

LIGHTING

§ 152.500 INTENT AND PURPOSE.

(A) All outdoor lighting, such as that used in and around buildings, recreation areas, parking lots and signs, shall be designed to protect against the spillover of light to adjacent properties. It shall also be designed to protect against glare onto public rights-of way thereby impairing the vision of motorists and adjoining properties.

(B) All outdoor lighting shall be shielded from adjacent properties by thick evergreen vegetated buffers, berms, walls, or fences , and/or the use of directional lighting, lighting shields, special fixtures, timing devices, appropriate light intensities, luminaries, and mountings at appropriate heights.

(C) Outdoor lighting shall be architecturally integrated with the building's style, materials, and colors in the selection and design of light poles, brackets, and fixtures. Only in the B-2 portion of the Historic District Overlay is an exception to allow low lumen lighting to illuminate the historic commercial buildings to create night time ambiance.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2016-O14, passed 10-25-2016)

§ 152.501 LIGHTING PLAN REQUIRED.

(A) A lighting plan indicating illumination intensities shall be submitted with site plans, plot plans and subdivision plats . The Town Planner is authorized to waive this requirement for small independent development projects on less than an acre if the fixture types are specified on the site plan or plat .

(B) Any changes to the lighting plan must be approved by the Town Planner through a site or plot plan revision and/or subdivision plat revision.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O13, passed 5-21-2013)

§ 152.502 LIGHT MEASUREMENT TECHNIQUE.

Light level measurements shall be made at the property line of the property upon which the light to be measured is being generated. If measurement on private property is not possible or practical, light level measurements may be made at the boundary of the public street right-of-way that adjoins the property of the complainant or at any other location on the property of the complainant. Measurements shall be made at finished grade (ground level), with the light- registering portion of the meter held parallel to the ground pointing up. The meter shall have cosine and color correction and have an accuracy tolerance of no greater than plus or minus 5%. Measurements shall be taken with a light meter that has been calibrated within the year. Light levels are specified, calculated, and measured in footcandles (FC). All FC values below are maintained footcandles .

(Ord. 2005-O3, passed 3-15-2005)

§ 152.503 GENERAL STANDARDS FOR OUTDOOR LIGHTING.

(A) Unless otherwise specified in §§ 152.503 through 152.508, the maximum light level shall be 0.5 maintained footcandle at any property line in a residential district, or on a lot occupied by a dwelling , congregate care, or congregate living structure, and 2.0 maintained footcandle at any public street right-of-way , unless otherwise approved by the Planning Board and Board of Commissioners .

(B) All flood lights , spotlights and other types of outdoor lighting shall be installed such that the fixture shall be aimed down at least 45 degrees from vertical, or the front of the fixture is shielded such that no portion of the light bulb extends below the bottom edge of an external shield. Flood lights and display lights shall be positioned such that any such fixture located within 50 feet of a public street right-of-way is mounted and aimed perpendicular to the right-of-way , with a side-to-side horizontal aiming tolerance not to exceed 15 degrees from perpendicular to the right-of-way . These type lights shall not be used to illuminate buildings or other site features unless approved as an integral architectural element on the development plan. On-site lighting may be used to accent architectural elements and not be used to illuminate entire portions of building(s).

(C) All flood lamps emitting 1,000 or more lumens shall be aimed at least 60 degrees down from horizontal, or shielded such that the main beam from the light source is not visible from adjacent properties or the public street right-of-way .

(D) All wall pack fixtures on buildings may be used at entrances to a building to light unsafe areas. They are not intended to draw attention to the building or provide general building or site lighting. All wall pack fixtures shall be true cutoff fixtures.

(E) Service connections for all freestanding fixtures installed after application of this subchapter shall be installed underground.

(F) Within the B1, B2, and B3 districts, all outdoor lighting fixtures shall be at minimum full-cutoff fixtures .

(G) All light fixtures installed by public agencies, their agents, or contractors for the purpose of illuminating public streets are otherwise exempt from this regulation. For regulations regarding street Lighting, see §§ 152.350 through 152.367.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O13, passed 5-21-2013; Am. Ord. 2016-O14, passed 10-25-2016)

§ 152.504 LIGHTING IN PARKING LOTS AND OUTDOOR AREAS.

(A) Other than flood lights and flood lamps, all outdoor area and parking lot lighting fixtures of more than 2,000 lumens shall be cutoff fixtures, or comply with division (C) of this section.

(B) The mounting height of all outdoor lighting, except outdoor sports field lighting and outdoor performance area lighting, shall not exceed 41 feet above finished grade, unless approved by the Planning Board and Board of Commissioners as having no adverse effect.

(C) *Exceptions.*

(1) Non-cutoff fixtures may be used when the maximum initial lumens generated by each fixture shall not exceed 9,500 initial lamp lumens per fixture.

(2) All metal halide, mercury vapor, fluorescent, induction, white high pressure sodium, and color improved high pressure sodium lamps used in non-cutoff fixtures shall be coated with an internal white frosting inside the outer lamp envelope.

(3) All metal halide fixtures equipped with a medium base socket must utilize either an internal refractive lens or a wide-body refractive globe.

(4) All non-cutoff fixture open-bottom lights shall be equipped with full cutoff fixture shields that reduce glare and limit uplight.

(Ord. 2005-O3, passed 3-15-2005)

§ 152.505 LIGHTING FOR VEHICULAR CANOPIES.

Areas under a vehicular canopy shall have a maximum point of horizontal illuminance of 24 maintained footcandles (FC). Areas outside the vehicular canopy shall be regulated by the standards of § 152.504. Lighting under vehicular canopies shall be designed so as not to create glare off-site. Acceptable methods include one or more of the following:

(A) Recessed fixture incorporating a lens cover that is either recessed or flush with the bottom surface (ceiling) of the vehicular canopy.

(B) Light fixture incorporating shields, or shielded by the edge of the vehicular canopy itself, so that light is restrained to five degrees or more below the horizontal plane.

(C) Surface mounted fixture incorporating a flat glass that provides a cutoff fixture or shielded light distribution.

(D) Surface mounted fixture, typically measuring two feet by two feet, with a lens cover that contains at least 2% white fill diffusion material.

(E) Lighting shall be restricted to lighting fixtures (including lenses) that do not project below the bottom of the canopy. Lighting for canopies for service stations and other similar uses shall not exceed an average of 20 footcandles as measured at ground level at the inside of the outside edge of the canopy.

(F) Canopies used for building accents over doors, windows, etc. shall not be internally lit (i.e. from underneath or behind the canopy).

(G) Indirect lighting where light is beamed upward and then reflected down from the underside of the vehicular canopy. Such fixtures shall be shielded such that direct illumination is focused exclusively on the underside of the vehicular canopy.

(H) Other methods approved by the Planning Board.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O13, passed 5-21-2013)

§ 152.506 OUTDOOR SPORTS FIELD/OUTDOOR PERFORMANCE AREA LIGHTING.

(A) The mounting height of outdoor sports field and outdoor performance area lighting fixtures shall not exceed 80 feet from finished grade unless approved by the Planning Board as having no adverse effect or approved by the board of commissioners as part of a special use permit.

(B) All outdoor sports field and outdoor performance area lighting fixtures shall be equipped with a glare control package (louvers, shields, or similar devices). The fixtures must be aimed so that their beams are directed and fall within the primary playing or performance area.

(C) The hours of operation for the lighting system for any game or event shall not exceed one hour after the end of the event.

(Ord. 2005-O3, passed 3-15-2005)

§ 152.507 LIGHTING OF OUTDOOR DISPLAY AREAS.

(A) Parking lot outdoor areas shall be illuminated in accordance with the requirements for Section § 152.503. Outdoor display areas shall have a maximum point of illuminance of 24 maintained footcandles (FC).

(B) All light fixtures shall meet the IESNA definition of cutoff fixtures. Forward throw fixtures (type IV light distribution, as defined by the IESNA) are required within 25 feet of any public street right-of-way . Alternatively, directional fixtures (such as flood lights) may be used provided they shall be aimed and shielded in accordance with § 152.502(A) and (B).

(C) The mounting height of outdoor display area fixtures shall not exceed 41 feet above finished grade , unless approved by the Planning Board and Board of Commissioners as having no adverse effect.

(Ord. 2005-O3, passed 3-15-2005)

§ 152.508 SIGN LIGHTING.

Lighting fixtures illuminating signs shall comply with the requirements of §152.265 through 152.277, Signs, and such fixtures shall be aimed and shielded so that direct illumination is focused exclusively on the sign.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O13, passed 5-21-2013)

§ 152.509 LIGHTING OF BUILDINGS AND LANDSCAPING.

Lighting fixtures shall be selected, located, aimed, and shielded so that direct illumination is focused exclusively on the building facade , plantings, and other intended site feature and away from adjoining properties and the public street right-of-way .

(Ord. 2005-O3, passed 3-15-2005)

§ 152.510 TIMER DEVICES.

Timer devices shall be employed to shut off luminaries or to reduce light levels when full lighting is not required, such as after normal business hours. Special attention shall be given to protecting adjoining residential properties from off-site illumination after 10:00 p.m.

(Ord. 2005-O3, passed 3-15-2005) (Am. Ord. 2013-O13, passed 5-21-2013)

§ 152.511 PERMITS.

(A) The applicant for any permit required for work involving outdoor lighting shall submit documentation at time of site plan or plot plan approval that the proposed lighting plan complies with the provisions of this subchapter. The submission shall contain, but not be limited to the following, all or part of which may be part of or in addition to the information required elsewhere in this subchapter:

(1) A point-by-point footcandle array in a printout format indicating the location and aiming of illuminating devices. The printout shall indicate compliance with the maximum maintained footcandles required by this subchapter.

(2) Description of the illuminating devices, fixtures, lamps, supports, reflectors, poles, raised foundations and other devices (including but not limited to manufacturers or electric utility catalog specification sheets and/or drawings, and photometric report indicating fixture classification [cutoff fixture , wall pack , flood light , and the like]).

(B) The Administrator or his/her designee(s) may waive any or all of the above permit requirements, provided the applicant can otherwise demonstrate compliance with this subchapter.

(Ord. 2005-O3, passed 3-15-2005)

§ 152.512 NONCONFORMITIES.

(A) Following application of this regulation, the installation of outdoor lighting, replacement of outdoor lighting, and changes to existing light fixture wattage, type of fixture, mounting, or fixture location shall be made in strict compliance with this subchapter. Routine maintenance, including changing the lamp, ballast, starter, photo control, fixture housing, lens and other required components, is permitted for all existing fixtures not subject to division (B) of this section.

(B) All outdoor lighting that fails to conform with §152.502 above which is either located in a residential zoning district or which affects a lot occupied by a dwelling , congregate care, or congregate living structure located in a residential zoning district shall be discontinued, removed, or made to conform with § 152.502 within five and one-half years from the effective date of this provision. All such lights which are made nonconforming by a subsequent amendment to this subchapter or extension of areas in which this section is applicable shall be discontinued, removed, or made to conform within five and one-half years after the date of such amendment or extension.

(Ord. 2005-O3, passed 3-15-2005)