

§ 164-43.4. Lighting. [Amended 1-24-2002 by L.L. No. 2-2002; 10-24-2002 by L.L. No. 6-2002; 2-18-2010 by L.L. No. 1-2010]

A. Purpose. The purpose of this section is to provide standards for outdoor lighting, to encourage lighting that conserves energy and resources while providing safety, utility and security; to maintain and protect the scenic and aesthetic character of the Town; to minimize glare; to protect the privacy of residences; to ensure that development fits into its natural and rural surroundings; to reduce atmospheric light pollution; to avoid impacts on nearby residential properties; and to enhance the Town's nighttime character.

B. Definitions. The following definitions apply to terms used in this section:

FOOTCANDLE (FC) — A unit of illuminance amounting to one lumen per square foot.

FULLY SHIELDED FIXTURE — An outdoor lighting fixture that, by design of the housing, does not allow any light dispersion or direct glare to shine above a ninety-degree, horizontal plane from the base of the fixture. Fully shielded fixtures must be installed in a horizontal position as designed, or the purpose of the design is defeated, and direct glare will result.

GLARE — The eye's line-of-sight contact with a direct light source that causes annoyance, discomfort, or loss in visual performance and ability.

HEIGHT OF THE LUMINAIRE — The height of the luminaire shall be the vertical distance from the ground directly below the center line of the luminaire to the lowest direct-light-emitting part of the luminaire.

ILLUMINANCE — Density of luminous flux incident on a surface. Unit is footcandle or lux.

LIGHT TRESPASS — Light from an artificial light source that intrudes into an area where it is not wanted or does not belong. Light trespass includes glare from direct light as well as unwanted spill light.

LUMINAIRE — A complete lighting unit consisting of one or more lamps (light sources), together with the parts designed to control the light disturbance and other mechanical and electrical components.

LUX — One lumen per square meter; unit of illuminance.

OUTDOOR LIGHTING — The nighttime illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

OUTDOOR LIGHTING FIXTURE — An electrically powered illuminating device or other outdoor lighting fixture, including all parts used to distribute the light and/or protect the lamp, permanently installed or portable, used for illumination or advertisement. Such devices shall include, but are not limited to, search, spot, flood, and area lighting for buildings and structures; recreational areas; parking lot lighting; landscape lighting; signs (advertising and other); street lighting; product display area lighting; building overhangs, and open canopies.

RECESSED CANOPY FIXTURE — An outdoor lighting fixture recessed into a canopy ceiling so that the bottom of the fixture is flush with the ceiling.

UPLIGHTING — Any light source that distributes illumination above a ninety-degree horizontal plane.

WALLPACK FIXTURES — A lighting unit designed for direct mounting on building walls whose primary function is to light building exteriors.

C. Submission of plans and outdoor lighting compliance.

(1) An applicant for any work involving outdoor lighting fixtures that requires site plan approval shall submit, as part of the application, evidence that the proposed work shall comply with this section. In addition, the applicant for any work involving outdoor lighting fixtures governed by this section occurring in areas of the Town covered by the Ridgeline Overlay District shall submit, as part of the application for a building permit, evidence that the proposed work will comply with this section. The submission shall contain the following:

- (a) Plans indicating the location, height, orientation, type of illuminating device, and wattage of each outdoor lighting fixture;
- (b) Description of the illuminating fixtures, lamps, supports, reflectors, and other devices, including, but not limited to, catalog cuts by manufacturers and drawings (including sections where required), glare reduction/control devices, on-off cycle control devices, and mounting devices;
- (c) Location and use of adjacent properties;

- (d) Nearby properties that may be affected by the proposed lighting plan;
 - (e) Photometric data, such as that furnished by manufacturers, or similar showing the angle of cutoff or light emissions;
 - (f) Additional information that the Planning Board or Building Inspector determines is necessary, including, but not limited to, an iso-lux plan indicating levels of illumination in footcandles, at ground level, and a statement of the proposed hours and days of the week when the luminaries will be on and when they will be extinguished.
- (2) Lamp or fixture substitution. Should any outdoor lighting fixture or the type of light source therein be changed to a greater intensity after a lighting permit has been issued or the site plan approved, a change request must be submitted to the Building Inspector for revised approval. The Building Inspector, in consultation with the Town Engineer and Town Planner, shall review the change request to assure compliance with this section. If the change request is not substantial, the Building Inspector may approve it. If the change request is substantial, the Building Inspector shall forward such request to the Planning Board for an amended approval, which must be received prior to substitution.
- D. Approved materials and methods of construction or installation/operation. The provisions of this section are not intended to prevent the use of any design, material, or methods of installation or operation not specifically prescribed by this section, provided any such alternate has been approved. The Planning Board or Building Inspector may approve such proposed alternative provided it:
- (1) Provides at least approximate equivalence to the applicable specific requirement of this section; and
 - (2) Is otherwise satisfactory and complies with the purpose of this section.
- E. General requirements: all zoning districts.
- (1) General standards. All outdoor lights and externally illuminated signs shall be designed, located, installed, and directed in such manner as to prevent objectionable light at and across the property lines, and to prevent direct glare at

any location on or off the property. The Town encourages, and in some cases requires, that the minimum lighting levels be used to attain efficient and effective use of outdoor lighting. The latest recommended levels for outdoor lighting set by the Illuminating Engineering Society of North America (IES) shall be observed. See sign regulations in § 164-43.1 for additional requirements.

(2) Prohibitions.

(a) Uplighting that is unshielded is prohibited. Externally lit signs, displays, buildings, structures, streets, parking areas, recreational areas, landscaping, and other objects lit for aesthetic or other purposes shall be illuminated only with steady, stationary, fully shielded light sources without causing glare or light trespass beyond the property line. **[Amended 6-11-2015 by L.L. No. 2-2015]**

(b) Roof-mounted area lighting is prohibited.

(c) The use of laser lighting for outdoor advertising or entertainment and the operation of search lights for advertising purposes are prohibited.

(d) The use of mercury vapor lamps is prohibited.

(e) Unshielded wallpack-type fixtures are prohibited.

(3) Shielding. All outdoor fixtures, with the exception of those using lamps not requiring shielding cited in Subsection F, shall be fully shielded using full cutoff light fixtures and installed in such a way that no light is emitted above a horizontal plane running through the lowest part of the fixture. The lighting shall also be shielded to prevent direct glare and/or light trespass and shall be, as much as physically practical, contained to the target area. All light fixtures that are required to be fully shielded shall be installed and maintained so that the shielding is effective as described in the definition of a fully shielded fixture in this section of the Zoning Law. Floodlighting is discouraged and, if used, must be shielded to prevent direct glare for drivers and pedestrians; light trespass beyond the property line; light above a ninety-degree, horizontal plane.

(4) Light trespass. Light trespass from a property shall be designed not to exceed 0.25 footcandle at the property line.

An exception may be made for a nonresidential use in a nonresidential zoning district where light trespass may be allowed up to 3.6 footcandles onto an adjoining property, provided such adjoining property is also a nonresidential use in a nonresidential zoning district. Light trespass onto a public right-of-way shall not exceed the requirements for roadway lighting found in § 164-43.4G. Adjacent to residential property, no direct light source shall be visible at the property line at ground level or above. Mitigation to avoid or minimize light trespass may include landscaping and berming. **[Amended 6-11-2015 by L.L. No. 2-2015]**

- (5) Height. Unless specified elsewhere herein and except for recreational facilities, such as baseball and other field sports, the maximum allowable height of a freestanding luminaire shall be 16 feet above the average finished grade. The maximum allowable height of a building- or structure-mounted luminaire shall be 35 feet.
- (6) Spacing. Space between fixtures should be approximately four times the height or as determined by the Planning Board.
- (7) Time controls. All nonessential lighting shall be turned off after business hours, leaving only the necessary lighting for site security, which shall be reduced to the minimum level necessary. Nonessential can apply to display, aesthetic, parking and sign lighting. Motion-sensor security lighting is recommended to promote safety and reduce the amount of night lighting in the Town as determined by the Planning Board.
- (8) Auto/truck filling stations. Island canopy ceiling fixtures shall be recessed so that the bottom of the fixture is flush with the ceiling.
- (9) Recreational facilities, public or private. Lighting for outdoor recreational facilities shall be fully shielded, as defined in this section.

F. Table of Shielding Requirements.

Fixture Lamp Type	Shielded
Low-/High-pressure sodium, metal halide, quartz, and fluorescent over 50 watts	Fully
Incandescent	

Fixture Lamp Type	Shielded
Greater than 160 watts	Fully
160 watts or less, except for floodlighting [See Section 164-43.4.E(3)]	None
Any light source of 50 watts or less	None
Fossil fuel	None
Other sources	As approved by § 164-43.4C

- G. Illuminance and Uniformity. Light levels shall be designed not to exceed the latest recommended levels for outdoor lighting set by the Illuminating Engineering Society of North America (IES) for the type of activity/area being lighted, except light levels for ATM machines shall be in accordance with the New York State ATM Safety Act. Where no standard is available from IES, the applicable standard shall be determined taking into account the levels for the closest IES activity. The uniformity ratio (average to minimum) shall not exceed 3:1 for parking and traffic areas, nor 4:1 for pedestrian areas. Maximum to average light levels shall be kept within a 6:1 ratio. Design should establish a hierarchy of lighting to assure a smooth transition from bright areas to those with subdued lighting. Light levels shall be maintained at design levels with lamp or luminaire replacement as needed. Lighting in conformance with this section is required for all parking lots having five or more cars. The following current IES recommendations are to be observed, followed by a table presenting recommended outdoor lighting types:

Roadway Lighting, If Provided

Type of Road	Average Maintained Illuminance (FC)	Uniformity Ratio (average to minimum)
Major road	0.6 - 1.6	3:1
Collector road	0.4 - 1.1	4:1
Local road	0.3 - 0.8	6:1

Parking Lots

Level of Activity	Horizontal Illuminance (FC)		Uniformity Ratio
	Average	Minimum	
High:	3.6	0.9	4:1
Automotive dealerships			
Entertainment theaters			
Medium:	2.4	0.6	4:1
Community shopping areas			
Cultural, civic, or recreational events			
Office parking			
Residential parking			
Low:	0.8	0.2	4:1
Neighborhood shopping with > 5,000 square feet			
Industrial employee parking			
Educational facility parking			
Recreational facilities			
Church parking			
Wherever there is a requirement to maintain security at any time in areas where there is a low level of nighttime activity			

Other Outdoor Lighting Levels

Building Exteriors	Footcandles
Entrances	
Active (pedestrian and/or conveyance)	5
Inactive (normally locked, infrequently used)	1
Service stations	
Approach	1.5

Driveway	1.5
Pump island	5
Service areas	2
Retail outdoor lighting	5
Auto sales lots	5

Recommended Outdoor Lighting Types

Lighting Type	Color	Recommended Uses	Comments
Incandescent	Full spectrum, white light	Infrequently used lighting, occupant sensor-activated lighting	Most common but most energy-inefficient of common lamp types
Fluorescent	Clear white light	Residential lighting, walkways, building entrances	Excellent color rendition, energy efficient, and inexpensive
Sodium			
High-pressure	Yellowish cast	Sports fields, parking, roadways	Recommended only where light distribution is valued more than appearance; can negatively affect vegetation
Low-pressure	Monochromatic	Roadways, walkways, parking, security lighting	One of the most energy-efficient but recommended only where color rendering is not important

Recommended Outdoor Lighting Types

Lighting Type	Color	Recommended Uses	Comments
Light-emitting diodes (LED)	Variable, especially when digitally controlled	Area, architectural, walkway, landscaping and floodlighting	The emerging technology for LED lighting is eventually expected to eclipse traditional lighting due to long life, broad application and highest energy efficiency

H. Exemptions. The following uses shall be exempt from the provisions of this section:

- (1) Roadway and airport lighting and lighting activated by motion-sensor devices.
- (2) Temporary circus, fair, carnival, religious, historic, or civic use.
- (3) Construction or emergency lighting, provided such lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency necessitating said lighting.
- (4) Temporary lighting, including holiday lighting for no more than two months per year.
- (5) Lighting associated with agricultural pursuits, including harvest activities, unless such lighting is permanent and/or creates a safety hazard.
- (6) Lighting, preferably low voltage, that is considered a landscape or building design element and is integral to the aesthetic value of the design, as determined by the Planning Board or Building Inspector.
- (7) All outdoor light fixtures producing light directly by the combustion of natural gas or other fossil fuels.
- (8) Outdoor light fixtures installed on, and in connection with, those facilities and land owned or operated by the federal government, the State of New York, the County of Orange, or any department, division, agency or instrumentality thereof.

Voluntary compliance with the intent of this section at those facilities is encouraged.

- I. Nonconforming outdoor lighting. All outdoor lighting fixtures shall be brought into compliance with the provisions of this section within three years from date of adoption of Local Law No. 1 of 2010. No replacement or installation of new luminaires, including lamps, shall be permitted unless in conformance with this section. Nonconforming outdoor lighting that is the subject of subdivision, special use permit and/or site plan applications, certificates of occupancy, no-violation letters, or other permit, approval, entitlement, or authorization from the Town of Warwick shall comply with the terms and conditions of this section. (§ 164-43.4).
- J. Enforcement and inspections. The Town of Warwick Code Enforcement Officer is responsible for conducting postinstallation nighttime inspection to verify compliance with the provisions of this section and, if appropriate, to require remedial action.
- K. Maintenance. Lighting fixtures shall be maintained so that they always meet the requirements of this section.