

Thermal and Optical Properties of Selected Laminated PPG Glass Combinations in an Insulating Unit*



Insulating Glass Unit*					space + 1/4" • clear glass + 0.060" clear PVB +				1/4" clear glass)			
Product Type and Description	Transn	Transmittance		Reflectance		U-Value ² (Imperial)		K-Value ² (Metric)		Solar	Light to	
	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Night- time	Summer Day- time	Winter Night- time	Summer Day- time	Shading Coeffi- cient ³	Heat Gain Coeffi- cient ⁴	Solar Gain (LSG)⁵	
Uncoated												
Clear Glass	77	49	15	11	0.46	0.48	2.61	2.73	0.76	0.66	1.17	
SOLEXIA [®] Glass	67	32	13	8	0.46	0.48	2.61	2.73	0.54	0.47	1.43	
ATLANTICA [®] Glass	58	25	11	7	0.46	0.48	2.61	2.73	0.45	0.38	1.53	
AZURIA [®] Glass	59	24	11	7	0.46	0.48	2.61	2.73	0.43	0.37	1.59	
SOLARBRONZE® Glass	46	31	9	7	0.46	0.48	2.61	2.73	0.55	0.48	0.96	
SOLARGRAY [®] Glass	38	26	8	7	0.46	0.48	2.61	2.73	0.49	0.43	0.88	
GRAYLITE [®] II Glass	8	5	4	4	0.47	0.50	2.59	2.73	0.25	0.21	0.37	
Coated (1) and (2) indicates the	ne coating l	ocation										
Solar Control Low-E and Low-E	Glasses											
SOLARBAN 60 (2) Clear	67	30	12	27	0.29	0.27	1.65	1.53	0.43	0.38	1.76	
SOLARBAN 80 (2) Clear	46	18	33	38	0.28	0.26	1.59	1.48	0.27	0.24	1.92	
SOLARCOOL® Reflective Glasse	s											
SOLARCOOL (1) SOLEXIA	26	15	37	30	0.46	0.48	2.61	2.73	0.30	0.25	1.04	
SOLARCOOL (2) SOLEXIA	26	15	24	12	0.46	0.48	2.61	2.73	0.34	0.29	0.9	
SOLARCOOL (1) AZURIA	23	10	37	30	0.46	0.48	2.61	2.73	0.23	0.20	1.1	
SOLARCOOL (2) AZURIA	23	10	20	10	0.46	0.48	2.61	2.73	0.28	0.24	0.9	
SOLARCOOL (1) Bronze	18	15	37	31	0.46	0.48	2.61	2.73	0.33	0.28	0.64	
SOLARCOOL (2) Bronze	18	16	14	12	0.46	0.48	2.61	2.73	0.37	0.32	0.5	
SOLARCOOL (1) Gray	15	13	37	30	0.46	0.48	2.61	2.73	0.30	0.25	0.6	
SOLARCOOL (2) Gray	15	13	11	10	0.46	0.48	2.61	2.73	0.34	0.29	0.5	
SOLARCOOL (1) GRAYLITE II	3	2	36	30	0.46	0.48	2.59	2.73	0.16	0.14	0.2	
SOLARCOOL (2) GRAYLITE II	3	2	5	5	0.46	0.48	2.60	2.73	0.21	0.18	0.1	

* Performance data is based on representative samples of factory production. Actual values may vary slightly due to variations in the production process.

Figures may vary due to manufacturing tolerances. Performance data simulated using LBL Optics 5 and Window 5.2. with NFRC 100-2001 standard winter and summer design condition.
 U-value (K-value) is the overall coefficient of heat transmittance or heat flow measured

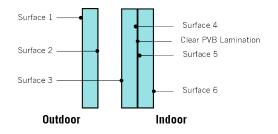
in BTU/hr. • ft2 • °F (watts/m2 • °C). Lower U-values indicate better insulating

performance. 3. Shading coefficient is the ratio of the total amount of solar energy that passes through a glass relative to 1/8-in. (3.0mm) thick clear glass under the same design conditions.

It includes both solar energy transmitted directly plus any absorbed solar energy reradiated and convected. Lower shading coefficient values indicate better performance in reducing solar heat gain.

Solar heat gain coefficient (SHGC) represents the solar heat gain through the glass relative to the incident solar radiation. It is equal to 86% of the shading coefficient.
 Light to Solar Gain ratio (LSG) is the ratio of visible light transmittance to solar heat gain

coefficient.



For additional configurations on laminated Solarban 60 glass, see literature #7065 on the PPG Certified Laminator Program or visit www.ppgglazing.com or call 1-888-PPG-IDEA.

See other side for Selected Monolithic Laminated PPG Glass Combinations.



Thermal and Optical Properties of Selected Monolithic Laminated PPG Glass Combinations*

Product Type and Description	Transm	Transmittance		Reflectance		U-Value ² (Imperial)		K-Value ² (Metric)		Solar	Light to
	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Night- time	Summer Day- time	Winter Night- time	Summer Day- time	Shading Coeffi- cient ³	Heat Gain Coeffi- cient ⁴	Solar Gain (LSG)⁵
Uncoated											
Clear Glass	86	61	8	6	0.95	0.86	5.39	4.88	0.82	0.71	1.21
SOLEXIA [®] Glass	75	39	7	5	0.95	0.86	5.39	4.88	0.65	0.56	1.34
ATLANTICA [®] Glass	65	29	7	5	0.95	0.86	5.39	4.88	0.58	0.50	1.30
AZURIA [®] Glass	66	28	7	5	0.95	0.86	5.39	4.88	0.57	0.49	1.35
SOLARBRONZE [®] Glass	52	39	6	5	0.95	0.86	5.39	4.88	0.65	0.56	0.93
SOLARGRAY [®] Glass	43	33	6	5	0.95	0.86	5.39	4.88	0.61	0.52	0.83
GRAYLITE [®] II Glass	9	6	4	4	0.93	1.02	5.41	4.91	0.41	0.35	0.25
Coated											
SOLARCOOL® Reflective Glasse	es										
SOLARCOOL (1) SOLEXIA	29	18	37	30	0.95	0.86	5.39	4.88	0.40	0.34	0.85
SOLARCOOL (2) SOLEXIA	33	18	19	10	0.95	0.86	5.39	4.88	0.48	0.41	0.80
SOLARCOOL (1) AZURIA	25	11	36	30	0.95	0.86	5.39	4.88	0.35	0.30	0.83
SOLARCOOL (2) AZURIA	30	13	16	8	0.95	0.86	5.39	4.88	0.45	0.38	0.79
SOLARCOOL (1) Bronze	20	20	36	30	0.95	0.86	5.39	4.88	0.41	0.35	0.57
SOLARCOOL (2) Bronze	24	23	11	9	0.95	0.86	5.39	4.88	0.52	0.45	0.53
SOLARCOOL (1) Gray	17	17	36	30	0.95	0.86	5.39	4.88	0.39	0.33	0.52
SOLARCOOL (2) Gray	20	19	9	8	0.95	0.86	5.39	4.88	0.50	0.42	0.48
SOLARCOOL (1) GRAYLITE II	3	3	36	30	0.95	0.87	5.41	4.92	0.29	0.24	0.14
SOLARCOOL (2) GRAYLITE II	4	4	5	4	0.95	0.87	5.41	4.91	0.39	0.33	0.12

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4. Solar heat gain coefficient (SHGC) represents the solar heat gain through the glass

relative to the incident solar radiation. It is equal to 86% of the shading coefficient.
Light to Solar Gain ratio (LSG) is the ratio of visible light transmittance to solar heat gain coefficient.

Shading coefficient is the ratio of the total amount of solar energy that passes through a glass relative to 1/8-in. (3.0mm) thick clear glass under the same design conditions.

For additional configurations on laminated *Solarban* 60 glass, see literature #7065 on the PPG Certified Laminator Program or visit www.ppgglazing.com or call 1-888-PPG-IDEA.

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Printed in U.S.A. 7091 11/14