

GUARDIAN

HIGH PERFORMANCE COATED GLASS

SUNGUARD® HIGH SELECTIVE ON EXTRACLEAR FLOAT GLASS												
Product	Visible Light		Solar Energy			g Value		SC	U value		Processing	
	Total Trans-mission %	Reflection Outside %	Direct Trans-mission %	Reflection outside %	Absorption %	EN 410 %	g EN / 0.87	Air W/m²K	Argon (90%) W/m²K	Edge Delete	Single /Dual Version	ε _n
Double Glazing 6-16-4, SunGuard SN on surface #2												
SNx 60/28	60	12	26	38	37	28	0.32	1.3	1.0	Yes	Dual	0.01
SN 70/37	70	11	35	39	26	37	0.43	1.3	1.0	Yes	Dual	0.01
SN 62/34	62	15	32	37	31	34	0.39	1.3	1.0	Yes	Dual	0.01
SN 51/28	51	12	26	37	37	28	0.32	1.3	1.0	Yes	Dual	0.01
SN 40/23	40	16	21	36	43	23	0.26	1.3	1.0	Yes	Dual	0.01
Triple Glazing 6-16-4-16-4, SunGuard SN on surface #2, Climaguard 1.0 on surface #5												
SNx 60/28	47	17	20	42	38	23	0.27	0.7	0.5	Yes	Dual	0.01
SN 70/37	55	18	26	42	32	30	0.35	0.7	0.5	Yes	Dual	0.01
SN 62/34	49	20	23	40	36	28	0.32	0.7	0.5	Yes	Dual	0.01
SN 51/28	40	16	19	29	42	23	0.26	0.7	0.5	Yes	Dual	0.01
SN 40/23	32	18	16	37	47	19	0.22	0.7	0.5	Yes	Dual	0.01

SUNGUARD® HP ON EXTRACLEAR FLOAT GLASS												
Product	Visible Light		Solar Energy			g Value		SC	U value		Processing	
	Total Trans-mission %	Reflection Outside %	Direct Trans-mission %	Reflection outside %	Absorption %	EN 410 %	g EN / 0.87	Air W/m²K	Argon (90%) W/m²K	Edge Delete	Single /Dual Version	ε _n
Double Glazing 6-16-4, SunGuard HP on surface #2												
Light Blue 62/52	62	16	48	17	35	52	0.60	1.7	1.5	No*	Single	0.14
Neutral 60/40	60	25	38	35	27	40	0.46	1.4	1.1	No*	Single	0.03
Neutral 50/32	50	23	29	37	34	32	0.37	1.4	1.1	No*	Single	0.03
Neutral 41/33	41	22	29	24	47	33	0.38	1.6	1.4	No*	Single	0.11
Silver 43/31	43	32	29	36	35	31	0.36	1.4	1.2	No*	Single	0.05
Royal Blue 41/29	41	26	26	27	47	29	0.33	1.4	1.1	No*	Single	0.03
Amber 41/29	41	25	27	36	37	29	0.33	1.4	1.1	No*	Single	0.03
Bright Green 40/29	40	37	26	24	50	29	0.33	1.4	1.1	No*	Single	0.03
Bronze 40/27	40	15	24	27	49	27	0.31	1.4	1.1	No*	Single	0.03
Silver 35/26	35	44	24	43	33	26	0.31	1.4	1.2	No*	Single	0.04

SUNGUARD® SOLAR ON EXTRACLEAR FLOAT GLASS												
Product	Visible Light		Solar Energy			g Value		SC	U value		Processing	
	Total Trans-mission %	Reflection Outside %	Direct Trans-mission %	Reflection outside %	Absorption %	EN 410 %	g EN / 0.87	Air W/m²K	Argon (90%) W/m²K	Edge Delete	Single /Dual Version	ε _n
Double Glazing 6-16-4, SunGuard Solar on surface #2, Climaguard 1.0 #3												
Neutral 67	52	23	33	28	40	40	0.46	1.3	1.0	No*	Single	0.83
Light Blue 52	40	17	24	18	58	31	0.36	1.3	1.0	No*	Single	0.71
Silver Grey 32	25	23	15	22	63	21	0.24	1.3	1.0	No*	Single	0.53
Royal Blue 20	17	19	11	20	70	17	0.19	1.3	1.0	No*	Single	0.41
Bright Green 20	16	35	10	20	71	15	0.17	1.3	1.0	No*	Single	0.36
Bronze 20	17	18	9	21	70	15	0.17	1.3	1.0	No*	Single	0.33
Silver 20	17	35	10	34	56	15	0.17	1.3	1.0	No*	Single	0.42
Silver 08	7	43	5	35	60	9	0.10	1.3	1.0	No*	Single	0.27

CLIMAGUARD® LOW E ON EXTRACLEAR FLOAT GLASS												
Product	Visible Light		Solar Energy			g Value		SC	U value		Processing	
	Total Trans-mission %	Reflection Outside %	Direct Trans-mission %	Reflection outside %	Absorption %	EN 410 %	g EN / 0.87	Air W/m²K	Argon (90%) W/m²K	Edge Delete	Single /Dual Version	ε _n
Double Glazing 4-16-4, Climaguard on surface #3												
Climaguard D	73	12	56	20	25	68	0.78	1.6	1.4	No*	Dual	0.12
Climaguard A+	82	13	63	22	15	71	0.81	1.4	1.2	Yes	Single	0.05
Climaguard 1.0	69	20	44	36	20	52	0.59	1.3	1.0	Yes	**	0.01
Triple Glazing 4-16-4-16-4, Climaguard on surfaces #3 and #5												
Climaguard D	58	15	37	22	40	57	0.65	0.9	0.8	No*	Dual	0.12
Climaguard A+	74	17	51	26	23	61	0.70	0.8	0.6	Yes	Single	0.05
Climaguard 1.0	55	27	30	42	28	40	0.46	0.7	0.5	Yes	**	0.01

Notes: The above tables contain indicative calculated values in accordance with EN 410 and EN 673, subject to fabrication tolerances.

* Does not require edge deletion for approved sealants.

** These products are available only in annealed float and annealed laminated float.



Guardian LamiGlass Certificated Sound Reduction Indices - dB

Insulating glass unit configuration (float glass & sound control laminates (SC))

Insulating glass unit configuration for float glass, PVB laminates & Sound Control Laminates (SC)	Frequency - Hertz						R _w (C:C _{tr})	R _w	R _w + C	R _w + C _{tr}
	125	250	500	1000	2000	4000				
Single glass										
8.8 SC	26	29	34	38	39	45	37(-0;-3)	37	37	34
9.5 SC	26	29	34	39	39	43	37(-1;-3)	37	36	34
10.8 SC	26	31	35	39	40	48	38(-0;-3)	38	38	35
12.8 SC	30	33	37	40	42	51	40(-1;-3)	40	39	37
16.8 SC	32	34	39	41	46	55	42(-1;-3)	42	41	39
Double insulating glass units										
4 / 16 / 4	24	18	26	40	45	39	30(-1;-4)	30	29	26
4 / 16 / 6	24	21	29	43	43	45	34(-1;-5)	34	33	29
4 / 16 / 8	25	22	32	41	45	46	35(-2;-5)	35	33	30
4 / 16 / 10	27	23	33	41	48	51	37(-2;-6)	37	35	31
6 / 16 / 8.8	26	27	36	43	42	53	38(-1;-5)	38	37	33
6 / 16 / 9.5	24	26	39	45	42	50	39(-2;-6)	39	37	33
6 / 16 / 8.8 SC	24	28	39	48	46	56	41(-2;-6)	41	39	35
8 / 16 / 8.8 SC	24	31	40	49	51	63	42(-2;-7)	42	40	35
8 / 16 / 10.8 SC	24	31	41	46	46	59	42(-2;-6)	42	40	36
8 / 16 / 12.8 SC	25	34	41	44	46	62	43(-2;-6)	43	41	37
10 / 16 / 8.8 SC	27	32	43	46	48	61	44(-2;-6)	44	42	38
10 / 16 / 9.5 SC	26	34	44	47	50	61	45(-3;-7)	45	42	38
10 / 16 / 10.8 SC	27	34	43	47	52	64	45(-2;-7)	45	43	38
8.8 SC / 16 / 12.8 SC	28	38	46	50	54	67	47(-2;-6)	47	45	41
8.8 SC / 16 / 13.1 SC	28	37	46	51	54	66	48(-3;-8)	48	45	40
9.1 SC / 16 / 13.1 SC	29	40	47	51	53	64	49(-3;-7)	49	46	42
8.8 SC / 16 / 16.8 SC	31	41	48	53	58	67	50(-1;-6)	50	49	44
12.8 SC / 16 / 16.8 SC	34	41	47	53	61	68	51(-1;-5)	51	50	46
Triple insulating glass units										
4 / 12 / 4 / 12 / 4	20	18	27	43	49	43	31(-1;-5)	31	30	26
4 / 12 / 4 / 12 / 6	22	24	32	46	47	47	35(-1;-5)	35	34	30
4 / 12 / 4 / 12 / 8	21	24	33	44	48	51	36(-2;-6)	36	34	30
6 / 12 / 4 / 12 / 8	21	28	37	43	41	55	38(-1;-5)	38	37	33
6 / 12 / 4 / 12 / 8.8 SC	23	30	42	51	46	60	41(-2;-6)	41	39	35
8 / 12 / 4 / 12 / 8.8 SC	24	31	40	48	47	60	42(-2;-6)	42	40	36
8 / 12 / 5 / 12 / 8.8 SC	24	32	41	49	47	58	43(-3;-7)	43	40	36
8.8 SC / 12 / 6 / 12 / 10.8 SC	29	34	45	53	54	66	47(-2;-7)	47	45	40

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