

#### **ORDINANCE NO. 2003-08-01**

AN ORDINANCE OF THE CITY OF LAVON, TEXAS FOR THE REGULATION OF OUTDOOR LIGHTING. THE PURPOSE OF THIS ORDINANCE IS TO CREATE STANDARDS FOR OUTDOOR LIGHTING TO MINIMIZE LIGHT POLLUTION, GLARE, AND LIGHT TRESPASS CAUSED BY INAPPROPRIATE OR MISALIGNED LIGHT FIXTURES, WHILE IMPROVING NIGHTTIME PUBLIC SAFETY, UTILITY, AND SECURITY.

WHEREAS, the City Council of the City of Lavon, Texas finds it necessary to adopt and enforce Outdoor Lighting Regulations; and the following Ordinance shall be put in place; and

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LAVON, COLLIN COUNTY, TEXAS:

#### **OUTDOOR LIGHTING REGULATIONS**

## **SECTION 1 DEFINITION:**

For the purposes of this section, the following definitions shall apply, unless clearly indicated to contrary.

**Direct Light**: Light emitted directly from the lamp, off of the reflector or reflector diffuser, or through the refractor or diffuser lens, of a luminaire.

Fixture: The assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and/or a refractor or lens.

Flood or Spotlight: Any light fixture or lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction.

Fully Shielded: shall mean a technique or method of construction and/or manufacture which does not allow any light dispersion to shine above the horizontal plane from the highest light emitting point of the light fixture. In addition, the light emitting, distributing, reflecting and refracting components of the light fixture, i.e. lamp, lens, reflective surface, etc., shall not extend beyond the shielding of the fixture. Any structural part of the light fixture providing this shielding shall be permanently affixed to the light fixture.

Glare: shall mean artificial light that causes annoyance, discomfort, or loss of visual performance and visibility.

Height of Luminaire: The height of a luminaire shall be the vertical distance from the ground directly below the centerline of the luminaire to the lowest direct-light-emitting part of the luminaire.

High Intensity Discharge (HID): an electric lamp that produces light directly from an arc discharge under high pressure. Metal halide, high-pressure sodium, and mercury vapor are types of HID lamps.

**High Pressure Sodium**: A type of HID lamp that uses sodium under high pressure as the primary light-producing element. These lights produce a golden white color and are typically used for interior industrial applications, such as in warehouses and manufacturing, and for security, street, and area lighting.

Indirect Light: Direct light that has been reflected or has scattered off of other surfaces.

Installed: The initial installation of outdoor light fixtures defined herein, following the effective date of this ordinance. A project with an approved building permit prior to the effective date of this ordinance is excluded from compliance with the article for the initial installation only.

Lamp: The component of a luminaire that produces the actual light.

Light pollution: Any artificial light that causes a detrimental effect through uplighting on the environment or causes undesirable glare or light trespass.

Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located.

Low Pressure Sodium: A discharge lamp in which light is produced by radiation from sodium vapor operating at a low pressure (0.1-1.5 Pascals). Low-pressure sodium is commonly used for outdoor, roadway, parking lot, and pathway lighting and light output is monochromatic yellow

Lumen: A unit of luminous flux. One foot-candle is one lumen per square foot. For the purposes of this Ordinance, the lumen-output values shall be the INITIAL lumen output ratings of a lamp.

Luminaire: This is a complete lighting system, and includes a lamp or lamps and a fixture.

Metal Halide: a HID light source in which radiation from a mixture of metallic vapors produces visible light, characterized by a white color.

Outdoor light fixtures: Outdoor electrically powered illuminating devices, outdoor light or reflective or refractive surfaces, lamps and similar devices including all parts used to distribute the light and/or protect the lamp, permanently installed or portable, used for flood lighting, general illumination or advertisement. Such devices shall include, but are not limited to, lights for:

- 1. buildings and structures, including canopies and overhangs;
- 2. recreation facilities;
- 3. parking lot lighting;
- 4. landscape lighting;
- 5. advertising signs;
- 6. display and service areas; and
- 7. walkway lighting

Outdoor Lighting: The nighttime illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

Page 2 of 8 Outdoor Lighting Regulations Outdoor recreation facility: An area designed for active recreation, whether publicly or privately owned, including, but not limited to, baseball and softball diamonds, soccer and football fields, golf courses, tennis courts and swimming pools.

Partially Shielded: An outdoor light fixtures designed or constructed so that ninety-five percent (95%) of the light rays emitted by the fixture are projected below the horizontal plane passing through the photometric center of the fixture from which the light is emitted.

**Temporary outdoor lighting**: The specific illumination of an outside area of object by any man-made device located outdoors that produces light by any means for a period of less than 7 days, with at least 180 days passing before being used again.

**Uplighting**: Any artificial light source that distributes light above an imaginary horizontal plane passing through the highest light emitting point of the light fixture.

Wall Pack: A building-mounted luminaire installed for the purpose of lighting the adjacent ground areas, walkways, streets and/or parking lots.

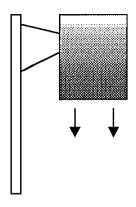
# **SECTION 2 GENERAL REQUIREMENTS**

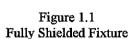
a. All outdoor light fixtures installed after the effective date of this ordinance and thereafter maintained upon private property used for commercial, industrial or multi-family purposes shall be fully shielded in accordance with Table 2.1. In addition, light trespass and glare shall be limited to a reasonable level through the use of shielding, and directional lighting methods, including, but not limited to, fixture location and height. Refer to Figures 1.1 and 1.2 for shielding examples. Lighting in the public right-of-way is exempted from this ordinance.

Table 2.1 Shielding Requirements

Fixture Lamp Type	Shielding
Low Pressure Sodium	Partial
High Pressure Sodium	Fully
Metal Halide	Fully
Fluorescent	Fully
Quartz	Fully
Incandescent greater than 160 watts	Fully
Incandescent less than 160 watts	None
Any light source 100 watts or less	None
Glass tubes filled with neon, argon or	None
krypton	
Other	Determined by City

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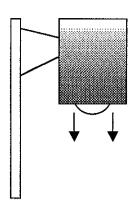


Figure 1.2 Partially Shielded Fixture

- b. Externally illuminated signs, advertising displays, billboards, and building identification shall use top mounted light fixtures which shine light downward and which are fully shielded.
- c. Low-pressure sodium lighting by itself shall not be used in outdoor light fixtures due to poor color rendition and the need by public safety personnel to identify color in the nighttime environment. A combination of low-pressure sodium lighting and other type(s) of lighting, such as, fluorescent, may be used if color rendition can be maintained.
- d. Outdoor light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a very narrow cone of light for the purpose of confining the light to the object of interest and minimize spill-light and glare.
- e. Outdoor light fixtures used for outdoor recreational facilities shall be fully shielded except when such shielding would cause an impairment to the visibility required in the intended recreational activity. In such cases, partially shielded fixtures and directional lighting methods shall be utilized to limit light pollution, glare and light trespass to a reasonable level, as determined by the City, without diminishing the performance standards of the intended recreational activity. Illumination from recreational facility light fixtures shall be shielded to minimize glare extending toward roadways where impairment of motorist vision might cause a hazard.
- f. Light trespass, on adjacent residential or unlighted properties shall be minimized by complying with the following:
  - 1. Provide material, methods, and designs so that no more than 0.25 foot-candle is measured at the property line of the adjacent property and at six feet, six inches above the ground.
  - 2. Wall packs shall not be mounted higher above the ground than their distance to the lot (property) line unless they are mounted so as to direct the light away from the adjacent property, i.e., on a wall on the property line, but directed inward.
  - 3. Where the adjacent property is residential, all lighting shall be arranged so as to direct the light away from the adjacent property.

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- g. Direct or nuisance glare shall be minimized by compliance with the following luminaire construction and mounting height requirements:
  - 1. Wall pack type luminaries may be partially shielded if they are mounted so as to direct the light away from the adjacent property or if the adjacent property is commercial.
  - 2. All wall packs shall have optics designed to direct the light away from the wall and shall incorporate internal house (wall) side shields, baffles or reflectors to minimize wall brightness.
  - 3. All building-mounted luminaries shall be a maximum of fifteen feet, zero inches in height above ground to the luminaire in residential areas, and a maximum of twenty feet, zero inches in height above ground to the luminaire in all other areas.
- h. Freestanding luminaries are permitted to be a maximum of thirty (30) feet in height. When a luminary is located within one hundred (100) feet of residential property, the maximum permitted height shall be twenty five (25) feet. Freestanding luminaries shall be fully shielded.
- i. Time of Operation
  - 1. On-premises advertising signs may be illuminated all night;
  - 2. Outdoor recreational facilities may remain lighted past ten p.m. to complete recreational activities that are in progress and under illumination at ten p.m. and still be in conformance with this chapter, i.e., activities in progress may complete after ten p.m., but they cannot start under illumination after ten p.m.

# **SECTION 3 EXEMPTIONS**

- a. All outdoor light fixtures existing and legally installed prior to the effective date of this ordinance are exempt from the provisions of this article, provided, however, that no replacement, structural alteration, or restoration of outdoor light fixtures shall be made unless it thereafter conforms to the provisions of this article. However, exemptions shall be granted to this conformance standard if:
  - 1. utilization of conforming outdoor light fixtures would have the effect of decreasing the lighting levels to below the minimum illumination levels required by the city, and, the additional cost necessary to meet the minimum illumination levels would pose an unreasonable financial burden; and/or
  - 2. utilization of conforming outdoor light fixtures would negatively impact the aesthetic quality/architectural design of the property or immediate area by mixing substantially different styles and types of fixtures/poles.
- b. All outdoor light fixtures producing light directly by the combustion of fossil fuels, such as, kerosene lanterns or gas lamps, are exempt from the requirements of this article.
- c. Temporary lights used for holiday decorations are exempt from the requirements of this article during holiday periods.

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- d. Construction or emergency lighting is exempt, provided such lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency necessitating said lighting.
- e. Signs of the type constructed of translucent materials and wholly illuminated from within are exempt from the shielding requirement.
- f. All temporary emergency lighting needed by the Police or Fire Departments or other emergency services, as well as all vehicular luminaires, shall be exempt from the requirements of this ordinance.

## **SECTION 4 PROHIBITED LIGHTS**

Exterior lighting luminaries existing on the effective date of this Ordinance which are found to direct light or glare onto residential properties may be declared a public nuisance if the level of illumination on residential property is greater than 0.25 foot-candle. Such fixtures shall be altered to comply with the provisions of this Ordinance within two (2) months of receiving a written notice of violation from the City.

Certain Other Fixtures and Lamps. The installation, sale, offering for sale, lease or purchase of any low pressure sodium, high pressure sodium, metal halide, fluorescent, quartz or incandescent outdoor lighting fixture or lamp the use of which is not allowed by Table 2.1 is prohibited.

Laser Source Light. The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal is prohibited.

Searchlights. The operation of searchlights in the City of Lavon is prohibited.

#### SECTION 5 TEMPORARY EXEMPTION

The City of Lavon may grant a temporary exemption, as defined herein, for such activities, including, but not limited to circuses, fairs, carnivals, sporting events, and promotional activities, if the following apply:

- 1. The purpose for which the lighting is proposed is not intended to extend beyond thirty (30) days:
- 2. The proposed lighting is designed in such a manner as to minimize light pollution as much as feasible; and
- 3. The proposed lighting will comply with the general intent of this ordinance.

The application for a temporary exemption shall include the following information:

- 1. Name and address of applicant and property owner;
- 2. Location of proposed fixtures;
- 3. Type, wattage and lumen output of lamp(s);
- 4. Type and shielding of proposed fixture(s);
- 5. Intended use of lighting:

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- 6. Duration of time for requested exemption;
- 7. The nature of the exemption;
- 8. Such other information as the City may request.

The City may grant one (1) renewal of the application for up to an additional thirty (30) days if, because of an unanticipated change in circumstances, a renewal would be in the public interest. The City will not grant more than one (1) thirty (30) day temporary exemption and one (1) renewal for up to a thirty (30) day period for the same property within one (12) month period.

# SECTION 6 VIOLATIONS, LEGAL ACTIONS, AND PENALTIES:

- a. Violations and Legal Actions: If, after investigation, the Code Enforcement Officer finds that any provision of the Ordinance is being violated, he shall give notice by hand delivery or by certified mail, return-receipt requested, of such violation to the owner and/or to the occupant of such premises, requesting that violation be abated within thirty (30) days of the date of hand delivery or of the date of mailing of the notice. If the violation is not abated within the thirty-day period, the Code Enforcement Officer may institute actions and proceedings, either legal or equitable, to enjoin, restrain, or abate any violations of this Ordinance and to collect the penalties for such violations.
- b. Penalties: A violation of this Ordinance, or any provision thereof, shall be punishable by a criminal penalty of no more than one hundred dollars (\$100), and each day of violation after the expiration of the thirty-day period provided in the previous paragraph shall constitute a separate offense for the purpose of calculating the civil penalty.

#### SECTION 7 SEVERABILITY CLAUSE

If any section, paragraph, subdivision, clause, phrase, or provision of this ordinance is adjudged invalid or held unconstitutional, the same shall not affect the validity of this ordinance as a whole or any part or provisions thereof, other than the part so decided to be invalid or unconstitutional.

#### SECTION 8 EFFECTIVE DATE

Whereas, it appears that this ordinance should be adopted to protect the public interest, welfare, health, peace, and safety of the citizens of the City of Lavon. Therefore this ordinance shall be in full force and effect from and after its adoption by the City Council and publication of its caption as the law provides in such cases.

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# PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF LAVON, COLLIN COUNTY, TEXAS ON THIS \$1TH DAY OF AUGUST, 2003.

OF LAVONTEXAS

Steve Parker, Mayor

ATTEST:

Rosa Stovall, City Secretary

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