



GUARDIAN EUROPE Sàrl
19, rue du Puits Romain
L-8070 Bertrange
G-D of Luxembourg

Product Category : [Coated Glass - Low Emissivity Glass](#)

TYPE:

ClimaGuard

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PRODUCT:

ClimaGuard® Solar

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ClimaGuard® Solar								
EN 1096-4:2018								
Coated soda lime silicate glass intended to be used in buildings and construction works values as of Februar 2016								
		03mm	04mm	05mm	06mm	08mm	10mm	12mm
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		A1	A1	A1	A1	A1	A1	A1
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Pendulum body impact resistance (EN 12600)		NPD	NPD	NPD	NPD	NPD	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	3	4	5	6	8	10	12
Characteristic Bending Strength	MPa	45	45	45	45	45	45	45
Direct airborne sound insulation (EN 12758)	dB	28 (-1;-4)	29 (-2;-3)	30 (-1;-2)	31 (-2;-3)	32 (-2;-3)	33 (-2;-3)	34 (0;-2)
Thermal properties								
Normal emissivity of coated glass surface ϵ_n (EN 12898)		0.01	0.01	0.01	0.01	0.01	0.01	0.01
Radiation properties								
Light transmission τ_V (EN 410)		0.73	0.73	0.72	0.72	0.72	0.71	0.71
Light reflection (coated side / glass side) ρ_V (EN 410)		0.19 / 0.22	0.19 / 0.22	0.19 / 0.22	0.19 / 0.22	0.19 / 0.22	0.19 / 0.22	0.19 / 0.21
Solar energy transmission τ_E (EN 410)		0.45	0.45	0.44	0.44	0.43	0.42	0.42
Solar energy reflection (coated side / glass side) ρ_E (EN 410)		0.46 / 0.43	0.46 / 0.41	0.46 / 0.40	0.46 / 0.39	0.46 / 0.37	0.46 / 0.34	0.46 / 0.33
Solar factor (coated side / glass side) g (EN 410)		0.47 / 0.47	0.47 / 0.46	0.47 / 0.46	0.46 / 0.46	0.46 / 0.46	0.45 / 0.45	0.45 / 0.45
Durability (EN 1096)		C	C	C	C	C	C	C

NPD = No Performance Determined



All values are nominal values and subect to product tolerances Disclaimer: The Information contained in this publication is a general description of glass products and GUARDIAN hereby disclaims all liability howsoever arising from any inaccuracy in or omissions from this publication and all the consequences of relying on it. It is the responsibility of the users of this information to ensure that the intended application of glass products is appropriate and complies with all relevant laws, regulations, standards, codes of practices and other requirements.