

SGG LUMITOP®

*"Daylighting" glazing which  
redirects light*

Technical Sheet  
United Kingdom

# SGG LUMITOP®

## "Daylighting" glazing which redirects light

### Description

SGG LUMITOP is a double-glazed unit incorporating special layers in the cavity, which are designed to catch and redirect light. The exterior glass pane is usually a 4mm low emissivity glass such as SGG PLANITHERM TOTAL. The interior pane is either a clear pane or a patterned glass, specially adapted for SGG LUMITOP.

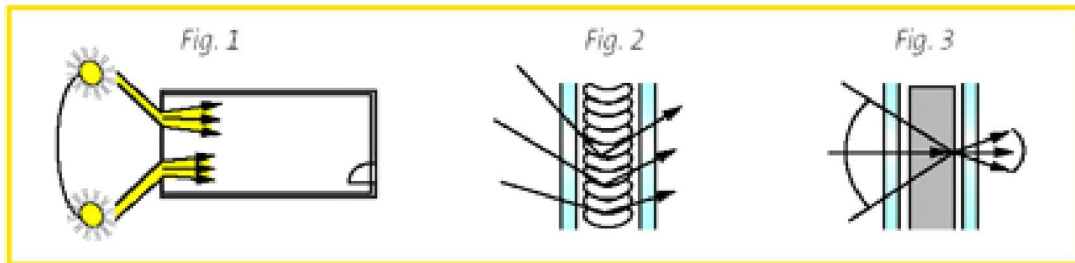


Fig. 1 : Variations in the sun's position during the day is compensated for by SGG LUMITOP. All daylight is reflected directly into the room.

Fig. 2 : Vertical section of SGG LUMITOP: showing vertical redirection of light

Fig. 3 : Horizontal section of SGG LUMITOP: showing horizontal redirection of light

### Applications

SGG LUMITOP has been developed to provide natural lighting, without glare, in buildings where solar shading systems (sun visors, blinds, etc) are used.

SGG LUMITOP units are usually installed in clerestory high-level glazing. The internal or external solar shading systems must therefore be designed with this in mind.

When SGG LUMITOP is used in overhead glazing (e.g. for consistent natural lighting of high or narrow areas such as atriums, interior courtyards or corridors), the glazing should ideally be installed at a 20° angle in relation to the horizontal and directed towards the sun.

### Advantages

- Sunlight hitting the window is redirected by SGG LUMITOP towards the ceiling (vertical redirection). It is then reflected over the work areas, which provides natural and consistent interior light, without glare.
- The special properties of the inner pane also redirect light horizontally (horizontal redirection). Natural light hitting the glass at an oblique angle is projected towards the back of the area, thus optimising lighting.

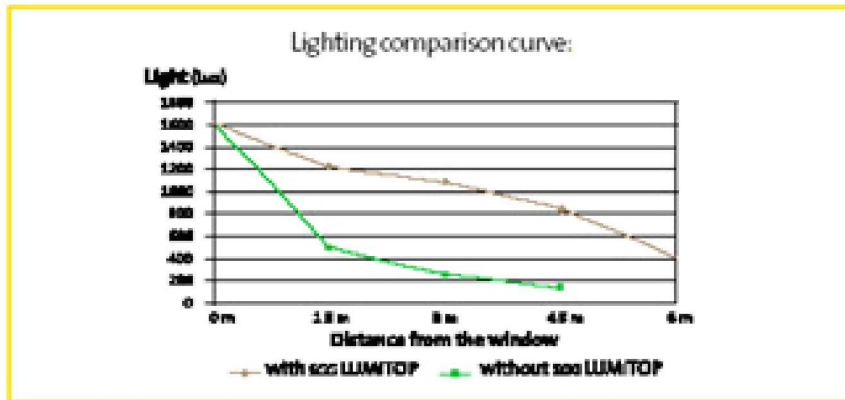
## Range

SGG LUMITOP is available double-glazed as standard with a 24 mm krypton-filled cavity.

- Maximum sizes:
  - 2600 x 600 mm with SGG PLANILUX or a laminated patterned glass for the inner pane
  - 1600 x 600 mm with a monolithic patterned glass.

For widths greater than 1500 mm, SGG LUMITOP must be made with a vertical distance piece. Special sizes or compositions: please contact SAINT-GOBAIN GLASS.

## Performance



*U-value for a double glazed window with SGG LUMITOP standard (24mm space with argon): 1.1W/M<sup>2</sup>K; Solar factor g<sub>1</sub>: approximately 0.30.*

## Installation Guidelines

SGG LUMITOP can be installed in facades or in overhead glazing. Although it has a unique appearance, it is made up in the same way as an ordinary double-glazed unit. It can therefore be integrated in a facade alongside standard glazing. Walls and ceilings act as the reflective surfaces, so must be specially adapted so that light from SGG LUMITOP is reflected effectively.



*SGG LUMITOP installed in high-level glazing*