

Lighting Ordinance

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM TO: AMEND ARTICLE II, DEFINITIONS, TO ADD DEFINITIONS FOR OUTDOOR LIGHTING STANDARDS AND TO AMEND ARTICLE XX, GENERAL PROVISIONS TO ADD SECTION 126-500 AND 126-501, OUTDOOR LIGHTING STANDARDS FOR O-1, O-2, B-1, B-2, B-2B, B-3, B-4, M-X, P, R-5, R-6, AND R-7 ZONE DISTRICTS.

THE CITY OF BIRMINGHAM ORDAINS:

Chapter 126, Zoning, of the Birmingham City Code, Article II, Section 126-26, Definitions, is hereby amended to read as follows:

Canopy structure: Any overhead protective structure which is constructed in such a manner as to allow pedestrians/vehicles to pass under.

Footcandle: A unit of illumination produced on a surface, all points of which are one foot from a uniform point source of one candle

Glare: Direct light emitted by a luminaire that causes reduced vision or momentary blindness-

Illuminance: The level of light measured at a surface.

Light Nuisance: Detrimental illuminance within the visual field, **greater than 3.0 footcandles**, that is sufficiently greater than the illuminance to which the eyes are adapted that causes annoyance, discomfort, and is otherwise distressful to surrounding properties.

Light shield: Any attachment which interrupts and blocks the path of light emitted from a luminaire or fixture.

Lamp: The component of the luminaire that produces the actual light including luminous tube lighting.

Light Fixture: The assembly that holds a lamp and may include an assembly housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and a refractor or lens. A light fixture also includes the assembly for luminous tube and fluorescent lighting.

Light Pollution: General sky glow caused by the scattering of artificial light which may have a detrimental effect on the environment, enjoyment of the night

sky or causes undesirable glare or unnecessary illumination of adjacent properties.

Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located measured at 5 feet above grade at the property line.

Luminaire: The complete lighting system including the lamp and light fixture.

Mounting Height: The vertical distance between the surface to be illuminated and the bottom of the light source.

Outdoor Light Fixtures: Outdoor artificial illuminating devices, outdoor fixtures, lamps and other similar devices or systems, permanently installed or portable, used for flood lighting, general illumination or advertisement.

Shielded Fixture: Outdoor light fixtures shielded or constructed so that light rays emitted by the fixture are projected below the horizontal plane passing through the lowest point on the fixture from which light is emitted, i.e. a shoebox-type fixture or a cutoff fixture as defined by the Illuminating Engineering Society of North America. The fixtures almost always have a flat, horizontally oriented lens and opaque (usually metal) sides. A luminaire mounted in a recessed fashion under a canopy or other structure so that the surrounding structure effectively shields the light in the same manner is also considered fully shielded for the purposes of this Chapter.

Spot Light: A lighting assembly designed to direct the output of a contained lamp in a specific tightly focused direction (a beam) with a reflector located external to the lamp, generally allowed on a temporary basis.

Chapter 126, Zoning, of the Birmingham City Code, Article XX, General Provisions, Division 2, Site Plan Review, is hereby amended to add Section 126-500 Intent and Purpose regarding Outdoor Lighting Standards, which shall read as follows:

INTENT & PURPOSE

The purpose of this Chapter is to protect the health, safety and welfare of the public by recognizing the need for buildings and sites to be illuminated for safety, security and visibility for pedestrians and motorists balanced against the often detrimental effects associated with the use of outdoor lighting. This Chapter provides standards for various forms of lighting that will: minimize light pollution; reduce the potential for off-site light pollution; preserve the restful quality of nighttime by eliminating intrusive artificial light and lighting that unnecessarily contributes to sky glow; reduce light pollution and light trespass from light

sources onto adjacent properties; enhance customer and employee safety; contribute to improving visibility by requiring illuminated areas to have uniform light; and curtail the degradation of the nighttime visual environment.

Chapter 126, Zoning, of the Birmingham City Code, Article XX, General Provisions, Division 2, Site Plan Review, is hereby amended to add Section 126-501 regulations for Outdoor Lighting Standards, which shall read as follows:

1. APPLICABILITY

The standards in this Chapter shall apply to any light source visible beyond the property from which it is emanating. The Building Official or City Planner may review any building or site to determine compliance with the requirements under this Chapter. Whenever a person is required to obtain a building permit, electrical permit for outdoor lighting or illuminated signs, a Special Land Use approval, multiple-family residential lighting approval, subdivision approval or site plan approval from the City, the applicant shall submit sufficient information to enable the Building Official or City Planner to determine whether the proposed lighting will comply with this Chapter.

2. SUBMITTAL REQUIREMENTS

The following information must be included for all site plan submissions which include any new exterior lighting and where site plan approval is not required, some or all of the items may be required by the Building Official or City Planner prior to lighting installation:

- A) Location of all outdoor lighting fixtures, including but not limited to freestanding pole fixtures, building-mounted and canopy light fixtures on the site plan and building elevations;
- B) Photometric grid overlaid on the proposed site plan indicating the light intensity throughout the site (in footcandles). Measurements must be at ground level and shown at 10' spacing;
- C) Manufacturer's specification sheets and details for the type of fixture being proposed including but not limited to the total footcandle output, type of lamp, distribution type and method of shielding;
- D) Maximum footcandle calculation and minimum footcandle calculation. These statistics shall be provided for areas where vehicular and pedestrian movement is provided for and for other areas as necessary to show compliance with standards of Section 126-500 ;
- E) Use of fixture(s) proposed; and

F) Any other information deemed necessary by the Building Official or City Planner in accordance with the intent and purpose of this chapter.

3. GENERAL STANDARDS

A) Unless otherwise permitted, only shielded fixtures as defined in section 26-26 may be used. Any interior light fixtures that are deemed to be causing glare and therefore not meeting the purpose or intent of this ordinance shall be shielded to prevent glare at the property line.

B) Decorative fixtures using lamps with low wattages do not have to be shielded; these include incandescent lamps of 100 watts or less, glass tubes filled with neon, argon and krypton and any other light source of 100 watts or less. Decorative luminaries above 100 watts shall have internal and/or external reflectors that shield the light source.

C) It is recognized that metal halide and fluorescent lamps are superior lights for color and object recognition when compared to other lamp types such as low and high pressure sodium or mercury vapor. Therefore, use of metal halide and fluorescent lamps is highly encouraged over low or high pressure sodium or mercury vapor lamps. It is also recognized that as the lighting industry develops, new lamp types are occasionally introduced that may have similar characteristics as the currently preferred types that may also be desirable for use in outdoor lighting.

D) The intensity of light on a site shall not exceed three-tenths (0.3) foot candles at any property line that abuts a residential zoned property or three (3.0) foot candles for any other zoned property. To encourage energy conservation, it is recognized that some commercial, office and industrial sites may desire to share fixtures along property lines or allow light to trespass onto adjacent sites. Such light trespass shall be allowable if a letter of permission is provided by the property owner where the light trespass is occurring and if the footcandle intensities meet the intent and purpose of this ordinance, as determined by the Building Official or City Planner.

E) All exterior lighting shall be designed in a consistent and coordinated manner for the entire site.

Indirect internal illumination of signs and canopies is permitted provided a maximum one hundred and twenty five (125) watt bulb is utilized and the transmittal surface is of a color and material that effectively shields lamps.

F) Building facades and signs shall not be illuminated if they are of glass, polished metal or other glossy surface including painted surfaces. Building facades shall also not be entirely illuminated; illumination shall be for

architectural ornament and/or the illumination of small areas for visibility and security. For spotlight fixtures, no less than ninety percent (90%) of the light beam must be concentrated on the surface intended to be illuminated.

G) For fixtures mounted directly to a wall surface or sign, external shields or dark colored non-reflective surface materials or other appropriate methods shall be used to minimize reflectance glare.

H) The maximum height of parking lot light fixtures shall be twenty (20) feet when within one hundred and fifty (150) feet of a residential zone or public or private roadway, and twenty-five (25) feet when one hundred and fifty (150) feet from a residential zone or public or private roadway.

4. LIGHTING INTENSITY

A) For exterior recreational facilities, sufficient information must be submitted that demonstrates that the location, selection and aiming of all lighting fixtures will focus light on the playing areas, minimize glare and visibility from adjacent and nearby properties and roadways and minimize sky glow. A written explanation and statements shall be supplied explaining why locations, fixtures types, intensities, orientation of fixtures and other decisions were made. Lighting of sports facilities shall not be operated except for 45 minutes before, during, and forty five (45) minutes after an event is over.

5) PROHIBITED OUTDOOR LIGHTING

- a) Laser light sources, search lights, or any other high intensity light **greater than 3.0 footcandles.**
- b) Flashing, moving or intermittent type lighting.
- c) **Exposed** Neon gas tubing or other **exposed** neon gas lighting.

6. EXEMPTIONS

The following are exempt from the lighting requirements of this section, provided they are not deemed a light nuisance.

- A) Lighting for Private Swimming Pools
- B) Lighting for Holiday Decorations
- D) Pedestrian Walkway Lighting
- E) Single Family Residential Lighting

- F) Streetlights
- G) Approved Special Event Lighting
- (H) Lighting for U.S. Flags

7. LIGHT NUISANCE VIOLATIONS

Any lighting structure erected, constructed, enlarged, altered, replaced, moved, improved, or converted contrary to the provisions of this section shall be unlawful and declared a light nuisance and is subject to abatement in the manner provided by law.

8. ADMINISTRATION

- a) An outdoor lighting permit shall be issued for all approved lighting plans. The permit shall list what is being approved and contain copies of relevant documents.
- b) The Building Official or City Planner shall have the discretion and the authority to require redirection of existing light fixtures when it is determined that the fixture is creating off site glare.

9. ALTERATIONS TO APPROVED LIGHTING PLAN

Should any fixture, light source, or other element of an approved lighting plan be changed after an outdoor lighting permit has been issued, a change request must be submitted to the City Planner for approval, together with adequate information to assure compliance with this ordinance.