

SGG CONTRAFLAM®

Fire Protection: Class EI fire-resistant glass

Technical Sheet
United Kingdom

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Description

SGG CONTRAFLAM is a fire-resistant glass which consists of two or more sheets of toughened safety glass, separated by one or more thermo plastic spacer bars. The cavity between the sheets of glass is filled with a transparent gel which reacts when exposed to fire. It absorbs the energy of the fire, acting as a heat shield, keeping temperatures on the non fire side within strict limits imposed by applicable test standards and national regulations.

The overall thickness of the glass is determined by the fire resistance level that is required.

Applications

SGG CONTRAFLAM is a glass designed for structures which have to meet the following stringent criteria:

- flameproof and impervious to gases.
- providing thermal insulation during a fire for a period of 30 minutes (class EI 30) to 120 minutes (class EI 120).

Single glazing

- SGG CONTRAFLAM can be used as a single-glazed unit for doors and glazed partitions. These structures can be wooden or steel and installed either vertically, at an angle or horizontally. Subject to current test evidence.
- SGG CONTRAFLAM is a genuine fireproof wall when used for partitioning, doors and walls. It is also an impact-resistant safety glass, in particular in the event of crowd panic.

Double glazing

Assembled as a double-glazed unit, SGG CONTRAFLAM can be used in internal or external applications.

Solutions tested and certified

Any length of partition and doors EI 30, EI 60, EI 90 and EI 120, with wooden, insulated steel and even aluminium-based frames, depending on the required performance level.

Advantages

Transparency

SGG CONTRAFLAM is a clear, transparent glass. The gel is UV stable and does not discolour.

Resistance

Impact-resistant and easy to transport and handle, especially on site.

Fireproof

In the event of a fire, the gel cavity opacifies and forms an insulating barrier against the heat by reducing the transmittance of radiation and limiting the temperature on the other side of the wall. SGG CONTRAFLAM also acts as a barrier against smoke, flames and toxic gases.

Range

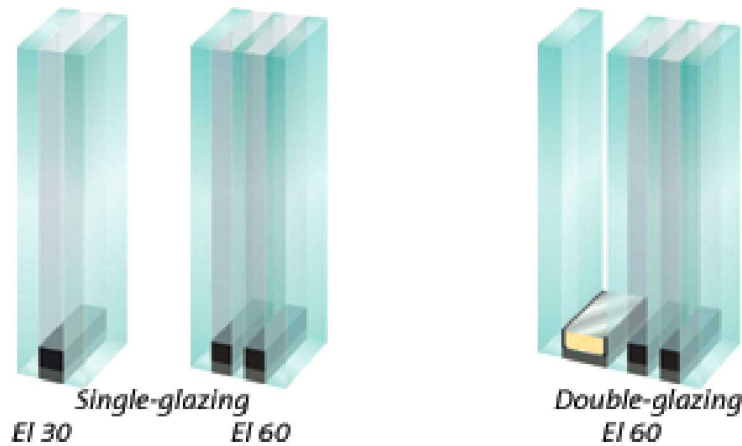
Single glazing

- SGG CONTRAFLAM is supplied as clear glass. One of the sheets of glass can be replaced with decorative glass or high performance glass.
- SGG CONTRAFLAM can be made up of a wide range of different products.

Double glazing

For double-glazed units, SGG CONTRAFLAM can be combined with:

- solar control glazing from the SGG COOL-LITE, SGG ANTELIO or SGG PARSOL range;
- low-emissivity glazing from the SGG PLANITHERM range for enhanced thermal insulation.



Performance

Single glazing

Product		SGG CONTRAFLAM			
Single glazing		EI 30	EI 60	EI90	EI120
Thickness	mm	16 mini	24 mini	36 mini	58 mini
Weight	kg/m ²	34 mini	49 mini	72 mini	108 mini
Light factor					
LT	%	87	83	80	70
LRe	%	8	8	9	16
LRi	%	8	8	9	16
UV	%	44	39	33	27
Energy factor					
T	%	62	57	52	37
Re	%	7	6	7	9
A1	%	7	6	7	9
A2	%	31	37	43	37/13
Solar factor g		0.70	0.67	0,62	0,53
Shading Coefficient		0.80	0.77	0,71	0,62
U-value	W/(m ² ,K)	5.0	4.7	3,7	2,3
Sound reduction indices (1)					
R>w	dB	38	41	44	
C	dB	-2	-2	-2	
C>tr	dB	-2	-2	-2	
R>A	dB	36	39	42	
R>A,tr	dB	36	39	42	

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Minimum thickness of the glazing	Flameproof and impervious to hot gases for:	Class
24 mm	60 mn	EI 60
36 mm	90 mn	EI 90
58 mm	120 mn	EI 120

Double glazing

Product	SGG CONTRAFLAM		
	EI30	EI60	
Composition	mm	16(8)6	24(8)6
Thickness	mm	30	38
Weight	kg/m ²	49	64
Position of the low-emissivity coating	face	no coating	no coating
Light factor			
LT	%	77	75
LRe	%	15	15
LRi	%	15	14
uv	%	36	33
Energy factor			
T	%	53	49
Re	%	12	12
Ri	%	11	10
AE	%	15/21	15/25
Solar factor g		0,69	0,68
Shading Coefficient		0,79	0,78
U-value	W/(m ² ,K)		
Air		2,8	2,6
Argon 85%		2,6	2,5

Installation Guidelines

- sGG CONTRAFLAM must be installed in strict accordance with the appropriate fire test certification and current national standards and regulations.
- sGG CONTRAFLAM must not be used near to heating systems
- The temperature limits for using the product must be observed: - 10° to + 45 °C (minimum and maximum temperatures permitted for the gel); please contact VETROTECH SAINT-GOBAIN UK for further information.



*Kenzo/LVMH, Paris, France
Architect : Ory - Réalisation : Presta Metal*

Standards and Regulations

- The characteristics of sGG CONTRAFLAM have been tested in compliance with BS EN 476-22.
- sGG CONTRAFLAM will receive CE marking when this becomes applicable.
- For all other questions, please contact VETROTECH SAINT-GOBAIN UK or visit www.vetrotech.com