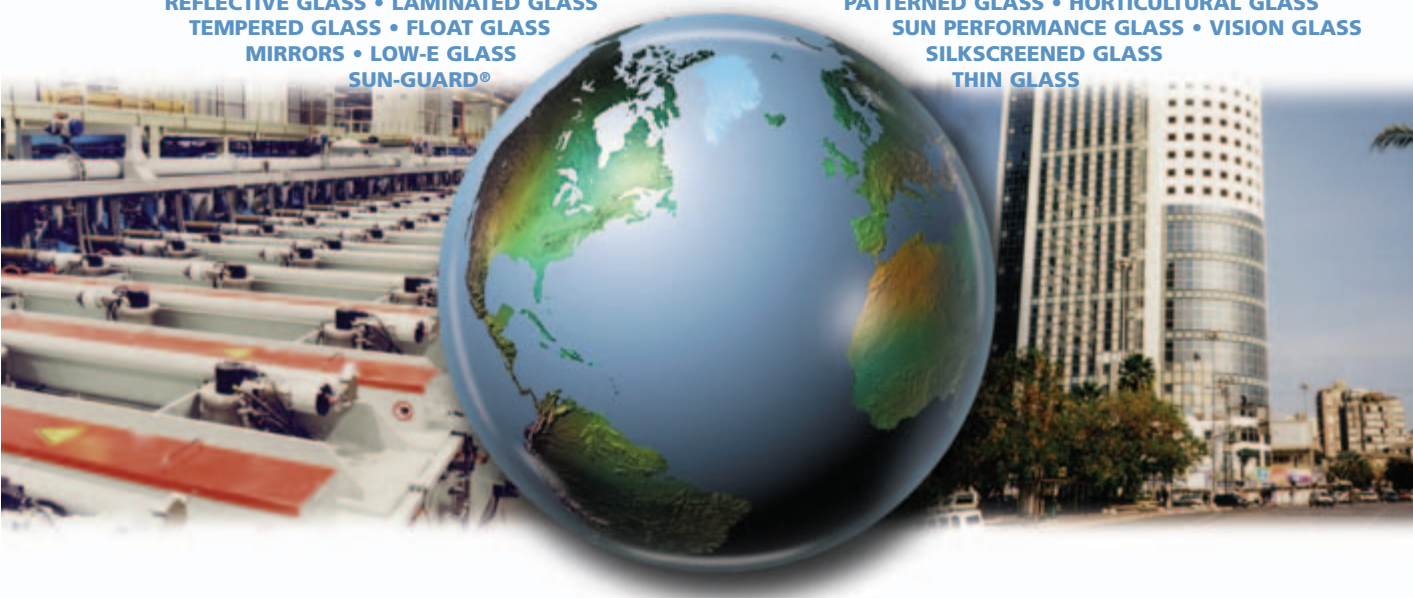


SUN-GUARD®

Solar Control Glass for
Creative Applications

REFLECTIVE GLASS • LAMINATED GLASS
TEMPERED GLASS • FLOAT GLASS
MIRRORS • LOW-E GLASS
SUN-GUARD®

PATTERNED GLASS • HORTICULTURAL GLASS
SUN PERFORMANCE GLASS • VISION GLASS
SILKSCREENED GLASS
THIN GLASS



MAIN TOWER, Frankfurt/Main
SUN-GUARD® 52 clear

Today's architecture is notable for its generous use of glass. Homes and offices, flooded with light, play an important role in our quality of life. However, the high degree of transparency of glass can also lead to unwanted increases in heat and ultraviolet light. Modern solar control glass such as SUN-GUARD® Series is able to reduce unwanted solar energy while allowing maximum visible light transmission for virtually any application.





Cooperativa Ceramica D'Imola, Imola
SUN-GUARD® 52 green



Internet City, Dubai
SUN-GUARD® Silver 20 clear



Phoenix, Brussels
SUN-GUARD® Plus 32 clear

Product Description

The SUN-GUARD® Series of Solar Control glass is manufactured using GUARDIAN's Silacoat® process. The result is a combination of attractive and useful product features. SUN-GUARD® Series products offer enhanced durability, both chemically and mechanically, when compared to traditional sputter coatings while offering similar or improved energy performance and coated glass quality.

The SUN-GUARD® Series product offering varies from high light transmission with good solar performance to lower light transmission with unsurpassed solar control. All coatings are available on clear float glass as SUN-GUARD® clear and green body tinted float glass as SUN-GUARD® green.

| | |
|----------------------------|----------------------------|
| SUN-GUARD® 67 clear | SUN-GUARD® 67 green |
| SUN-GUARD® 52 clear | SUN-GUARD® 52 green |
| SUN-GUARD® Plus 32 clear | SUN-GUARD® Plus 32 green |
| SUN-GUARD® Silver 20 clear | SUN-GUARD® Silver 20 green |
| SUN-GUARD® Silver 10 clear | SUN-GUARD® Silver 10 green |

The Manufacture of SUN-GUARD®

The SUN-GUARD® Series products are manufactured by sputtering multiple layers of metals on to a glass substrate. These coated glass products are produced using a patented magnetron sputtering process (Silacoat® process). This state-of-the-art technology deposits metal coatings on glass with a uniform appearance and the highest optical qualities.

Characteristics and Advantages

- Enhanced durability and flexibility for fabrication coupled with the excellent optical and performance properties typically associated with softer sputter coated products
- Uniform optical characteristics in transmission and reflection
- Excellent mechanical, chemical and thermal durability
- Aesthetically pleasing with both low to high degrees of light reflection
- A broad spectrum of solar control performance

Processing

SUN-GUARD® Series products are bendable and can be heat-treated. They can be used with laminated glass, allowing for contact between coating and the plastic laminate. SUN-GUARD® products can also be silkscreened, offering unlimited creativity to the architect and designer. SUN-GUARD® products can even be edge-working or drilled without damaging the coating.

It is recommended that fabricators of SUN-GUARD® products consult the Processing Directives provide by Guardian for specific instruction on how SUN-GUARD® products should be fabricated. Following these guidelines is critical to successful processing of SUN-GUARD® products. The Processing Directives will be provided with the first delivery of SUN-GUARD® products or they can be obtained directly from Guardian.



Múnic, La Moraleja, Madrid
SUN-GUARD® Plus 32 green

Application

SUN-GUARD® opens up new dimensions, offering architects almost unlimited possibilities and areas of usage. Whether employed externally for facades, roof glazings, conservatories, vehicles etc., or inside as room dividers or as component of high quality furniture, SUN-GUARD® provide the solution you are seeking in glass design. Moreover, SUN-GUARD® coated products offer an outstanding return on investment when you consider the savings in air conditioning and heating costs due to the performance of the coated glass.

SUN-GUARD® Series products can also be combined with other GUARDIAN float glass products for commercial and residential applications. This offers you the ability to combine solar control with soundproofing, insulation or security glass.

Usage in combination with GUARDIAN Low-E or Low-E 1.1 N insulating glass can reduce heating costs in winter and air-conditioning costs in summer, thanks to increased solar and thermal control.

In all glazing applications SUN-GUARD® should be used exclusively in insulated glass units with the coating on surface 2 (to the building-inside).

The increased energy-absorption of some SUN-GUARD® types causes the performance of a thermal analysis.



Jumeirah Beach Hotel-Banquet Hall, Dubai
SUN-GUARD® 52 green

Spandrel glass

The various SUN-GUARD® products offer a number of solutions for producing glass suitable for spandrel applications. Please contact GUARDIAN for help in determining the best spandrel solution for your project.

Since the colour-adaptation can be subjective, we recommend that sample mockups be prepared and approved.

Availability

SUN-GUARD® standard sizes are Jumbo sizes (3,21 x 6,00 m) and cut sizes. The available thicknesses are 4, 6 and 8 mm (other thicknesses or laminated glass are available on request).

SUN-GUARD® is supplied in all standard packaging types.



New Central Station "Lehrter Bahnhof", Berlin
graphic: Architects gmp Hamburg
SUN-GUARD® 52 clear



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