

SGG COOL- LITE

Solar control glass



DESCRIPTION

SGG COOL- LITE is a solar control glass manufactured by depositing a coating of metallic oxides by magnetically enhanced cathodic sputtering under vacuum conditions onto clear or body- tinted glass. This coating gives the glass its solar control properties and its distinctive appearance.

There are many types of SGG COOL- LITE coated glass:

SGG COOL- LITE SKN a solar control glass range which gives excellent selectivity while retaining a neutral appearance.

SGG COOL- LITE XTREME has the highest selectivity (the ratio of visible light to solar heat gain) in the SAINT- GOBAIN GLASS range.

SGG COOL- LITE ST is unique in that it can be toughened and curved after the coating has been applied.

RANGE

The following substrate glasses are used for SGG COOL- LITE coated glass:

SGG PLANILUX clear glass

SGG DIAMANT extra clear glass

SGG PARSOL body- tinted glass

Using an extra clear glass emphasizes the neutrality and transparency of high performance solar control glasses.

Using a body- tinted base substrate will offer a vibrant reflected colour.

Some coatings give a coloured reflection even when applied to clear glass. This is the case with the SGG COOL- LITE STB 136 and STB 120 coatings, which have a distinctive bluish reflection.

A neutral glass always has a slight greenish, bluish, or greyish residual reflected colour. The neutrality of the glass must be checked using a sample of the proposed glass in its intended location.

Certain SGG COOL- LITE coatings can be applied to the reverse face of SGG BIOCLEAR self- cleaning glass.

Download our brochures and discover the different SGG COOL- LITE product ranges.

New product

Download our brochure The Essential to get all the performances of the SGG COOL- LITE range.

STANDARDS AND REGULATION

SGG COOL- LITE coated glass produced and processed in Saint- Gobain Glass factories and subsidiaries complies with the requirements of European standard BS EN1096.

SGG COOL- LITE ST and SGG COOL- LITE CLASSIC comply with the requirements of class B of standard BS EN1096.

SGG COOL- LITE K and SK comply with the requirements of class C of standard BS EN1096.

Exterior structural sealant glazing: processors and installers must check the compatibility of sealants with the SGG COOL- LITE coating and their suitability for use in exterior structural sealant glazing in accordance with EOTA (European Organization for Technical Approvals) ETAG002.

The suitability of SGG COOL- LITE CLASSIC and SGG COOL- LITE ST coatings for use in exterior structural sealant glazing has been tested, in accordance with ETAG002, with Dow- Corning DC993 and DC3362 silicones covered by an ETA (European Technical Approval).

These tests do not apply to other soft- coated SGG COOL- LITE products such as SKN and XTREME coatings as they must be edge- deleted before assembly into double- glazed units.

PRODUCT APPLICATION

Windows in traditional facades

Curtain walling

Exterior structural sealant glazing

Exterior bolted glass assemblies

Double- skin applications

Cladding of external walls

Overhead and atria glazing

The most appropriate glass is selected using 2 criteria:

Solar control performance: relative to the amount of direct sunlight, the orientation of the facade and the area to be glazed, the specifier can select the best compromise between the light transmittance (LT) and the amount of solar energy entering the building (solar factor g). Overhead glazing should generally have a much lower light transmittance than facades.

Appearance (when viewed from the exterior): the aesthetic appearance of the glass (colour, intensity, reflection)

depends on 4 factors:

Orientation of the building

Surrounding environment

Glare

Amount of direct sunlight

The final choice must be made after viewing samples of the proposed glass types in their intended location.

ADVANTAGE

Solar control: energy saving and more economical use of air conditioning.

Improved "visual comfort" by reducing glare.

Multifunctional glazing: when assembled into double-glazed units, SGG COOL- LITE can become a multifunction glass, for example providing enhanced safety, security or comfort (thermal or acoustic).

SGG COOL- LITE SKN

More environmentally-friendly cooling solution with less need for costly air-conditioning or blinds.

Gently filters light to reduce uncomfortable glare from direct sun rays, whilst still allowing in plenty of natural light.

Excellent thermal insulation to reduce the need for internal heating during colder months.

SGG COOL- LITE XTREME

Very neutral aesthetics in comparison to its performance

High light transmission to create brighter interiors and year round natural lighting

A low solar factor to reduce the burden of costly air-conditioning

Temperable and bendable glass versions

An excellent U-value of 1,0 W/ m²K making it the ideal product for energy savings and improved thermal insulation.

SGG COOL- LITE ST

Energy savings for air conditioning

Large range from transparent to darkest on clear, green or blue glass

Easy to store, handle and process coated glass

Temperable and bendable glass

Possible combination with SGG PLANITHERM® on face 3 for a more efficient thermal insulation

Can be used as single glass

[SGG COOL- LITE SKN series](#) [SGG COOL- LITE ST series](#)