



American Bird Conservancy Model Bird-Friendly Building Guidelines

October 2023

These model guidelines are intended to be a starting point for cities, towns, villages, counties, states, universities, businesses, and any other entity interested in regulating or guiding building construction to reduce bird collisions with glass. They describe a truly bird-friendly building.

Summarized simply, these guidelines are based on a 100/100/100 framework: 100% of all glass and other building materials should be bird friendly in the first 100 feet of 100% of buildings. The guidelines also specifically include making bird friendly all hazardous features and materials that cause collisions no matter where they are found.

Any group that adopts these guidelines as written will be at the leading edge of creating a bird-friendly built environment. However, many groups considering such guidelines will be interested in softening the language to exempt certain types of buildings or to reduce the amount of bird-friendly materials required. In anticipation of this, American Bird Conservancy (ABC) has created a discussion of the issues to be considered when revising this model (see [ABC's Legislation, Ordinances, and Codes](#)).

This model will be most commonly adopted as an ordinance to modify municipal building codes and is therefore written in that format. However, the text can be easily adapted to fit other building guidance formats.

ABC will revise these guidelines as new science, materials, techniques, and technologies become available, so please make sure that you have the most current version before you begin the process of creating your own guidelines. The most recent version can be found on ABC's website (see [ABC's Legislation, Ordinances, and Codes](#)).

PROPOSAL NUMBER:

PROPOSAL NAME: Bird-Friendly Building Design Requirements

SPONSOR(S):

PURPOSE: This building ordinance has been created to address the role of the (MUNICIPALITY)'s built environment in the annual loss of up to 1 billion birds due to glass collisions in the United States.

WHEREAS, birds provide valuable and important ecological services,

WHEREAS, (MUNICIPALITY) has recorded (XXX) species of resident and migratory bird species,

WHEREAS, birding is a hobby enjoyed by 46 million Americans with an annual \$107 billion total industry output in the United States,

WHEREAS, as many as 1 billion birds may be killed by collisions with windows every year in the United States,

WHEREAS, new buildings can be designed to reduce bird deaths from collisions without significant additional cost,

WHEREAS there exist strategies to mitigate collisions on existing buildings,

WHEREAS witnessing a collision is an upsetting, sad event,

WHEREAS no person wants to live or work in a building that kills wildlife,

WHEREAS façades with more than 30% glass usually increase costs and CO₂ emissions from heating and cooling,

WHEREAS, bird-friendly practices can go hand-in-hand with energy efficiency improvements,

And **WHEREAS** (ANY ADDITIONS SPECIFIC TO THE MUNICIPALITY),

NOW, THEREFORE, the (LEGISLATIVE BODY) of the (MUNICIPALITY) does hereby ordain as follows:

1. Section (XX.XXX) of the (MUNICIPALITY)'s General Ordinances is created to read as follows:

- a. DEFINITIONS

- i. Glass: All glass, including spandrel glass.
- ii. Reflective and/or Transparent Non-Glass Materials: Any non-glass materials that are transparent or highly reflective, including but not limited to plexiglass and polished metal.
- iii. Bird Activity Zone: The zone between 0 and 100 feet above grade.
- iv. Auxiliary Structures: Structures that pose significant collision risks to birds wherever they are found, including but not limited to:
 1. Transparent or highly-reflective:
 - a. Railings, including balconies
 - b. Noise barriers
 - c. Wind barriers (including in parking structures)

- d. Transportation or weather shelters, including both private and public bus and train stops
 - 2. Small, stand-alone buildings that present conditions that can be both transparent and reflective:
 - a. Gazebos
 - b. External ticket booths
 - 3. Any other free-standing glass, plexiglass, or other clear, transparent, or highly-reflective free-standing structure
- v. High-Risk Building Features:
 - 1. Skyways/skywalks
 - 2. All floors of building connectors
 - 3. All outside corners where a bird can see in one side of the building and out the other (“fly-through conditions”) within 30 feet of the corner
 - 4. All interior corners within 30 feet of the corner
 - 5. Glazing adjacent to courtyards
 - 6. Atria, open and enclosed
 - 7. Three floors of glazing adjacent to any green roof or partial green roof
- vi. Major Renovations and Additions Involving Glass: Any renovation in the Bird Activity Zone that:
 - 1. Replaces at least 25% of a structure’s existing glass or other transparent or reflective materials, or
 - 2. Adds any new glass or transparent or reflective materials
- vii. Bird-Friendly Glass: Glass or materials that meet any of the following conditions:
 - 1. Any product with an American Bird Conservancy Material Threat Factor Rating ≤ 30 . Visit birdsmartglass.org to view the continuously-updated database
 - 2. Any product that follows American Bird Conservancy’s [Prescriptive Rating Criteria \(abcthreatfactor.org\)](http://abcthreatfactor.org)
 - 3. Glass with exterior surface (surface 1) obstructed and effectively covered by building-integrated structures that do not have gaps larger than 12” in any dimension, including non-glass double-skin facades, metal screens, fixed solar shading, exterior insect or solar screens, and other features as determined by the (*BUILDING DEPARTMENT OR SIMILAR*) that meet these conditions.
 - 4. Continuous-surface materials, including spandrel glass and polished or brushed metals, whose surface 1 gloss reading follows the [ABC Prescriptive Rating Criteria \(abcthreatfactor.org\)](http://abcthreatfactor.org) to ensure that they do not produce strong reflections).

b. REQUIREMENTS

- i. 100% of the glazing for all building types must be Bird-Friendly Glass for the following projects:
 - 1. All new construction in the Bird Activity Zone.

2. Major Renovations and Additions Involving Glass and Reflective and/or Transparent Materials in the Bird Activity Zone.
3. All Auxiliary Structures regardless of whether the rest of the building or project triggers these bird-friendly building requirements.
4. All High-Risk Building Features regardless of whether the rest of the building or project triggers these bird-friendly building requirements.