heat Gain (SHGC)	Light to Solar Gain (LSG)
0001	Coral Rose	1; (0.015 in)	015_8078	0.70	0.76	0.07	0.23	0.006	1.01	0.89	0.77	0.99
0002	Aquamarine	1; (0.015 in)	015_8278	0.69	0.77	0.07	0.25	0.008	1.01	0.87	0.76	1.02
0003	Smoke Grey	1; (0.015 in)	015_8378	0.67	0.78	0.07	0.27	0.009	1.01	0.86	0.75	1.04
0004	Sahara Sun	1; (0.015 in)	015_8178	0.63	0.78	0.08	0.30	0.000	1.01	0.83	0.72	1.08
0005	Ruby Red	1; (0.015 in)	015_8050	0.62	0.48	0.06	0.31	0.003	1.01	0.83	0.72	0.67
0006	Sapphire Blue	1; (0.015 in)	015_8250	0.55	0.52	0.06	0.38	0.001	1.01	0.77	0.67	0.77
0007	Evening Shadow	1; (0.015 in)	015_8350	0.48	0.49	0.05	0.47	0.003	1.01	0.72	0.62	0.80
0008	Golden Light	1; (0.015 in)	015_8186	0.69	0.85	0.08	0.25	0.000	1.01	0.88	0.76	1.12
0009	Arctic Snow	1; (0.015 in)	015_2165	0.60	0.68	0.16	0.28	0.001	1.01	0.78	0.68	1.00
000A	Cool White	1; (0.015 in)	015_2180	0.67	0.81	0.14	0.22	0.005	1.01	0.86	0.74	1.11
000B	Pure White	1; (0.032 in)	032_2107	0.08	0.07	0.61	0.44	0.001	1.00	0.25	0.21	0.30
000C	True Blue	1; (0.015 in)	015_8515	0.38	0.15	0.06	0.56	0.001	1.01	0.63	0.54	0.28
000D	Deep Red	1; (0.015 in)	015_8414	0.42	0.12	0.04	0.51	0.001	1.01	0.66	0.57	0.20
000E	Tangerine	1; (0.015 in)	015_8641	0.54	0.41	0.08	0.39	0.000	1.01	0.75	0.65	0.64

<sup>1</sup> Reported solar properties calculated using laminate spectral data and Lawrence Berkeley National Laboratory Window 5.2 Program; Laminates comprised of two pieces of 1/8 in clear glass plus interlayer. NFRC/ASHRAE Conditions; center of glass values; US Standard units.

<sup>2</sup> Number of single thickness interlayer sheets used to achieve the color.