



Shaping the future for birds

Guardian Glass test results with ABC February 2020

This document was prepared by Guardian Glass to summarize testing results received from American Bird Conservancy and is distributed with approval from ABC. All results below were tested at Powdermill Avian Research Center in Rector, PA.

To pass configurations must score 70 or greater in Avoidance Index (AI).

Bird1st with SN68 and inboard lamination

Bird strike deterrent: Bird1st surface 1, vertical stripes, 30% coverage

Configuration: IGU with inboard laminate

Low-e: SN 68

Results reported December 1st, 2016

AI Score: 74

Useable Flights: 80

MT Score: 26

Bird1st with SN 68 and outboard lamination

Bird strike deterrent: Bird1st surface 1, vertical stripes, 50% coverage

Configuration: IGU with outboard laminate

Low-e: SN 68

Result reported on November 17th, 2017

AI Score: 70

Useable Flights: 80

MT Score: 30

Bird1st with SNX 62/27 and outboard lamination

Bird strike deterrent: Bird1st surface 1, vertical stripes, 50% coverage

Configuration: IGU with outboard laminate

Low-e: SNX 62/27

Result reported on December 1st, 2018

AI Score: 75

Useable Flights: 81

MT Score: 25

Testing notes

1. Avoidance Index (AI) Scores indicate the fraction of trials in which birds flew towards the unpatterned control glass. When the tunnel test is run with two pieces of unpatterned glass, 50% of birds fly to the left and 50% to the right, so Avoidance Index Scores range from 50- 100.
2. A score of 50 therefore means 'no deterrent effect' for a test material. For this reason, the AI must be understood as an index of how well a material will perform at reducing collisions, relative to other tested materials, when installed on a structure.
3. The AI correlates with performance when the pattern is visible; if the pattern is on an internal surface, reflections on surface one can diminish actual effectiveness when the material is installed on a structure.
4. At least 80 trials were run for each sample.
5. All samples tested *with* background.
6. As of June 2015, Material Threat (MT) Scores are calculated as $(1 - AI) \times 100$. Note that this calculation is determined by the LEED Pilot Credit committee and is subject to change.
7. All testing with standard mirrors