

SGG POINT®

*(incorporating SGG SPIDER GLASS
and SGG LITE-WALL) Exterior
bolted glass assemblies with
point-fixings*

Technical Sheet
United Kingdom

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Description

SGG POINT is a modern solution for exterior bolted glass assemblies, which secures the glazing to a support structure by means of point-fixings.

The high-grade stainless steel fixings are designed to absorb all static and dynamic loads (i.e. the dead weight of the glass, wind loading, snow loads and differential expansion due to temperature difference) and distribute them to the support structure. Intermediate elements which are inserted between the bolt and the glass ensure:

- uniform transmission of stresses whilst avoiding local stresses
- a watertight facade.

NB : SGG POINT now incorporates all previous SGG SPIDER GLASS systems.

Applications

- Facades
- Inclined facades
- Double-skin facades
- Overhead glazing
- Wall cladding
- Streetfurniture
- Interior partitions

Advantages

Unobtrusive, flush appearance

SGG POINT fixings contribute to the creation of all-glass assemblies and innovative projects. With SGG POINT, the glass is not set in frames like traditional constructions, but held in place by point-fixings, thus creating innovative aesthetic all-glass facades.

Maximum transparency

All-glass structures can be created, ensuring interiors are generously provided with natural light. When refurbishing older buildings, the clarity of the glass allows the original structure to be exposed in its true form.

Range

Fixings

SGG POINT is a system with a range of fixings for toughened or heat-strengthened glass. The glass is available as monolithic, single or laminated glazing, or in double-glazed units.

The range includes 5 basic versions:

SGG POINT S (SGG SPIDER GLASS)

For monolithic toughened or laminated glazing with articulated fixings.

SGG POINT D

For double-glazed applications with articulated fixings.

SGG POINT SLW (SGG LITE WALL)

For monolithic toughened or laminated glazing with fixed-bolt fixings.

SGG POINT DLW

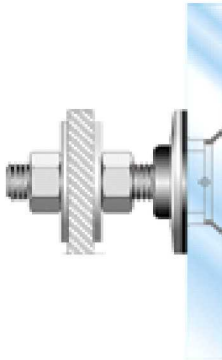
For double-glazed applications with fixed-bolt fixings.

SGG POINT XS

A new form of fixing for monolithic toughened or laminated glazing, with fixed-bolt fixings which do not pass through the glass.

SGG POINT S

SGG POINT S consists of an articulated bolt-fixing for monolithic glass, which is secured to a support structure to ensure that the glazing is firmly fixed in position. Use of such bolts permits movement in all directions. Each fitting is carefully inserted into a countersunk hole and is secured flush into the exterior surface of the glass.



SGG POINT S

SGG POINT D

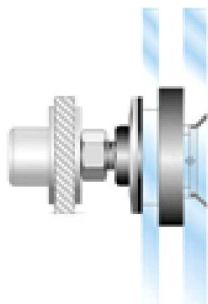
SGG POINT D uses a similar construction principle to SGG POINT for double-glazed solutions and the fitting is secured flush with the exterior surface.

The drilling of the glass includes:

- a countersunk hole in the load bearing glass
- a cylindrical hole in the second glass pane (monolithic or laminated).

Double-glazed units include an air cavity of 15 mm. Impermeability is assured by using a conventional double peripheral barrier.

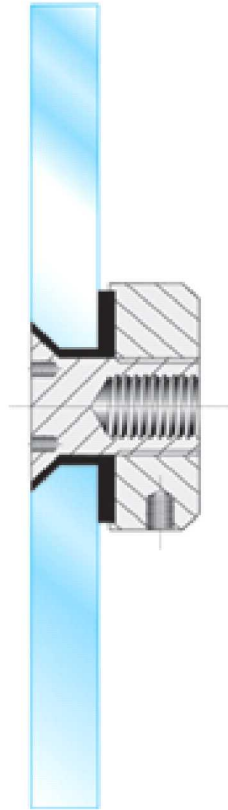
The bolts are factory fitted and sealed to ensure watertight construction.



SGG POINT D

SGG POINT SLW

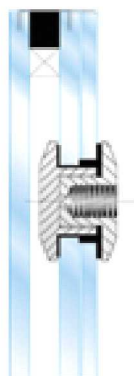
SGG POINT SLW consists of a fixed-bolt fixing for monolithic glass, which is secured to a support structure to ensure the glass is firmly fixed in position. It comprises countersunk holes in each sheet of glass, depending on the size and load conditions. The fitting is secured flush to the exterior surface of the glass and transfers the load from the facade to the supporting structure.



SGG POINT SLW

SGG POINT DLW

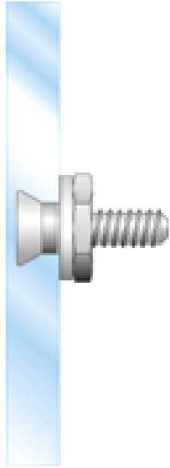
SGG POINT DLW uses a similar construction principal to the SGG POINT SLW for double-glazed solutions. Only the inner pane is drilled and must always be toughened and laminated (SGG STADIP POINT). This leaves the exterior surface totally flush with no bolts and therefore reduces the amount of heat loss through the glass and makes it easier to clean.



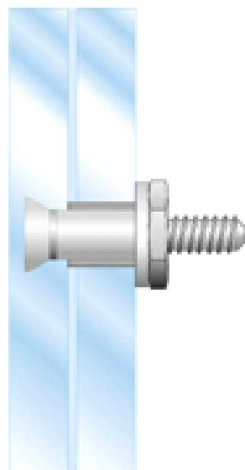
SGG POINT DLW

SGG POINT XS

SGG POINT XS is a new glass concept comprising a bolt which does not penetrate the glass. This fixing is integrated into the actual thickness of the glass component.



SGG POINT XS toughened glass



SGG POINT XS laminated glass

SGG SECURIPOINT glass

SGG SECURIPOINT is a high quality toughened and Heat Soak Tested glass, which is subjected to rigorous quality controls at manufacture stage for size of pane and drilling position. This single sheet safety glass has been specifically developed for the requirements of structural glass applications. It must undergo a Heat Soak Test (BS EN 14179) to identify the presence of critical Nickel Sulphide (NiS) inclusions in the glass. Its destructive process eliminates most glazing at risk. However it is currently unable to eliminate 100% of risk, though it is reduced considerably.

Dimensions

Maximum manufacturing sizes: please contact SAINT-GOBAIN GLASS.

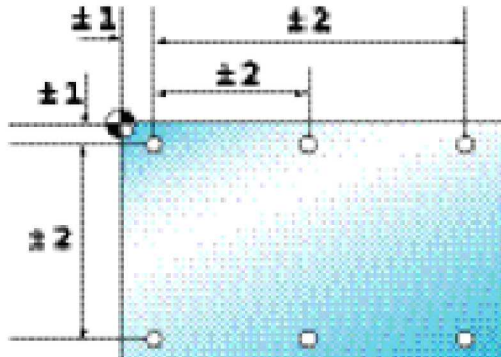
Tolerance sizes

For thicknesses $d < 12$ mm: $+0/-2$ mm

For thicknesses $d > 15$ mm: $+0/-3$ mm

Range .../...

Positioning tolerances of drilled holes (mm)



SGG STADIP-POINT

SGG STADIP- POINT is a range of laminated glass with PVB (Polyvinyl Butyral) interlayers, suitable for application in exterior bolted glass assemblies.

SGG STADIP-POINT S range

Laminated glass used with SGG POINT S fixings comprising a SGG SECURIPOINT S bearing component combined with a SGG PLANIDUR S heat-strengthened component.

SGG PLANIDUR S guarantees the integrity of the glass in the event of accidental breakage.

SGG STADIP-POINT D range

Laminated glass that is used in the second glass pane of a double-glazed unit comprising two sheets of SGG SECURIPOINT S toughened glass.

Most glass products from the SAINT-GOBAIN GLASS range can be used with SGG POINT:

- SGG PLANILUX clear float glass or SGG DIAMANT extra clear glass
- SGG PARSOL body-tinted glass
- SGG COOL-LITE CLASSIC, SGG COOL-LITE ST or SGG COOL-LITE K or SK*, SGG ANTELIO solar control glass
- SGG PLANITHERM low-emissivity glass
- SGG EMALIT EVOLUTION* enamelled glass
- SGG SERALIT EVOLUTION* screen-printed glass.

It is possible to use SGG BIOCLEAN self-cleaning glass depending on the type of sealants used. Please contact SAINT-GOBAIN GLASS for details of compatible products.

*If these products are used, they are subject to specific requirements. Please contact SAINT-GOBAIN GLASS for more information.

Performance

The spectrophotometric performance of SGG POINT glass corresponds to that of glazing which constitutes the system.

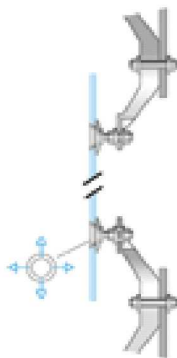
The U-value of SGG POINT D and SGG POINT DLW glass is dependent on the air cavity and the emissivity of the components used.

Installation Guidelines

SGG POINT is a complete system for glass bolted structures. The complete package includes the glass, fixings, fasteners for connection to the framework or structure.

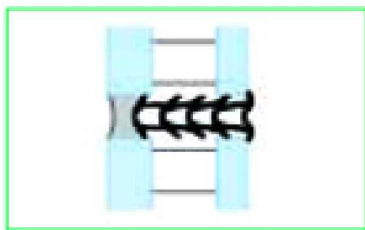
Installation requirements:

- a range of components suitable for different types of structure. These pieces are fitted with adjustment devices
 - impermeable components.
- A fixing is used as the reference point for each piece of glass. Other fixings provide translational movement in either one or two directions.



Design principles

- The size of the supporting structure must be adequate to take the weight of the glass and the wind load conditions so it does not put any strain on the glass itself.
- The glass needs to withstand the wind loads and imposed dead loads.
- There must be a gap between the two panes of glass to avoid transmitting the stresses one to the other.
- Various types of support structures are possible.



Seal

Panes must be sealed using a silicone mastic applied to an extruded silicone seal (e. g. SGG HYDROSTOP seal developed by SAINT-GOBAIN GLASS).

Cleaning

The glass must be cleaned regularly. Cleaning products that are used must be neutral and non-abrasive.

Installation Guidelines

