



LamiGlass® ExtraClear 10mm

Laminated Glass intended to be used in buildings and construction works values as of May 2020

Product Standard: [EN 14449:2005](#)

		5.5.1	5.5.2	5.5.3	5.5.4	5.5.6	6.4.1	6.4.2	6.4.4	6.4.6
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	P2A	NPD	P4A	P5A	NPD	P2A	P4A	NPD
Pendulum body impact resistance (EN 12600)		1(B)1	1(B)1	1(B)1	1(B)1	1(B)1	NPD	1(B)1	1(B)1	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40	40	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	10	10	10	10	10	10	10	10	10
Direct airborne sound insulation (EN 12758)	dB	34 (-1;-3)	34 (-1;-3)	34 (-1;-3)	34 (-1;-3)	34 (-1;-3)	NPD	NPD	NPD	NPD
Thermal properties										
Thermal transmittance (U-value)	W/(m².K)	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5
Radiation properties										
Light transmission τV (EN 410)		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Light reflection ρV (EN 410)		0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Solar energy transmission τE (EN 410)		0.76	0.74	0.73	0.72	0.71	0.76	0.74	0.72	0.71
Solar energy reflection ρE (EN 410)		0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

NPD = No Performance Determined

All values are nominal values and subject to product tolerances
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Guardian ExtraClear™

Basic soda lime silicate glass intended to be used in buildings and construction works values as of November 2023

Product Standard: [EN 572-9:2005](#)

		02mm	03mm	04mm	05mm	06mm	08mm	10mm	12mm	15mm
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		A1	A1	A1	A1	A1	A1	A1	A1	A1
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Pendulum body impact resistance (EN 12600)		NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40	40	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	2	3	4	5	6	8	10	12	15
Characteristic Bending Strength	MPa	45	45	45	45	45	45	45	45	45
Direct airborne sound insulation (EN 12758)	dB	NPD	28 (-1;-4)	29 (-2;-3)	30 (-1;-2)	31 (-2;-3)	32 (-2;-3)	33 (-2;-3)	34 (-1;-2)	36 (-1;-3)
Thermal properties										
Thermal transmittance (U-value)	W/(m².K)	5.8	5.8	5.8	5.7	5.7	5.6	5.6	5.5	5.4
Radiation properties										
Light transmission τV (EN 410)		0.91	0.91	0.91	0.90	0.90	0.90	0.89	0.88	0.88
Light reflection ρV (EN 410)		0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Solar energy transmission τE (EN 410)		0.89	0.88	0.87	0.85	0.84	0.82	0.79	0.78	0.75
Solar energy reflection ρE (EN 410)		0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

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LamiGlass® Transwhite 08mm

Low intensity coloured laminated glass intended to be used in buildings and construction works values as of November 2019

Product Standard: [EN 14449:2005](#)

		4.4.1	4.4.2	4.4.4	4.4.6
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		NPD	NPD	NPD	NPD
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	P2A	P4A	NPD
Pendulum body impact resistance (EN 12600)		2(B)2	1(B)1	1(B)1	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	8	8	8	8
Direct airborne sound insulation (EN 12758)	dB	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)
Thermal properties					
Thermal transmittance (U-value)	W/(m².K)	5.6	5.6	5.6	5.6
Radiation properties					
Light transmission τV (EN 410)		NPD	NPD	NPD	NPD
Light reflection ρV (EN 410)		NPD	NPD	NPD	NPD
Solar energy transmission τE (EN 410)		NPD	NPD	NPD	NPD
Solar energy reflection ρE (EN 410)		NPD	NPD	NPD	NPD

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LamiGlass® Transwhite 10mm

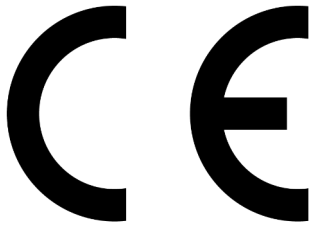
Low intensity coloured laminated glass intended to be used in buildings and construction works values as of March 2014

Product Standard: [EN 14449:2005](#)

		5.5.1	5.5.2	5.5.4
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD
Reaction to fire (EN 13501-1)		NPD	NPD	NPD
External fire performance (EN 13501-5)		NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	P2A	NPD
Pendulum body impact resistance (EN 12600)		1(B)1	1(B)1	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40
Wind, snow, permanent and imposed load resistance	mm	10	10	10
Direct airborne sound insulation (EN 12758)	dB	34 (-1;-3)	34 (-1;-3)	34 (-1;-3)
Thermal properties				
Thermal transmittance (U-value)	W/(m².K)	5.6	5.6	5.6
Radiation properties				
Light transmission τV (EN 410)		NPD	NPD	NPD
Light reflection ρV (EN 410)		NPD	NPD	NPD
Solar energy transmission τE (EN 410)		NPD	NPD	NPD
Solar energy reflection ρE (EN 410)		NPD	NPD	NPD

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LamiGlass® ExtraClear 06mm

Laminated Glass intended to be used in buildings and construction works values as of October 2025

Product Standard: [EN 14449:2005](#)

		3.3.1	3.3.2	3.3.3	3.3.4	3.3.6	3.3.8
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		NPD	NPD	NPD	NPD	NPD	NPD
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	P2A	NPD	P4A	NPD	NPD
Pendulum body impact resistance (EN 12600)		2(B)2	1(B)1	NPD	1(B)1	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	6	6	6	6	6	6
Direct airborne sound insulation (EN 12758)	dB	32 (-1;-3)	32 (-1;-3)	32 (-1;-3)	32 (-1;-3)	32 (-1;-3)	32 (-1;-3)
Thermal properties							
Thermal transmittance (U-value)	W/(m².K)	5.6	5.6	5.5	5.4	5.3	5.2
Radiation properties							
Light transmission τV (EN 410)		0.90	0.90	0.90	0.90	0.90	0.90
Light reflection ρV (EN 410)		0.08	0.08	0.08	0.08	0.08	0.08
Solar energy transmission τE (EN 410)		0.79	0.78	0.77	0.75	0.74	0.73
Solar energy reflection ρE (EN 410)		0.07	0.07	0.07	0.07	0.07	0.07

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LamiGlass® ExtraClear 08mm

Laminated Glass intended to be used in buildings and construction works values as of March 2007

Product Standard: [EN 14449:2005](#)

		4.4.1	4.4.2	4.4.3	4.4.4	4.4.6	4.4.8
Resistance to fire test (EN 13501-2)		NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire (EN 13501-1)		NPD	NPD	NPD	NPD	NPD	NPD
External fire performance (EN 13501-5)		NPD	NPD	NPD	NPD	NPD	NPD
Bullet resistance (EN 1063)		NPD	NPD	NPD	NPD	NPD	NPD
Explosion resistance (EN 13541)		NPD	NPD	NPD	NPD	NPD	NPD
Burglar resistance (EN 356)		NPD	P2A	P3A	P4A	P5A	P6B
Pendulum body impact resistance (EN 12600)		2(B)2	1(B)1	1(B)1	1(B)1	1(B)1	1(B)1
Resistance against sudden temperature changes and temperature differentials	K	40	40	40	40	40	40
Wind, snow, permanent and imposed load resistance	mm	8	8	8	8	8	8
Direct airborne sound insulation (EN 12758)	dB	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)	33 (-1;-3)
Thermal properties							
Thermal transmittance (U-value)	W/(m².K)	5.6	5.6	5.6	5.6	5.6	5.6
Radiation properties							
Light transmission τV (EN 410)		0.90	0.90	0.90	0.90	0.89	0.89
Light reflection ρV (EN 410)		0.08	0.08	0.08	0.08	0.08	0.08
Solar energy transmission τE (EN 410)		0.77	0.76	0.75	0.74	0.73	0.71
Solar energy reflection ρE (EN 410)		0.07	0.07	0.07	0.07	0.07	0.07

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