PRELCO

PREL-AIRSECUR

Bird Safe Glass

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BIRD SAFE GLASS

INTRODUCTION

Certain glass properties are detrimental to bird safety especially its transparency and reflectivity. Glass transparency does not allow birds to detect the obstacle to be avoided, its reflective aspect makes them see their own reflection or that of the sky and vegetation. They are then fooled by these false representations and will collide against the glass. Bird collisions are most common in areas near waterways, parks, wooded areas and migration corridors.

SOLUTIONS

Fortunately, we are becoming increasingly aware of the vital role that birds play in our environment. In recent years, there has been an increase in legislation governing the design of safe buildings for birds. Many municipalities, including Toronto, New York and San Francisco, have adopted bird collision mitigation measures and many other cities and territories are in the process of doing the same. These regulations, based on research undertaken by various expert groups, have led to the development of two main strategies:

- Adding structures integrated into the building: grids, screens, shutters, or the like
- Adding visual markers to the glass: dot patterns, lines or other

To date, research has shown that the most effective solution is to intervene on the glass itself according to the 2 x 4 in. (51 x 102 mm) and 2 x 2 in. (51 x 51 mm) rules for smaller birds.

RISK FACTORS FOR BIRDS

The built environment is undoubtedly a significant risk factor for birds. The location and configuration of buildings and other outdoor structures often have features that cause bird collisions. Here are a few:

Site Location

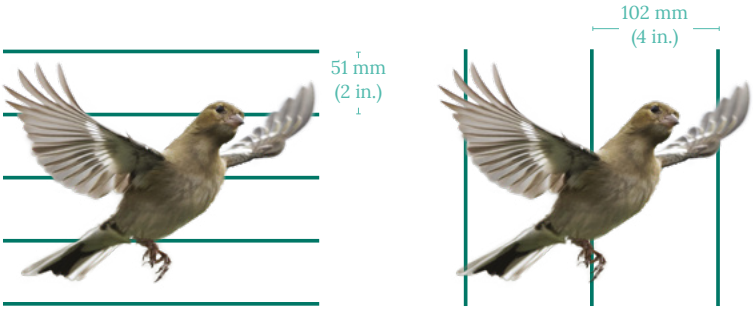
- Near green areas such as forests, bushes and parks
- Near shorelines, wetlands or marshes
- Near migration corridors

Building and Structure Design

- Buildings with green roofs, alcoves and courtyards
- Glass pedestrian shelters and walkways
- Glass awnings and canopies

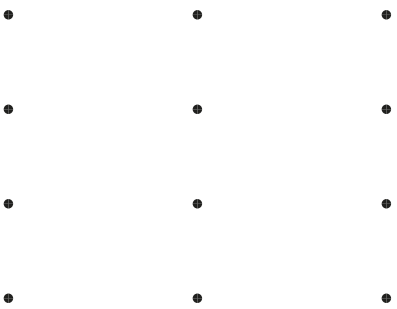
Glazing Configurations

- All types of glass: clear, tinted or reflective
- Windows with a black hole appearance



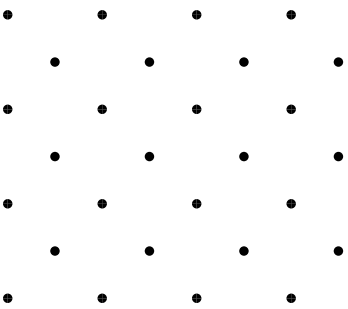
PREL-AIRSECUR PATTERNS

AS-5463



6 mm diameter etched dots,
spaced 50.8 x 101.6 mm (2 x 4 in)

AS-5462

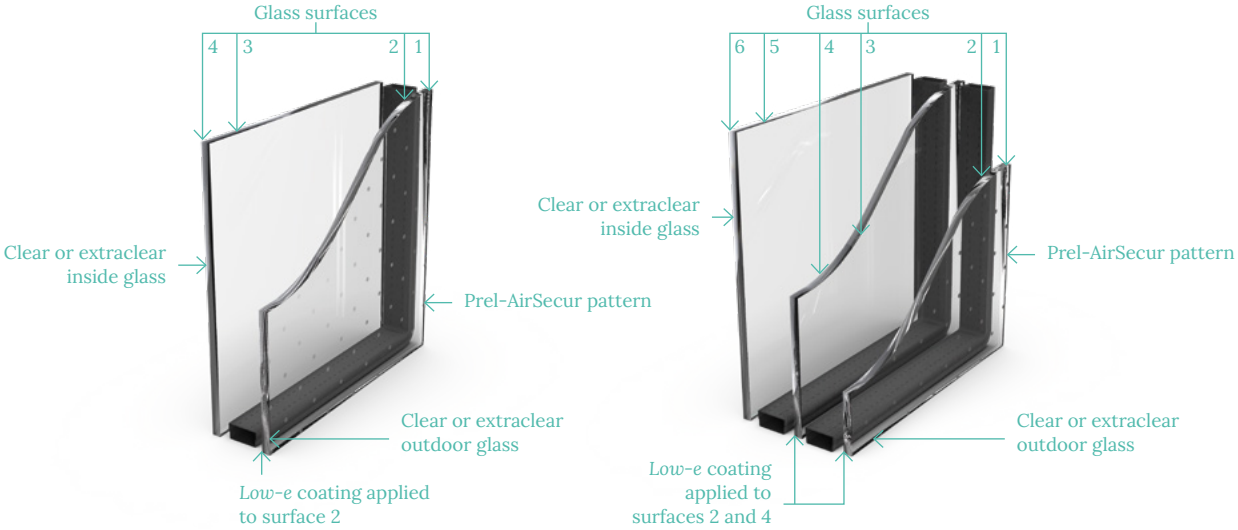


5 mm diameter etched dots,
spaced 50.8 x 50.8 mm (2 x 2 in)

BIRD SAFE GLASS

DESCRIPTION

With an etched pattern on side #1 and a low-e coating on side #2, Prel-AirSecur glass combines bird safety and energy efficiency. The etched pattern on the outside is more easily seen by birds while remaining discreet from the inside. The pattern is permanent, it does not require any particular maintenance and does not fade with time. The low-e on side #2 of the glass is more effective at blocking solar heat gain while controlling heat loss in cold weather. Prel-AirSecur glass is available in oversized format up to 5180 mm (204 in.) high.



MAXIMUM DIMENSIONS

WIDTH UP TO 2590 MM (102 IN.)*

HEIGHT UP TO 5180 MM (204 IN.)*

Prel-AirSecur glass is available in oversized format up to 5180 mm (204 in.) high. Therefore architects and designers no longer have to compromise between largely fenestrated buildings and bird protection.

Benefits

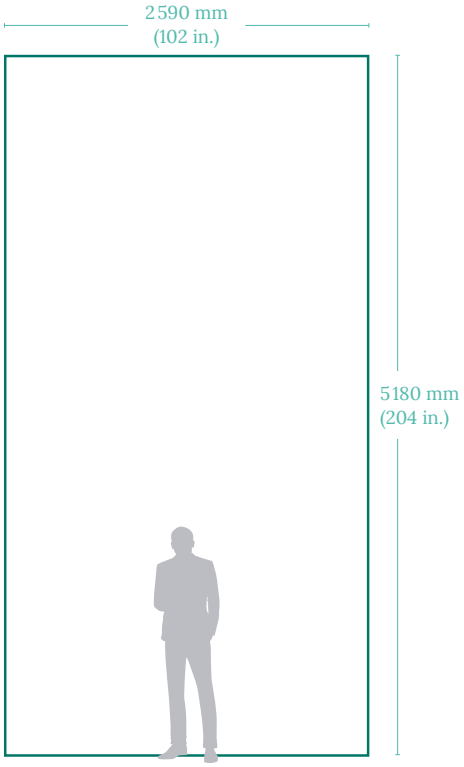
- Uninterrupted view from floor to ceiling
- Maximizes natural lighting
- Increased user satisfaction
- Provides a contemporary look

Thickness: 6 mm (1/4 in.) (other thicknesses available upon request)

Substrate: clear, extra-clear (other substrates available upon request)

Heat treatment: heat-strengthened or tempered

Configuration: double or triple insulating glass units



*Oversized insulating glass units are subject to increased stress due to dead and live loads. Implementing a project with oversized glass requires careful planning. Contact us to determine the type of glass that is best suited for your project.

LOW-E COATINGS

NEUTRAL SOLAR CONTROL *LOW-E*

Promotes light transmission, solar heat gain control and thermal insulation. Ideal for a wide range of applications.

SELECTIVE SOLAR CONTROL *LOW-E*

Provides an optimal ratio of daylight transmission and solar heat gain control. Provides comfort in sun-exposed areas while offering excellent thermal insulation.

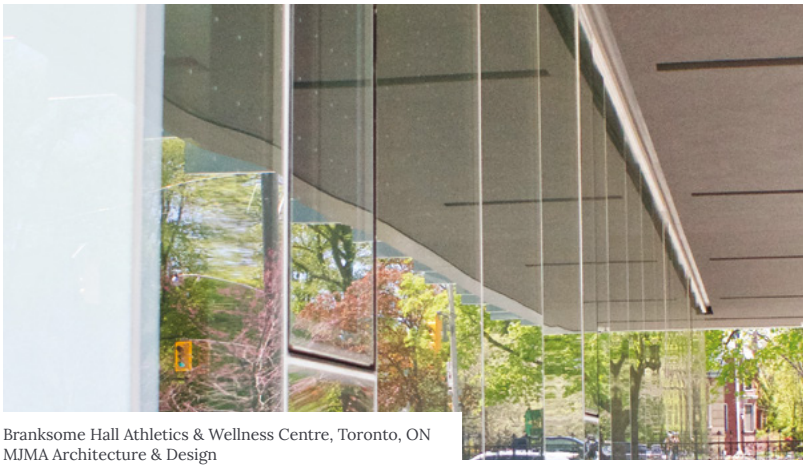
PREL-AIRSECUR INSULATING GLASS UNITS

Energy and optical performance

Description	Appearance	Visible light transmission (%)	External reflexivity (%)	U-value Winter	Solar heat gain coefficient	Light/solar gain
DOUBLE GLAZING						
PA68 – Neutral solar control *low-e*		67	11	0,25	0,37	1,81
PA62 – Selective solar control *low-e*		61	11	0,25	0,26	2,34
PA51 – Selective solar control *low-e*		50	14	0,24	0,23	2,19
TRIPLE GLAZING						
PA68 – Neutral solar control *low-e*		59	13	0,13	0,33	1,78
PA62 – Selective solar control *low-e*		53	13	0,13	0,23	2,32
PA51 - Selective solar control *low-e*		44	15	0,13	0,20	2,20

Notes: Data calculated with Window LBNL 6.3 software;
Double glazing: 6 mm clear, low-e surface #2/12.7 mm argon 90%/6 mm clear;
Triple glazing: 6 mm clear, low-e surface #2/12.7 mm argon 90%/6 mm clear, low-e surface #4/12.7 mm argon/6 mm clear;

Evergreen Brick Works, Toronto, ON
LGA Architectural Partners



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BF31123 — Printed in Canada