

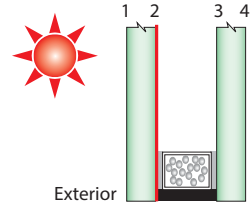
GLASPRO™

GlasPro-HP
High Performance Glass



www.glas-pro.com

800 776 2368 quotes@glas-pro.com

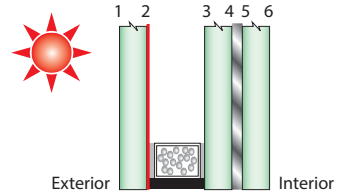


SunGuard, SuperNeutral, TwilightGreen, UltraClear, CrystalGray, CrystalBlue and Guardian Select are trademarks of Guardian Industries Corp.

Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value Winter Nighttime		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %	Air	Argon			
SunGuard SuperNeutral Series			Coating #2 Surface - unless noted (#3)						6 mm/12.7 mm a.s./6 mm				
SNX 62/27	UltraClear - UltraClear	Ultra Clear	64	8	24	11	13	51	0.29	0.24	65	0.27	2.40
	Clear - Clear	Clear	62	6	23	11	12	39	0.29	0.24	65	0.27	2.31
	Green - Clear	Green	52	3	18	9	12	10	0.29	0.24	59	0.24	2.13
	TwilightGreen - Clear	Dark Green	46	2	16	8	11	8	0.29	0.24	54	0.22	2.08
	CrystalGray - Clear	Light Gray	44	3	16	8	11	19	0.29	0.24	54	0.22	1.98
	Gray - Clear	Gray	31	3	12	6	11	19	0.29	0.24	45	0.18	1.71
SNX 51/23	CrystalBlue - Clear	Blue	40	4	15	7	11	25	0.29	0.24	51	0.21	1.91
	UltraClear - UltraClear	Light Blue	53	14	20	14	14	46	0.29	0.24	57	0.23	2.28
	Clear - Clear	Light Blue	51	11	19	14	14	36	0.29	0.24	57	0.23	2.19
	Green - Clear	Blue-Green	43	5	15	11	13	10	0.29	0.24	52	0.22	1.99
	TwilightGreen - Clear	Dark Green	38	3	13	10	13	8	0.29	0.24	49	0.20	1.93
	CrystalGray - Clear	Light Gray	36	6	14	9	13	18	0.29	0.24	48	0.20	1.85
SN 68	Gray - Clear	Gray	26	5	10	7	13	17	0.29	0.24	41	0.16	1.57
	CrystalBlue - Clear	Blue	33	7	13	9	13	23	0.29	0.24	46	0.19	1.78
	UltraClear - UltraClear	Ultra Clear	71	40	37	11	13	43	0.29	0.25	94	0.39	1.80
	Clear - Clear	Clear	68	30	33	11	12	33	0.29	0.25	90	0.38	1.80
	Green - Clear	Green	57	13	23	9	12	9	0.29	0.25	72	0.30	1.92
	TwilightGreen - Clear	Dark Green	51	9	20	8	11	7	0.29	0.25	64	0.27	1.93
SN 54	CrystalGray - Clear	Light Gray	48	17	23	8	11	16	0.29	0.25	71	0.30	1.64
	Gray - Clear	Gray	34	13	18	6	11	16	0.29	0.25	61	0.25	1.37
	CrystalBlue - Clear	Blue	44	19	23	7	11	21	0.29	0.25	70	0.29	1.51
	UltraClear - UltraClear	Ultra Clear	56	22	26	13	19	44	0.29	0.24	69	0.29	1.96
	Clear - Clear	Clear	54	16	24	13	18	35	0.29	0.24	68	0.28	1.92
	Green - Clear	Green	45	7	17	11	18	10	0.29	0.24	58	0.24	1.89
SNR 43	TwilightGreen - Clear	Dark Green	41	4	15	10	18	8	0.29	0.24	53	0.22	1.86
	CrystalGray - Clear	Light Gray	38	9	17	9	18	17	0.29	0.24	56	0.23	1.67
	Gray - Clear	Gray	27	7	13	7	17	16	0.29	0.24	48	0.19	1.40
	CrystalBlue - Clear	Blue	35	10	16	8	17	22	0.29	0.24	54	0.22	1.57
	UltraClear - UltraClear	Light Silver	45	24	21	28	14	54	0.29	0.24	56	0.23	1.96
	Clear - Clear	Light Silver	43	17	19	28	14	43	0.29	0.24	56	0.23	1.89
SunGuard High Performance Series	Green - Clear	Green	36	8	14	21	14	14	0.29	0.24	50	0.20	1.78
	TwilightGreen - Clear	Dark Green	32	5	12	18	14	11	0.29	0.24	46	0.19	1.73
	CrystalGray - Clear	Silver Gray	31	9	13	16	14	21	0.29	0.24	47	0.19	1.59
	Gray - Clear	Silver Gray	22	8	10	10	13	19	0.29	0.24	41	0.17	1.31
	CrystalBlue - Clear	Silver Blue	28	11	13	14	13	26	0.29	0.24	46	0.19	1.50
	Neutral 78/65(#3)	UltraClear - UltraClear	Ultra Clear	81	54	66	13	13	23	0.31	0.27	171	0.72
Clear - Clear		Clear	78	39	55	13	13	19	0.31	0.27	156	0.66	1.18
Neutral 78/65	UltraClear - UltraClear	Ultra Clear	81	54	66	13	13	22	0.31	0.27	160	0.68	1.19
	Clear - Clear	Clear	78	39	55	13	13	18	0.31	0.27	147	0.62	1.26
Neutral 61	Clear - Clear	Neutral Pewter	60	31	37	21	14	29	0.30	0.26	101	0.42	1.42
	Green - Clear	Green	50	13	23	16	13	11	0.30	0.26	72	0.30	1.69
Neutral 50	Clear - Clear	Neutral Blue	50	31	32	16	11	20	0.33	0.29	95	0.39	1.27
	Green - Clear	Green	42	13	20	13	10	9	0.33	0.29	68	0.28	1.50
Neutral 40	Clear - Clear	Neutral Gray	40	27	25	21	12	23	0.33	0.29	78	0.32	1.25
	Green - Clear	Green	34	11	16	16	12	10	0.33	0.29	59	0.24	1.40
AG 50	UltraClear - UltraClear	Light Silver	52	43	33	28	19	41	0.30	0.25	86	0.36	1.45
	Clear - Clear	Light Silver	50	30	29	27	19	34	0.30	0.25	82	0.34	1.48
	Green - Clear	Green	42	12	18	21	18	13	0.30	0.25	61	0.25	1.66
	CrystalGray - Clear	Silver Gray	35	16	20	16	18	18	0.30	0.25	64	0.26	1.34
	Gray - Clear	Silver Gray	25	12	16	10	18	16	0.30	0.25	57	0.23	1.08
	CrystalBlue - Clear	Silver Blue	32	17	20	14	18	21	0.30	0.25	65	0.27	1.20
AG 43	UltraClear - UltraClear	Light Silver	45	38	30	30	15	40	0.30	0.26	80	0.33	1.34
	Clear - Clear	Light Silver	43	26	26	30	15	33	0.30	0.26	76	0.31	1.37
	Green - Clear	Green	36	11	16	22	15	13	0.30	0.26	57	0.23	1.55
	CrystalGray - Clear	Silver Gray	30	14	18	17	14	18	0.30	0.26	60	0.25	1.23
	Gray - Clear	Silver Gray	21	11	15	11	14	15	0.30	0.26	54	0.22	0.98
	CrystalBlue - Clear	Silver Blue	28	15	18	15	14	20	0.30	0.26	61	0.25	1.10
SunGuard Solar Control													
Silver 20	Clear - Clear	Silver	18	16	14	30	30	26	0.37	0.33	56	0.22	0.81
	Green - Clear	Green	15	7	8	23	30	12	0.37	0.33	46	0.18	0.83

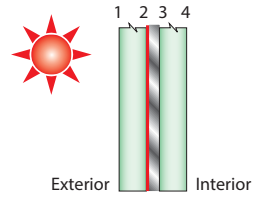
- The performance values shown are nominal and subject to variations due to manufacturing tolerances.
- Performance data are calculated for center-of-glass only (no spacer or framing) in accordance with the LBNL Window 7 program.
- Relative Heat Gain, Shading Coefficient, Solar Heat Gain Coefficient and/or LSG may change slightly when using argon gas fill.
- A slight shift in visible light reflectance or transmission may be noticed after heat-treatment.
- GlasPro reserves the right to change product performance characteristics without notice or obligation.

SUNGUARD®
Advanced Architectural Glass



Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value Winter Nighttime		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %	Air	Argon			
SunGuard SuperNeutral Series			Coating #2 Surface						6 mm/12.7 mm a.s./6 mm/060 PVB/6 mm				
SNX 62/27	UltraClear - UC/UC	Ultra Clear	63	0	23	11	12	51	0.28	0.23	64	0.26	2.37
	Clear - Clr/Clr	Clear	59	0	21	11	12	39	0.28	0.23	64	0.26	2.25
	Green - Clr/Clr	Green	50	0	17	9	11	10	0.28	0.23	58	0.24	2.09
	TwilightGreen - Clr/Clr	Dark Green	45	0	15	8	11	8	0.28	0.23	53	0.22	2.04
	CrystalGray - Clr/Clr	Light Gray	42	0	15	8	11	19	0.28	0.23	53	0.22	1.94
	Gray - Clr/Clr	Gray	30	0	11	6	10	19	0.28	0.23	44	0.18	1.67
	CrystalBlue - Clr/Clr	Blue	38	0	14	7	11	25	0.28	0.23	50	0.21	1.87
SNX 51/23	UltraClear - UC/UC	Light Blue	52	0	19	14	14	45	0.28	0.23	56	0.23	2.26
	Clear - Clr/Clr	Light Blue	49	0	17	14	13	36	0.28	0.23	56	0.23	2.14
	Green - Clr/Clr	Blue-Green	41	0	14	11	12	10	0.28	0.23	51	0.21	1.95
	TwilightGreen - Clr/Clr	Dark Green	37	0	12	10	12	8	0.28	0.23	48	0.20	1.89
	CrystalGray - Clr/Clr	Light Gray	35	0	12	9	12	18	0.28	0.23	47	0.19	1.81
	Gray - Clr/Clr	Gray	25	0	9	7	12	17	0.28	0.23	40	0.16	1.54
	CrystalBlue - Clr/Clr	Blue	32	0	12	9	12	23	0.28	0.23	45	0.18	1.74
SN 68	UltraClear - UC/UC	Ultra Clear	69	0	34	11	12	42	0.28	0.24	92	0.39	1.79
	Clear - Clr/Clr	Clear	66	0	30	11	12	33	0.28	0.24	89	0.37	1.77
	Green - Clr/Clr	Green	55	0	21	9	11	9	0.28	0.24	70	0.29	1.88
	TwilightGreen - Clr/Clr	Dark Green	49	0	18	8	11	7	0.28	0.24	63	0.26	1.89
	CrystalGray - Clr/Clr	Light Gray	47	0	21	8	11	16	0.28	0.24	70	0.29	1.61
	Gray - Clr/Clr	Gray	33	0	16	6	10	16	0.28	0.24	59	0.24	1.35
	CrystalBlue - Clr/Clr	Blue	42	0	21	7	11	21	0.28	0.23	69	0.29	1.49
SN 54	UltraClear - UC/UC	Ultra Clear	55	0	24	13	18	44	0.28	0.24	68	0.28	1.94
	Clear - Clr/Clr	Clear	52	0	21	13	17	34	0.28	0.24	67	0.28	1.88
	Green - Clr/Clr	Green	44	0	16	10	17	10	0.28	0.24	57	0.24	1.85
	TwilightGreen - Clr/Clr	Dark Green	39	0	14	9	17	8	0.28	0.24	52	0.21	1.82
	CrystalGray - Clr/Clr	Light Gray	37	0	15	9	17	17	0.28	0.24	55	0.23	1.64
	Gray - Clr/Clr	Gray	26	0	12	7	16	16	0.28	0.24	47	0.19	1.37
	CrystalBlue - Clr/Clr	Blue	34	0	15	8	16	22	0.28	0.23	53	0.22	1.54
SNR 43	UltraClear - UC/UC	Light Silver	44	0	19	28	14	54	0.28	0.23	55	0.23	1.94
	Clear - Clr/Clr	Light Silver	41	0	17	28	13	43	0.28	0.23	55	0.22	1.86
	Green - Clr/Clr	Green	35	0	13	21	13	14	0.28	0.23	49	0.20	1.75
	TwilightGreen - Clr/Clr	Dark Green	31	0	11	18	13	11	0.28	0.23	45	0.18	1.70
	CrystalGray - Clr/Clr	Silver Gray	29	0	12	16	13	21	0.28	0.23	46	0.19	1.56
	Gray - Clr/Clr	Silver Gray	21	0	9	10	13	19	0.28	0.23	40	0.16	1.29
	CrystalBlue - Clr/Clr	Silver Blue	27	0	12	14	13	26	0.28	0.23	45	0.18	1.47
SunGuard High Performance Series													
Neutral 78/65	UltraClear - UC/UC	Ultra Clear	79	0	60	13	13	21	0.30	0.26	158	0.67	1.19
	Clear - Clr/Clr	Clear	75	0	47	13	12	18	0.30	0.26	143	0.60	1.25
Neutral 61	Clear - Clr/Clr	Neutral Pewter	57	0	32	21	13	29	0.29	0.25	98	0.41	1.40
	Green - Clr/Clr	Green	48	0	20	16	13	11	0.29	0.25	70	0.29	1.66
Neutral 50	Clear - Clr/Clr	Neutral Blue	48	0	27	16	10	20	0.32	0.28	92	0.38	1.26
	Green - Clr/Clr	Green	40	0	17	13	10	9	0.32	0.28	66	0.27	1.49
Neutral 40	Clear - Clr/Clr	Neutral Gray	39	0	21	20	11	23	0.32	0.28	76	0.31	1.24
	Green - Clr/Clr	Green	32	0	14	16	11	10	0.32	0.28	57	0.23	1.39
AG 50	UltraClear - UC/UC	Light Silver	51	0	30	28	19	41	0.29	0.25	85	0.35	1.44
	Clear - Clr/Clr	Light Silver	48	0	25	27	18	34	0.29	0.25	80	0.33	1.46
	Green - Clr/Clr	Green	40	0	16	20	17	13	0.29	0.25	60	0.25	1.64
	CrystalGray - Clr/Clr	Silver Gray	34	0	17	16	17	18	0.29	0.25	63	0.26	1.32
	Gray - Clr/Clr	Silver Gray	24	0	14	10	17	16	0.29	0.25	55	0.23	1.06
AG 43	CrystalBlue - Clr/Clr	Silver Blue	31	0	17	14	17	21	0.29	0.25	63	0.26	1.19
	UltraClear - UC/UC	Light Silver	44	0	27	30	15	40	0.29	0.25	79	0.33	1.34
	Clear - Clr/Clr	Light Silver	41	0	22	29	14	33	0.29	0.25	74	0.30	1.36
	Green - Clr/Clr	Green	35	0	14	22	14	13	0.29	0.25	55	0.23	1.53
	CrystalGray - Clr/Clr	Silver Gray	29	0	15	17	14	18	0.29	0.25	59	0.24	1.22
SunGuard Solar Control	Gray - Clr/Clr	Silver Gray	21	0	12	11	13	15	0.29	0.25	52	0.21	0.97
	CrystalBlue - Clr/Clr	Silver Blue	27	0	16	15	14	20	0.29	0.25	60	0.24	1.09
	Silver 20	Clear - Clr/Clr	Silver	17	0	11	30	28	26	0.36	0.32	53	0.21
Green - Clr/Clr		Green	15	0	7	23	28	12	0.36	0.32	44	0.18	0.83

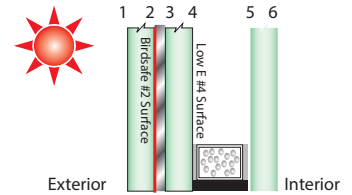
• Other laminated options are available, contact your GlasPro representative for more information.
 • Changes in PVB thickness have little effect on performance figures shown above.



Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %	Winter Night	Summer Day			
SunGuard SuperNeutral Series			Coating #2 Surface						6 mm/.060 PVB/6 mm				
SN 68	Clear/Clear	Clear	67	0	29	11	11	34	0.94	0.85	103	0.40	1.69
	Green/Clear	Green	56	0	21	9	10	9	0.94	0.85	105	0.40	1.39
	TwilightGreen/Clear	Dark Green	50	0	18	8	10	7	0.94	0.85	101	0.39	1.29
	CrystalGray/Clear	Light Gray	48	0	21	8	10	17	0.94	0.85	100	0.38	1.25
	Gray/Clear	Gray	34	0	16	6	9	16	0.94	0.85	92	0.35	0.97
	CrystalBlue/Clear	Blue	43	0	20	7	9	22	0.94	0.85	96	0.36	1.19

Other combinations of float glass and coatings may be available. Please contact GlasPro for assistance.
 When SunGuard coatings are laminated facing the PVB, there will be a noticeable color change when compared to standard insulated applications.
 GlasPro recommends a full size mock-up be approved.

High Performance Insulated Glass with Bird Safe Laminated



Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %	Winter Nighttime	Air / Argon			
4mm/062 BirdSafe / 6mm Low E / Air Space / 6mm (Coating on the #4 surface)													
SNX 62/27 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Ultra Clear Clear	63 59	0	23	11	12	51	0.28	0.23	64	0.26	2.37
SNX 51/23 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Light Blue Light Blue	52 49	0	19	14	14	45	0.28	0.23	56	0.23	2.26
SN 68 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Ultra Clear Clear	69 66	0	34	11	12	42	0.28	0.24	92	0.39	1.79
				0	30	11	12	33	0.28	0.24	89	0.37	1.77

Fabrication Certifications

GlasPro is an independently-owned, Guardian Select Fabricator of SunGuard products.



www.glas-pro.com

GlasPro, Inc. 9401 Ann Street. Santa Fe Springs, CA 90670-2613 Tel (562) 946-7722

The information contained in this brochure, other GlasPro publications and the GlasPro Website is subject to change and does not constitute a warranty of merchantability or fitness for any particular purpose. Actual performance may vary in specific applications.