

VETROTECH

FIRE RESISTANCE



Saint-Gobain
Glass Solutions

SGG SWISSFLAM® SF60-N2

Fire-test Certification Summary

*Fully Insulating Clear
Fire Resisting Glass*

*Multi-panel Hardwood Screen / Partition
66 Minutes Integrity
62 Minutes Insulation*

Test Institute: Warrington Fire Research Centre

Test Number: 106985

Test Standard: BS 476: Part 22:1987

Test Sponsor: Vetrotech Saint-Gobain
International AG

SAINT-GOBAIN GLASS PROTECT

SGG SWISSFLAM® SF60-N2

Test Institute: Warrington Fire Research Centre

Test Number: 106985

Test Date: 30 March 1999

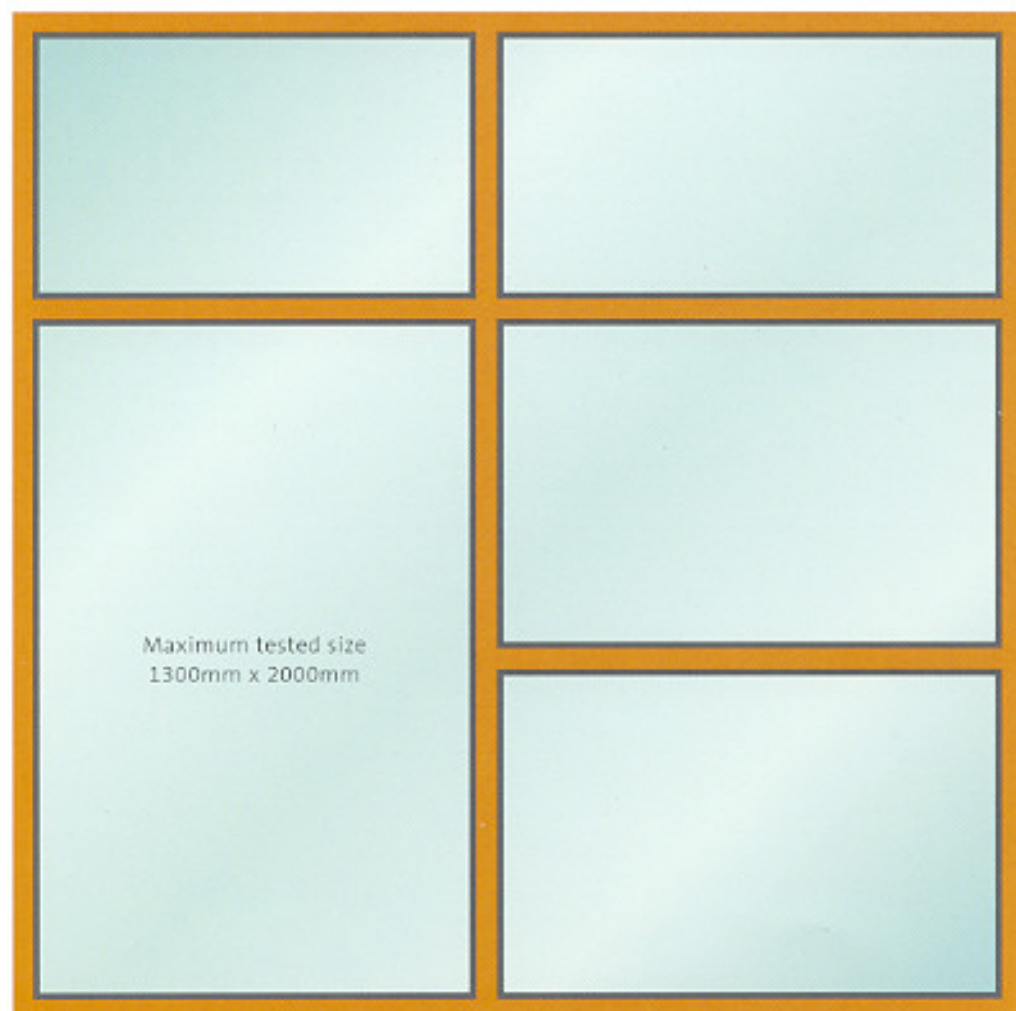
Test Standard: BS 476: Part 22:1987

Test Sponsor: Vetrotech Saint-Gobain International AG

Test Result: 66 minutes integrity
62 minutes insulation

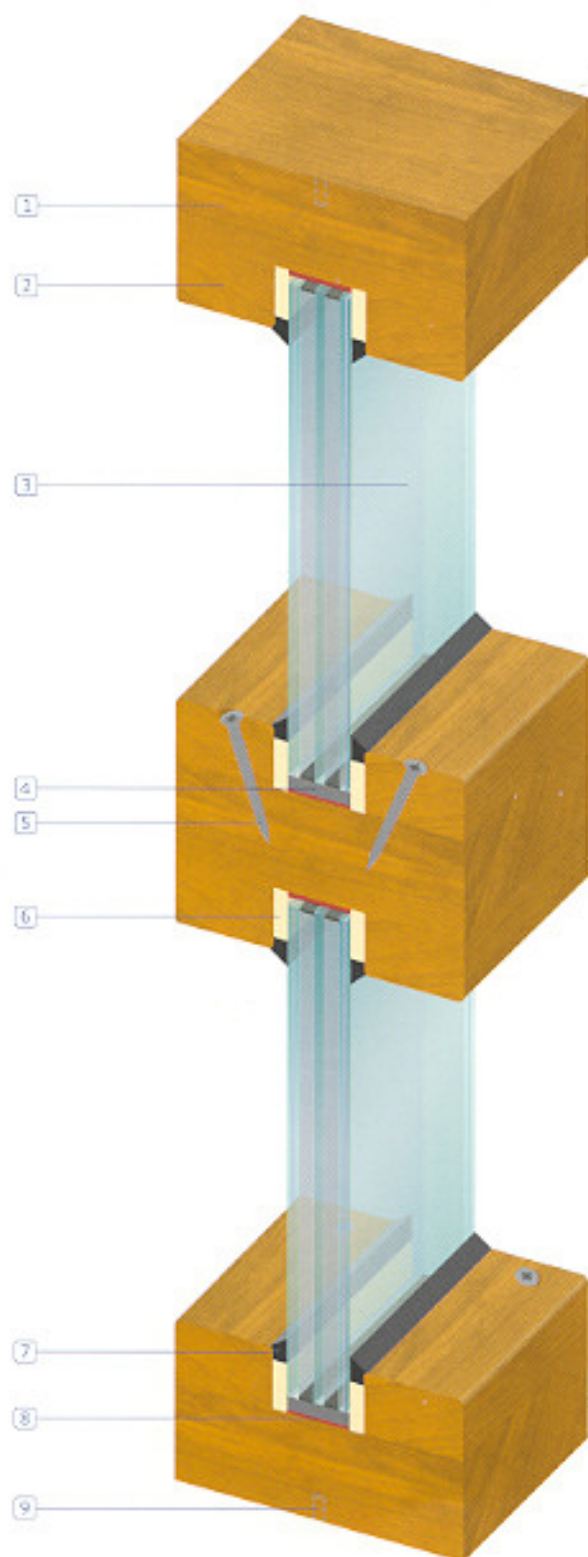
Summary: A multi-panel glazed hardwood timber screen of overall dimensions 2960mm x 2960mm, incorporating a full height mullion and three transom members. Glazed with 5 no. panes of 24mm thick SGG SWISSFLAM SF60-N2 fully insulating clear fire resisting glass, retained within the frame by screw fixed hardwood timber beads on either face. Subjected to a test in accordance with BS 476: Part 22:1987 for a fully insulated glazed screen, to 66 minutes integrity and 62 minutes insulation (EI60).

Elevation



SGG SWISSFLAM® SF60-N2

Section



Parts List

1. Sapele hardwood timber frame
116mm x 50mm.
2. Sapele hardwood glazing bead
40mm x 25mm
3. SGG SWISSFLAM SF60-N2
fully insulating clear fire
resisting glass
4. Non-combustible setting blocks
50mm x 24mm x 5mm
5. Stainless steel wood screws
4mm diameter x 50mm @
200mm centres with a skew
angle of 30 degrees
6. Kerafix ceramic glazing tape
20mm x 6mm (compressed
to 3mm)
7. Silicone sealant capping
8. Kerafix +3 graphite impregnated
paper tape 24mm wide x 1.6mm
9. Fischer fixing screws S10R 8mm
diameter x 150mm long, into
plastic plugs

SGG SWISSFLAM® SF60-N2

Construction

The frame was made from Sapele hardwood, with a stated density of 640kg/m³. The perimeter frame along with the transoms and mullions had section dimensions 116mm x 50mm. All timber joints were mortice and tenon. The perimeter frame was fixed using 'Fischer' fixing screws 510R 8mm diameter x 150mm long at 600mm centres, into plastic plugs. The frames were glazed with SGG SWISSFLAM SF60-N2 glass, supported on 'Promatect H' setting blocks 50mm x 24mm x 5mm, 2 no. per glass pane. Between the face of the glass and the glazing bead, Kerafix ceramic paper tape 20mm wide x 6mm thick (compressed to 3mm) was fitted. Directly underneath the glass edges, to the inside faces of each aperture, 'Kerafix +3' graphite impregnated paper tape 24mm wide x 1.6mm was fitted. The glazing beads were also of Sapele hardwood 40mm wide x 25mm deep. The timber beads were attached to the frame with 4mm diameter x 50mm long stainless steel wood screws, with a skew angle of 30 degrees fitted at 200mm centres.

Performance

The specimen satisfied the performance requirements specified in Clause 5 of BS 476: Part 22:1987, for an insulated glazed screen, for the following periods:

Integrity: 66 minutes
Insulation: 62 minutes

Glazing

1300mm wide x 2000mm high
1482mm wide x 968mm high
1482mm wide x 782mm high
1300mm wide x 782mm high
(Nominal edge clearance 5mm /
Edge cover 20mm ±2mm)

Safety

SGG SWISSFLAM SF60-N2 fully insulating clear fire resisting glass is a Class A safety glazing material, in accordance with BS 6206:1981.

Product Description

SGG SWISSFLAM SF60-N2 is a fully insulating clear fire resisting glass. Produced from high performance laminated safety glass incorporating an advanced intumescent interlayer, which when exposed to fire turns opaque to form a fully insulating barrier to heat, smoke and flames. For use in doors and partitions of steel or timber construction, for 60 minutes integrity and insulation (EI60) fire resisting applications.

Installation

SGG SWISSFLAM SF60-N2 should be glazed in accordance with our recommendations to ensure full compliance with the relevant fire-test certification. Each panel must be ordered to the correct size and shape, as the product cannot be cut down on site after manufacture. Any subsequent alterations required to size or shape can only be carried out at an authorised cutting station or approved stockist. As part of the production process, SGG SWISSFLAM SF60-N2 has a special metallic protection tape applied to the glass edges. This must not be removed under any circumstances. The glass should not be glazed in a manner which would allow water to be trapped in the glazing channel as this may contaminate the intumescent interlayers. Once installed the glass should be immediately capped off with a suitable silicone.

Storage and Handling

When handling SGG SWISSFLAM SF60-N2, particular care should be taken to prevent mechanical damage to the glass edges. Abrasions to glass panels which result in damage to the protective edge tape should be avoided, as the intumescent interlayer may be contaminated. Such panels should be inspected and replaced as necessary. SGG SWISSFLAM SF60-N2 should be stored in a dry environment. The glass edges should be supported on timber battens or other non-abrasive materials and stacked upright. During storage, the glass should not be exposed to temperatures likely to exceed or fall below +45°C / -10°C.

Maintenance

SGG SWISSFLAM SF60-N2 glass requires no special maintenance procedures. Once installed the glass should be cleaned regularly using warm water and a liquid detergent, washed down with clean water. Damaged or broken panels should be replaced, as this could affect the fire performance capabilities of the product.

Technical Advice

A Technical Advice Service is in daily operation at Vetrotech Saint-Gobain U.K. Ltd. where comprehensive information can be obtained on the correct use and application of the wide range of fire resisting glass products available.

If you would like more information or help, please call Vetrotech Saint-Gobain on 0113 239 1500 or contact us by email on infovsguk@vetrotech.co.uk

SAINT-GOBAIN
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