

# SGG BIOCLEAN® COOL-LITE ST

Dual coated self-cleaning glass  
with solar control properties

## Handling & Processing Guidelines

### Description

SGG BIOCLEAN is manufactured at Saint-Gobain Glass UK, Eggborough. It is a dual-coated self-cleaning glass with a high performance solar control coating on face 2. The SGG BIOCLEAN self-cleaning coating conforms to Class A of standard EN1096, ensuring a high level of durability for coatings on face 1. The SGG COOL-LITE coating is applied to face 2 by the cathodic sputtering of metal oxides vacuum conditions. This solar control coating is also very robust and offers processing flexibility and ease of handling.

### Product Range

SGG BIOCLEAN COOL-LITE ST	
Thickness:	4mm 6mm
Dimensions (in mm):	PLF 6000 x 3210 DLF 3210 x 2250

### Toughened Glass

SGG BIOCLEAN COOL-LITE ST is a "to be tempered" coating and therefore must always be toughened.

### Monolithic & Double Glazing

SGG BIOCLEAN COOL-LITE ST is suitable for use in both single and double glazing.

### SGG BIOCLEAN COOL-LITE ST

U-value

**1.0 W/m<sup>2</sup>K**

(4(16)4 unit with 90% argon combined  
with SGG PLANITHERM 4S)

Solar Factor

**0.29**

Light Transmittance

**37%**

Light Reflectance

**26%**

### Processing Guidelines

SGG BIOCLEAN COOL-LITE ST must always be toughened.

When assembled into a doubled glazed unit care needs to be taken to ensure that the self-cleaning coating is placed on face 1.

SGG BIOCLEAN COOL-LITE ST should be stored in a dry and well ventilated location.

The use of silicone seals should be prohibited when they come into direct contact with the SGG BIOCLEAN coating. Silicone can leach onto the coating affecting the self-cleaning performance. Saint-Gobain Glass recommends the use of silicone free products with SGG BIOCLEAN.

For a list of products that are compatible with SGG BIOCLEAN or for full guidance on handling and processing please contact the SGGUK Marketing Department or visit [www.selfcleaningglass.com](http://www.selfcleaningglass.com)

### Applications

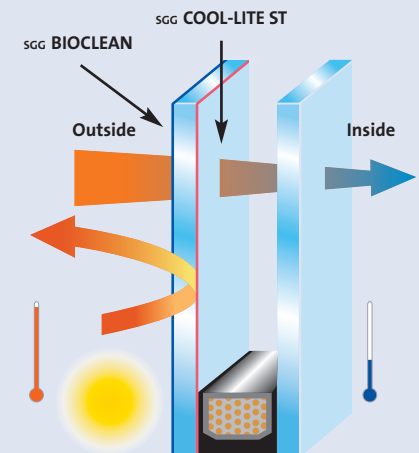
SGG BIOCLEAN COOL-LITE ST is an extremely versatile product, offering a long-term and effective low-maintenance solution coupled with high performance solar control.

This glass is particularly suited to applications where access for cleaning is either difficult or dangerous. It also allows for large areas of glazing, whilst reducing glare and excessive heat build up.

### Product Combinations

SGG BIOCLEAN COOL-LITE ST can be combined with many other high performance products in the Saint-Gobain range, such as SGG PLANITHERM 4S for even better solar protection and thermal insulation. SGG BIOCLEAN COOL-LITE ST is now also available on a green substrate, providing even more advanced solar control protection.

### Double glazed unit with SGG BIOCLEAN COOL-LITE ST



Up to 71% of heat is blocked by the solar control coating.  
(solar factor as low as 0.29 when combined with SGG PLANITHERM 4S).

## Technical Specifications

The updated SGG BIOCLEAR COOL-LITE ST file will be available within our CALUMEN software which can be downloaded from our website. The most common unit configurations are given in the following table.

Double-glazed unit with:					
Glass		SGG BIOCLEAR COOL-LITE ST			
External	Internal	SGG PLANILUX	SGG PLANITHERM TOTAL+	SGG PLANITHERM ULTRA N II	SGG PLANITHERM 4S
Composition	mm	4(16)4	4(16)4	4(16)4	4(16)4
Position of Coating					
• self-cleaning	Face	1	1	1	1
• solar control	Face	2	2	2	2
• thermal insulation	Face	N/A	3	3	3
• 4 seasons	Face	N/A	N/A	N/A	3
Light Factors					
LT	%	45	44	44	37
LRe	%	23	21	21	26
LRi	%	23	21	21	31
UV Tuv	%	20	17	15	13
Solar Radiant Heat Factors					
T	%	39	33	30	23
Re	%	19	23	26	29
A1	%	37	37	40	44
A2	%	4	6	5	5
Solar Factor					
$g_{EN 410}$		0.46	0.40	0.36	0.29
Shading Coefficient	SC	0.53	0.46	0.41	0.33
U-Value	W/(m <sup>2</sup> K)				
90% Argon filled cavity (EN 1279)		N/A	1.2	1.1	1.0
Air filled cavity		2.7	1.4	1.4	1.3

SGG BIOCLEAR COOL-LITE ST meets the requirements of standard EN 1096 relating to the durability of coated glass in buildings.

SGG BIOCLEAR conforms to Class A of this standard (for coating on face 1).

SGG COOL-LITE ST conforms to Class B of this standard.



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