



## The Art of Preserving Birds

Finnglass Glass Laser-Bird friendly satisfies the greatest aesthetic standards. It safeguards billions of our feathery companions while enhancing the beauty of matt (light grey) surfaces.



# Position 1: Extremely Effective Bird Protection

Finnglass Laser-Bird offers multiple bird strike protection.

The dots are aesthetically of high standard and present an obstacle for birds, even though people scarcely see them.

The design successfully breaks up the enticing reflections of shrubs and trees since it is placed on the outside side (position 1).

The protective pattern's light-scattering qualities serve as an extra signal that strengthens the birds' sense of texture.

## Functionality of Laser-Bird Technology

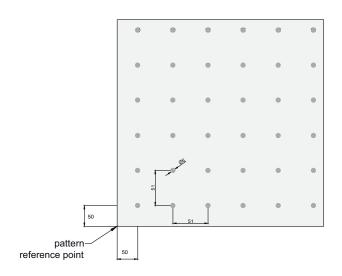
Using laser printing, the protective pattern is made up of microscopic dots that are printed from a ceramic transfer tape onto the surface in a wafer-thin layer.

The protective pattern, which is tailored to the width of the wingspan, is made up of 5-9 mm dots placed 50-100 mm apart. The dots are resistant to light, colorfast, and scratches. They may be made in two contrast levels: light and dark. The dots have no effect on the characteristics of the glass..



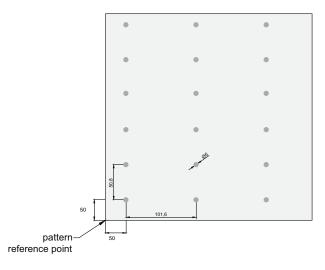
Currently three standard patterns are available. Customized designs are available on request.

## **Available Pattern Types**



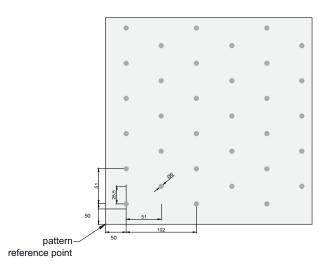
FGL 001-LB Orthogonal Ø dots 6 mm

Surface coverage: 1.13 %



FGL 002-LB Pseudo-Orthogonal Ø dots 6 mm

Surface coverage: 0.57 %



FGL 003-LB Hexagonal Ø dots 6 mm

Surface coverage: 1.10 %



## **Available Options**

Either the tin side or the air side of the glass is covered with the Laser-Bird design. Almost any sort of glass may be processed non-destructively using the Laser-Bird technology. This includes heat-treated glass, laminated glass and even insulating glass units. Glass with Laser-Bird protection blends in seamlessly with individual solutions for solar control, energy-saving, safety, and sound-isolation systems.

Max. Production Size	Available Glass Types	Available Interlayers
Rectangular 3050 mm (120")	Annealed Laminated annealed	
x 5000 mm (196") Shapes	Heat Strengthened Toughened and Heat-Soak-Tested	
2600 mm (102") x 5300 mm (208")	Laminated Heat Strengthened	PVB, SGP, SGX,
Non-Standard 3300 mm (130")	Laminated Toughened and Heat-Soak-Tested	other interlayers on request
x 9000 mm (354")	Insulating Glass	

## Quality Tests, Standards and Certificates

Finnglass Bird-friendly glasses meet all relevant standards. "Guidelines for Assessment of the Visual Quality of Glass in Buildings" and "Guidelines for Assessment of the Visual Quality of Enamelled Glass"



Our Partners in Bird Protection



#### For Humans

- · Aesthetics marking (semi transparent or opaque)
- · Pleasant appearance through dot grid
- · Additional possibility of decorative design

#### For birds

- 3 chances of survival:
  - 1. Transmission
  - 2. Reflection and
  - 3. Scattering
- Long life solution with 20 years of warranty





## We value Quality and Thrive on Challenge

Finnglass Oy, located in Alavus, Finland, provides customized glazing solutions for architectural applications and demanding needs.

Around the globe our partners in architecture and façade construction value our knowledge and expertise. We specialize in heated glass, multiple layer laminated glass, signal glass, electrochromic glass, heat treated glass and high-quality insulating glass.

Finnglass designs and manufactures both structural and non-structural glazing solutions for tough climates, creative architectural designs and demanding requirements in safety, security and comfort.



## Want to know more about Finnglass and Bird Protection Solutions?

#### International Enquiries

Mikko Filmer

Mobile: +49.163.8090762

email: mikko.filmer@finnglass.com

Phone: +358.400.882.114

### National Enquiries

Ari Uusikartano

Phone: +358.407.563.251

email: ari.uusikartano@finnglass.com

We are glad to help.





Finnglass Oy · Asematie 46 · 63400 Alavus

www.finnglass.com