



Unique identification code of the product Type:	NOVOLAY® secure Declaration of performance no. 1121 – CPR – CA5005
Intended use:	Laminated safety glass and insulating glass units to be used in buildings and construction works
Manufacturer:	SCHOTT Technical Glass Solutions GmbH Otto-Schott-Strasse 13 07745 Jena Germany
Harmonised standard:	EN 14449:2005 und EN 1279-5:2005+A2:2010
Notified bodies:	No.: 0086, 0402, 0432, 0589, 0672, 0757, 0761, 0786, 0832, 0833, 0843, 1121, 1139, 1166, 1234, 1288, 1314, 1322, 1343, 1396, 1644, 1812, 2502

Essential characteristics	AVCP systems	Declared performance/s	
		Type P4A / 2.4.2	Type P5A / 3.13.10
Safety in the case of fire			
Resistance to fire	1	E60 / EW20	NPD
Reaction to fire	3, 4	E	E
External fire behaviour	3, 4	NPD	NPD
Safety in use			
Bullet resistance	1	NPD	NPD
Explosion resistance	1	NPD	NPD
Burglar resistance	3	P4A	P5A
Pendulum body impact resistance	3	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	4	40 K	40 K
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	NPD
Protection against noise			
Direct airborne sound reduction	3	NPD	NPD
Thermal properties			
Emissivity	3	NPD	NPD
U-value		5,6 W/(m²K)	5,6 W/(m²K)
Radiation properties			
Light transmission	3	0,89	0,89
Light reflection		0,08 / 0,08	0,08 / 0,08
Solar energy characteristics			
Solar transmission	3	0,73	0,72
Solar reflection		0,07	0,07
Solar factor (g-Value)		0,78	0,77
Durability	3	Pass	Pass

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Jena, 02/01/2017

Kai Olbricht

ppa. Christian Jabschinsky



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Essential characteristics	AVCP systems	Declared performance/s	
		Type BR2NS / 1.4.5	Type BR3NS / 1.7.4
Safety in the case of fire			
Resistance to fire	1	EW30 / E60	NPD
Reaction to fire	3, 4	E	E
External fire behaviour	3, 4	NPD	NPD
Safety in use			
Bullet resistance	1	BR2NS	BR3NS
Explosion resistance	1	ER4NS	NPD
Burglar resistance	3	NPD	NPD
Pendulum body impact resistance	3	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	4	40 K	40 K
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	NPD
Protection against noise			
Direct airborne sound reduction	3	NPD	NPD
Thermal properties			
Emissivity	3	NPD	NPD
U-value		5,2 W/(m²K)	5,1 W/(m²K)
Radiation properties			
Light transmission	3	0,89	0,89
Light reflection		0,08 / 0,08	0,08 / 0,08
Solar energy characteristics			
Solar transmission	3	0,75	0,77
Solar reflection		0,07	0,07
Solar factor (g-Value)		0,79	0,81
Durability	3	Pass	Pass

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Essential characteristics	AVCP systems	Declared performance/s	
		Type BR4NS / 1.7.5	Type BR4NS / 1.5.4
Safety in the case of fire			
Resistance to fire	1	NPD	EI20 / EW30 / E60
Reaction to fire	3, 4	E	E
External fire behaviour	3, 4	NPD	NPD
Safety in use			
Bullet resistance	1	BR4NS	BR4NS
Explosion resistance	1	NPD	ER4NS
Burglar resistance	3	NPD	P8B
Pendulum body impact resistance	3	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	4	40 K	40 K
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	NPD
Protection against noise			
Direct airborne sound reduction	3	NPD	NPD
Thermal properties			
Emissivity	3	NPD	NPD
U-value		4,8 W/(m²K)	4,7 W/(m²K)
Radiation properties			
Light transmission	3	0,88	0,88
Light reflection		0,08 / 0,08	0,08 / 0,08
Solar energy characteristics			
Solar transmission	3	0,75	0,73
Solar reflection		0,07	0,07
Solar factor (g-Value)		0,79	0,78
Durability	3	Pass	Pass

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Essential characteristics	AVCP systems	Declared performance/s	
		Type BR6NS / 1.7.8	Type BR6NS / 1.5.7
Safety in the case of fire			
Resistance to fire	1	NPD	EI30 / EW60
Reaction to fire	3, 4	E	E
External fire behaviour	3, 4	NPD	NPD
Safety in use			
Bullet resistance	1	BR6NS	BR6NS
Explosion resistance	1	NPD	ER4NS
Burglar resistance	3	NPD	P8B
Pendulum body impact resistance	3	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	4	40 K	40 K
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	NPD
Protection against noise			
Direct airborne sound reduction	3	NPD	NPD
Thermal properties			
Emissivity	3	NPD	NPD
U-value		4,4 W/(m²K)	4,3 W/(m²K)
Radiation properties			
Light transmission	3	0,86	0,86
Light reflection		0,08 / 0,08	0,08 / 0,08
Solar energy characteristics			
Solar transmission	3	0,70	0,69
Solar reflection		0,07	0,07
Solar factor (g-Value)		0,75	0,75
Durability	3	Pass	Pass

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Essential characteristics	AVCP systems	Declared performance/s	
		Type BR7NS / 4.9.8	
Safety in the case of fire			
Resistance to fire	1	NPD	
Reaction to fire	3, 4	E	
External fire behaviour	3, 4	NPD	
Safety in use			
Bullet resistance	1	BR7NS	
Explosion resistance	1	NPD	
Burglar resistance	3	NPD	
Pendulum body impact resistance	3	NPD	
Resistance against sudden temperature changes and temperature differentials	4	40 K	
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	
Protection against noise			
Direct airborne sound reduction	3	NPD	
Thermal properties			
Emissivity	3	NPD	
U-value		4,4 W/(m²K)	
Radiation properties			
Light transmission	3	0,86	
Light reflection		0,08 / 0,08	
Solar energy characteristics			
Solar transmission	3	0,69	
Solar reflection		0,07	
Solar factor (g-Value)		0,75	
Durability	3	Pass	

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Essential characteristics	AVCP systems	Declared performance/s	
		IGU type BR4NS / 1.6.5 ¹	IGU type BR4NS / 1.6.6 ²
Safety in the case of fire			
Resistance to fire	1	NPD	NPD
Reaction to fire	3, 4	E	E
External fire behaviour	3, 4	NPD	NPD
Safety in use			
Bullet resistance	1	BR4NS	BR4NS
Explosion resistance	1	NPD	NPD
Burglar resistance	3	NPD	NPD
Pendulum body impact resistance	3	NPD	NPD
Resistance against sudden temperature changes and temperature differentials	4	40 K	40 K
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	NPD
Protection against noise			
Direct airborne sound reduction	3	NPD	NPD
Thermal properties			
Emissivity	3	NPD	NPD
U-value		1,6 W/(m²K)	1,1 W/(m²K)
Radiation properties			
Light transmission	3	0,77	0,77
Light reflection		0,15 / 0,13	0,15 / 0,13
Solar energy characteristics			
Solar transmission	3	0,50	0,50
Solar reflection		0,21	0,21
Solar factor (g-Value)		0,56	0,56
Durability	3	Pass	Pass

¹ Design: Outside - Laminated 3.3.2-7 mm lowE – Argon filled 08mm – NOVOLAY® secure BR4NS / 1.6.5 - Inside

² Design: Outside - Laminated 3.3.2-7 mm lowE – Argon filled 18mm – NOVOLAY® secure BR4NS / 1.6.5 - Inside

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Essential characteristics	AVCP systems	Declared performance/s	
		Type ER3NS / 14.0.12	
Safety in the case of fire			
Resistance to fire	1	NPD	
Reaction to fire	3, 4	E	
External fire behaviour	3, 4	NPD	
Safety in use			
Bullet resistance	1	NPD	
Explosion resistance	1	ER3NS	
Burglar resistance	3	NPD	
Pendulum body impact resistance	3	NPD	
Resistance against sudden temperature changes and temperature differentials	4	40 K	
Resistance against wind, snow, permanent load and/or imposed loads	4	NPD	
Protection against noise			
Direct airborne sound reduction	3	NPD	
Thermal properties			
Emissivity	3	NPD	
U-value		5,3 W/(m²K)	
Radiation properties			
Light transmission	3	0,90	
Light reflection		0,08 / 0,08	
Solar energy characteristics			
Solar transmission	3	0,79	
Solar reflection		0,07	
Solar factor (g-Value)		0,82	
Durability	3	Pass	

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Remark to the Declaration of Performance

For laminated glass and insulating glass units, this declaration of performance indicates some exemplary glass structures/designs but it is not possible to list all available glass structures/designs.

The declaration of performance and the characteristics of performance of non-listed glass structures/designs is available on request or with your order.

SCHOTT Technical Glass Solutions GmbH
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