

SGG BIOCLEAN[®]

Self-cleaning Glass





Let nature do your dirty work !

Applications

SGG BIOCLEAN is a self-cleaning glass which will revolutionise the way you clean your windows! It has been designed for all external building applications, in both the residential and commercial sectors, and is equally suited to both new build and refurbishment projects incorporating:

- windows and French windows, conservatories, skylights and overhead glazing
- glazed facades, exterior shopfronts and display windows, overhead and atria glazing, street furniture

SGG BIOCLEAN can be used in all environments even those which are heavily polluted (industrial and airport zones). It can be installed vertically or in an inclined position.

Advantages

6 benefits of SGG BIOCLEAN

- Less frequent cleaning - the glass stays clean for longer.
- Much easier cleaning - less dirt and grime adheres to the surface.
- The cost of window cleaning is reduced.
- Clear vision through your windows even when it is raining.
- Neutrality and transparency is the same as for normal glass.
- Less frequent use of detergents, helping to protect the environment.

Veranda, France - Architect P. Candelot



Description

SGG BIOCLEAR is a self-cleaning glass manufactured by depositing a transparent layer of photocatalytic and hydrophilic mineral material onto clear glass.

The coating, which is integrated into the glass itself, ensures a high level of durability. The mechanical, thermal and acoustic properties of SGG BIOCLEAR are identical to normal glass.

How does it work?

SGG BIOCLEAR works by harnessing the power of both sun and rain to efficiently remove accumulated dirt and grime (dried water marks, atmospheric pollutants, dust, resin and insect residues) from the external surface of the glass. The more exposure the product has to both sun and rain, the cleaner it will

stay for longer. However, a number of other factors affect the time it takes for a mark to be naturally removed including the level of ambient pollution and atmospheric conditions. The length of time required to activate the coating by UV rays can vary depending on the season, the orientation of the glass and so forth, but is normally within a week.

Product Range

SGG BIOCLEAR

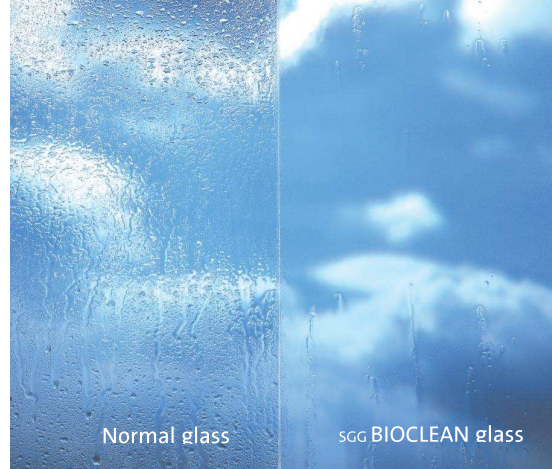
Monolithic Glazing	Thicknesses: 4 - 5 - 6 - 8 - 10mm
	Standard dimensions (in mm): PLF 6000 x 3210 DLF 3210 x 2250
Double Glazing	SGG BIOCLEAR CLIMALIT and SGG BIOCLEAR CLIMAPLUS
Laminated Glass	SGG BIOCLEAR STADIP, SGG BIOCLEAR STADIP PROTECT, SGG BIOCLEAR STADIP SILENCE
Toughened Glass	SGG BIOCLEAR SECURIT

Processing

Avoid all contact between the glass and pointed or sharp objects. Cut and toughen the product coated face up. Avoid all direct contact with silicones (sealants, sprays, suckers, gloves, ...).

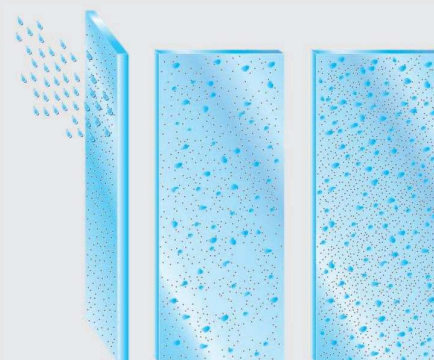
Always position the coated face towards the outwards of a sealed unit. Separate stock or processed glass with non-adhesive transit pads.

Anti-noise Barrier, High Speed Trainline, Netherlands



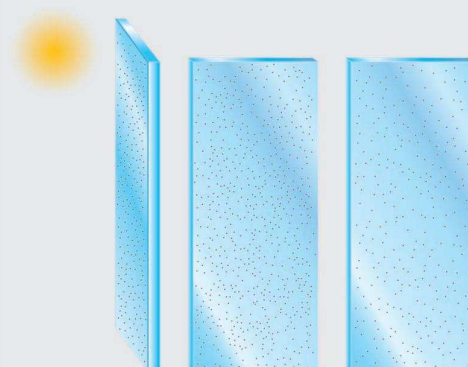
Normal glass

SGG BIOCLEAR glass



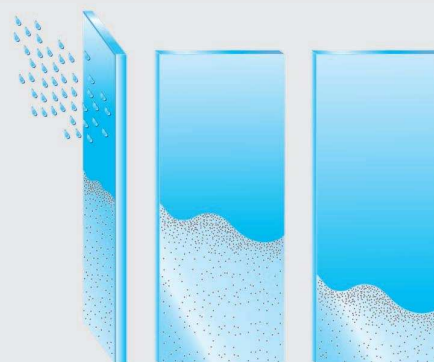
Normal Glass

Accumulation of grime and dirty water marks.



SGG BIOCLEAR - Action 1: photocatalysis

Exposure to the UV rays in daylight triggers the decomposition of organic dirt and causes the surface of the glass to turn hydrophilic.



SGG BIOCLEAR - Action 2: hydrophilic action

Water (or rain) forms a sheet of water across the surface of the glass and rinses away broken-down organic dirt and mineral material.

Installation

- Ensure that SGG BIOCLEAR is installed with the coating facing the outside.
- Use pre-formed dry gaskets (EPDM) where at all possible.
- The glass must be thoroughly cleaned when all site work has been completed.
- For further detail, or in instances where silicone-based weatherseals must be used please refer to the specific guidelines for installation of this product (ask for document B2).

Maintenance

- SGG BIOCLEAR does not need to be cleaned as frequently as conventional glass. However, it is not a "maintenance-free" glass.
- Should the glass require cleaning this can be done by rinsing with soft water. For stubborn marks use warm soapy water with a clean soft cloth, or a standard window cleaning product.
- Avoid those glass window-cleaners that leave behind an oily deposit on the surface of the glass.
- Do not bring the coating into contact with sharp or abrasive objects: razors, wirewool, knives.
- Do not use abrasive cleaners, or 'water-repellent' cleaning products which may form a film on the glass.

Performance

SGG BIOCLEAR meets the requirements of standard BS EN 1096 relating to the durability of coated glass in buildings.

SGG BIOCLEAR conforms to Class A of this standard (for coating on face one).

Spectrophotometric Data in accordance with CEN standards (Self-cleaning coating on face 1)

Products	Light Factors		UV	Solar Factor g	U-Value
	LT %	LR _E %	Tuv %	EN 410	EN 673 W/m ² K
SGG PLANILUX 4 mm (conventional glass)	90	8	56	0.85	5.8
SGG BIOCLEAR 4 mm	87	11	51	0.83	5.8
SGG BIOCLEAR 6 mm	86	11	46	0.81	5.7
SGG BIOCLEAR STADIP PROTECT 8.8 mm	84	11	<1	0.74	5.7
SGG BIOCLEAR CLIMALIT 4 (12air) 4 mm	79	17	39	0.74	2.9
SGG BIOCLEAR CLIMAPLUS 4 (16argon) 4mm*	77	15	27	0.62	1.1

* indicates 4 or 6mm SGG PLANITHERM FUTUR N on face 3



Saint-Gobain Glass UK
Marketing Department,
Herald Way
Binley, Coventry
CV3 2ND
Tel: 024 7654 7400
Fax: 024 7663 6473

www.saint-gobain-glass.com

Distributor

SGG BIOCLEAR, SGG CLIMALIT, SGG CLIMAPLUS, SGG STADIP PROTECT, SGG STADIP PROTECT, SGG SECURIT, SGG PLANITHERM, SGG PLANITHERM FUTUR N are registered trademarks