

Solar Gard® WingSafe™

AN EFFECTIVE AND DURABLE SOLUTION FOR ENHANCING EXISTING GLASS FOR A SAFER WORLD FOR BIRDS!





Each year, hundreds of millions of birds die across Europe due to collisions with windows and glass facades. This issue is a serious concern for nature conservation, as it impacts bird populations and biodiversity.

One major factor is the rise in buildings with high percentages of glass in their facades, which has drastically altered birds' natural habitats. Common solutions, such as stickers resembling birds of prey, have proven largely ineffective in reducing both the frequency and risk of these collisions.

Just as Saint-Gobain seeks solutions to incorporate bird protection measures into new glass designs, Solar Gard is focusing on making existing facades and glazing more bird-friendly.




Special attention is needed for transparent surfaces that offer unobstructed views of the sky, vegetation, and natural landscapes—such as in conservatories, winter gardens, lobbies, lift enclosures, and large glass facades. Buildings in open landscapes or near transport routes present significant hazards for birds. Reflective surfaces are also problematic, as birds cannot distinguish reflected images of trees, branches, or the sky from the real thing. From a bird protection standpoint, reflective glass should be treated with the same urgency as clear glass.

SOLAR GARD WINGSAFE™ MAKES EXISTING FACADES AND GLAZINGS MORE BIRD FRIENDLY

- 1- A multi-layer product consisting of optically clear, outside weatherable, polyester film with Solar Gard's proprietary Outside Weatherable hardcoat. 
- 2- Pattern integrated in the product: unlike solutions with stickers, there is no risk for discoloration, accidental removal or damage of the dots. 
- 3- No edge sealing required on vertical surfaces (except when there is risk for stagnant water). Applied like any other outside weatherable window film. 
- 4- 10 year product warranty on vertical surfaces.* 

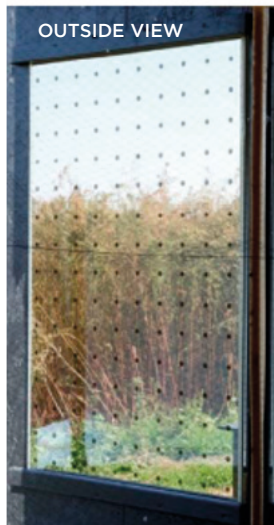
*For details see the Solar Gard SWT&C on www.solargard.eu.



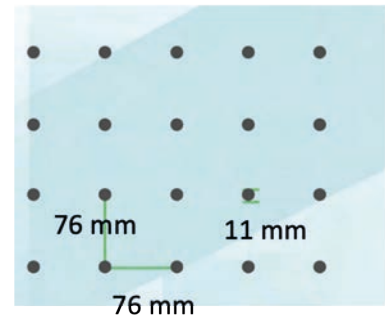
-  5- Special adhesive allowing removal without leaving traces of adhesive on the glass.
-  6- Standard roll length : 30 m. Longer rolls possible on a project basis. Also cut-to-size solutions available.
-  7- No special maintenance required. The pattern (dots) do not interfere with the cleaning.

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Solar Gard WingSafe™ has been tested at the Biologischen Station Hohenau-Ringelsdorf, Austria (WIN-Tests im Flugtunnel II) on a glass covered with a reflective window film (reflectivity of the film: 41%).



Currently **WingSafe™** comes with 1 pattern: 11 mm black dots at 76 mm distance in an orthogonal grid.



Coverage: 2;2%

This is the first and, so far, only product tested specifically on reflective glass. Typically, tests are conducted on clear glass with a reflectance of 8–9%. However, in reality, modern glazing often features reflective coatings to achieve better U-values (thermal insulation) or G-values (summer heat control), resulting in a reflectance closer to 14–15%. Testing this product under higher reflectance conditions provided a more rigorous evaluation of its effectiveness, simulating extreme conditions such as those created by solar window films.

The TF obtained in these tests: 13% (sunny conditions) and 16% (clouded conditions).

Product Performance and physical characteristics on 6 mm clear double glazing		Solar gard WindSafe™
Visible Light	Transmittance %	82
	Reflectance exterior %	16
	Reflectance interior %	16
	Reduction in Glare (%)	1
Solar Energy	Transmittance %	68
	Absorptance %	19
	Reflectance %	13
	Solar heat gain coefficient (G-value)	0.72
	Light to solar heat gain ratio (VLT/SHGC)	1.11
	Total solar energy rejected %	28
	Total solar energy rejected % @60°	39
	Reduction in solar heat gain (%)	7
IR Rejection	IRER Infrared Energy Rejected % ¹	29
	SIRR Selective Infrared Energy Rejected %	37
Product Thickness (µM)		125
Fire Reaction	EN 13823	B-s1, d0

Product Code	SF53000000-60100 (100 FT ROLLS)
	SF53000000-60200 (200 FT ROLLS)