

**ORDINANCE NO. 2734-08**

**AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA, AMENDING CHAPTER 58 "LAND DEVELOPMENT CODE" ARTICLE V, "ENVIRONMENTAL PROTECTION REGULATIONS" SO AS TO ADD DIVISION 9 "LIGHTING STANDARDS", PROVIDING FOR APPLICABILITY, PROVIDING AN EFFECTIVE DATE.**

**NOW THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF WINTER PARK:**

**SECTION 1.** That Chapter 58 "Land Development Code", Article V "Environmental Protection Regulations" of the Code of Ordinances is hereby amended by a new Division 9 to read as follows:

**DIVISION 9. EXTERIOR LIGHTING STANDARDS**

**Sec. 58-361. Purpose and intent.**

The purpose and intent of this article is to ensure that exterior (outdoor) lighting positively enhances the visual impact of a building or project on adjacent buildings surrounding properties and uses. To that end, exterior lighting at a building or project shall be designed and installed in a consistent and coordinated fashion to provide safe, convenient and energy efficient lighting for customers, pedestrians and vehicles, and to avoid the creation of hot spots, glare, obtrusive light, light pollution, light trespass, and visual nuisance. Also, exterior lighting shall accentuate key architectural elements of the building or project, and highlight or otherwise emphasize landscape features.

**Sec. 9-362. Scope.**

This article shall apply to all buildings and projects with exterior lighting in the City, except single family residences, duplexes, and triplexes. At religious institutions, this article shall apply only to paved parking areas; IESNA standards shall apply to non-paved parking areas.

**Sec. 9-363. Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context may clearly indicate a different meaning:

*Color rendering index (CRI)* shall mean the scale used to compare the effect of the light source on the color appearance of its surroundings. (The higher the score, the more accurately the light source reflects true color.)

*Cutoff fixture* shall mean an outdoor light fixture that provides a cutoff (shielding) of the emitted light.

*Fixture* shall mean the assembly that houses the lamp or lamps, and may include all or some of the following parts: reflector (mirror), refractor (lens), ballast, housing, and other attachment parts.

*Footcandle (f.c.)* shall mean a measure of light noted as a unit of illuminance amounting to one lumen per square foot.

*Glare* shall mean intense and somewhat blinding light, or the sensation produced by a brightness within the visual field that is sufficiently greater than the intensity of light to which human eyes are accustomed or adapted, thereby causing annoyance, discomfort, visual impairment, or loss or reduction of visibility.

*Hot spot* shall mean an area of very high illumination above normal footcandle levels -- typically found in an area directly underneath a luminaire, making normal f.c. levels appear relatively dark.

*Illuminance* shall mean the quantity of light arriving at a surface divided by the area of the lighted surface, measured in footcandles.

*Illuminating Engineering Society of North America (IES or IESNA)* shall mean the nonprofit professional society of lighting engineers and specialists that has established recommended design standards for various exterior lighting applications.

*Internal louvered optical system* shall mean a series of high specular (mirror type) stacked louvers that cover the lamp, creating a cutoff, low glare light pattern.

*Lamp* shall mean a light bulb.

*Lighting professional (approved)*. A licensed professional engineer or other professional have a technical expertise in lighting design as determined by the building official.

*Light pollution* shall mean any adverse effect of manmade light, often used to denote a brightness of the night sky, commonly known as urban sky glow.

*Light trespass* shall mean light falling where it is not desired, wanted or needed.

*Lumen* shall mean a quantitative unit measuring the amount of light emitted by a lamp or luminaire.

*Luminaire* shall mean a complete lighting unit consisting of the lamp, the fixture and other parts designed to distribute the light.

*Metal halide (lamp)* shall mean a high intensity discharge lamp where the light is produced by radiation from metal-halide vapors, and which renders colors close to their daytime appearance.

*Obtrusive light* shall mean light which causes annoyance, discomfort, visual impairment, or loss or reduction of visibility.

*Sag lens, convex lens or drop-lens* shall mean a clear or prismatic or frosted lens that extends below the lowest opaque portion of a light fixture.

*Spill light* shall mean light which shines or emanates outside the property limits where the luminaire is sited.

## **Sec. 58-364. Exterior lighting.**

### *(a) General standards.*

(1) *Exterior lighting plan.* An exterior lighting plan, including a photometric plan (which covers the parcel which is the site of the building or project in question), appropriate pole, fixture, and lamp technical specifications, descriptions of lenses and optical systems and appropriate data tables shall be submitted for review. The exterior lighting plan shall be prepared by a professional engineer, landscape architect or professional architect registered in Florida who shall certify on the photometric plan that the exterior lighting plan complies with this article. The photometric plan shall be prepared in a scale that is easily legible.

(2) *Lighting intensities.* Lighting intensities for buildings, projects, or other uses not specifically regulated by this article (for example, athletic fields, courts, and swimming pools) shall be designed as recommended by the Illuminating Engineering Society of North America (IESNA). However, all such uses shall comply with these regulations for control of glare and light level at the property line, by using hoods, visors or similar shielding devices.

(3) *Footcandle intensities.* Footcandle intensities specified in this article shall be maintained values calculated using a maintenance factor ("m.f.") not lower than 1.0.

(4) *Light fixtures; types.* All light fixtures, including security lighting, shall be cutoff fixtures, and shall be incorporated as an integral design element that complements the design of the building or project through style, material or color. Luminaires shall not be tilted. Lighting of or on buildings shall be limited to wall washer type fixtures or up-lights, which do not produce spill light or glare. A cutoff fixture shall not have more than one percent (1%) of lamp lumens above horizontal. Sag lenses, convex lenses, and drop lenses shall be prohibited. Lighting at a building or project shall not be comprised in whole or part of any floodlights, except floodlights may be permitted with a noncommercial industrial use, provided the floodlights are shielded to meet cut-off standards and light levels at the property line.

(5) *Illumination levels.* Illumination levels at the interior (side or rear) property line of the building or project shall not be more than 0.5 f.c. at any point when the building or project is located next to any residential use, and shall not be more than 1.0 f.c. when

located next to any other use. To avoid glare or spill light from encroaching onto adjacent properties, illumination shall be installed with house side shields and reflectors, and shall be maintained in such a manner as to confine light rays to the premises of the building or project.

(6) *Time controls.* Non-residential lighting shall be installed with time controls so that light levels are reduced not later than one hour after the close of operations to the minimum levels needed under the IESNA to ensure safety and security (approximately a fifty (50) percent reduction).

(7) *Upgrade or replacement.* When fifty (50) percent or more of any component (e.g., luminaires, poles) of the exterior lighting system at a building or project is upgraded, changed, or replaced (not including regular maintenance), such component for the remainder of the exterior lighting shall be brought into substantial compliance with the requirements of this article.

(b) *Specific standards.*

(1) *Height.* Except as otherwise required under this article, the height of an outdoor lighting fixture (inclusive of the pole and light source/luminaire) shall be a maximum of sixteen (16) feet. For large parking lots over one acre in area, a maximum pole and lighting fixture height of thirty (30) feet shall be permitted. Height shall be measured from the finished grade to the top of the light fixture. The height of the fixture shall be in scale with the building; for example the fixture height shall not exceed the height of the building. Parking lots adjacent to or across the street from residential properties will be subject to lesser height requirements to prevent glare or light trespass onto those properties. Any additional fixture height increase or deviation for heights of fixtures will be considered on a case by case basis where it is shown not to be detrimental to the purpose and intent of this Division.

(2) *Parking areas.* To avoid conflict in layout, parking area lighting shall be coordinated with the required parking area landscape plans. In a parking area, the following lighting requirements shall apply:

a. The lamp source shall be metal halide, or compact fluorescent, or a light source that produces a Color Rendering Index (CRI) of sixty-five (65) or higher. Wattage shall not exceed four hundred (400) watts per bulb.

b. Illumination levels outside the radius of any light pole or the building mounted fixture (with radius meaning or equaling the height of the fixture, not to exceed thirty (30) feet, but no less than twenty (20) feet) shall range between a minimum of 0.6 f.c. and a maximum of 3.6 f.c. The thirty-foot or lesser radius shall be shown on the photometric plan. Overflow lighting in a transition zone around a canopied area (see subsection (b)(4) regarding canopied areas) shall be permissible in the parking area surrounding the canopied area, notwithstanding the general lighting requirements in this subsection (b)(2) for parking areas.

c. Decorative acorn-type fixtures shall not exceed sixteen (16) feet in height and one hundred seventy five (175) watts per bulb, and shall have a textured clear lens/globe, frosted/phosphor coated bulbs, and an internal louvered optical system. (Refractor type glass globes that meet the cutoff standard and are equipped with frosted/phosphor

coated bulbs are acceptable.) Any additional fixture height increase will be considered on a case by case basis where it is shown not to be detrimental to the purpose and intent of this Division. Acorn-type fixtures may be permitted in other locations on a case by case basis.

(3) *Pedestrian walkways and bikeways.* In pedestrian walkways or bikeways away from buildings the following lighting requirements shall apply:

- a. The light fixture/luminaire shall match or complement the architecture of the building.
- b. The lamp source shall be metal halide, or compact fluorescent, or a light source that produces a CRI of sixty-five (65) or higher and shall not exceed one hundred (100) watts per bulb.
- c. Illumination level shall not exceed a maximum of 2.5 f.c.

(4) *Vehicular Canopied areas.* At a vehicular canopied area, such as that found at drive-through facilities at banks, service stations, convenience centers, and car-washes, lighting under the vehicular canopy, awning, porte-cochere, etcetera, shall be either recessed or cut-off fixtures. Additionally, the following lighting requirements shall apply:

- a. The lamp source shall be either metal halide, with wattage not to exceed two hundred fifty (250) watts per bulb, or compact fluorescent, or a light source that produces a CRI of sixty-five (65) or higher;
- b. The maximum footcandle level shall be fifteen (15) f.c. (average maintained maximum),

(5) *Dealerships.*

a. Display areas at dealerships for new and used vehicles, such as automobiles, trucks, recreational vehicles, motorcycles, and boats, shall have a maximum footcandle level of fifteen (15) f.c. for any row or tier of display that is adjacent to an external road or street (public or private), and a maximum level of ten (10) f.c. for all other rows or tiers of display. However, overflow lighting in a transition zone around a row or tier of display that is adjacent to an external road or street shall be permissible between such row or tier and the adjoining row or tier.

b. Entrances and exits to and from the dealership shall not exceed ten (10) f.c. when located away from the main display areas.

c. All other areas (parking and storage) shall comply with the applicable requirements of this Division.

d. Existing dealerships may continue with current lighting levels; however, when undergoing redevelopment or remodeling as a new dealership lighting levels shall be reduced by at least 10% in foot candle measurement.

(6) *Fire lanes and driveways.* Lighting at fire lanes or driveways at building entrances may exceed allowable standards of intensity for safety purposes upon demonstration that compliance with these lighting criteria would otherwise create a safety hazard.

(7) *Automatic teller machines (ATMs)*. Lighting intensities at ATM machines shall be governed by applicable Florida Statutes. However, free standing ATMs shall not exceed twenty (20) f.c. within a five-foot radius from the ATM or five (5) f.c. within a thirty-foot radius.

(8) Parking garages. Light for parking garages shall be designed to have no visible glare emitted from each intermediate story and shall incorporate low wall mount or similar fixtures on the exterior perimeter of the top level of the garage. Internal fixtures on the top level shall be installed no more than twelve (12) feet above the floor surface and shall provide shielding to minimize visibility from neighboring properties.

(9) Adjustable fixture mounting systems are prohibited unless they are designed to comply with the provisions of this Division at all adjustable positions of the fixture.

(10) Wall mounted fixtures shall be a full cutoff type fixture.

(11) Backlit awnings on storefronts or similar locations may be prohibited in areas subject to architectural design review such as the Central Business District, Morse Boulevard, and Winter Park Village.

#### **Sec. 58-365. Technical deviations.**

- (a) Any proposal which includes technical deviations from these lighting standards shall demonstrate the unique aesthetic and/or lighting design that meets or is within the spirit of these regulations. Such presentation shall include appropriate calculations and drawings or illustrations as necessary to explain the request or as may be required by the City.
- (b) The building official shall make a determination whether to accept such proposed technical deviation. The cost of making such determination shall be borne by the party requesting the technical deviation.
- (c) Alternate methods of lighting to accomplish green building standards or alternate decorative lighting such as gas lamps or lights shall be considered on a case by case basis but shall not violate the intent of this Division.

#### **Sec. 58-366. Letter of compliance required.**

The building official shall not issue a certificate of occupancy until a licensed professional engineer or approved lighting professional delivers a letter of compliance stating that the exterior lighting at the building and site complies with this article. However, for a small scale project (buildings under 5,000 square feet in gross area) a letter of compliance may be provided by the licensed professional that prepared the plans for the project.

**Section 2.** It is the intention of the city commission of the city that the provisions of this ordinance shall become and be made a part of the Code of Ordinances of the city; and that sections of this ordinance may be numbered or renumbered or lettered or relettered and the word "ordinance" may be changed to "chapter", "section", "article", or


such other appropriate word or phrase in order to accomplish such intentions; and regardless of whether such inclusion in the code is accomplished, sections of this ordinance may be numbered or renumbered or lettered or relettered and typographical errors which do not affect the intent may be authorized by the city manager, without need of public hearing, by filing a corrected or recodified copy of same with the city clerk.

**Section 3.** All ordinances or parts of ordinances in conflict herewith are hereby repealed.

**Section 4.** If any section, subsection, sentence, clause, phrase of this ordinance, or the particular application thereof shall be held invalid by any court, administrative agency, or other body with appropriate jurisdiction, the remaining section, subsection, sentences, clauses or phrases under application shall not be affected thereby.

**Section 5. Effective Date.** This ordinance shall take effect on immediately upon its adoption.

**ADOPTED** at a regular meeting of the City Commission of the City of Winter Park, Florida, held at City Hall, Winter Park, Florida, on the 24<sup>th</sup> day of March, 2008.

  
\_\_\_\_\_  
Mayor David C. Strong

Attest:   
\_\_\_\_\_  
City Clerk Cynthia S. Bonham