## 17.01.010 Lighting and Illumination

- A. **Purpose.** The purpose of this Section is to preserve the existing character of our communities and rural areas by minimizing light pollution, glare, and light trespass caused by inappropriate or misaligned light fixtures or luminaires. To ensure a continued ability to enjoy the night sky and minimize conflicts with neighbors, it is necessary to adopt standards for outdoor lighting to accomplish the following objectives:
  - 1. Encourage a less light-oriented nighttime environment for residents, businesses, and visitors, consistent with the concurrent need for nighttime safety, security, and productivity.
  - 2. Require a reduction in unnecessary light intensity and glare, while minimizing light pollution and trespass onto adjacent properties.
  - 3. Protect the ability to view the night sky by restricting unnecessary upward projections of light.
  - 4. Promote energy conservation and a reduction in greenhouse gas emissions that can result from excessive or unwanted outdoor lighting.
- B. **Applicability.** The standards of this Section apply to all new or replaced outdoor luminaires, light fixtures, and/or systems unless specifically exempted below or required pursuant to any other applicable code or regulation.
  - 1. **Exemptions.** The following lighting is exempt from the provisions of this Section.
    - a. Lighting not under the jurisdiction of the County.
    - b. Safety and Security Lighting. Security lighting necessary for public safety facilities. Construction and Emergency Lighting. All construction or emergency lighting fixtures, provided they are temporary and are discontinued immediately upon completion of the construction work or abatement of the emergency.
    - c. *Temporary Seasonal Lighting.* Temporary seasonal lighting displays related to cultural or religious celebrations.
    - d. Luminares with a maximum output of 60 lumens, including solar lights.
    - e. Underwater lights used to illuminate swimming pools, spas, fountains, and other water features.
    - f. Temporary lighting for agricultural activities of a limited duration.
- C. **Prohibitions.** The following types of exterior lighting are prohibited.
  - 1. **Searchlights.** The operation of searchlights and/or laser lights for advertising purposes.
  - 2. *Mercury Vapor.* The operation of mercury vapor lights for any purpose.

- 3. Low Pressure Sodium. Low pressure sodium lights in Residential and Commercial Zones.
- 4. Any lights operated in such a manner as to constitute a hazards or danger to persons or vehicular travel.
- D. **General requirements.** The intent of the following standards is to ensure that outdoor lighting does not constitute a hazard or danger to persons or vehicular travel and to prevent glare and light trespass on adjacent properties and light pollution in the night sky.
  - 1. Compliance With State Codes & Regulations. All lighting installations shall comply with the currently adopted versions of the California Energy Code, California Green Building Standards Code, and all other codes, regulations, & laws applicable to lighting projects with respect to efficiency, lighting controls, minimum & maximum light levels, and other considerations governed by such codes.
  - Maximum Light Levels at Property Lines. The light level at property lines shall not exceed 0.1 foot-candles, except as provided below or where allowed through the approval of a Conditional Use Permit.
    - a. Abutting or Within a Commercial or Industrial Zone. Where a property is located within a Commercial or Industrial Zone and the neighboring property is located within a Commercial or Industrial Zone, the maximum lighting level at the shared property line shall be 0.25 foot-candles.
  - 3. **Shielding.** All outdoor light fixtures shall be fully shielded or full cut off, except as provided below or as specifically stated in another part of this Code.
    - a. Decorative string lights are not required to be shielded.
    - b. Outdoor light fixtures used for outdoor recreational facilities shall be fully shielded except when such shielding would cause impairment to the visibility required in the intended recreational activity. In such cases, partially shielded fixtures and downward lighting methods shall be utilized to limit light pollution, glare, and light trespass to a reasonable level as determined by the Director.
    - c. Partially shielded light fixtures are allowed provided the light source is obscured by translucent glass or other means, the light fixture does not exceed 850 lumens, and the lighting complies with all other provisions of this Section.
    - d. Unshielded light fixtures may be allowed provided the light source is obscured by translucent glass or other means, the light fixture does not exceed 600 lumens, and the fixture is located under a porch or roofed area where no upward directed lighting may escape.
  - 4. *Glare Prevention.* All lights shall be selected, directed, and oriented to prevent light spillover and glare onto adjacent properties. No unobstructed beam of exterior light shall be directed off-site.

- 5. *Timing Controls.* All outdoor lighting in nonresidential development utilize a time clock, photo-sensor, motion controls, and/or other lighting control systems to prevent operation during daylight hours, when the building or site is not in use, and when the lighting is not required for security except as follows.
  - a. Code Required Lighting. Building, emergency, or other construction and safety code required lighting for steps, stairs, walkways, entrances, parking areas, and other building and site features that is dimmed to the minimum light level necessary to meet code requirements.
- 6. *Kelvin.* Light fixtures for outdoor security lighting shall not exceed 5,000 Kelvin. All other outdoor light fixtures shall not exceed 3,500 Kelvin.
- 7. *Maximum Height.* Lighting fixtures shall be installed at the lowest height required to achieve the design purpose of the lighting fixture.
  - a. Building Mounted. Light fixtures shall not exceed the height of the building upon which it is attached.
  - b. Freestanding Light Fixtures. The maximum height of freestanding light fixtures and lighting fixtures mounted on a structure or feature other than a building is as follows:
    - i. <u>Within and/or within 25 feet of a Residential Zone:</u> 16 feet from finished grade.
    - ii. Other Locations: 30 feet from finished grade.
  - c. *Exceptions:* The Director may allow additional height of up to 20 percent of the allowed height for activities, uses, or development with unique lighting needs where the additional light fixture height will not appreciably interfere with the enjoyment of the night sky on nearby properties.
- 8. *Uplighting*. Uplighting is allowed for government flags and commemorative objects such as statues and plaques pursuant to review of the Director where light levels are the minimum necessary to highlight the flag or object and the lighting will not appreciably interfere with the enjoyment of the night sky on nearby properties.

## 9. Sign Lighting.

- a. Externally illuminated signs shall use top mounted light fixtures which shine downward and are directed so that lighting does not shine or glare into traffic patterns within a parking lot, on a road, or onto adjoining property.
- b. Internally illuminated signs shall not produce light such that lighting levels increase by more than 0.3 foot-candles over ambient lighting conditions as measured using a foot candle meter at a distance of 150 feet from the sign. The light source, lamps,

or bulbs shall not be directly visible and shall be obscured by translucent or filtered lenses or designs.

- E. **Submittal of Plans and Evidence of Compliance.** Any application for a permit that includes outdoor light fixtures subject to the standards of this Section shall include evidence that the proposed outdoor lighting will comply with all the standards of this Section. The application shall include:
  - 1. Plans showing the location and height of all outdoor lighting fixtures.
  - 2. Description of the outdoor lighting fixtures including luminaire, lamp or bulb type, wattage, lumen output, temperature rating, and shielding.
  - 3. Photometric plans showing foot-candle readings every ten feet within the property or site and ten feet beyond the property lines, except as provided below.
    - a. Applications for outdoor lighting associated with residential development and property-owner installed lighting are not required to submit photometric plans unless requested by the Director due to project location, size, use, and proposed lighting.
  - 4. The above plans and descriptions shall be sufficiently complete to enable the plan examiner to readily determine whether compliance with the requirements of this Section have been met.