

PROPOSED ADDITION TO ARTICLE 17--TOWN BETTERMENT BY-LAWS:

SECTION 23 - OUTDOOR LIGHTING

1. Purpose

The regulation of outdoor lighting is intended to enhance public safety and welfare by providing for adequate and appropriate outdoor lighting, provide energy savings, provide for lighting that will complement the character of the Town and expand dark skies protection by reducing glare and minimizing light trespass onto other properties. Definitions relating to this bylaw are contained in Section 4.

2. Applicability

The requirements of this bylaw shall apply to outdoor lighting on all lots and parcels, residential, commercial and non-profit, but shall not apply to:

- street lighting,
- seasonal holiday lighting/temporary lighting (limited to a 60-day period),
- lighting during special events such as fairs, concerts, celebrations sponsored by the Town of Becket or approved by the Board of Selectmen;
- public athletic fields,
- outdoor recreational lighting, which must be turned off by 10:00 p.m., or at the conclusion of a competition begun before 10:00 p.m. In no case may the lighting remain on after midnight, unless approved by the Board of Selectmen.
- light fixtures with a lighting output of less than 1000 lumens (a 60 watt incandescent or a 15 watt compact fluorescent lamp),
- lights that control traffic, or for public safety on streets and ways.

Municipal facilities shall comply with this bylaw except as required for emergency services and when public safety dictates special lighting. Illuminated signs (see Zoning Bylaws 5.1.2) must meet the intent of this bylaw.

Although this bylaw does not address street lighting, we encourage the Town to pursue other means of bringing those lights into conformance.

3. Outdoor Lighting Basics

To minimize the harmful effects of light pollution, lighting should

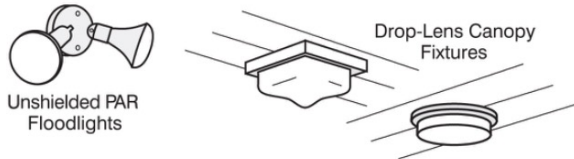
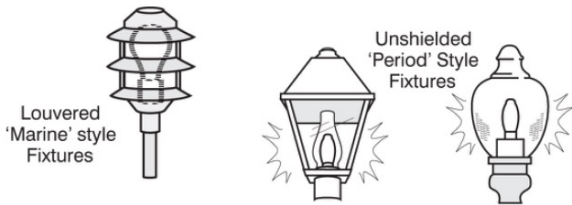
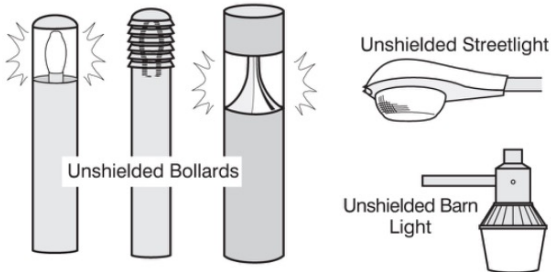
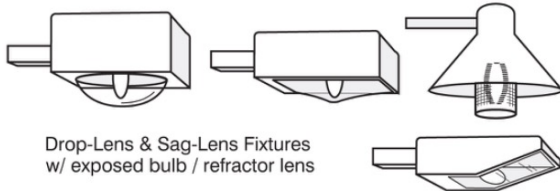
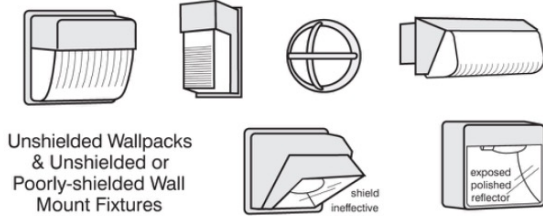
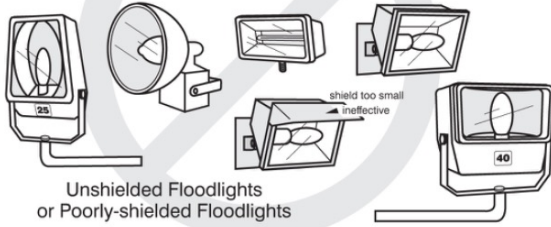
- Only be on when needed
- Only light the area that needs it
- Be no brighter than necessary
- Minimize blue light emissions
- Be fully shielded (pointing downward)

The figure below provides an easy visual guide to understand the differences between unacceptable, unshielded light fixtures and those fully shielded fixtures that minimize skyglow, glare and light trespass.

Examples of Acceptable / Unacceptable Lighting Fixtures

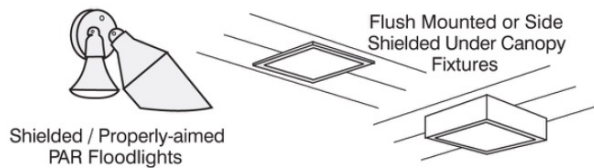
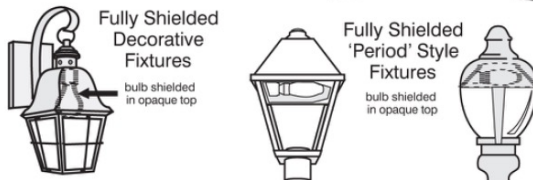
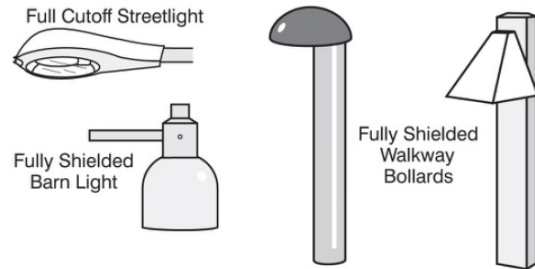
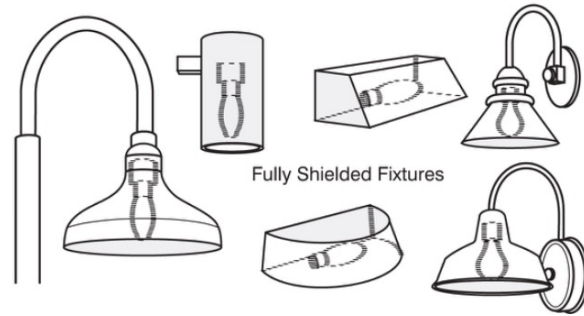
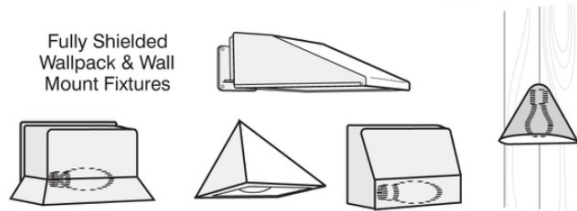
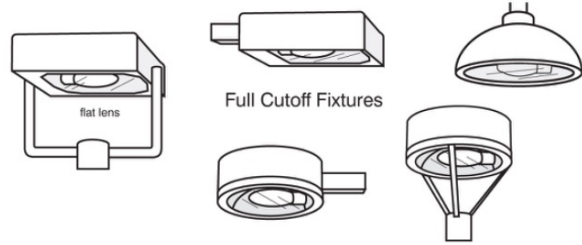
Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



Illustrations by Bob Crelin © 2005. Rendered for the Town of Southampton, NY. Used with permission.

4. Definitions

EVENT LIGHTING - Any lighting used for outdoor activities with large public gatherings.

FULLY SHIELDED LIGHT FIXTURE - A light fixture closed at the top with shielding so that the lower edge of the shield is at or below the lowermost part of the lamp or diffuser so as to eliminate all light emitted above the horizontal plane. Incidental reflections off structural supports or shields to limit light trespass are permitted.

GLARE - Light emitted from a lamp with an intensity great enough to produce a reduction in a typical viewer's ability to see.

HEIGHT OF THE LIGHT FIXTURE - The vertical distance from the finished grade of the ground directly below the light fixture to the lowest point of the lamp of the light fixture.

LAMP - A bulb or tube, which is a component of a light fixture that emits light.

LIGHT FIXTURE - A lighting device that may be secured to a wall, ceiling, pole, or post and is used to hold one or more lamps. Lighting fixtures are designed to distribute the light, to position and protect the lamp(s), and to connect the lamp(s) to the electrical power supply. Sometimes referred to as a LUMINAIRE.

LIGHT TRESPASS - Light falling where it is not wanted or needed, generally caused by a light on a property that shines onto the property of others.

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

SKYGLOW - The brightening of the nighttime sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Skyglow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky..

UPLIGHTING - Lighting that is directed in such a manner as to shine light rays above the horizontal plane.

5. Control of Glare and Light Trespass

To the greatest extent feasible, all light fixtures shall be equipped with shielding, lenses, or cutoff devices required to eliminate light trespassing onto a street or abutting lot or parcel and to minimize glare to persons on any street or abutting lot or parcel.

All light fixtures, regardless of their intended use or mounting configuration, shall be fully shielded, properly installed, and directed downward. Downward direction may be waived by the Building Inspector when illuminating architectural feature such as building sections, spires, American flags, or landscaping features, provided efforts are made to minimize glare and use only the minimum amount of light necessary.

All light fixtures shall also be positioned on the site so as to direct light into the site, lot or parcel and away from the property boundaries of the site, and or abutting properties.

6. Pole Height

Wherever outside light fixtures are proposed for parking areas, the height of the light fixture, including the pole, base and light fixture itself shall not exceed 20 feet in height.

Parking area lights in commercial areas are encouraged to be greater in number, lower in height and lower in light level, as opposed to fewer in number, higher in height and higher in light level.

Wherever outside light fixtures are proposed for walkway lighting, the height of the light fixture shall not exceed 12 feet in height above median grade at each pole location along the walkway.

Wherever outside light fixtures are proposed for walls or building surfaces, the height of the light fixture shall not exceed 15 feet in height above median grade. Fixtures illuminating a deck surface shall be no higher than 8 feet from the surface of the deck.

Wherever outside light fixtures are proposed for accenting architectural features of building surfaces, the height of the light fixture shall be exempt from the height requirements granted, provided the light fixture is in compliance with all other provisions of this bylaw.

7. Compliance

When an existing outdoor lighting fixture is being modified, extended, expanded, or added to, outdoor lighting shall be subject to this section. All other outdoor lighting fixtures must come into conformance with this section within 5 years of its effective date.

8. Enforcement

This bylaw shall be enforced by the Building Inspector of the Town. The Building Inspector shall have the authority and the duty to periodically visually inspect properties for compliance with this article, respond to complaints, and issue warnings and/or citations for any violations. Failure to comply with this bylaw after receipt of a warning or citation shall subject the offending property owner to a fine not exceeding twenty-five dollars (\$25.00) per day. In addition to any other means of enforcement available to the Building Inspector, the Building Inspector may enforce this article by means of noncriminal enforcement pursuant to MGL chapter 40, section 21D.