# Chapter 117 Lighting (Recommended revisions, August 2017).

[HISTORY: Adopted by the Board of Trustees of the Village of East Hills 9-12-1983 by L.L. No. 1-1983 as Ch. 142 of the 1983 Code. Amendments noted where applicable.]

GENERAL REFERENCES

Commercial filming — See Ch. 78.

Zoning — See Ch. **271**.

#### § 117-1 Legislative Intent.

It is the intention of the Village of East Hills to protect the environment, preserve the ability to enjoy the night sky for present and future generations, conserve valuable energy resources and improve the aesthetic quality of life in East Hills. By this legislation, the Village Board wishes to establish a mechanism by which exterior lighting which is protective of the environment (Dark Sky complaint) is installed on new construction and used to replace current exterior lighting fixtures which are not in compliance with this Chapter, and allow for reasonable on-site lighting for security and safety.

#### § 117-2 Definitions.

For the purpose of this Chapter, the following words and phrases shall have the meanings indicated herein.

AREA LIGHT: A lighting fixture designed for the illumination of a broad area, including but not limited to streetlights, lights in parking fields, and yard lights over one thousand eight hundred (1,800) lumens.

AVERAGE HORIZONTAL FOOTCANDLES: The average level of illuminance for a given area measured at ground level with the light meter placed parallel to the ground.

<u>DARK SKY COMPLIANT:</u> Dark Sky compliance is a standard of lighting design specification standards to reduce lighting pollution and irritation to communities and increase energy efficiency.

EXTERIOR LIGHTING (OUTDOOR LIGHTING): Temporary or permanent lighting equipment that is installed, located, placed or used in such manner so as to illuminate the outdoors, in whole or in part.

ESSENTIAL LIGHTING: Lights which are used to identify a location or place, to illuminate an area for public circulation, and for public safety or security purposes, such as entrances to buildings, parking areas and access ways.

EXCESSIVE LIGHTING: Illuminance levels which exceed the minimum illuminance levels contained in the IESNA Recommended Practices Handbook, Publications RP-33, RP-20 and RP-8.

FIXTURE (also LUMINAIRE): The bulb and the assembly that holds the bulb (or lamp) in a lighting system, including reflecting elements, shielding elements, cover glass or lenses, the ballast and the housing.

FLOODLIGHT: A lamp or luminaire commonly used to illuminate a large area, and which can produce light above the luminaire.

FOOTCANDLE ("fc"): The basic unit of illuminance (the amount of light falling on a surface). One footcandle is equal to the illuminance produced by a light source of approximately one candle in intensity as measured on a surface at a distance of one (1) foot from the source. Horizontal footcandles is the

measure of illumination striking a horizontal plane.

FULL CUT-OFF LUMINAIRE: A luminaire where no light is emitted above the horizontal plane of the lowest light emitting point of the luminaire, and the total lamp lumens at 10 degrees below the horizontal is limited to ten (10) percent of the total output.

FULLY SHIELDED: A luminaire constructed and installed in such a manner that all light emitted by it, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane. It is the same as a full-cutoff luminaire but without any restrictions on light distribution below the horizontal plane.

GLARE: The sensation produced by a light source within the visual field that is sufficiently brighter than the level to which the eyes are adapted and may cause annoyance, discomfort, loss or impairment of visual performance and visibility.

HOLIDAY LIGHTING: Temporary lighting customarily placed or installed to celebrate a holiday.

<u>ILLUMINANCE:</u> The density of light falling on any point of a surface, usually measured in footcandles. See also definition for "Footcandle ("FC")."

<u>IESNA:</u> <u>Illuminating Engineering Society of North America (IESNA), an organization which promulgates illumination standards, guidelines and publishes recommended practices for the lighting industry.</u>

<u>LAMP</u>: The generic term for an artificial light source to be distinguished from the whole assembly or "Fixture." (Most commonly referred to as a light bulb).

<u>LIGHT POLLUTION:</u> Any adverse effect of manmade light that unnecessarily diminishes the ability to view the night sky or is disruptive to flora and fauna.

LIGHT TRESPASS: Light projected onto the property of another, or onto public right-of-ways, when not required or permitted to do so.

LIGHT ASSEMBLAGE: Any or all parts of a luminaire that function to produce light, including the bulb, assembly, ballast, mounting features and/or pole.

LUMEN: A unit used to measure the actual amount of light that is produced by a bulb. The lumen quantifies the amount of light energy produced by a lamp at the lamp, not solely by the "wattage". (For example, a 75-watt incandescent lamp can produce 1,000 lumens while a 70-watt high-pressure sodium lamp produces 6,000 lumens).

LUMINAIRE: The complete light assembly (including the lamp, housing, ballasts, photocells, reflectors, lenses and shields), less the support assembly (pole or mounting bracket). For purposes of determining total light output from a luminaire or light fixture, lighting assemblies which include multiple unshielded or partially shielded lamps on a single pole shall be considered as a single unit.

<u>LUMINANCE</u>: The "brightness" of a source of light.

MAINTAINED ILLUMINANCE: The light levels that are produced by a lamp and luminaire after a period of time, taking into consideration normal losses due to lamp aging and the accumulation of dirt on the fixture.

MOUNTED HEIGHT: The distance from grade to the lowest light emitting part of the luminaire.

NON-ESSENTIAL LIGHTING: Lighting for an intended purpose where the purpose is not taking place.

<u>PARTIALLY SHIELDED:</u> A luminaire, which incorporates a partial shield around the lamp concealing the lamp from view only in certain directions.

PHOTOMETRICS: Technical test reports that indicate light distribution and performance from a luminaire.

REPAIR: Substantial repairs to the luminaire or light assembly which change the type, design, material or outward appearance of the luminaire. This Chapter is not intended to prohibit the performance of minor repairs and normal maintenance, including but not limited to, painting the light assemblage, or replacement with the same type and same output lamp, photoelectric control, or fuse.

SKYGLOW: The overhead glow from light emitted sideways and upwards, including light reflected upward from the ground or other surfaces, which reduces a person's ability to view the night sky.

UNIFORMITY RATIO ("U. RATIO"): A ratio that describes uniformity of illuminance across an area. The uniformity ratio may be a ratio of the maximum-to-minimum illuminance, or the average-to-minimum illuminance. (For example, if the average-to-minimum ratio of 4:1 for a parking lot is recommended, the minimum illuminance should be no less than \( \frac{1}{4} \) of the average illuminance across the parking lot).

### § 117-1-3 Restrictions on outdoor lighting.

Outdoor lights operated or maintained on or after implementation of this section upon any premises in the Village shall be subject to the following regulations and restrictions:

- A. Lights and lamps shall be so arranged, adjusted and operated with <a href="mailto:shielding">shielding</a>, reflectors and refractors so that the upper outline of any beam or ray shall not project beyond the property line of the premises of the owner or occupant. <a href="mailto:All lighting shall be illustrated through-established professional standards and light levels at the property lines should not exceed 0.1 footcandles (fc) adjacent to business properties, and 0.05 fc at residential property boundaries.
- B. Lights and lamps shall be so arranged, adjusted, shaded and operated so that no beam shall project above the height of the light or lamp.
- C. Lighting types and coloration. [Amended 1-21-1997 by L.L. No. 3-1997; 7-21-1997 by L.L. No. 4-1997]
  - (1) <u>In residential districts, fixtures will be limited to LED, incandescent, fluorescent lamp types.</u>
    Lights and lamps in <u>all-other</u> zoning districts shall be <u>LED,</u> incandescent, fluorescent, halogen or sodium vapor only. \_No other gaseous lighting shall be permitted, including but not limited to neon. \_Coloration shall be permitted in the business and light industrial districts, but not in the residence districts.
  - (2) Use of the following shall not constitute a violation of this section where such lights or lamps are at variance with the requirements of Subsection C(1) above:
    - (a) Traffic control devices approved by the New York State Department of Transportation.
    - (b) Municipal and public utility streetlight lamps.
    - (c) Pest control lighting.
    - (d) Seasonal holiday lighting as long as such lighting is installed up to forty-five (45) days before the holiday being celebrated and is removed no later than thirty (30) days of the end of such holiday.
    - (e) Landscape lighting in residence districts.
- D. No light shall be directed upon any surface which shall reflect the beams or rays thereof.

- E. All such exterior lights shall be equipped with shielding devices so that the glow emanating therefrom shall be directed only on and toward the property upon which they are located. [Added 1-21-1997 by L.L. No. 3-1997]
- F. No such exterior lights shall be arranged, adjusted or operated so as to permit a flashing or strobing effect. [Added 7-21-1997 by L.L. No. 4-1997]
- G. Any lighting which violates the light trespass limits per \$ 117-3A, causes glare at adjacent properties, or creates a public nuisance or hazard, can be ordered removed at any time.
- H. Sign lighting equipment where signs are permitted, provided that the light falls primarily on the surface of the sign, and no glare is visible from the property lines or from public streets is permitted. Top mounted sign lights are encouraged.
- I. Illumination of the United States Flag is permitted.
- J. See Section 223-14 F(5) for Lighting requirements/restrictions on construction sites.

## § 117-4. Requirements for Outdoor lighting in all zoning districts.

- A. All exterior lighting on or after implementation of this section shall be designed, located, and lamped in order to prevent:
  - (1) Over lighting.
  - (2) Energy waste.
  - (3) Glare.
  - (4) Light trespass.
  - (5) Unnecessary sky glow.
  - (6) Interference with pedestrian or vehicular travel on streets, roadways and highways.
  - (7) A public hazard or nuisance.
- A.B. All exterior lighting shall use fully shielded luminaires, with the light source directed downward and with the fixture installed level with the horizontal plane, with the following exceptions:
  - (1) Unshielded luminaires in residentially-utilized properties are permitted as long as there is no more than 900 lumens (one sixty (60) watt incandescent light or compact fluorescent or LED equivalent) per fixture, or if the luminaires are shielded or directed downward and does not cause glare or light trespass.
  - (2) Unshielded floodlights and fixtures of less than 1,800 lumens (100 watt incandescent light or LED equivalent) in residentially utilized properties are permitted if angled downward so that the center of the beam is not directed above a forty-five (45) degree angle. Lighting fixtures with timers and motion sensors are encouraged. Motion sensors shall not be triggered by motion off the subject property.
- C. Height of mounted luminaires.
  - (1) For residential use, the total permitted height of a luminaire mounted on a building is a maximum of 22' and shall be downlight only.
  - (2) For a free-standing pole on a residential property, the maximum height of the luminaire shall be 8' with a maximum individual bulb wattage of 60 watts (or LED equivalent) and total wattage no greater than 400 watts.
  - (3) For a non-residential use on residentially-zoned property, the mounted height shall not be greater than twenty (20) feet; and fixture shall be downlight only and not greater than

60 watts or LED equivalent.

- (4) For any non-residential property that is adjacent to residentially-utilized property, the maximum mounted height of any luminaire shall be fourteen (14) feet.
- (5) For any non-residential property, the maximum mounted height of any luminaire shall be eighteen (18) feet.
- D. Prohibited luminaires.
  - (1) Unshielded wall packs and unshielded floodlights are not permitted.
  - (2) Searchlights, pulse and laser lights are prohibited.
  - (3) Blinking, tracing or flashing lights are prohibited.
  - (1)(4) Mercury vapor (MV) light sources are not permitted.

### § 117-5. Requirements for Outdoor Lighting for Non-Residential Properties.

- A. All non-essential exterior parking lot lighting shall be turned off within one (1) hour after the close of business or end of the activity.
- B. No luminaire shall be located or concentrated so as to produce glare or direct illumination across the boundary lines of the property nor shall any such light create a nuisance or hazard or detract from the use and enjoyment of adjacent property.
- C. The average illuminance levels listed in the Illumination Levels for Various Common Tasks, as provided in the IESNA Publications RP-33, RP-20 and RP-8 shall not be exceeded unless approved by the Planning Board as part of Site Plan Review or upon the recommendation of the Village's designated lighting expert. The Planning Board may vary the required lighting level listed in the IESNA Publications depending upon the general nature of the property under review and the surrounding area.
- D. Automatic Teller Machine (ATM) and other bank lighting assemblages shall use full cut off luminaires, and shall not cause glare or light trespass, except that nothing in this Chapter is intended to apply to lighting installed for security purposes pursuant to the regulations or guidelines of the Public Services Commission or other agency having jurisdiction, or the lighting requirements of Banking Law.

### § 117-2-6 Time limit for compliance by existing installations.

[Amended 1-21-1997 by L.L. No. 3-1997]

Any light or lamp now installed or operated in violation of the provisions hereof shall be altered to comply with this section within 15 days of notification.

## § 117-3-7 Penalties for offenses.

[Added 1-21-1997 by L.L. No. 3-1997]

A violation of this chapter shall, upon conviction, be punishable as provided in Chapter 1, General Provisions, Article III.