

Mankato, Minnesota Code of Ordinances Sec. 10.89

CHARTER AND CODE City of MANKATO, MINNESOTA Codified through Ordinance No. 19-0513-2, enacted May 13, 2019. (Supp. No. 5)

Minnesota Municipal Codes > Minnesota > Mankato Code of Ordinances > **CHAPTER 10 - LAND USE (ZONING) > PART IX. STANDARD OF GENERAL APPLICABILITY.**

§ Sec. 10.89 Performance Standards.

Subd. 1. General Requirement. All uses shall comply with the performance standards established in this section unless any Federal, State, County, or City law, **ordinance**, or regulation establishes a more restrictive standard, in which case the more restrictive standard shall apply.

Subd. 2. Noise. Any activity or operation of any use producing noise, other than ordinary vehicle noise, shall be conducted so that no noise from the activity shall be deemed a public nuisance, as declared by the City Council.

Subd. 3. Glare and Heat. Any activity or operation of any use producing glare or heat shall be conducted so that no glare or heat from the activity or operation shall be detectable at any point off the zoning lot on which the use is located. Flickering or intense sources of light shall be controlled or shielded so as not to cause a nuisance across lot lines.

Subd. 4. Exterior Lighting.

Subpart 1. Purpose and Intent. The purpose of this lighting **ordinance** is to create standards for outdoor lighting which will provide for nighttime safety, **security** and utility while reducing light pollution, light trespass, and conserving energy.

It is the intent of this **ordinance** to require appropriate lighting levels, efficient (watts to lumens) lighting sources, full cut-off lighting, and to minimize/discourage lighting glare, lighting pollution and lighting trespass.

Subpart 2. Definitions. For the purposes of applying the regulations of this section, the following definitions shall apply:

1. Cutoff: The point at which all light rays emitted by a lamp, light source or luminaire is completely eliminated (cutoff) at a specific angle above the ground.
2. Cutoff Angle: The maximum angle formed by a line drawn in the direction of emitted light rays at the light source and a line perpendicular to the ground from the light source.
3. Full Cutoff-Type Luminaire: A luminaire constructed or shielded to direct all light at a cutoff angle of less than 90 degrees. Also, referred to as a Horizon Limited Luminaire.
4. Foot-candle: A unit of illumination produced on a surface, all points of which are one foot from a uniform point source of one-candle.
5. Glare: Direct light emitted from a light source which causes eye discomfort.
6. Light Pollution: The shining of light produced by a luminaire above the height of the luminaire and into the sky.
7. Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located.
8. Luminaire: A complete lighting unit consisting of a light source and all necessary mechanical, electrical and decorative parts.

Mankato, Minnesota Code of Ordinances Sec. 10.89

9. Lighting Districts: The districts as depicted on the Official District Lighting Map. The Official Lighting District Map shall be considered part of this **ordinance**.

Subpart 3. General Standards. In addition to the regulations specific to each lighting district outlined in Subpart 7 of this subdivision, the following provisions shall apply:

A. General Standards for Lighting on Private Property:

- 1) No flashing light shall be permitted.
- 2) Light for outdoor advertising shall be designed to function as Full Cutoff Luminaires. Lighting intended for outdoor advertising which projects light into the sky shall be prohibited. The temporary use of lasers and spotlights that project light into the sky may be allowed subject to the restrictions of temporary signs contained in Section 10.87.
- 3) Light sources or luminaires shall not be located within transitional yards except along pedestrian walkways.
- 4) All luminaires located on commercial, industrial, or institutional property shall be designed so that the light source (bulb or lamp) is completely shielded from direct view of an observer standing a point five feet above grade on the lot line abutting a transitional yard or at any location on residentially zoned property.
- 5) All luminaires located on private property shall be designed or positioned so that the maximum illumination at the property line shall not exceed one-half () foot candle.
- 6) The use of exterior lighting for nonresidential uses shall observe the same hours of operation as the use itself, except that a minimum level of lighting for **security** purposes may be left on beyond the normal hours of operation.
- 7) Lighting for canopies covering fueling stations at automobile service stations and drive-thru facilities shall not illuminate abutting properties and the luminaires shall be designed so that the light source (bulb or lamp) is completely shielded from direct view of an observer standing at the property line at a point five feet above grade.
- 8) Because of their unique requirement for nighttime visibility and their limited hours of operations, ball diamonds, playing fields and tennis courts are exempted from the general standards of this section. Lighting for these outdoor recreational uses shall be shielded to minimize light and glare from spilling over onto adjacent residential properties. The maximum permitted illumination at the property line shall not exceed two foot candles.
- 9) As part of the approval of public street or sidewalk projects, the City Council may vary from the requirements of this section.
- 10) The illumination levels contained in the Lighting Handbook, Illuminating Engineering Society of North America, as amended from time to time, shall be used as a guide for providing adequate and safe illumination levels. The City Council may require conformance with the illumination levels contained in the Lighting Handbook, Illuminating Engineering Society of North America as part of the review and approval of a private or public development project.

B. Method of Measurement. Illumination levels shall be measured in foot candles with a meter sensor in a horizontal position at an approximate height of three feet above grade. Maximum illumination readings are to be taken directly beneath the luminaire. Readings should normally be taken after a cumulative initial lamp burn in period of at least 200 hours.

To determine minimum permitted illumination, illumination levels shall be measured in foot candles with a meter sensor in a horizontal position at an approximate height of three feet above grade. The point at which readings shall be taken is dependent upon the area classification and fixture arrangement as follows:

Mankato, Minnesota Code of Ordinances Sec. 10.89

1. Opposite Spaced Street Lighting. (Requires two readings) Readings should be taken as described above 1.) At the center of the street, equidistant between two sets of fixtures, and 2.) at the curbline equidistant between two fixtures on the same side of the street.
2. Public Sidewalks. (Sharing a lighting system with the street) Readings should be taken as described above at the farthest "house" side of the pavement, equidistant between two fixtures.
3. Public Sidewalks. (Separate lighting system from street lighting) Readings should be taken as described above in the center of the pavement, equidistant between two fixtures.
4. Parking Areas. (Perimeter lit) Readings should be taken as described above equidistant between two fixtures at the perimeter, as well as at the location of the property farthest from the fixtures.
5. Parking Areas. (Centrally lit or combination of central/perimeter lighting) Readings should be taken as described above in the center of large parking areas, equidistant between all of the fixtures illuminating the area. If perimeter lighting is also used, take readings as described in Parking Areas, Perimeter lit.

In instances where only one fixture is located on a property, the minimum illumination level shall be measured in foot candles with a meter sensor in a horizontal position located approximately three feet above grade. Readings should be taken at the location on the property farthest from the fixture.

Subpart 4. Exemptions. The following are exempt from the standards contained in this ordinance:

- 1) Decorative seasonal lighting with a power rating of less than or equal to 75 watts.
- 2) Lighting for one-and two family dwellings, provided that the lamps have a power rating of less than or equal to 75 watts, a cutoff component is incorporated in the design of the luminaire, and the lighting level at the property line shall not exceed the maximum level contained in Subpart 3. The maximum lighting level at the property line may be exceeded in cases where the lamp is turned on an off by a motion sensor and the lamp is not on for a continuous period exceeding ten minutes.
- 3) Temporary emergency lighting used by police, fire fighters, or other emergency services, as well as all vehicular luminaires.
- 4) Hazard warning luminaires which are required by federal regulatory agencies.
- 5) Lighting utilized for the purpose of illuminating the flag of the United States of America; provided each luminaire shall be limited to 150 watts with a maximum number of two luminaires. The light fixtures shall incorporate a cutoff component in the design of the luminaire, and the light source shall be directed at the flag and arranged to minimize the amount of light pollution, trespass, or glare on to adjacent properties and public streets. This exemption shall apply only to flags displayed on flagpoles.

Subpart 5. Exterior Lighting Plan Required. A lighting plan shall be required anytime exterior lighting is proposed, or modified, that is associated with use of greater intensity than a one or two-family dwelling. The lighting plan shall be submitted with the site plan information required in Section 10.90, Subdivision 6 of the Mankato City Code.

The plan shall be prepared by a certified engineer, architect, landscape architect or lighting engineer or designer. The plan shall identify the location, size, type of luminaire, height of luminaire, a photometric plan of the site, and fixture data sheets. The plan shall also contain a certification by the property owner or agent and the preparer of the plan that the exterior lighting depicted on the plan complies with the requirements of this subdivision. Once the plan is approved, the exterior lighting of the property shall conform to the plan.

Subpart 6. Nonconforming Luminaires. Exterior lighting luminaires in existence on the effective date of this chapter shall be exempt from the standards of this chapter and shall be considered legally nonconforming. Such fixtures may be repaired and maintained. However, if any legal nonconforming luminaire is moved or damaged by any means to an extent that its total replacement is necessary, the luminaire, or replacement, shall comply with this subdivision.

Exterior lighting luminaires existing on the effective date of this ordinance which are located on private commercially zoned property and are found to direct light or glare to private property located in a residential zoning district may be declared a public nuisance if the level of illumination on private property located in

Mankato, Minnesota Code of Ordinances Sec. 10.89

the residential zoning district, which is caused by the luminaire, is equal to or greater than foot candle. Such fixtures shall be altered to reduce the level of illumination in the residential zoning district to less than foot candle within six months of receiving a written notice of violation from the Zoning Administrator.

Subpart 7. District Standards. The zones referred to in the standards are depicted on the Official Lighting Map, as adopted as part of this subdivision:

A. **Downtown Lighting District.** Luminaires located in the Downtown Lighting District shall have a design that allows not more than 10 percent of the light from the luminaire to be projected above the fixture. Luminaires shall be designed to provide adequate pedestrian illumination levels as outlined in Lighting Handbook, Illuminating Engineering Society of North America. The appearance of luminaires shall be complementary and compatible with significant architectural features or themes found in the Downtown Lighting District.

B. **General Lighting District.** Luminaires located in the General Lighting District (GLD) shall be designed to function as full cutoff luminaires and prevent light from the luminaire to be projected into the sky or across zoning lot lines.

Exceptions to the full cutoff requirement of this district may be approved by the City Council as part of the review and approval of an Institutional Overlay District, planned unit development, or street improvement. Standards for considering an exception include all of the following:

1. The proposed development or district is characterized by a high degree of pedestrian traffic.
2. The purpose and design of the luminaire are to provide adequate pedestrian illumination levels as outlined in Lighting Handbook, Illuminating Engineering Society of North America.
3. The purpose of the luminaire's design is to be compatible with significant architectural features or themes associated with the development or planning area.
4. No full cutoff of luminaire is available which is architecturally compatible with the development and provides adequate illumination levels for pedestrian traffic.
5. The design of the fixture incorporates a cutoff component which allows a minimal amount of light emitted from the luminaire to be projected above the height of the luminaire.
6. The luminaire shall comply with all other requirements of this section.

HISTORY NOTE:

(Ord. of 8-25-97, Subd. 4)

Subd. 5. Dust and Air Pollution.

A. **Dust.** Dust and other types of air pollution borne by the wind from sources such as storage areas, yards, roads, bulk materials, conveying equipment and the like within lot boundaries shall be kept to a minimum by appropriate landscaping, screening, sheltering, paving, fencing, wetting, collecting, or other acceptable means.

B. **Fugitive Particulate Matter.** No person shall cause or allow the emission or movement of fugitive particulate matter across the lot lines of a zoning lot. This requirement shall not apply when the wind speed is greater than twenty-five (25) miles per hour.

Subd. 6. Electromagnetic Interference. Electromagnetic interference from any operations of any use in any district shall not adversely affect the operation of any equipment located off the zoning lot on which such interference originates.

Subd. 7. Odors. The regulation of odors shall conform to State law.

Subd. 8. Storage. Except as specifically permitted by this chapter, all raw materials, supplies, finished or partially finished products, and equipment shall be stored within an enclosed building, unless said items are used in connection with an approved construction activity.

Mankato, Minnesota Code of Ordinances Sec. 10.89

Subd. 9. Compliance. In order to assure compliance with the performance standards set forth above, the Zoning Administrator may require an owner of any permitted or allowed use to have made such investigations and tests as may be required to show adherence to the performance standards. Such investigations and tests as are required to be made shall be carried out by an independent testing organization as may be agreed upon by all parties concerned, or if there is failure to agree, by such independent testing organization as may be selected by the Zoning Administrator. The cost incurred in having such investigations or tests conducted shall be the responsibility of the owner or operator.

Minnesota Municipal **Codes**

Copyright 2020 Municipal **Code** Corporation All Rights Reserved

End of Document