

VETROTECH  
FINE RESISTANCE

Saint-Gobain  
Glass Solutions



SGG FIVESTAR®  
Fire-test Certification Summary

*Clear Fire Resisting  
Safety Glass*

*Multi-panel Hardwood Screen / Partition  
33 Minutes Integrity*

Test Institute: Warrington Fire Research Centre  
Test Number: R12267  
Test Standard: BS 476: Part 22:1987  
Test Sponsor: Vetrotech Saint-Gobain  
International AG

SAINT-GOBAIN GLASS PROTECT

# SGG FIVESTAR®

*Test Institute:* Warrington Fire Research Centre

*Test Number:* R12267

*Test Date:* 27 July 1995

*Test Standard:* BS 476: Part 22:1987

*Test Sponsor:* Vetrotech Saint-Gobain International AG

*Test Result:* 33 minutes integrity

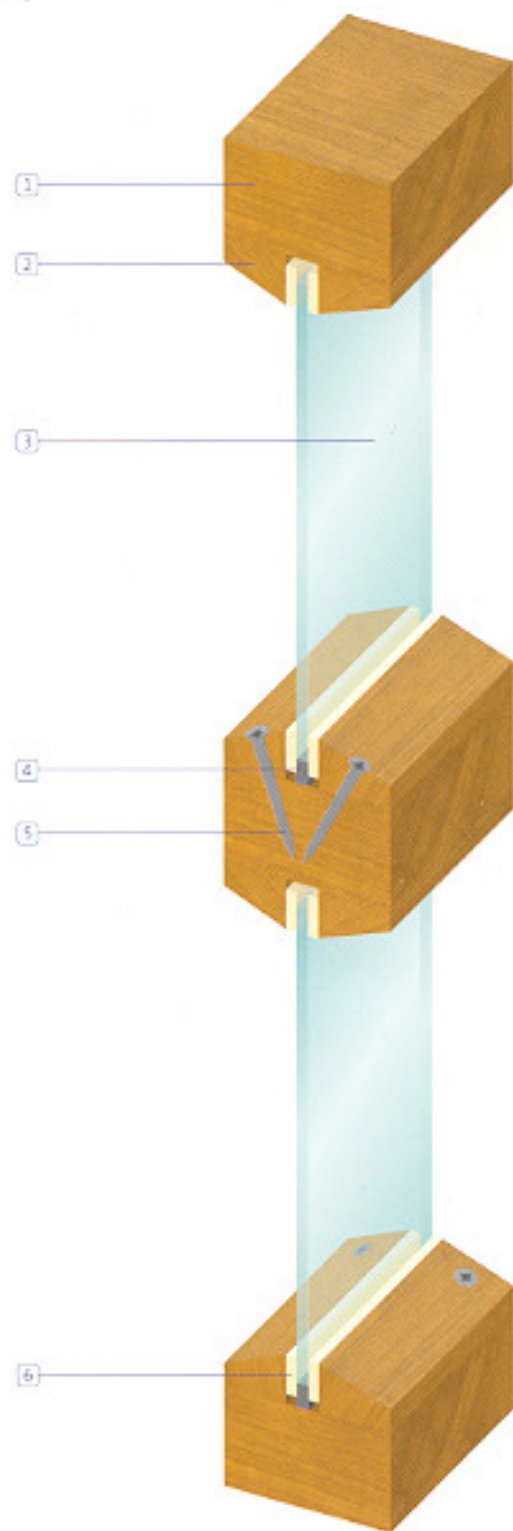
*Summary:* A multi-panel glazed hardwood Mahogany timber screen of overall dimensions 2960mm x 2160mm glazed with 5 no. panes of 5mm thick SGG FIVESTAR clear fire resisting safety glass. Subjected to a test in accordance with BS 476: Part 22: 1987 to 33 minutes integrity.

## Elevation



# SGG FIVESTAR®

## Section



## Parts list

1. Hardwood timber frame  
67mm x 40mm
2. Hardwood glazing bead  
27mm x 20mm
3. SGG FIVESTAR clear fire resisting  
safety glass
4. Non-combustible setting blocks  
80mm x 10mm x 6mm
5. Counter sunk wood screws  
4.5mm diameter x 50mm @  
200mm centres
6. Kerafix ceramic glazing tape  
15mm x 4mm (compressed  
to 2mm)

# SGG FIVESTAR®

## Construction

The frame was made from African Mahogany, with a stated density of 640kg/m<sup>3</sup>. The perimeter frame along with the transoms and mullions had section dimensions 67mm x 40mm. All timber joints were mortice and tenon. The perimeter frame was fixed using steel anchor bolts 100mm long into plastic plugs. The frames were glazed with SGG FIVESTAR glass, supported on 'Promatect H' setting blocks 80mm x 10mm x 6mm. Between the face of the glass and the glazing bead, Kerafix ceramic paper tape 15mm x 4mm (compressed to 2mm) was fitted. The glazing bead was 27mm x 20mm hardwood, chamfered away from the glass to a leading edge depth of 10mm. The timber beads were attached to the frame with 4.5mm diameter x 50mm counter sunk wood screws at 200mm centres.

## Performance

The specimen satisfied the performance requirements specified in Clause 10 of BS 476: Part 22, for the following period:  
Integrity: 33 minutes

## Glazing

Maximum panel size:  
1.25m<sup>2</sup> overall area  
1000mm wide x 1250mm high  
1250mm wide x 1000mm high  
(Nominal edge clearance 5mm /  
Edge cover 10mm ±1mm)

## Safety

SGG FIVESTAR clear fire resisting safety glass is a Class A safety glazing material, in accordance with BS 6206:1981.

## Product description

SGG FIVESTAR is a single sheet of 5mm thick glass. Light and thin, the glass possesses high mechanical stability with tempered glass safety characteristics. Recommended for use in doors and partitions of steel or timber construction for 30 minute integrity (E30) fire resisting applications.

## Installation

SGG FIVESTAR 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 SGG FIVESTAR cannot be cut or worked on after manufacture. SGG FIVESTAR can be used for both internal and external applications.

## Storage and Handling

When handling SGG FIVESTAR, particular care should be taken to avoid mechanical damage to the glass edges. SGG FIVESTAR should be stored in a dry environment. The glass edges should be supported on timber battens or other non-abrasive materials and stacked upright.

## Maintenance

SGG FIVESTAR 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](mailto:infovsguk@vetrotech.co.uk)



Represented by