GLASPRO - BIRD SAFE GLASS

HIGHLY-EFFECTIVE BIRD-FRIENDLY SOLUTIONS

ULTRAVIOLET REFLECTIVE COATING | FRIT | ETCH PATTERNS

Collisions with glass claim the lives of millions of birds every year in North America. Birds are unable to decipher glass as a solid object and are fooled by the reflectivity. In most cases, birds do not survive the impact with glass. Cities and states are adopting new building codes that require the use of bird-friendly materials for new construction. Glass must have visible lines or dot patterns to be an effective bird collision deterrent.

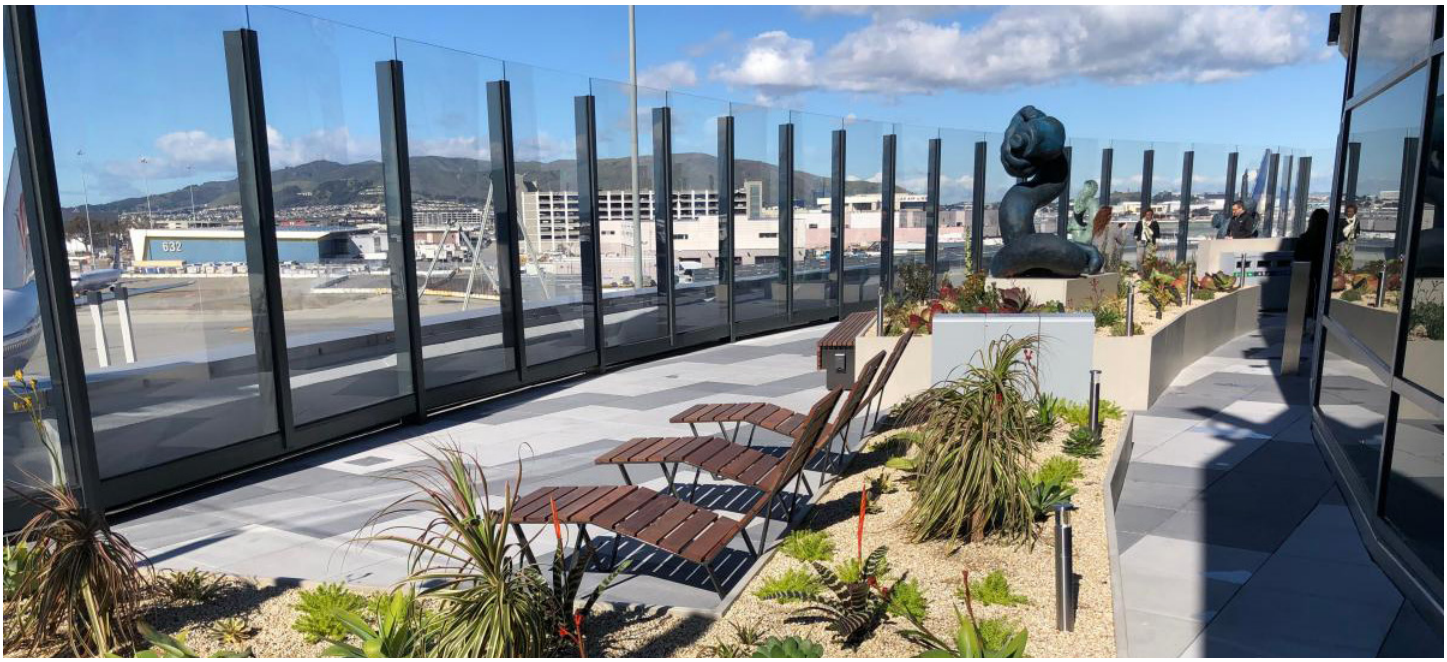
According to the American Bird Conservancy (ABC), the easiest way to stop birds hitting glass is to apply visible patterns. The ABC has found that most birds will not attempt to fly through horizontal spaces less than 2" high nor through vertical spaces 4" wide or less. Patterns covering as little as 5% of the total glass surface can deter 90% of bird strikes. This is known as the "2" by 4" rule.

The 2×4 rule, as defined by the American Bird Conservancy, describes the distance between elements making up a pattern applied to windows for the purpose of preventing bird strikes. To be effective, the pattern must uniformly cover the entire window and consist of elements of any shape (lines, dots, other geometric figures, etc.) separated by no more than 5 cm (2 inches) if oriented in horizontal rows, or by 10 cm (4 inches) if oriented in vertical columns.

"In a time when wildlife faces unprecedented, human-driven challenges, we have an obligation to be responsible members of our environment and do what we can to mitigate our impacts on those we share this planet with. That can start with protecting wildlife from deadly collisions with our buildings."

"Including my amendment in HR 2 brings us that much closer to making the Bird-Safe Buildings Act law and would go a long way toward reducing the billions of fatal bird-building collisions that are contributing to the vanishing of America's native songbirds."

- House Representative, Mike Quigley, author of H.R. 919 – Bird Safe Buildings Act 2019



FEATURES & BENEFITS OF GLASPRO BIRD SAFE GLASS

- Highly-effective collision deterrent
- Safety glass ANSI z97.1
- Meets the performance standards required throughout North America when combined with high performance low-E glass.
- Meets the 2"x4" rule as stated by the American Bird Conservancy
- Range of prices to accommodate project budgets
- Made in the United States

ULTRAVIOLET REFLECTIVE PATTERN

Most birds have a broader spectrum of vision than people and can see colors that are part of the ultraviolet (UV) spectrum, giving them better visual acuity. This is where GlasPro Bird Safe UV glass with ultraviolet reflective coating can help prevent collisions while being highly-transparent to the human eye. Birds avoid the glass because they can see the bird-friendly, colored pattern in the glass.

According to the American Bird Conservancy, bird-friendly materials, including glass, are defined as having a material Threat Factor (TF) value of 30 or less. The ABC uses Threat Factors to indicate the relative ability of materials to reduce collisions. Products with lower TFs are considered more effective at preventing collisions. A TF of 30 should reduce collisions by at least 50 percent and is ABC's upper threshold for categorizing materials as bird-friendly.

GlasPro Bird Safe UV glass was tunnel tested by the ABC and earned a Threat Factor of 21, exceeding the standard for effective bird collision deterrent materials. GlasPro Bird Safe UV glass is proven to effectively deter birds, improve energy efficiency, meet safety standards, and maintain the human visual experience with its high transparency.

(An ultraviolet flashlight was used in the example on the right, to show the ultraviolet reflective panels that are visible to birds. These images are not photoshopped in any way.)

THIS IS WHAT HUMANS SEE

THIS IS WHAT BIRDS SEE

GLASPRO BIRD SAFE FIRST SURFACE ETCH

Bird Safe First Surface Etch products comply with the 2"x 2" rule* for bird-friendly glazing. The etched dot and linear patterns on the exterior surface are visible to birds, including small songbirds, and help prevent collisions with glass. First Surface Etch can also help construction projects achieve certification under LEED®.

The monolithic over monolithic glass can be laminated or insulated depending upon the design requirements. The First Surface Etch product line, like all Bird Safe glass, is fabricated at our US-based facilities, saving customers time and money.

LINEAR PATTERNS

ETCHED HORIZONTAL LINES

FS 2000 – 1/8" etched lines spaced two inches apart horizontally.

ETCHED VERTICAL LINES

FS 2001 – 1/8" etched lines spaced two inches apart vertically.

DOT PATTERNS

5MM DOTS TWO INCHES APART

FS 3000 – 5mm dots spaced two inches apart staggered.

4MM DOTS ONE INCH APART

FS 3001 – 4mm dots spaced one inch apart non staggered.

20 PERCENT DOTS

FS 3002 – Dots covering 20% of the glass surface.

GLASPRO FRITTED GLASS FOR RAILINGS

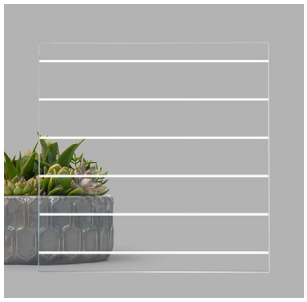
GLASPRO'S FRIT PATTERNS FOLLOW THE 2 X4 RULE FOR BIRD COLLISION AVOIDANCE

Silk-screened, ceramic frit patterns on glass can reduce bird collisions with railings as they are always visible, even with strong reflections. GlasPro's fritted glass is a long-lasting solution for railings that blends bird-friendly function with performance and aesthetics.

Bird Safe Fritted Glass includes options with 1) white ceramic dots covering 20 percent of the glass or 2) 1/8" lines on the outermost (1st) surface of the glass. The line and dot patterns comply with the bird-friendly 2 x 4 rule which is related to the size and shape of birds in flight.

BIRD SAFE FRIT WITH HORIZONTAL LINES

1/8" silk-screened ceramic frit lines spaced two inches apart horizontally.

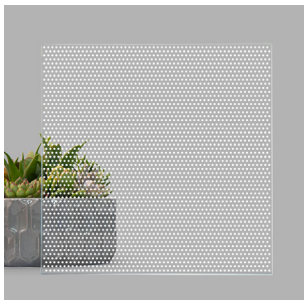


BIRD SAFE FRIT WITH VERTICAL LINES

1/8" silk-screened ceramic frit lines spaced four inches apart vertically.

BIRD SAFE FRIT WITH 20% WHITE DOTS

Silk-screened ceramic frit dots covering 20 percent of the glass surface.



HAVE A QUESTION ABOUT BIRD-FRIENDLY SOLUTIONS?

Contact us now!