

Article 27B – Outdoor Lighting

27B00 PURPOSE

Regulation of outdoor lighting is required to:

- A. Protect drivers and pedestrians from the glare of non-vehicular light sources,
- B. Protect neighbors, the environment, and the night sky from glare and light trespass,
- C. Promote energy efficiency,
- D. Protect the visual character of the town.

27B01 APPLICABILITY

- A. All outdoor lighting shall meet the requirements of this ordinance. This includes, but is not limited to, residential, commercial, industrial, and public lighting.
- B. The Town may require or restrict lighting when public health, safety, and welfare are concerns.
- C. In the event of conflict between a provision of this subchapter and any other provision of this chapter, the provisions of this subchapter shall prevail.
- D. The following lighting uses are exempt from the requirements of this ordinance:
 - 1. Temporary decorative lighting is exempt from all but glare-control requirements,
 - 2. Lighting used under emergency conditions,
 - 3. Lighting used at Newport State Airport or required by federal, state, or local law.
 - 4. Lighting used at construction sites,
 - 5. Lighting associated with Town permitted events,
 - 6. Lighting solely for signs (see Sign Ordinance for sign lighting regulations).

27B02 CRITERIA

- A. Illumination Levels
 - 1. Illumination levels shall be appropriate to the application. Illumination levels shall not be greater than is reasonably necessary for its purpose.
- B. Fixture Design
 - 1. Fixtures shall be of a type and design appropriate to the lighting application.
 - 2. For the lighting of predominantly horizontal surfaces, such as roadways, sidewalks, parking lots, and building entrances, fixtures shall be fully-shielded and aimed straight down.
 - 3. For the lighting of predominantly non-horizontal surfaces where downward, fully-shielded fixtures are impractical (e.g. facades, landscaping, monuments), fixtures shall be located, aimed, and shielded to avoid lighting nuisances and hazards and limit impacts on the night sky.
 - 4. Fixtures with the International Dark-Sky Association's (IDA) seal of approval are preferred and strongly encouraged.
- C. Lamp correlated color temperature (CCT)
 - 1. Light sources shall have a "warm" CCT at or below 3000K. Higher CCTs include more blue light which has a negative impact on glare, human health, and the night sky.
- D. Lighting Control
 - 1. All lighting shall be located, aimed, designed, shielded, and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely

travel and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.

2. The illumination projected from any use onto a residential use shall not exceed 0.1 footcandle, measured line-of-sight and from any point on the receiving residential property.
3. The illumination projected from any property onto a non-residential use shall not exceed 1.0 footcandle, measured line-of-sight from any point on the receiving property.
4. Vegetation screens shall not serve as the primary means for controlling glare. Glare control shall be achieved primarily using such means as fixture location, aiming, design, shielding, and illumination level.
5. Lighting Control for single-family and two-family residential property owners
 - a. Directional fixtures such as floodlights, wall packs, and spotlights shall be permitted for use by individual property owners, but shall conform to the following requirements: (1) They shall be directed, shielded, and installed so they do not project onto neighboring properties or public rights-of-way, create unacceptable glare from an adjacent residential property, or have a significant impact on the night sky. (2) They shall be aimed no more than 45 degrees from straight down. (3) The maximum allowed lumens per fixture shall be 1800 lumens (i.e. one 120-watt incandescent bulb or two 60-watt incandescent bulbs), though lesser brightness is preferred.
6. Lighting Control for common space in multi-family residential and mixed-use developments that include residential use
 - a. While outdoor lighting might not be required to be installed in multi-family and mixed-use residential developments (i.e. apartment and condominium complexes), should a developer or property owner choose to include lighting it shall comply with this ordinance.
 - b. Directional fixtures such as floodlights, wall packs, and spotlights shall require approval from the Planning Board when going through the land development plan process or the building official when a new fixture is to be added to an existing use. Such fixtures shall conform to the following requirements: (1) They shall be directed, shielded, and installed so they do not project onto neighboring properties or public rights-of-way, create unacceptable glare from an adjacent residential unit or property, or have a significant impact on the night sky. (2) They shall be aimed no more than 45 degrees from straight down.
 - c. For multi-family residential developments outdoor lighting shall be extinguished nightly by 11 p.m. Exceptions include lighting of pedestrian pathways and sidewalks that grant access to dwellings and parking areas.
 - d. For mixed-use developments outdoor lighting shall be extinguished nightly by 11 p.m. or within one-half hour of the close of commercial uses on the property, whichever is later. Exceptions include lighting of pedestrian pathways and sidewalks that grant access to dwellings, and parking areas used by residents of the development.

7. Non-Residential lighting control
 - a. Directional fixtures such as floodlights, wall packs, and spotlights shall require approval from the Planning Board when going through Development Plan Review process, or the Building Official when a new fixture is to be added to an existing use. Such fixtures shall conform to the following requirements: (1) They shall be directed, shielded, and installed so they do not project onto neighboring properties or public rights-of-way, create unacceptable glare from an adjacent residential property, or have a significant impact on the night sky. (2) They shall be aimed no more than 45 degrees from straight down.
 - b. With the exception of security lighting, all outdoor lighting for commercial, office, industrial, and institutional uses, including lighting for parking areas and vehicular and pedestrian ways shall be extinguished nightly within one-half hour of the close of the facility. When after-hours site security lighting is required, the use of motion-sensor controlled lighting is encouraged.
 - c. Canopy lighting used at gas stations, drive throughs, hotel marquees, etc. shall be accomplished using flat-lens, fully-shielded fixtures aimed straight down.
8. Streetlight Control
 - a. This ordinance shall apply to streetlights.
 - b. Ornamental streetlights, as may be installed in a village center or residential neighborhood, shall have a minimal impact on the night sky due to uplight. Fixtures with the International Dark-Sky Association's (IDA) seal of approval are preferred.
 - c. Streetlight illumination level shall be appropriate for its context, with streetlights in residential neighborhoods being dimmer than streetlights on highly trafficked streets or in commercial areas.
 - d. In appropriate locations and circumstances, the town may extinguish or dim streetlights after 11 p.m.
- E. Installation & Maintenance
 1. Electrical feeds for fixtures mounted on poles for the illumination of parking areas shall be run underground, not overhead.
 2. Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces, shall be placed a minimum of five feet outside paved area, curbing, or tire stops, or on concrete pedestals at least thirty inches above the pavement, or suitably protected by other approved means.
 3. Fixtures shall not be mounted more than twenty feet above finished grade of the surface being illuminated, except that fixtures that are not fully shielded, if approved, shall not be mounted more than sixteen feet above finished grade.
 4. Fixtures and ancillary equipment shall be maintained to always meet the requirements of this ordinance.

27B03 ADMINISTRATION

- A. Single-family and two-family residential property owners shall be exempt from this subchapter and may install outdoor lighting without prior approval from the town. Such lighting shall be in conformance with the Criteria section of this subchapter.
- B. Wherever outdoor lighting is proposed, lighting plans shall be required and approved during the subdivision, land development plan, development plan review, or building/electrical permit application process. Submission requirements shall include:
 - 1. A site plan with structures, parking areas, building entrances, roads and sidewalks, and abutting uses. The plan shall include the location of all proposed lighting fixtures and existing lighting fixtures proposed to remain. The following information should be provided about each fixture: location, mounting height, orientation, aiming direction, fixture type, lamp type, photometry, correlated color temperature (if LED), fixture catalog cuts, glare reduction devices, on/off control devices, pole foundation details (if applicable), and mounting methods.
 - 2. For projects where a landscaping plan is required to be submitted, that plan shall contain lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
 - 3. Calculations demonstrating that the proposed lighting plan will not exceed the allowable number of footcandles at any point along the lot lines.
- C. When requested by the Planning Board or Building Official, the applicant shall submit a visual-impact plan that demonstrates appropriate steps have been taken to mitigate lighting impacts.
- D. The following plan notes shall appear on the lighting plan
 - 1. "Post-approval alterations, including equipment substitutions, to approved lighting plans shall be submitted to and approved by the Town prior to installation."
 - 2. "The Town reserves the right to conduct post-installation inspections to verify compliance with requirements and approved Lighting Plan commitments, and, if necessary, to require remedial action at no expense to the Town."

27B04 COMPLIANCE MONITORING

- A. Safety Hazards
 - 1. If the Town judges a lighting installation creates a safety hazard, the person(s) responsible for the lighting shall be notified and required to take remedial action without undue delay.
 - 2. If appropriate corrective action has not been taken within thirty days of notification, the Town may initiate appropriate legal action.
- B. Nuisance Glare and Inadequate Illumination Levels
 - a. When the Town judges an installation produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient illumination levels or otherwise varies from this Ordinance, the Town may notify the person(s) responsible for the lighting and require appropriate remedial action.
 - b. If appropriate corrective action has not been taken within thirty days of notification, and the Town determines the infraction so warrants, the Town may initiate appropriate legal action.

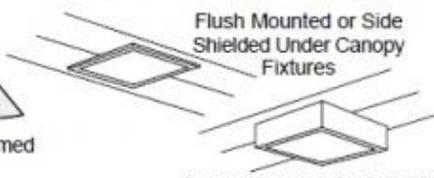
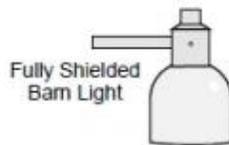
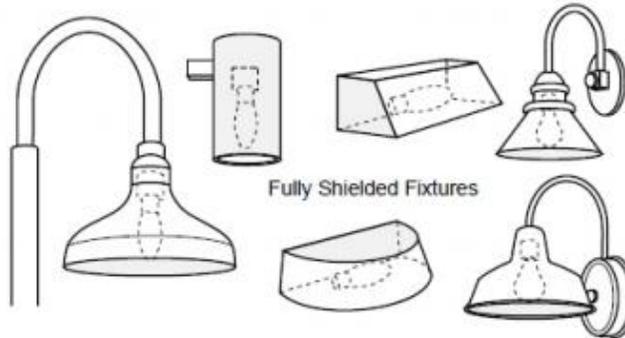
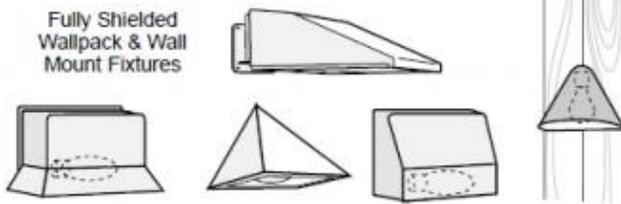
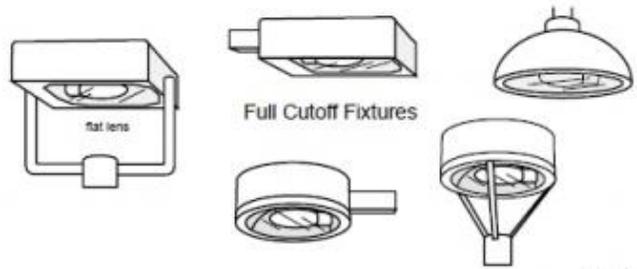
27B05 NONCONFORMING LIGHTING

- A. Any fixture or lighting installation existing on the effective date of this subchapter that does not conform with the requirements of this subchapter, shall be considered as a lawful nonconformance.
 - 1. A nonconforming fixture or lighting installation shall be made to conform with the requirements of this subchapter when:
 - a. Minor corrective action, such as re-aiming or shielding the light source can achieve conformity
 - b. It is deemed by the Town to create a safety hazard
 - c. It is replaced by another fixture or is relocated
 - d. There is a change in use of the property

27B06 DEFINITIONS

- A. Fixture. The complete lighting unit, consisting of the lamp(s), and parts designed to distribute the light (reflector, lens, diffuser), position and protect the lamp(s), and connect the lamp(s) to the power supply. Also called a Luminaire.
- B. Footcandle. The unit of measure expressing the quantity of light received on a surface. One footcandle is the illuminance produced by a candle on a surface one-foot square from a distance of one foot.
- C. Fully-shielded fixture. A fixture constructed and installed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane through the fixtures lowest light-emitting part.
- D. Glare. Lighting entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility
- E. Lamp. A generic term for a source of light, often called a “bulb” or “tube”.
- F. Light trespass. Light that falls beyond the property it is intended to illuminate.
- G. Lumen. The unit of measure used to quantify the amount of light produced by a lamp or emitted from a fixture. This is different from a watt which is a measure of power consumption; a 12-watt LED bulb and a 60-watt incandescent bulb each produce about 900 lumens.
- H. Photometry. The measurement of light in terms of its perceived brightness to the human eye.

Examples of Fully Shielded Luminaires



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