

## 2025 California Green Building Standards Code, Title 24, Part 11 Appendix A5

### SECTION A5.107—BIRD-FRIENDLY BUILDING DESIGN

#### A5.107 Bird-friendly building design.

A newly constructed building, or an alteration of an existing building that includes the addition or replacement of 50 percent or more of the exterior glazing, shall comply with the bird-friendly building design elements and features in [Sections A5.107.1](#) through [A5.107.3](#) of the [California Energy Code](#) and the fire hazard severity zone regulations in Chapter 7A of the [California Building Code](#).

**Exception:** Alteration to the glazing in historical buildings per the [California Historical Building Code](#).

#### A5.107.1 Required elevation treatment.

Building elevation treatment shall incorporate bird-friendly mitigation strategies. No less than 90 percent of a building elevation, measured from grade to a height of 40 feet (12 m) above grade, or from grade to the height of an adjacent mature tree canopy (whichever is greater), shall incorporate bird-friendly mitigation strategies. No less than 60 percent of building elevation, 40 feet (12 m) above grade to the top of the building elevation, shall incorporate bird-friendly mitigation strategies.

Strategies to minimize the risk of birds colliding with buildings:

#### 1. Glazing

Glazing with visual markers shall include, but is not limited to, the following:

- a. Etched or fritted glass with patterns of elements on the exterior having minimum dimensions of  $\frac{1}{4}$ " (.64 cm) diameter for dots or  $\frac{1}{8}$ " (.32 cm) width for stripes in a density of 2 inches (5.1 cm) maximum horizontally and vertically (the "2 × 2 Rule").
  - **Note:** If the visual markers are on glass surface 2, they can be effective if visible behind an exterior surface with reflectivity of 15 percent or less.
- b. Interior or exterior glazing film with 2 × 2 visual markers.

- c. Laminated glass with 2 × 2 visual markers, patterned ultraviolet (UV) coating or use of contrasting patterned UV-absorbing and UV-reflecting films.
  - **Note:** Low-e coatings shall be behind the visual markers.
- d. Glass block or channel glass.
- e. Developed glazing technologies documented to reduce bird strikes, as tested by an independent third party and approved by the authority having jurisdiction; or

## 2. Slats, Screens, Netting, Louvers

Glazing protected by exterior features that create a visible barrier in front of the glazing, may include, but not be limited to:

- a. Horizontal or vertical slats of 1/8" (.32 cm) minimum face width with minimum 2" (5.1 cm) spacing that obscure 85 percent or more of glass when viewed from all feasible angles.
- b. Grilles, screens or 1/8" (.32 cm) dia. welded wire mesh with openings no more than 2" (5.1 cm) maximum horizontally and vertically installed parallel to and no more than 3 1/4 ft (1 m) from the first surface of glass (glass surface 1).
- c. Netting with 1" (2.5 cm) maximum openings, installed taut at least 6" (15 cm) away from the first surface of glass; or
- d. Sunshades or louvers 9" (22.5 cm) deep vertically spaced a maximum 9" (22.5 cm) or 6" (15 cm) deep horizontally at maximum 6" (15 cm) spacing and parallel or angled to the glass surfaces.

### A5.107.2 Special conditions.

The following special conditions shall comply with the provisions in Section A5.107.1 (as appropriate):

1. Glass facades adjacent to vegetated roof.
2. Glass railings and guardrails.
3. Transparent corners that extend 5.5 feet (1.68 m) on either side of a building.
4. Glass passageways less than 5.5 feet (1.68 m) wide.

5. Auxiliary glass building such as a glass pavilion or atrium exposed to the sky.
6. Auxiliary glass building such as a glass pavilion or atrium exposed to a courtyard with a water feature or plants.
7. Stained glass windows insulated on the exterior with clear glazing.

**A5.107.3 Nighttime conditions.**

Nighttime lighting at the top of the building, and in the interiors of all areas visible through exterior glazing, including lobby and atrium, shall be controlled with time-switch control devices or occupancy sensors complying with the current [California Energy Code](#). The control device shall be programmed so the lights are extinguished from 2 am to dawn.

**Exception:** Emergency lighting, lighting required for nighttime security and aeronautical beacon lighting required by the Federal Aviation Administration.

**A5.107.3.1 Systems or operation and maintenance manual.**

Include written recommendations that lighting is extinguished pursuant to [Section A5.107.3](#) and janitorial services to the building are scheduled between sunrise and sunset.