

## Insulating Data, Clear Outboard Glass, Configuration: 6mm/12mm A.S./6mm

Product	Visible Light			Colour Rendering Index R <sub>a</sub> (D65)	Solar Energy		European Standards		American Standards (NFRC 100 - 2004)					Light to Solar Gain
	Transmission %	Reflection Outside %	Reflection Inside %		Direct Transmission %	Reflection Outside %	Solar Factor, (g) EN 410 %	U-Value, EN 673 W/(m <sup>2</sup> K)	Winter	Summer				
									U-Value, Night time BTU/hr.ft <sup>2</sup> .F	U-Value, Day time BTU/hr.ft <sup>2</sup> .F	Shading Coefficient	SHGC	Relative Heat Gain BTU/hr.ft <sup>2</sup>	
<b>SunGuard Solar- 6mm clear/ 12mm a.s. / 6mm clear</b>													<b>Solar Coating #2 Surface</b>	
Silver 20	19	32	29	92	14	27	21	2.3	0.39	0.41	0.26	0.23	57	0.88
Royal Blue 20	21	21	33	97	16	19	24	2.5	0.43	0.45	0.30	0.27	67	0.85
Silver Grey 32	30	23	26	93	25	18	34	2.7	0.45	0.48	0.40	0.35	87	0.91
Neutral 34	34	24	15	90	24	20	31	2.5	0.42	0.45	0.37	0.32	80	1.08
Light Blue 52	46	19	22	96	39	15	47	2.8	0.47	0.49	0.56	0.49	118	0.97
<b>SunGuard Solar- 6mm clear/ 12mm a.s. / 6mm clear</b>													<b>Solar Coating #2 Surface, Climaguard Neutral 70 # 3 Surface</b>	
Silver 20	16	31	21	90	11	27	19	1.8	0.33	0.33	0.22	0.20	50	0.82
Royal Blue 20	17	20	24	95	12	20	21	1.9	0.33	0.34	0.26	0.23	56	0.82
Silver Grey 32	26	22	19	91	19	19	29	1.9	0.33	0.34	0.34	0.30	72	0.87
Neutral 34	28	24	12	88	18	21	28	1.9	0.33	0.34	0.32	0.28	69	1.01
Light Blue 52	39	18	16	94	28	16	41	1.9	0.34	0.34	0.47	0.41	99	0.94
<b>SunGuard High Performance - 6mm clear/ 12mm a.s. / 6mm clear</b>													<b>High Performance Coating #2 Surface</b>	
Silver 35	34	42	23	97	22	40	26	1.6	0.30	0.29	0.29	0.26	63	1.28
Neutral 40	39	23	12	90	26	27	31	1.7	0.31	0.31	0.34	0.30	73	1.27
Royal Blue 40	38	25	23	94	24	29	29	1.7	0.31	0.30	0.33	0.29	70	1.31
Neutral Plus 50	48	26	20	94	29	33	33	1.6	0.29	0.29	0.35	0.32	77	1.45
Neutral 60	55	23	15	95	36	29	41	1.7	0.30	0.30	0.44	0.39	93	1.35
Climaguard Neutral 70	67	12	12	95	49	15	56	1.9	0.34	0.34	0.62	0.54	128	1.21
<b>SunGuard High Selective - 6mm clear/ 12mm a.s. / 6mm clear</b>													<b>High Selective Coating #2 Surface</b>	
Super Neutral 40	39	16	31	90	21	36	24	1.6	0.29	0.28	0.26	0.23	56	1.62
Super Neutral 51	50	12	22	92	25	37	29	1.6	0.29	0.28	0.30	0.26	64	1.75
Super Neutral 62	62	14	17	94	31	38	34	1.6	0.29	0.28	0.36	0.31	75	1.80
Super Neutral 70	69	11	12	95	37	34	41	1.6	0.29	0.28	0.43	0.38	91	1.67

## Insulating Data, Green Outboard Glass, Configuration: 6mm/12mm A.S./6mm

Product	Visible Light			Colour Rendering Index R <sub>a</sub> (D65)	Solar Energy		European Standards		American Standards (NFRC 100 - 2004)					Light to Solar Gain
	Transmission %	Reflection Outside %	Reflection Inside %		Direct Transmission %	Reflection Outside %	Solar Factor, (g) EN 410 %	U-Value, EN 673 W/(m <sup>2</sup> K)	Winter	Summer				
									U-Value, Night time BTU/hr.ft <sup>2</sup> .F	U-Value, Day time BTU/hr.ft <sup>2</sup> .F	Shading Coefficient	SHGC	Relative Heat Gain BTU/hr.ft <sup>2</sup>	
<b>SunGuard Solar- 6mm green/ 12mm a.s. / 6mm clear</b>													<b>Solar Coating #2 Surface</b>	
Green 20	15	23	29	85	9	14	17	2.3	0.39	0.41	0.21	0.19	48	0.91
Aquamarine 20	17	16	33	89	10	11	19	2.5	0.43	0.45	0.24	0.22	55	0.91
Green 32	25	17	26	86	15	11	24	2.7	0.45	0.48	0.30	0.27	67	1.03
Green 34	28	18	15	83	15	11	24	2.5	0.42	0.45	0.29	0.25	63	1.19
Green 52	38	15	22	88	23	9	32	2.8	0.47	0.49	0.38	0.34	83	1.19
<b>SunGuard Solar- 6mm green/ 12mm a.s. / 6mm clear</b>													<b>Solar Coating #2 Surface, Climaguard Neutral 70 # 3 Surface</b>	
Green 20	13	23	21	83	7	14	15	1.8	0.33	0.33	0.18	0.16	41	0.86
Aquamarine 20	14	16	24	87	8	11	16	1.9	0.33	0.34	0.20	0.18	44	0.90
Green 32	21	17	19	84	12	11	21	1.9	0.33	0.34	0.24	0.22	54	1.01
Green 34	24	18	11	81	12	11	21	1.9	0.33	0.34	0.24	0.22	53	1.13
Green 52	32	14	16	87	18	10	28	1.9	0.34	0.34	0.32	0.28	68	1.15
<b>SunGuard High Performance - 6mm green/ 12mm a.s. / 6mm clear</b>													<b>High Performance Coating #2 Surface</b>	
Green 35	28	31	23	90	14	18	20	1.6	0.30	0.29	0.22	0.20	49	1.42
Green 40	33	18	12	83	17	12	23	1.7	0.31	0.31	0.26	0.23	56	1.42
Aquamarine 40	32	19	23	87	15	14	21	1.7	0.31	0.30	0.25	0.22	53	1.48
Green Plus 50	40	19	20	87	19	14	25	1.6	0.29	0.29	0.28	0.24	59	1.62
Green 60	46	18	14	87	23	12	29	1.7	0.30	0.30	0.32	0.28	68	1.58
Green 70	56	10	12	87	31	8	37	1.9	0.34	0.34	0.41	0.36	87	1.51

Notes: • Guardian reserves the right to change product performance characteristics without notice or obligation. • The performance values shown are nominal and subject to variations due to manufacturing tolerances. • Guardian performance data are calculated in accordance with the LBNL Window 5.2 computer analysis using an air mass of 1.5. • May require heat strengthening or tempering to resist potential thermal stresses. Please contact Guardian for assistance. • A slight shift in visible light reflectance or transmission may be noticed after heat-treatment.