

CHAPTER 19.102: GLASS AND LIGHTING STANDARDS

Section

- 19.102.010 Purpose.
- 19.102.020 Applicability of regulations.
- 19.102.030 Bird-safe development requirements.
- 19.102.040 Outdoor lighting requirements

19.102.010 Purpose.

The purpose of this chapter is to regulate design and construction of structures and accessory elements in all zoning districts to protect the natural environment, particularly enhancing bird-safety and reducing light pollution. This Chapter establishes regulations to reduce bird mortality from windows, other specific glass features, and certain lighting elements that are known to increase the risk of bird collisions. This Chapter also establishes regulations to reduce light pollution, which is known to contribute to bird mortality, reduced visibility of the night sky, and adverse impacts to human health.

(Ord. 21-2225, Att. A (§ 1, part), 2021)

19.102.020 Applicability of regulations.

Whenever an applicant is required to obtain a building permit or a Permit pursuant to Title 19, or whenever exterior lighting is added, replaced, or altered (whether temporary or permanent), the project shall meet the requirements of this Chapter. The following table indicates the applicability of regulations by type of project in which exterior glass/transparent windows, doors, or features or interior or exterior lighting is added, replaced, or altered:

Type of Development	Applicable Sections
A. New primary or accessory building or structure construction	Sections 19.102.030 and 19.102.040
B. Complete or Partial Remodel of primary or accessory buildings or structures	Sections 19.102.030 and 19.102.040 apply to remodeled portions
C. Parking lot upgrade or redesign, excluding maintenance or repair activities (i.e., restriping, resealing, or repaving)	Section 19.102.040
D. New or replacement glass windows, doors, or features	Section 19.102.030(A), (B), and (D), apply only to the new exterior glass windows, doors, or features
E. New or replacement exterior lighting	Section 19.102.040
F. Exemptions	See Sections 19.102.030(E) and 19.102.040(D)

(Ord. 21-2225, Att. A (§ 1, part), 2021)

19.102.030 Bird-safe Development Requirements.

A. Application submittal requirements: All projects that are subject to the bird-safe development requirements shall submit the following:

1. Elevation drawings indicating the bird-safe treatment and how the proposed treatment meets the requirements of Section 19.102.030(B) and (D);
2. Cross sections, if required;
3. Other exhibits indicating consideration and incorporation of the regulations in Section 19.102.030(B), (C), and (D); and
4. Biologist report in support of alternative compliance method pursuant to Section 19.102.030(B)(3), if proposed.

B. Fenestration and Glass Requirements

1. Façades of all projects subject to bird-safe development requirements shall have:
 - a. No more than 10% of the surface area of the façade be untreated glass between the ground and 60 feet above ground.
 - b. No more than 5% of the surface area of the façade be untreated glass between 60 feet above ground and up.
2. Standard Compliance Treatments: The Planning Division may maintain a list of acceptable bird-safe treatments that may be updated from time to time. The list may include, but not be limited to, permanent treatments such as opaque glass, window muntins, exterior insect screens, exterior netting, or special glass treatments such as fritting to provide visual cues and reduce the likelihood of bird collisions. Glass treatments must have high color contrast with the glass and be applied to the outermost surface. Prior to publication of the list, the Planning Division may review information available from interest groups, such as the National Audubon Society.

3. Alternative Compliance Method: Property owners/applicants may propose an alternate compliance method recommended by a qualified biologist to meet the requirements and intent of this section. The alternate compliance method shall be peer-reviewed by a third-party consultant, paid for by the applicant, and subject to the approval of the Director of Community Development.

C. Non-residential Indoor Lighting Requirements:

1. Install time switch control devices or automatic occupancy sensors on non-emergency interior lights that are programmed to turn off at eleven p.m. or within two hours after the business is closed.

2. Businesses that involve the direct retailing of goods to the general public may have downward directed, low voltage, and fully shielded lighting for window displays at any time when there is a display of such goods.

D. Bird-safe Design Requirements. All projects shall:

1. Avoid the funneling of flight paths along buildings or trees towards a building façade.

2. Avoid use of highly reflective glass or highly transparent glass.

3. Not include skyways or walkways, balconies, freestanding walls, or building corners made of untreated glass or other transparent materials, or any other design elements that are untreated and through which trees, landscape areas, water features or the sky are visible from the exterior or from one side of the transparent element to the other.

E. Exemptions: The following are exempted from bird-safe treatment regulations of subsection 19.102.030(B):

1. Any historic structure, either as set forth in the General Plan Figure LU-3 Historic Resources or listed on the State or National Historical Registers;

2. First floor retail storefronts, up to a height of 15'; and,

3. Residential development in R1 zoning districts outside of Bird-Sensitive Areas.

F. California Building Code. All windows, doors, or other features must comply with the requirements of the California Building Code. Should a conflict exist with the provisions of this Chapter, the standards in the California Building Code shall prevail.

(Ord. 21-2234, Att. A (§ 9, part), 2021; Ord. 21-2225, Att. A (§ 1, part), 2021)

19.102.040 Outdoor Lighting Requirements.

A. Submittal Requirements: Projects subject to outdoor lighting regulations must submit the following information:

1. A site plan indicating the location of all outdoor lighting fixtures.

2. A description of each lighting fixture. This description may include, but not be limited to, manufacturer's catalog cuts and drawings (including sections if requested), lamp types, and lumen outputs.

3. Photometric plans, prepared, stamped and signed by a licensed professional engineer qualified in outdoor lighting, depicting the location of all outdoor lighting fixtures and building-mounted lighting fixtures and a maximum ten-foot by ten-foot grid of both the initial and maintained lighting levels on the site, including any impact on adjacent properties.

4. The project lighting plan shall indicate how lighting has been coordinated with any associated landscaping plan to prevent site planning conflicts.

5. Any other information the Director may determine is necessary to ensure that the proposed lighting is in compliance with the provisions of this Chapter.

6. Any of the above requirements may be waived by the Director of Community Development when determined to be unnecessary for determining compliance with the provisions of this Chapter.

B. Outdoor Lighting Standards

1. All outdoor lighting shall be fully shielded fixtures, directed downward to meet the particular need and away from adjacent properties and rights-of way to avoid light trespass, except:

a. Low-voltage Landscape Lighting: Low-voltage landscape lighting, such as that used to illuminate fountains, shrubbery, trees, and walkways, do not have to be shielded fixtures and may use uplighting, provided that they use no more than ten (10) watt incandescent bulb or LED equivalent, or a maximum of 150 lumens (whichever is less), and not directed toward the right-of-way.

b. Architectural Features: Uplighting may be used to highlight special architectural features.

c. Public Art: Alternative lighting standards may be used to illuminate public art or serve as public art subject to the review and approval by the Arts and Culture Commission.

d. Historic Lighting Fixtures: Lighting fixtures that are historic or that exhibit a historical period appearance, as determined by the Director of Community Development, need not be fully shielded.

e. String Lighting: String Lighting may be used in compliance with Section 19.102.040 (B) (12).

2. Illumination Levels

a. No exterior light, combination of exterior lights, or activity shall cast light exceeding zero point one (0.1) foot-candle onto an adjacent or nearby property, with the illumination level measured at the property line between the lot on which the light is located and the adjacent lot, at the point nearest to the light source, except if two adjacent properties are non-residential, or function as a shopping center, and agree to coordinate lighting.

b. No direct off-site glare from a light source shall be visible above three feet at a public right-of-way.

c. The maximum light intensity on a site shall not exceed a maintained value of ten foot-candles, when measured at finished grade.

d. Parking lots, sidewalks and other areas accessible to pedestrians and automobiles on properties with four or more units, mixed-use development, and non-residential development shall be illuminated with uniform and adequate intensity. Typical standards to achieve uniform and adequate intensity are:

i. Average horizontal maintained illumination shall not be more than three foot-candle.

ii. Maximum to minimum ratio should be between 6:1 and 10:1, but shall not be more than 10:1.

e. Critical areas of illumination such as stairways, ramps and main walkways may have a higher illumination.

3. All light sources shall have a maintained correlated color temperature of 3,000 Kelvin or less.

4. All outdoor lighting shall be fully extinguished or be motion sensor operated by 11:00 p.m. or when people are no longer present in exterior areas, whichever is later, except for:

a. Critical lighting pursuant to section 2(e) above;

b. Any lighting at building entrances, parking areas, walkways, and driveways area required to remain illuminated after 11:00 p.m. by the California Building Code or state law;

c. Lighting of an appropriate intensity, allowed in conjunction with uses that are permitted to operate past 11:00 p.m., with a conditional use permit; and

d. Outdoor solar powered pathway lights that are 25 lumens or less.

e. Lighting that illuminates a pedestrian pathway (examples include bollard, in-place step, or building mounted), provided that such lighting is a maximum height of four (4) feet above the pathway, fully shielded, and downward directed.

5. Automated control systems, such as motion sensors and timers, shall be used to meet the outdoor lighting requirements.

a. Photocells or photocontrols shall be used to extinguish all outdoor lighting automatically when sufficient daylight is available.

b. All lighting activated by motion sensors shall extinguish no more than 10 minutes after activation.

c. Automated controls shall be full programmable and supported by battery or similar backup.

6. Security lighting may be provided when necessary to protect persons and property. When security lighting is utilized only the following standards shall apply:

a. Security lighting shall be controlled by a programmable motion-sensor device, except where continuous lighting is required by the California Building Code. All lighting activated by motion sensors shall extinguish no more than 10 minutes after activation. Automated controls shall be fully programmable and supported by battery or similar backup.

b. Security lighting shall be downward directed, shielded, and not be mounted at a height that exceeds 12 feet, measured from the adjacent grade to the bottom of the fixture.

c. Floodlights shall not be permitted.

d. Security lights intended to illuminate a perimeter, such as a fence line, are permitted only if such lights do not result in light trespass.

e. Motion-activated security lights shall not use lamps that exceed 100 watt incandescent bulb or LED equivalent, or a maximum of 1,600 lumens (whichever is less).

7. Lighting design standards:

a. Lighting fixtures must be of a design that complements building and landscaping design.

b. Lighting fixtures shall be appropriate in height, intensity, and scale to the use they are serving. Parking lot lights in non-residential zones shall not exceed a height of 21 feet, and any wall-mounted lights shall not exceed a height of 12 feet, measured from the adjacent grade to the bottom of the fixture.

8. Service Station Canopies: The following standards shall apply to service station canopy lighting, in addition to all other applicable standards:

a. Lighting fixtures in the ceiling of canopies shall be fully recessed in the canopy.

b. Light fixtures shall not be mounted on top of the fascia of such canopies.

c. The maximum light intensity under the canopy shall not exceed an average maintained foot-candle (horizontal) of 12.5, when measured at finished grade.

d. The fascia of such canopies shall not be illuminated, except for approved signage in compliance with Chapter 19.104.

9. Areas around Automatic Teller Machines shall meet minimum standards required by the State of California Business and Professions Code.

10. All lighting must comply with the requirements of the California Building Code. Should a conflict exist with the provisions of this Chapter, the standards in the California Building Code shall prevail.

11. Lighting in ML zones shall additionally comply with the standards in Chapter 19.72.

12. String Lighting Regulations:

a. String lighting is different from holiday and/or seasonal lighting, and in addition to subsections (b) and (c) as applicable below, shall not be:

- i. Blinking and/or chasing lights
- ii. Secured with materials or in a manner that will puncture the skin or restrict the growth of any living landscape feature.
- iii. Attached to a fence in a manner that permits light trespass to adjacent property.
- iv. More than a 2.8-watt incandescent bulb system or equivalent LED system and emit no more than 42 lumens (whichever is less).

b. Residential Areas: String lighting is permitted subject to the following requirements:

- i. It shall not illuminate more than fifty (50) percent of the rear yard or 500 sq. ft., whichever is more restrictive.
- ii. It shall not be visible from the City right-of-way.
- iii. It shall be used primarily to illuminate patio areas.
- iv. It shall be extinguished by 11:00 p.m.

c. Commercial and Mixed-Use Commercial Areas: String lighting may be permitted subject to the following requirements, with approval of the Director of Community Development:

i. Any development or property is permitted to submit one application for string lighting, which shall include all uses of string lighting on the development or property.

ii. It shall not illuminate an area greater than:

1. Five (5) percent of the building(s) footprint of a shopping center, and,
2. Fifteen (15) percent for a freestanding commercial building not part of a shopping center.

iii. It is limited to the lighting of the following:

1. Living landscape features (trees, shrubs, etc.), if used in combination with other highlighting or pedestrian lighting fixtures within the immediate area, and,
2. Designated outside dining or display areas.

C. Prohibited Lighting: The following types of lighting are prohibited:

1. Outdoor lighting that blinks, flashes, or rotates except those that may be permitted pursuant to Chapter 10.26.
2. Outdoor flood lights that project above the horizontal plane.
3. Lighting that unnecessarily illuminates any other lot or substantially interferes with use or enjoyment of that lot.
4. High-intensity discharge lighting for recreation courts on private property.
5. Spotlights.

D. Exemptions: The following types of lighting are exempt from the lighting requirements of the Chapter:

1. Lighting within the public right-of-way and public parks
2. Permitted lighting for signs pursuant to Chapter 19.104 of the Municipal Code
3. Temporary construction or emergency lighting
4. Short-term lighting authorized by a special events permit
5. Holiday seasonal lighting during the period of October 15 through January 15 of each year
6. Required lighting to comply with Building Code, Fire Code, or state law. To the extent permitted by Building Code, Fire Code, or state law such lighting shall additionally comply with the requirements of this Chapter.

(Ord. 22-2241, § 7, 2022; Ord. 21-2225, Att. A (§ 1, part), 2021)