

CHAPTER 31
LIGHTING

SECTION 31.01 GENERAL REQUIREMENTS.

- A. When the installation of outdoor lighting is part of a development proposal for which site plan approval is required, the Planning Commission shall review and approve the lighting installation as part of its site plan approval process.
- B. A lighting plan shall be submitted with the site plan showing luminaire locations, shop drawings with a photometric plan, and additional lighting specifications as may be required by this Ordinance to demonstrate compliance with Ordinance requirements.
- C. Proposed lighting installations not covered by this ordinance may be approved if they are designed to minimize glare, do not direct light beyond the boundaries of the area being illuminated or onto adjacent properties or streets, and do not result in excessive illumination levels.
- D. The maximum light level within the property for a non-residential use shall not exceed 5.0 initial foot-candles measured at the 30-inch work plane, except gasoline service stations with a canopy shall be permitted to have a maximum light level of 20.0 initial foot-candles as measured at the 30-inch work plan under the canopy.
- E. The maximum light level for the parking area serving a multi-family or institutional use shall not exceed 2.0 initial foot-candles.
- F. The Planning Commission may modify the requirements of this section of the ordinance if it determines that in so doing, it will not jeopardize the intent of the ordinance.
- G. All luminaires including building mounted fixtures, shall be cut-off fixtures as defined by IESNA (Illumination Engineering Society of North America) except those exempted under Section 31.02 below. The intensity of the light emitted from the luminaire at any angle above a cut-off angle of 80 degrees from the vertical must be less than 10% of the total lamp lumens of the outdoor luminaires. No more than 2.5% of the lamp lumens shall be emitted above a horizontal plane running through the lowest point on the luminaire where light is emitted.
- H. Electrical light sources shall have a color rendering index of 65 CRI or better.

SECTION 31.02 EXEMPTIONS. The following outdoor luminaires are exempt from the provisions of this ordinance.

- A. Outdoor luminaires installed prior to the effective date of this ordinance are exempt from its provisions; *provided, however, that when there is any change or any replacement, structural alteration or restoration of such outdoor luminaire, then the luminaire shall thereafter conform to all provisions of this ordinance.*
- B. Fossil fuel light produced directly or indirectly by the combustion of natural gas or other utility type fuels.
- C. Street lights located within a public right-of-way.

- D. Outdoor luminaires which use a lamp of 2,000 lumens (approximately equivalent to a 150 watt incandescent lamp) or less except where they create a hazard or nuisance from glare or spill light.
- E. Lighting necessary for road or utility construction or emergencies.

SECTION 31.03 PARKING LOT AND ACCESS DRIVE LIGHTING.

- A. Parking lot lighting shall be designed to provide the minimum lighting necessary to ensure adequate vision and comfort and not to cause glare or direct illumination on to adjacent properties or streets.
- B. All luminaires serving parking lots shall be cut-off fixtures as defined by IESNA's Lighting Handbook.
- C. Mounting heights of standard cut-off luminaires shall not exceed 35 feet. Mounting heights of luminaires that are located within 200 feet of a residential use or district shall not exceed 25 feet.
- D. Alternative Lighting: The use of luminaires from a particular period or architectural style may be utilized as either alternatives or supplements to the lighting described above. If such fixtures are not "cut-off" fixtures as defined by IESNA, the maximum initial lumens by each luminaire shall not exceed 2000 lumens. Mounting heights of such alternative luminaires shall not exceed 15 feet.
- E. The level of light trespass onto surrounding properties or roads shall not exceed 0.1 foot-candles.

SECTION 31.04 CANOPY LIGHTING.

- A. Light luminaires mounted in canopies shall be recessed so that the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy and/or shielded by the luminaire or the edge of the canopy so that light is restrained to no more than 85 degrees from vertical.
- B. As an alternative (or supplement) to recessed ceiling lights in a canopy, indirect lighting may be used where light is beamed upward and then reflected down from the underside of the canopy. In this case luminaires must be shielded so that direct illumination is focused exclusively on the underside of the canopy.
- C. Luminaires shall not be mounted on the top or sides (fascias) of the canopy, and the sides of the canopy shall not be illuminated unless the decorative luminaire puts out less than 500 lumens per linear foot.
- D. The level of light trespass onto surrounding properties or roads shall not exceed 0.1 foot-candles.

SECTION 31.05 SECURITY LIGHTING. All security luminaires shall be shielded and aimed so that illumination is directed only to designated areas within the owner's property and not cast onto other areas. In no case shall lighting be directed above a horizontal plane through the top of the luminaire and the luminaire shall include shields that prevent the light source or lens from being visible from adjacent properties and roadways. The use of general floodlighting fixtures shall be prohibited.

SECTION 31.06 ILLUMINATION OF BUILDING FACADES. When buildings and structures including flags mounted on poles or on buildings are to be illuminated, the Planning Commission shall approve a design for the illumination and the following shall apply:

- A. Maximum illumination on any surface shall not exceed 4.0 initial foot-candles.
- B. Luminaires shall be carefully located, aimed and shielded so that light is directed only onto the item being illuminated and not directed skyward. Luminaires shall not be directed toward adjacent streets, roads or properties.
- C. Luminaires mounted on the building and designed to “wash” the facade with light are preferred.
- D. The illumination of landscaping shall not generate excessive light levels, cause glare, or direct light beyond the landscaping.
- E. The level of light trespass onto surrounding properties or roads shall not exceed 0.1 foot-candles.

SECTION 31.07 NIGHT LIGHTING. Luminaires for off-street parking lots or building facades which face or abut a residential zone shall be turned off between 11:00 p.m. to 6:00 a.m. except for luminaires which are necessary for security purposes during these hours which shall not exceed 1.0 foot-candles at the 30-inch work plane.

SECTION 31.08 DEFINITION OF TERMS. Lighting terms used in this section shall have the same meaning as set forth in the IESNA's *Lighting Handbook*.