#### LIGHTING

**EXAMPLES OF ZONING REGULUATIONS** 

# **GREENWICH ZONING REGULATIONS**DIVISION 14 LIGHTING REQUIREMENTS

Sec. 6-151. PURPOSE OF ARTICLE.

The purpose of this Division shall be to reduce to reasonable limits trespass of artificial lighting except street lighting. (Bldg. Zone Regs., Section 21.5.)

Sec. 6-152. BUSINESS ZONE REGULATIONS.

(a) Exterior lighting shall include but shall not be limited to all lights mounted on the exterior of building as well as freestanding or ground lights.

All exterior lights shall be designed so that the filaments, light sources or lenses are shielded with opaque material in such a way that they will not be visible at property lines except as follows:

- (1) Adjacent to business uses the light source shall not be visible at a height greater than five (5) feet above ground level.
- (2) Adjacent to residential uses the light source shall not be visible at ground level or above.
- (3) Exceptions are the following types of lighting which may be used only if approved by the Chief Building Inspector:
- (A) Unshielded lighting may be used if it can be shown that the type of fixture proposed is not objectionable because of the light distribution characteristics of the fixture.
- (B) Holiday or special events lighting may be used of a period of forty (40) days per year.
- (C) Lighting for athletic activities or activities used intermittently rather than continuously may be used.
- (D) Marine lighting may be used if directed at or toward a body of water not visible on other land areas.
- (b) Parking structures which have unshielded perimeters shall shield fixtures in accordance with SubSection (a).
- (c) Any type of lighting directed upward at such an angle that neither buildings, trees, shrubs or site surfaces are lighted, is prohibited in all zones.

- (d) Lights producing varying intensities, changing colors, moving lights or search lights are prohibited in all zones.
- (e) When all interior, exterior and sign lighting is fully lighted the intensity of lighting as measured by a light meter with a cosine corrector shall not exceed 0.5 footcandles at any point along a property line of the subject premises unless shielded by opaque fencing. Interior lighting that exceeds this standard may be reduced by installation of curtains, drapes, blinds, louvers, shields or other devices as long as the shielding device selected remains in a fixed position at all times. (Bldg. Zone Regs., Section 21.5.)

#### Sec. 6-153. RESIDENTIAL ZONE REGULATIONS: EXCEPTION.

- (a) The lighting regulations for residential zones shall be the same as for Business Zones except that perimeter lighting as described in Section 6-152(e) must be limited to one-tenth (0.1) footcandles at any point along a property line.
- (b) The flood lights regulations shall be the same as Business Zone.
- (c) Moving lights and search lights regulations shall be the same as Business Zone.
- (d) Holiday lights or special events regulations shall be the same as Business Zone.
- (e) For the purposes of this Section, residential zones shall not include detached one (1) and two (2) family dwellings, but shall include tennis courts and platform tennis courts and similar recreation facilities. (Bldg. Zone Regs., Section 21.5)

#### WILTON ZONING REGULATIONS

#### WILTON CENTER DESIGN GUIDELINES FOR STREETSCAPES

The following guidelines and site features should aid in creating uniformity in the elements of the street are in Wilton Center.

### LIGHTING

Lighting fixtures shall have opaque hoods over all light elements, to ensure that the light source is not visible off a site. All fixtures shall have sharp cut off shields and light sources shall be directed down toward the ground surfaces. Light pole height shall be kept as low as practical. Lighting for walkways shall be at a maximum pole height of 15 feet. Bollard type lights are encouraged.

## WOODBURY ZONING REGULATIONS

9.2.11 Lighting: The location, height, design and arrangement of outside lighting shall be such as to avoid glare on any other lot and to avoid hazards to traffic on any street.

#### ASHFORD ZONING REGULATIONS

F. No exterior lighting shall be used in a manner which produces a bloom or a direct glare on neighboring property, or which produces an objectionable visual disturbance to obstruct scenic views. All exterior lighting shall be shielded so that the source of light (light bulb) cannot be directly seen from off the property.

#### **BROOKFIELD ZONING REGULATIONS**

B. Glare:

## (1) Purpose:

It is the purpose of this standard to regulate illumination intensities associated with the use of land by the control of glare so as to eliminate deleterious physical effects.

#### (2) Standard:

In general, all exterior light sources shall be directed downward and the of illumination confined to necessary or useful areas. An excessively high level of illumination, spillage of unwanted illumination beyond lot lines and lighting designed or situated in such a manner as to be mistaken for traffic signals or presenting a hazard to safe driving is prohibited.

- (a) Exterior lighting shall include but shall not be limited to all lights mounted on the exterior of buildings and structures as well as freestanding or ground lights. All exterior lighting shall be designed so the filament, light sources or lenses are shielded with opaque material in such a way that they will not be directly visible at a point five feet (5') or higher above ground level at the property lines. Improved effectiveness of lighting, rather than higher levels of intensity, is to be achieved where possible. The maximum intensity of all lighting measured at any angle by a light meter with a cosine corrector shall not exceed the levels listed below at any location along the property line:
- [1] Industrial and commercial premises: one and zero-tenths (1.0) footcandle.
- [2] Industrial and commercial premises, where the property line abuts a residential premises: zero and five-tenths (0.5) footcandle.
- (b) Interior lighting: For the purposes of these regulations, interior lighting visible from the exterior shall be treated as exterior lighting.
- (c) Flood, spot and searchlights: Any type of lighting directed upward at such an angle that neither buildings, structures, trees, shrubs or site surfaces are lighted is prohibited.
- (d) Illuminated signs and advertising devices: Animated, flashing, moving and festooned lighting and lighting producing changing colors are prohibited.
- (e) Security lighting: Lighting installed for purposes of security of a building shall be directed toward the building(s).

- (f) Exceptions: The following types of lighting are excepted from these regulations:
- [1] Holiday lighting: During the period from November 20 through January 5 each year.
- [2] Lighting for special events: When permitted in conjunction with a special permit granted under Section 242-308C of this chapter.
- [3] Marina lighting: Marina lighting directed at or towards a body of water not visible on other land areas and not presenting a danger to navigation.
- [4] Aircraft warning lights and navigation beacons.

### EAST GRANBY ZONING REGULATIONS

Section VII - SITE DEVELOPMENT REGULATIONS

#### D. OUTDOOR ILLUMINATION

## 1. Purpose

This section is intended to control the number, size, location, and intensity of outdoor illumination in order to protect the public health, safety and general welfare.

## 2. Requirements

- a. All outdoor lighting shall be directed to avoid glare outside the property line or boundary.
- b. All outdoor lighting which is designed and intended to illuminate buildings or yards shall be arranged so that the lights will not shine into the eyes of any person external to the premises, or cause a nuisance or hazard from glare.
- c. Light standards shall be located so as not to interfere or conflict with traffic movement or parking and shall be shown on the Site Plan.
- d. Poles and standards used for outdoor lighting shall not to exceed 24 feet in height.
- e. Flood lighting shall be avoided except for loading areas.

#### VERNON ZONING REGULATIONS

13.5 Exterior and/or interior lighting shall not produce glare on public highways or neighboring property or conflict with any traffic signals.

# LIGHTING STANDARDS 1/21/05

# **NEW FAIRFIELD ZONING REGULATIONS**

2.9.7 - Lighting Standards. If light standards are proposed they shall not exceed eighteen (18) feet in height from the ground to the highest point on the fixture. The Commission shall retain the right to require that the number of light fixtures be increased, decreased, that the light source be shielded all where necessary to provide for the safety of pedestrian and motorists or to meet topographic constraints or to protect adjacent residential zoned areas.

#### NORTH BRANFORD ZONING REGULATIONS

M. Exterior lighting shall be of a style and character which is in harmony with the character of the district. Lighting standards in parking areas shall not exceed twenty (20) feet in height. Luminaries shall have shielded light sources to prevent glare. Pedestrian walkways shall be illuminated by light bollards or other low level lighting standards with shielded light sources. All outdoor lighting shall be designed for safety, convenience and security while minimizing sky glow, an averse effect from illumination upon the size, enjoyment and value of nearby property and upon the appearance of the community

#### RIDGEFIELD ZONING REGULATIONS

334.0 Exterior Lighting Standards. [Adopted 2/2/99; effective 2/12/99]

- A. Intent and Purpose. It is the intent of this section to discourage the installation of lighting fixtures that emit objectionable illumination that is intrusive and aesthetically incompatible with the character of the Town. It is the purpose of this Section to provide guidelines and standards for the design of effective site lighting, while avoiding unnecessary upward illumination, the illumination of adjacent properties, and to reduce glare.
- B. Applicability. The standards herein shall apply to all exterior lighting where site plan review or special permit is required.
- C. Lighting Standards. In order to avoid undue glare and objectionable lighting, lights shall be installed and maintained in accordance with the following guidelines and standards.
- 1. That all exterior lights and illuminated signs shall be designed, located, installed and directed in such a manner as to prevent objectionable light at (and glare across), the property lines and disability glare at any location on or off the property. The "maintained horizontal illuminance recommendations" set by the Illuminating Engineering Society of North America (IES) shall be observed.
- 2. All parking area lighting will be full cut-off type fixtures and shall not exceed fourteen (14) feet in height from the ground to the highest point on the fixture.

- 3. Uplighting and high pressure sodium light sources are prohibited. Externally lit signs, display, building and aesthetic lighting must be lit from the top and shine downward. The lighting must be shielded to prevent direct glare and/or light trespass. The lighting must also be, as much as physically possible, contained within the target area.
- 4. All building lighting for security or aesthetics will be full cut-off or a shielded type, not allowing any upward distribution of light. Floodlighting is discouraged, and if used, must be shielded to prevent: (a) disability glare for drivers or pedestrians, (b) light trespass beyond the property line, and (c) light above a horizontal plane. Wallpack type fixtures are not acceptable.
- 5. Where non-residential development is adjacent to residential property, no direct light source shall be visible at the property line at ground level or above.
- 6. High pressure sodium and flickering or flashing lights are prohibited.

# SOUTHBURY ZONING REGULATIONS

Section 11. Lighting.

- 11.1 General: The following regulations shall apply to the provision of any outdoor illumination in connection with a use of land, buildings and other structures that is subject to submission and approval of a SITE DEVELOPMENT PLAN. The purpose of this Section is to enable the provision of sufficient outdoor illumination for safety, convenience and security while minimizing sky glow, safeguarding against discomfort glare and disability veiling glare and avoiding adverse effects from illumination upon the use, enjoyment and value of property and upon the appearance and beauty of the community.
- 11.2 Definition: For the purpose of these Regulations, certain lighting terms are defined as follows:
- 11.2.1 Footcandle: A unit of illumination (light flux incident on a surface); one (1) footcandle equals one (1) lumen of light flux distributed evenly on one (1) square foot of surface.
- 11.2.2 Footlambert: A unit of brightness (light seen by the eye); one (1) footlambert equals either one (1) lumen of light flux reflected by one (1) square foot of a reflecting surface or one (1) lumen of light flux emitted or transmitted by one (1) square foot of a diffusing surface.\*\*
- \*\*Note: For example, if a white surface has a reflectance factor of 80% and is illuminated with 100 footcandles, it will have a brightness of 80 footlamberts.
- 11.2.3 Luminaire: A complete lighting unit consisting of a lamp or lamps, together with

any reflectors, refractors, diffusers, baffles or other devices to distribute the light, and with parts to position and protect the lamp and to connect the lamps to the power supply.

- 11.3 Standards: Outdoor illumination that is subject to this Section, except illuminated signs shall conform to the following standards:
- 11.3.1 Glare: All outdoor illumination shall be provided and maintained in a manner that safeguards against discomfort glare and disability veiling glare in any street and upon pedestrian ways and vehicular parking, loading and circulation areas on the lot where located on any other lot.
- 11.3.2 Area Lighting: Area lighting luminaries whether on poles, attached to buildings or otherwise provided, but excluding flood lighting luminaries, shall conform to the following:
- a. Such area lighting shall be provided by means of cutoff-type luminaires which shall have a medium distribution having their maximum candlepower directed no higher than 70 degrees above nadir (straight down), and having a rapid runback of candlepower above 70 degrees, with the candlepower at 80 degrees above nadir not numerically exceeding five (5) percent of the lamp lumens (light output) and the candlepower at 90 degrees above nadir not exceeding one (1) percent of the lamp lumens; refractor, or diffuser components shall not be visible above 75 degrees above nadir.
- b. Such cutoff-type luminaires shall be located or shielded so as to deliver no more than .05 footcandles of illumination at the property line if on a lot located in a Residential District or at any Residential District boundary line if on a lot located in a Business, Industrial or Public Utility District, which illumination shall be measured in both a horizontal and vertical plane at such lines.
- c. In addition, such cutoff-type luminaires shall have shielding, such as visors or baffles, which shield the lamp, refractive glass, diffusers and bright reflector components from view from any angle above 75 degrees above nadir and from view other than from the lot where located.
- d. Other than the above cutoff-type luminaries may be used for area lighting when the luminaire used does not exceed a maximum brightness of 200 foot lamberts in B-1A, B-1B, B-2F, B-3, B-3A, B-3B, B-3C, B-4, M-2, M-2A, M-5 and PUD and any Residential District, measured at any vertical angle above 75 degrees above nadir, and in B-2, B-2A, B-2B, B-2C, B-2D and B-2E Districts a maximum brightness of 400 foot-lamberts measured at any vertical angle above 75 degrees above nadir.
- e. No area lighting luminaire shall be located more than 25 feet above the ground.
- 11.3.3 Floodlighting: Floodlight luminaires shall be used only for illumination of buildings and other structures and architectural and landscape features and shall conform to the following:

- a. Floodlight luminaires shall be shielded, such as by visors or baffles, to minimize spillage of light beyond the outside edge of the object being illuminated.
- b. Floodlight luminaires shall not be aimed across streets, driveways, parking spaces and sidewalks.
- c. No floodlight illumination shall be provided in a Residential District, nor on the side of a building located in a Business, Industrial or Public Utility District and facing, or within 60 degrees of facing, a Residential District boundary line and located within 200 feet of such line, unless such illumination meets the standards of Par. 11.3.2(b).
- d. Any floodlight illumination shall not result in the luminance (brightness) of the illuminated object exceeding five (5) footlamberts in B-1A, B-1B, B-2F, B-3, B-3A, B-3B, B-3C, B-4, M-2, M-2A, M-5, PUD and any Residential District and not exceeding 10 footlamberts in B-2, B-2A, B-2B, B-2C, B-2D and B-2E Districts.
- e. No floodlight luminaire shall be located more than 25 feet above the ground if supported by or attached to a pole or other standard.