



Pilkington **AviSafe™**
Bird-safe Glass

Pilkington **AviSafe™**

Bird Friendly Glass

Every year, billions of birds around the world are killed due to collisions with glass. With the development of built environments in migratory paths, legislation regulating glazing materials to mitigate avian fatalities is becoming more common.

Birds do not see building elements, such as window frames, as visual markers to identify glass as a physical barrier. Instead, birds see a clear line of sight to what is on the other side of the glass, or an uninterrupted reflected image of natural surroundings on the glass surface. As a result, birds perceive an unobstructed flight path to vegetation or open skies leading to collisions with windows.

To create a more bird-friendly environment, NSG Group is excited to introduce Pilkington **AviSafe™**. By combining glass coating innovation with an understanding of bird vision, we have developed an award-winning solution that is proven to save lives.

How it Works

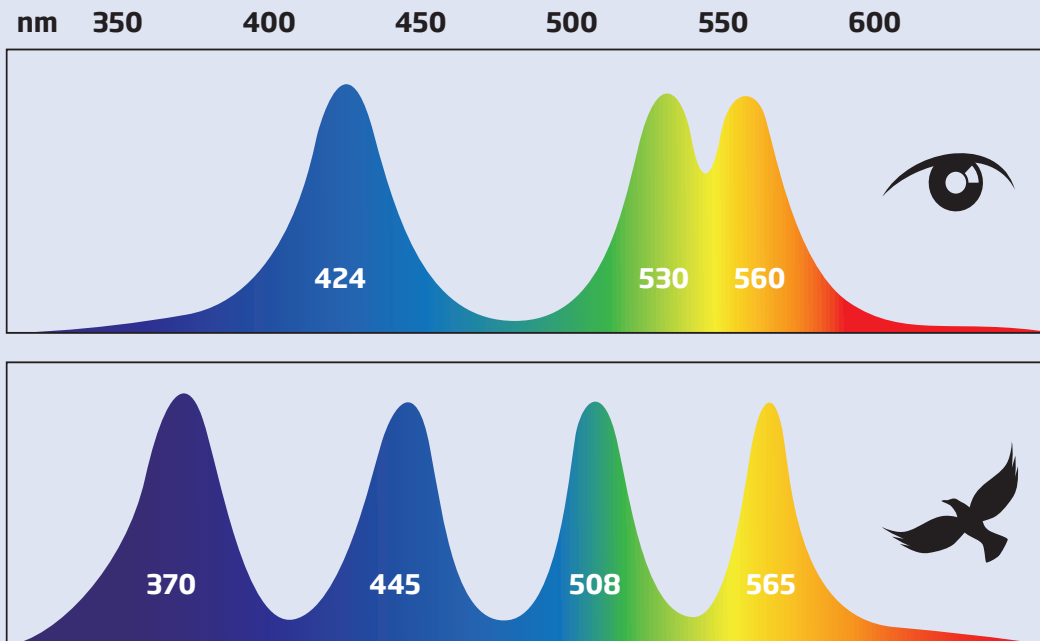
Unlike humans, birds can see light in the ultraviolet spectrum. Pilkington **AviSafe™** uses a unique patterned UV enhanced coating that disrupts the reflections, providing a visible barrier to birds and preventing collisions. The technologically advanced patterned coating on Pilkington **AviSafe™** uses the industry accepted 2x4 rule making the glass more visible to birds while remaining aesthetically appealing on both the interior and exterior surfaces.

When installed, the coating is located on surface #1 or the external face of the window. This enables the product to be as effective as possible at disrupting the reflection and deterring potential collisions.

Features and Benefits

- Available in 1/4" thickness
- Available in a max size of 88"x126"
- Highly durable surface #1 coating
- Temperable
- Can be combined with other products for additional benefits such as thermal insulation, solar control, and noise control

COMPARISON OF HUMAN AND AVIAN VISION



| Product | Nominal Glass Thickness | | Visible Light (%) | | | Solar Energy (%) | | UV % | U-Factor | | | | SHGC | SC |
|--|-------------------------|----|-------------------|---------------------|--------------------|------------------|---------------------|---------------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|------|------|
| | in. | mm | Transmittance | Reflectance Outside | Reflectance Inside | Transmittance | Reflectance Outside | Transmittance | Summer | | Winter | | | |
| | | | | | | | | | Air Btu/(hr-ft ² -°F) | Argon Btu/(hr-ft ² -°F) | Air Btu/(hr-ft ² -°F) | Argon Btu/(hr-ft ² -°F) | | |
| Pilkington AviSafe™ (coating on #1 surface) outer lite and Pilkington Optifloat™ Clear or Pilkington Energy Advantage™ (coating on #3 surface) inner lite | | | | | | | | | | | | | | |
| Pilkington AviSafe™ / Pilkington Optifloat™ Clear | 1/4 | 6 | 74 | 21 | 20 | 62 | 17 | 41 | 0.50 | 0.47 | 0.47 | 0.45 | 0.71 | 0.81 |
| Pilkington AviSafe™ / Pilkington Energy Advantage™ | 1/4 | 6 | 69 | 23 | 20 | 53 | 20 | 33 | 0.33 | 0.28 | 0.33 | 0.29 | 0.67 | 0.77 |
| Pilkington AviSafe™ (coating on #1 surface) outer lite and Pilkington Suncool™ (coating on #3 surface) inner lite | | | | | | | | | | | | | | |
| Pilkington AviSafe™ / Pilkington Suncool™ 70/40 | 1/4 | 6 | 67 | 18 | 14 | 34 | 40 | 20 | 0.27 | 0.21 | 0.29 | 0.24 | 0.44 | 0.51 |
| Pilkington AviSafe™ / Pilkington Suncool™ 70/35 | 1/4 | 6 | 65 | 23 | 20 | 29 | 44 | 12 | 0.26 | 0.20 | 0.28 | 0.23 | 0.40 | 0.46 |
| Pilkington AviSafe™ / Pilkington Suncool™ 66/33 | 1/4 | 6 | 62 | 24 | 20 | 28 | 45 | 12 | 0.26 | 0.20 | 0.28 | 0.23 | 0.39 | 0.45 |
| Pilkington AviSafe™ / Pilkington Suncool™ 50/25 | 1/4 | 6 | 47 | 29 | 20 | 20 | 42 | 7 | 0.26 | 0.20 | 0.28 | 0.23 | 0.41 | 0.47 |
| Pilkington AviSafe™ / Pilkington Suncool™ 40/22 | 1/4 | 6 | 37 | 27 | 22 | 17 | 40 | 8 | 0.27 | 0.21 | 0.29 | 0.23 | 0.42 | 0.48 |
| Pilkington AviSafe™ / Pilkington Suncool™ 30/16 | 1/4 | 6 | 27 | 17 | 26 | 13 | 31 | 8 | 0.26 | 0.20 | 0.28 | 0.23 | 0.49 | 0.57 |

An insulating unit consists of two lites of equal glass thickness, and 1/2 in. (12.7mm) airspace
U-Factor (Btu/hr-ft²-°F) is based on NFRC/ASTM standards. To obtain metric U-Factor (W/m²-K), multiply by 5.678.
All performance values are center-of-glass values calculated using the LBNL WINDOW 7.7 program.



This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington and "AviSafe" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



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