

SGG **BIOCLEAN[®]**

*Dual-action
self-cleaning glass*



SGG BIOCLEAN®



Dual-action self-cleaning glass

Applications

SGG BIOCLEAN self-cleaning glass will revolutionise the way you clean your windows.

It has been designed for external use, either in the home or commercial buildings, both new build and refurbishment projects including:

- **Windows and patio doors**
- **Conservatories, balconies and overhead glazing**
- **Glazed façades, exterior shopfronts and display windows, overhead and atria glazing, street furniture**
- **Hard to reach areas**

SGG BIOCLEAN can be used in all environments and is particularly effective in heavily polluted areas (e.g. near industrial estates and airports). It must be installed vertically or in an inclined position.



Advantages

- **The most neutral self-cleaning glass available** - no unsightly tint or reflective surface. Looks just like normal glass!
- **Less frequent cleaning** - windows stay cleaner for longer.
- **Much easier cleaning** - less dirt and grime adheres to the glass.
- **Save money** - the cost of window cleaning is reduced.
- **Ideal for hard to reach areas** - clean where you have never been able to clean before!
- **Permanent coating** - lasts the lifetime of the window.
- **Environmentally friendly** - less frequent use of water and detergents.
- **Now available with an advanced performance solar control coating.**



Conservatory, Private House

Description

SGG BIOCLEAN 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 BIOCLEAN are identical to normal glass.

How does it work?

SGG BIOCLEAN harnesses the power of both UV light from the sun and rain to efficiently combat dirt and grime that accumulates on the outside of the window (dried water marks, organic atmospheric pollutants, dust, sea spray and insect residues).

The performance of the self-cleaning action can vary depending on the

amount and type of dirt on the windows, the total exposure to light and rain the glass will receive and the incline of the window.

To activate the coating, the glass must be exposed to natural light for several days. The length of time required will also depend on the season and the orientation of the glass.

Product Range

SGG BIOCLEAN	
Monolithic Glazing	Standard Dimensions (in mm): PLF 6000 x 3210 x 2250 Thicknesses: 4 - 6 - 8 - 10mm
Double Glazing	SGG BIOCLEAN can be combined with many other high performance products, such as the SGG PLANITHERM range for multi-functional glazing
Laminated Glass	SGG BIOCLEAN STADIP, SGG BIOCLEAN STADIP PROTECT, SGG BIOCLEAN STADIP SILENCE
Toughened Glass	SGG BIOCLEAN SECURIT
Solar Control Coated Glass	SGG BIOCLEAN COOL-LITE ST, dual-coated glass (please contact SGG UK for details)

Processing Guidelines

Avoid all contact between the glass and pointed or sharp objects.

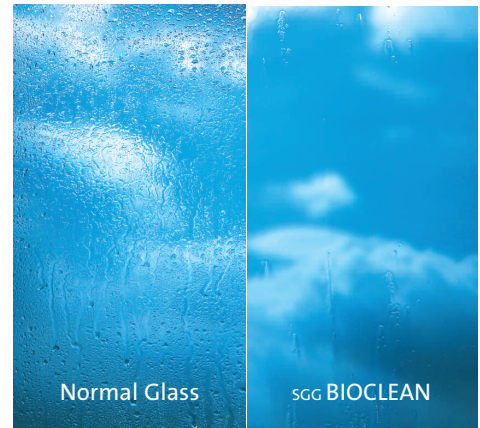
Avoid all direct contact with silicone (sealants, sprays, suckers, gloves).

Always position the coated face towards the outside of the sealed unit and laminated glass.

Separate stock or processed glass with non-adhesive transit pads.

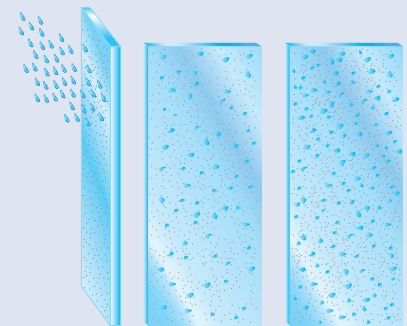


Fergamma Offices, Italy – Architect: Amerigo Berto



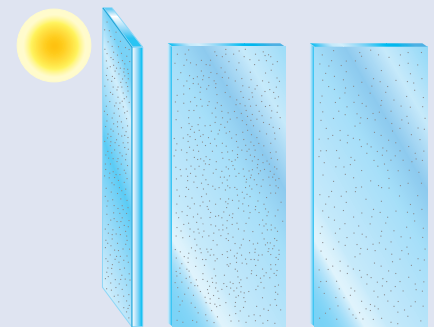
Normal Glass

SGG BIOCLEAN



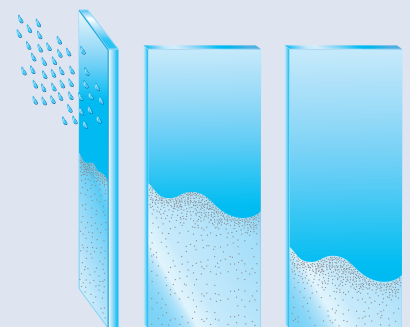
Normal Glass

Dirty water marks and grime gather on the window.



SGG BIOCLEAN - Step 1 : Photocatalysis

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



SGG BIOCLEAN - Step 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 BIOCLEAN 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.
- Must be installed at a minimum pitch of 10° to the horizontal.
- For more details please refer to the installation guidelines (document B2) and the list of recommended products for use with SGG BIOCLEAN.

Maintenance

- SGG BIOCLEAN 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 simply rinsing with soft or demineralised water. For stubborn marks use warm soapy water with a clean sponge, or a standard window cleaning product and a soft, clean cloth.
 - Do not bring the coating into contact with sharp or abrasive objects such as razors, wire wool or knives.
 - Do not use abrasive cleaners or 'water-repellent' cleaning products which may form a film on the glass.
 - For further details please refer to the maintenance guidelines (document B1).

Performance

SGG BIOCLEAN meets the requirements of standard EN 1096 relating to the durability of coated glass in buildings. SGG BIOCLEAN conforms to Class A of this standard (for coating on face 1).

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

Products	Light Factors		UV	Solar Factor	U-Value
	LT %	LRe %	Tuv %	gEN 410	W/m ² K
SGG PLANILUX 4 mm	90	8	56	0.85	5.8
SGG BIOCLEAN 4 mm	87	11	51	0.83	5.8
SGG BIOCLEAN 6 mm	86	11	46	0.81	5.7
SGG BIOCLEAN STADIP PROTECT 8.8 mm	84	11	< 1	0.74	5.7
SGG BIOCLEAN with SGG PLANITHERM TOTAL+ 4 (16) 4 mm [*]	77	14	30	0.68	1.2
SGG BIOCLEAN COOL-LITE ST with SGG PLANITHERM TOTAL+ 4 (16) 4mm ^{**}	44	21	17	0.40	1.2
SGG BIOCLEAN COOL-LITE ST with SGG PLANITHERM ULTRA N II 4 (16) 4mm ^{***}	44	21	15	0.36	1.1
SGG BIOCLEAN COOL-LITE ST with SGG PLANITHERM 4S 4 (16) 4mm ^{****}	36	25	13	0.29	1.0

^{*} SGG PLANITHERM TOTAL+ coating on face 3, 4mm (16mm 90% argon-filled cavity) 4mm.

^{**} SGG COOL-LITE ST coating on face 2. SGG PLANITHERM TOTAL+ coating on face 3, 4mm (16mm 90% argon-filled cavity) 4mm.

^{***} SGG COOL-LITE ST coating on face 2. SGG PLANITHERM ULTRAN II coating on face 3.

^{****} SGG COOL-LITE ST coating on face 2. SGG PLANITHERM 4S coating on face 3.

Distributor

SGG BIOCLEAN, SGG COOL-LITE, SGG PLANILUX, SGG PLANITHERM, SGG SECURIT, SGG STADIP, SGG STADIP PROTECT, SGG STADIP SILENCE and all other devices and logos are registered trademarks of Saint-Gobain.


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GLASS

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