

APPROVED

12-6-23


MAYOR

ORDINANCE 2023-20

**AN ORDINANCE OF THE TOWNSHIP OF FLORENCE IN THE COUNTY
OF BURLINGTON, NEW JERSEY ADOPTING SECTION 91-87.1
LIGHTING STANDARDS FOR NON-RESIDENTIAL USES
OF THE TOWNSHIP CODE**

NOW THEREFORE BE IT ORDAINED by the Council of the Township of Florence, in the County of Burlington and State of New Jersey that:

SECTION 1. Article XV Required Improvements of Chapter 91 is hereby supplemented to add a new Section to the Township Code, known as Chapter 97-87.1 LIGHTING STANDARDS FOR NON-RESIDENTIAL USES is hereby created to read as follows:

SECTION 91-87.1 LIGHTING STANDARDS FOR NON-RESIDENTIAL USES

A. Intent

The purpose of this Ordinance is to provide regulations for outdoor lighting that will:

1. Provide sufficient lighting on each site and along roadways for safety, utility, security, productivity, enjoyment, and commerce.
2. Be designed to avoid the creation of hazards to motorists and pedestrians or nuisance to adjoining property owners or residents.
3. Minimize adverse offsite impacts including light trespass, obtrusive light, and light pollution.
4. Conserve energy and resources to the greatest extent possible, without providing an undue burden upon local residents or businesses.

B. Applicability

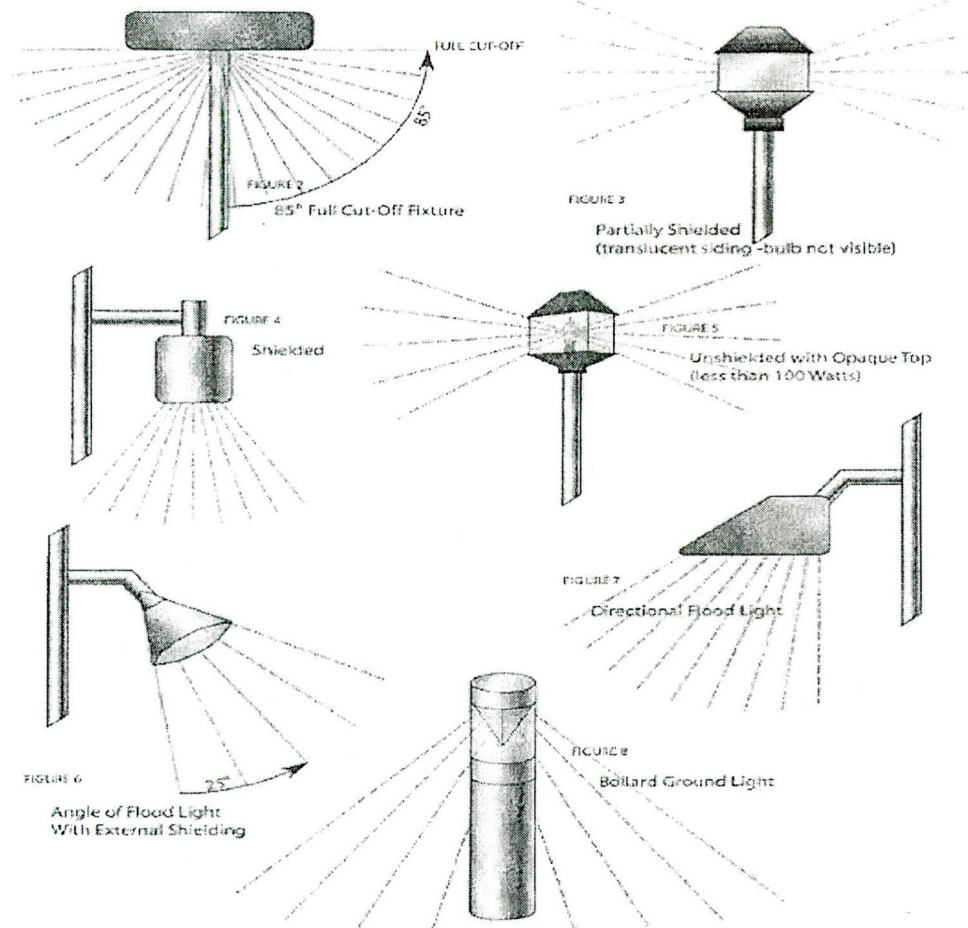
1. **The requirements of this Section shall apply to non-residential uses in the following Zones:**
 - a. Agricultural (AGR).
 - b. Highway Commercial (HC).
 - c. Neighborhood Commercial (NC).
 - d. Office Park (OP).
 - e. General Manufacturing (GM).
 - f. Special Manufacturing (SM).
 - g. Park (P).
 - h. Historic (H).
 - i. School District (S).

These requirements shall also apply to non-residential uses in all other Zones.

2. Each applicant for development plan approval shall provide adequate lighting to ensure safe movement of persons and vehicles and for security purposes. Lighting standards shall be of a type approved by the municipal agency. Directional lights shall be arranged to minimize glare and reflection on adjacent properties.

3. Each applicant for development plan approval shall provide, within the limits of practicability and feasibility, lighting consistent with conservation of energy and use of renewable energy sources.
 4. For minor site plans and wherever appropriate, at the discretion of the municipal agency engineer, for developments with insignificant impact with reference to lighting, the developer may submit a sample of the actual fixture and lighting proposed for review and approval by the municipal agency.
 5. All outdoor lighting, including, but not limited to, new lighting, replacement lighting, or any other lighting whether attached to structures, poles, the earth, or any other location, including lighting installed by any third party, shall comply with the requirements of this Ordinance.
 6. When twenty-five (25%) percent or more of existing outdoor light fixtures are being replaced or modified, all lighting shall be updated to comply with the requirements of this Ordinance.
 7. When twenty-five (25%) percent or less of the site is being changed in conjunction with a minor site plan application, including applications where no changes to light fixtures are proposed for replacement or modification, all fixtures should be retrofitted to minimum standards, including, but not limited to, changing the wattage of fixtures, adjusting the angle of fixtures to prevent glare, painting infrastructure, and adding shields.
 8. Exceptions: The following shall be exempt from the requirements of this Ordinance:
 - a. Lighting for public monuments and statues.
 - b. Lighting that is only used under emergency conditions.
 - c. Lighting required by federal or state laws or regulations.
 - d. Decorative holiday lighting fixtures and related decorations using light emitting diodes (LED) sources.
- C. General Requirements: The following shall apply to all outdoor lighting fixtures in the Township:
1. All outdoor lighting shall be installed in conformance with the provisions of this Ordinance, applicable Electrical and Energy Codes, and applicable sections of the Building Code. Lighting shall be designed to minimize energy and maintenance requirements and shall comply with the U.S. Energy Policy Act of 1992 as it may be amended or superseded.
 2. No lighting shall be directed towards traffic, shine directly, or reflect into windows, or onto streets and driveways, in such a manner as to interfere with driver vision, or create glare as a visual obstruction.
 3. Lighting shall not be directed towards the sky, known as up-lighting, to prevent interference with commercial aviation routes, wildlife migration patterns, and to reduce light pollution.
 4. Flood lights, searchlights, flashing, rotating, and moving lights are strictly prohibited. The use of standard "shoe box" and wall-pack fixtures is discouraged.
 5. At no time shall the light source be visible from adjacent properties. A maximum of 0.25 footcandles at a height of five (5') feet above the property line and/or right-of-way line, excluding points of ingress and egress for vehicles, shall be permitted.
 6. Pole-mounted light fixtures shall be installed at a height no greater than twenty-four (24') feet from ground level with said pole foundation installed to a depth of five (5') feet below grade or to a depth required by site characteristics and specified by an engineer.
 7. When concrete pedestals more than six (6") inches above grade are used to support pole-mounted light fixtures, the concrete shall have either a rubbed or brushed finish.

8. Full cutoff flat lenses, which have a light distribution where there is zero candela at or above 90° degrees vertical from nadir, and where the candela value does not exceed ten (10%) percent of the maximum intensity at or above a vertical angle of 80° degrees, shall be utilized on all sites.
9. Shields: Light shields shall be installed on all non-conforming lights adjacent to a residential property or zone, around the perimeter of the property, and along any street right-of-way to control glare.
10. Security Lighting: For all non-residential parcels or zones, the following shall apply:
 - a. Lighting systems shall be designed so that they can be reduced or turned off when they are not necessary, **or**;
 - b. Controls shall be provided on all new lighting systems that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system, such as a photoelectric switch, astronomic time switch, or equivalent functions from a programmable lighting controller, building automation system or lighting energy management system, **or**;
 - c. All site lighting shall be illuminated for safety and security reasons from one hour after the close of business or before 10pm, whichever occurs earlier, until sunrise, and at no more than forty (40%) percent of the standard lighting. Motion activated lighting systems and 24-hour operations shall be exempt from this requirement.
11. Examples of Lighting Types.



12. The use of LED lighting within the range of 3,000 and 3,500 Kelvin (trending toward yellow) is encouraged.
13. General illumination of the exterior of buildings, including the roof, is discouraged. Objectionable spill, to the exterior, of bright and glaring interior building light shall be avoided using low-brightness lenses on interior lighting.
14. Conflicts with lighting on adjacent (parking areas) properties shall be avoided. For example, if one or more adjacent areas with established lighting systems are using mercury-vapor lamps, the submitted area shall seek to conform to the same type of light temperature, but not necessarily the same type of luminaire.
15. Recreational Facilities. Lighting for outdoor athletic fields, courts or tracks shall require Planning Board approval, which shall consider the minimum standards of glare, up-light, light trespass, fixture angles, illumination levels, time of illumination, length of use, shield installation, surrounding land uses, as well as other requirements of this Ordinance.
16. The reviewing Board may reduce the number of fixtures at their discretion.

D. Streetlighting

All public and private streets shall be sufficiently illuminated to ensure traffic and pedestrian safety under all weather conditions.

1. Design Criteria. The design of streetlighting shall take into consideration the following:
 - a. The brightness of the abutting uses in comparison to pavement brightness as seen by both motorists and pedestrians.
 - b. The ability to discern objects on the street or its edge in comparison to abutting features or objects and their brightness contrast.
 - c. The time available to the motorist and pedestrian to view such objects.
 - d. The amount of direct glare from the luminaire or lamp and reflected glare from the pavement.
 2. Location. Pole-mounted streetlight standards shall be located as follows:
 - a. Local Streets. On local neighborhood streets, the following shall apply:
 - i. Seventy (70) watt luminaires shall be provided in the following locations:
 - a) Along one (1) side of the street at three hundred (300') foot intervals on straight road segments, staggered on both sides of the roadway; and
 - b) At curves with an inside radius of less than three hundred (300') feet, unless the standard is within three hundred (300') feet of another; and
 - c) The end of each cul-de-sac. One hundred (100) watt luminaires shall be provided at each street intersection.
 - b. Collector Streets. On collector streets, one hundred (100) watt luminaries shall be provided in the following locations:
 - i. Along one (1) side of the street at three hundred (300') foot intervals on straight road segments, staggered on both sides of the roadway; and
 - ii. At curves with an inside radius of less than three hundred (300') feet, unless the standard is within three hundred (300') feet of another; and
 - iii. The end of each cul-de-sac.
 - iv. One hundred-fifty watt (150) watt luminaires shall be provided at each street intersection.
 3. General Requirements
 - a. Streetlighting shall be installed at no cost to the municipality by a developer in locations approved by the applicable Board or Township Engineer.
 - b. For residential subdivisions, streetlighting shall be installed, prior to the issuance of any Certificate of Occupancy, along all roadways necessary to ensure at least one route of illuminated access for any occupied structure and in conformance with R.S.I.S.
 - c. Operating expenses for residential subdivision streetlighting shall be assumed by the Township when fifty (50%) percent of the section is occupied.
- E. Off-Street Parking Lighting. All non-residential parking lots and residential parking lots in excess of five (5) spaces shall conform to the following requirements:
1. Sufficient illumination shall be provided for all off-street parking, loading, entrances and exits, and pedestrian areas to enable the safe movement of persons, vehicles, and to provide security.
 2. Standards for overall illumination shall be established.
 3. Minimum horizontal illumination shall be no lower than 0.2 footcandles.
 4. Average horizontal illumination shall not exceed 2.5 footcandles.

5. Minimum vertical illumination shall be measured at five (5') feet above parking surface at the point of lowest horizontal illuminance, excluding facing outward along boundaries.
6. All light fixtures shall be uniform throughout a given site. Lighting levels, lamp color, and fixture type shall be consistent throughout the subject parcel, which shall complement building architecture and landscaping.

F. Lighting Plan

1. A lighting plan shall be provided concurrent with the submission of all site plans and subdivision plans, with the exception of minor subdivision plans.
2. The plan shall be prepared, signed, and sealed by a Certified Landscape Architect, Professional Engineer, Professional Planner, or other qualified professional.
3. The lighting plan shall show:
 - a. All existing lights, including building-mounted and canopy fixtures, within one hundred (100') feet of the site in question, including location of all poles and luminaries.
 - b. Computer generated photometric grid showing footcandle readings every five (5') feet, including building-mounted and canopy fixtures. The plan should note whether the lines are initial or maintained.
 - c. Identify the maintained horizontal illuminance shown as footcandles, including the following required and proposed levels, per area:
 - i. Maximum
 - ii. Minimum
 - iii. Average, during operating and non-operating hours
 - iv. Average to minimum uniformity ratio
 - d. Description of outdoor light fixtures component specifications, including pole-mounted, building mounted, canopy lights and all exterior fixtures, including:
 - i. Lamp type.
 - ii. Wattage.
 - iii. Isolux diagrams for each fixture.
 - iv. Reflectors.
 - v. Optics.
 - vi. Angle of cutoff.
 - vii. Shields.
 - viii. Manufacturer's catalog cuts.
 - ix. The number of each luminary type.
 - x. Pole height and mounting height of the luminaries and details of the pole.
 - xi. Pole base, foundation design, and foundation detail, in accordance with the Uniform Construction Code (UCC). Parking area ADA, walkways, and driveways horizontal illumination.

| Type of Area | Minimum Intensity (footcandles) | Average Intensity (footcandles) | Uniformity Ratio (Maximum : Minimum) |
|------------------------------------|---------------------------------|---------------------------------|--------------------------------------|
| Residential Area Parking | 0.2 | 2.0 | 17:1 |
| Shopping Center Parking | 0.8 | 2.5 | 10:1 |
| Mall Parking | 0.8 | 2.0 | 16:1 |
| Site Lighting | 0.2 | 2.5 | 20:1 |
| Industrial/Commercial Area Parking | 0.5 | 1.0 | 15:1 |

- e. Show light levels along the property lines.
 - f. All proposed and existing freestanding and wall-mounted lights should be indicated.
 - g. Identify fixtures with existing shields and fixtures proposed for shield installation.
 - h. The hours of operation of the proposed use, and general notations.
 - i. Lamp life lumen depreciation factor.
 - j. Luminaries' dirt depreciation factor.
 - k. Maintenance factor correction.
 - l. Landscape plan to determine the correct location of canopy trees.
4. A night-light function test shall be conducted by the Zoning or Planning Board Engineer to ensure lighting levels conform to approved plans, which shall be required prior to the issuance of any Certificate of Occupancy.

G. Dark Sky

1. Based upon guidelines provided by IDA (International Dark Sky Association) and IES (Illuminating Engineering Society), efforts should be made to minimize light trespass, obtrusive lighting, and reduce skyglow.

SECTION 2. If any section, paragraph, subsection, clause, or provision of this Amendment shall be adjudged by the courts to be invalid, such adjudication shall apply only to the section, paragraph, subsection, clause, or provisions so adjudicated, and the remainder of the Ordinance shall be deemed valid and effective;

SECTION 3. If any ordinances or parts thereof are in conflict with the provisions of this Ordinance those provisions shall be repealed to the extent of such conflict.

SECTION 4. This Ordinance shall take effect upon passage and publication in accordance within applicable law.



Bruce Garganio, Council President



Nancy L. Erlston, RMC
Township Clerk

NOTICE
FLORENCE TOWNSHIP

ORDINANCE 2023-20

AN ORDINANCE OF THE TOWNSHIP OF FLORENCE IN THE COUNTY OF
BURLINGTON, NEW JERSEY ADOPTING "SECTION 91-87.1 – LIGHTING
STANDARDS FOR NON-RESIDENTIAL USES" OF THE TOWNSHIP CODE

Take Notice that the Ordinance identified above adopting "Section 91-87.1 – Lighting Standards for Non-Residential Uses" of the Township Code has received final adoption by the Township Council and was approved by the Mayor of the Township of Florence, County of Burlington, State of New Jersey, following a public hearing held on December 6, 2023 at 7:00 PM in the Municipal Complex, Council Chambers, 711 Broad Street, Florence, New Jersey.

Copies of the full Ordinance are on file with the Township Clerk of the Township of Florence in the Municipal Complex. The ordinance is posted on the township's website www.florence-nj.gov

Nancy L. Erlston, RMC
Township Clerk

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| Ordinance No. <u>2023-20</u> |
| Advertised in Burlington County Times on: <u>DECEMBER 10, 2023</u> |
| Effective Date: <u>DECEMBER 30, 2023</u> |
| <u>NLE</u> Initials |