

Article ____. Lighting Standards

I. Purpose.

The purpose of this section is to protect the health, safety and welfare of the public by encouraging lighting practices and systems that will minimize glare, light trespass, and light pollution and conserve energy and resources while maintaining nighttime safety, utility, security and productivity, and curtailing the degradation of the nighttime visual environment.

II. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Abutting. Any property having a common lot line or that would have a common lot line if the abutting street, alley or right-of-way were to be vacated.

Adjustable Light Fixture. Any fixture containing an adjustment screw which allows the aiming or adjustment of the light fixture or any fixture that can be retrofitted with a shield at a cost equal or less than 10% of the cost of a replacement fixture.

Beam. The spatial distribution of the emitted light from a light fixture.

Bulb. A source of light.

Candela (cd). The unit of measurement of the intensity of a point source of light (approximately equal to 1 candle power).

Effective Date. This ordinance shall take effect 30 days following adoption by the Mt. Pleasant City Commission.

Existing Light Fixtures. Outdoor light fixtures already installed at the time this ordinance is adopted.

Floodlight or Spotlight. Any light fixture or lamp that incorporates a reflector or refractor to concentrate the light output into a directional beam.

Footcandle (fc). The illuminance measured 1 foot from a 1 candela source.

Footcandle, Horizontal and Vertical. The illuminance measured by a light meter in those positions. Illuminance may also be measured in other specified positions or directions.

Full Cutoff. A shielded light fixture that emits no light above a horizontal plane touching the lowest part of the fixture.

Glare. The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted that causes annoyance, discomfort or loss in visual performance and visibility.

HID Lamp. In a discharge lamp, the emitted energy (light) is produced by the passage of an electric current through a gas. High-intensity discharge (HID) includes mercury, metal halide and high-pressure sodium lamps. Other discharge lamps are LPS and fluorescent. Some such lamps have internal coatings to convert some of the ultraviolet energy emitted by the gas discharge into visual output.

Holiday Lighting. Festoon type lights limited to small individual bulbs on a string where the output per bulb is no greater than 15 lumens.

Illuminance. The intensity of light in a specified direction measured at a specified point.

Lamp. The component of the luminaire that produces the actual light including luminous tube lighting.

Light Fixture. The assembly that holds or contains a lamp or bulb and may include an assembly housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and a refractor or lens. A light fixture also includes the assembly for luminous tube and fluorescent lighting.

Light Pollution. Any adverse affect of man-made light. Often used to denote urban sky glow.

Light Trespass. Light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited.

Lighting, Public . Outdoor light fixtures located on property owned, leased, or controlled by the City, including but not limited to streets, highways, alleys, easements, parking lots, parks, playing fields, schools, institutions, meeting places, and all entities completely or partly funded by grants obtained by the City or its agents from federal, state or private sources.

Lighting, Private. Outdoor light fixtures located on property owned or controlled by individual persons, including but not limited to families, partnerships, corporations, and other entities.

Lumen. The unit of luminous flux, the total amount of light falling uniformly on or passing through an area of 1 square foot, each of which is 1 foot from a 1-candela source, yielding an illuminance of 1 footcandle at that distance (the output of lamps and bulbs is customarily measured in lumens, a common 100 watt incandescent light bulb, for example, having an output less than 1,800 lumens).

Luminaire. A complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps and to connect the lamps to the power supply.

Luminous Tube Lighting. Gas filled tubing which, when subjected to high voltage, becomes luminescent in a color characteristic of the particular gas used, e.g. neon, argon, etc.

Mercury Vapor Fixture. Any fixture that utilizes a HID lamp where the light is produced by radiation from mercury vapor.

Non-adjustable Light Fixture. Any light fixture not containing an adjustment screw to permit the aiming or adjustment of the light fixture or that can only be shielded or retrofitted at a cost greater than 10% of the cost of a replacement fixture. An internally lit sign will be considered a non-adjustable light fixture.

Outdoor Light Fixture. Outdoor artificial illuminating devices, outdoor fixtures, lamps and other similar devices, permanently installed or portable, used for flood lighting, general illumination or advertisement.

Residentially Zoned Property. Any property within the city limits of Mt. Pleasant zoned any of the following classifications: R-1, R-2, R-3, R-4, M-1, M-1, PRD and any property located in the Charter Township of Union zoned R-1, R-2A, R-2B, R-3, R-4, R-5.

Sag-lens or drop-lens. A clear or prismatic refracting lens that extends below the lowest opaque portion of a light fixture.

Sports Facilities. Lighting at public and private outdoor sports facilities, including but not limited to playing fields, arenas, tracks and swimming pools.

Street Light. Light fixtures in public rights-of-way, either owned by the City of Mt. Pleasant or the public utility providing lighting to the city.

Strobe Light. A flash lamp that produces high intensity short duration light pulses by electric discharge in a gas.

III. Submittal Requirements.

- A. The following information must be included for all site plans required to be submitted to the Planning Commission in accordance with the zoning ordinance:
 - 1. Location of all freestanding, building-mounted and canopy outdoor light fixtures on the site plan.
 - 2. All building elevations for all structures on the site plan.
 - 3. Specifications and details for the type(s) of outdoor light fixture(s) being proposed including the method of shielding.
 - 4. Any other information deemed necessary by the Building Official/Zoning Administrator.
- B. Site plans required to be submitted to the Planning Commission for a location which abuts residentially zoned property or is within a residentially zoned district must also include a photometric grid overlaid indicating the overall light intensity (in footcandles) at the property lines of the site.
- C. All applications for building permits in all districts shall include the following:
 - 1. Verification that all outdoor light fixtures with a bulb producing over 680 lumens shall have a full cut-off style of fixture directed downward, and that (with the exception of motion activated fixtures) no outdoor light fixture may create an intensity of light greater than one-half (1 /2) footcandle at a property line which abuts residentially zoned property or is within a residentially zoned district.
 - 2. Any other information deemed necessary by the Building Official/Zoning Administrator.

IV. Standards.

Unless modified by other provisions of this section or unless exempted under Sections V or VI, all lighting must comply with the following standards:

- 1. All exterior lighting fixtures at all properties in the city with bulbs producing more than 680 lumens must be full cut-off or shielded and directed downward.
- 2. All light coming from anywhere on any property may not exceed one-half (1 /2) footcandle of intensity at the property line of abutting residentially zoned property.

3. Streetlights installed after the effective date shall be full cut-off fixtures or approved historical design fixtures utilizing a minimum output consistent with the safety of drivers and pedestrians as specified by Illuminating Engineering Society of North America (IESNA).
4. Strobe lights on towers or antennas shall be prohibited unless required by the FAA or other government entity.
5. The use of laser light sources, search lights or any similar high intensity light for outdoor advertisement or entertainment is permitted only with a special permit from the Mt. Pleasant City Commission and only then for no more than five (5) days per year, per applicant, for each location.
6. Any activity producing intense light, whether from floodlights or from high-temperature processes, such as combustion or welding or otherwise, shall be performed within an enclosure so as to completely obscure and shield the light from view from any point along the lot lines of the property or from the sky, except during the period of construction or repair of improvements on the property.
7. All lights bulbs used for the illumination of business establishments or for the illumination of business buildings or areas surrounding them, or for the illumination or display of merchandise or products of business establishments, shall be completely shielded from the view of vehicular traffic using streets abutting such business properties. Flood lights used for the illumination of a building or any sign thereon, whether or not such flood lights are attached to or separate from the building, are permitted but the lighting shall not project beyond the sign or the wall being illuminated.
8. Lighting at publicly owned and privately owned outdoor sports facilities shall be shielded to reduce glare, safety hazards, light trespass and light pollution, and shall provide levels of illuminance consistent with nationally recognized standards such as the Illuminating Engineering Society of North America (IESNA), and shall be operated on a schedule that coincides with scheduled events.
9. Unshielded sag-lens, drop lens, or mercury vapor fixtures are prohibited.

V. Exemptions.

The following are exempt from the lighting requirements of this section, except that the Building Officials/Zoning Administrators may take steps to eliminate the impact of the exempted items when deemed necessary to protect the health, safety and welfare of the public:

1. Holiday Decorations.
2. Temporary Lighting.

Temporary lighting that conforms to the requirements of this ordinance shall be allowed. Nonconforming temporary lighting may be permitted by the Planning and Zoning Administrator only after considering:

- 1) The public and/or private benefits which will result from the temporary lighting;
- 2) Any annoyance or safety problems that may result from the use of the temporary lighting; and

3) The duration of the temporary nonconforming lighting.

The applicant shall submit a detailed description of the temporary nonconforming lighting to the Planning and Zoning Administrator. The administrator shall provide written approval or denial within 10 days. If denied, the written notice shall state the basis for the denial. The applicant may appeal the denial to the City Manager. The decision of the City Manager is final. This notification process does not apply to temporary illuminated signs installed by MDOT, DPS, DPW or other public safety agencies.

3. Flags.

No flag lighting may exceed a 1/2 footcandle at the property line. However, flags illuminated with a fixture equivalent to the Bayville-Flaglighter Kit #MF-2348-30-2 may light the flag to the manufacturer's specifications.

4. Emergency Operations.

The light standards in this ordinance shall not apply to emergency operations performed under the directive of a public safety or public works agency, public utility, County Road Commission or Michigan Department of Transportation.

5. Motion Activated Fixtures.

Motion activated lighting may be unshielded provided it is located in such a manner as to prevent direct glare and lighting into properties of others or into a public right-of-way, and provided the light is set to only go on when activated and to go off within 10 minutes after activation has ceased, and the light shall not be triggered by activity off the property.

6. Historic Theater Marquees.

Historic theater marquees in the Central Business District, as defined by the City Zoning Ordinance, are exempt from this ordinance.

7. Signs.

Signs are exempt from the provisions of Section IV. 1.

VI. Existing Outdoor Light Fixtures.

1. Existing adjustable outdoor light fixtures installed before the effective date of this ordinance, if they are installed ten (10) feet above grade, or less, may continue in service without adjustment or modification for twelve (12) months. All other existing adjustable outdoor light fixtures installed before the effective date of this ordinance may continue in service without adjustment or modification for five (5) years.
2. Existing light fixtures, other than adjustable outdoor light fixtures, installed before the effective date of this ordinance may continue in service without adjustment or modification for twenty-five (25) years.

3. Light fixtures installed after the effective date of this ordinance, including replacements for existing fixtures, must conform to this ordinance.

VII. Inspection.

The Building Official/Zoning Administrator may inspect any site or outdoor light fixture to determine if the site or outdoor light fixture complies with the requirements of this section.

VIII. Inconsistencies Repealed.

If this ordinance conflicts with any other city ordinance or resolution, the more restrictive of the ordinance shall prevail.

IX. Severability.

Should any section, clause or paragraph of this ordinance be declared by court of competent jurisdiction to be invalid, the same will not affect the validity of the ordinance as a whole or part hereof other than the part declared to be invalid.

X. Saving Clause.

Nothing in this ordinance shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed; nor shall any just or legal right or remedy or any character be lost, impaired or affected by this ordinance.

XI. Penalty Clause.

Any person who fails to comply with this ordinance may be issued a municipal civil infraction pursuant to Title III, Chapter 36 of the Code of Ordinances.