

Bird-Friendly Glazing in Building Construction

The Request:

Responsible construction should incorporate bird-friendly glazing into the specification. Support the implementation of bird-friendly design strategies in your local building code.

The issue:

Clear and reflective surfaces in residential and commercial structures in urban, suburban, and rural landscapes can be invisible threats to birds.

Clear surfaces may create perceived flythrough conditions. Reflective surfaces may create reflected habitat conditions. Both of these conditions may render the surface invisible to birds.

Birds may perceive images reflected in the glass such as vegetation to be real and may fly into the glass thinking they are trees or sky.

Plants and trees placed in a glass-enclosed lobby for aesthetic and environmental reasons can attract birds in flight, who do not recognize the glass as a barrier.

Artificial lights in buildings visible through glass can obscure the light from the moon and stars, which provides natural direction to migratory birds.



The strategy:

Muting reflections by creating visual markers or patterns on the glass at a specific spacing and geometry can significantly reduce bird collisions. Such markers have been designed to address reflection and transmission conditions. Architects are specifying this type of glass, termed *Bird-Friendly Glass*, typically on the first four stories of buildings.

NGA [Bird-Friendly Glass Design Strategies*](#) Glass Technical Paper is an additional resource, including a list of Bird-Friendly ordinances.

Bird safe building materials and architectural design will be required to be incorporated into new or retrofitted public buildings by the pending legislation: US Federal Bird Safe Buildings Act of 2019 (H.R. Bill 191).

Research on bird-glazing collision prevention by American Bird Conservancy, Building Industry and Bird Conservation and FLAP has guided the development of bird friendly glazing, lighting and building design.

Mandatory and voluntary ordinances to prevent bird-window collisions at government and/or commercial buildings have been adopted by several states and provinces.

USGBC's LEED program offers credit for incorporating bird-friendly design.

*<https://www.glass.org/sites/default/files/2021-01/FB35-12%20%282020%29%20Bird-Friendly%20Glass%20Design%20Strategies.pdf>