

Section 14
PERFORMANCE STANDARDS¹

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14.1 **PURPOSE:**

Performance standards set forth herein are established to protect the public health, safety, comfort, convenience and the general welfare of the Village and to promote a more desirable environment in which to live and work within the Village.

14.2 **NOISE:**

No person shall emit beyond the boundary of his property any sound that unreasonably interferes with the enjoyment of life or with any lawful business or activity or so as to violate any rule set forth herein. Lands are to be classified into three classes; Class A is to consist of areas especially noise sensitive in that they incorporate sleeping quarters, namely residential and institutional uses. Class B is to consist of Retail Commercial and Office Commercial land uses, as well as recreational and open space uses. Class C is to include all industrial and manufacturing uses.

The applicable land use designation for undeveloped land shall be determined by the predominant land use of the surrounding property or, if no use is predominant, by the most restrictive designation applicable to any of the surrounding property.

The following standards shall apply.

- 14.2-1 No person shall cause or allow the emission of any noise to abutting Class A property from land used as designated below in excess of the levels specified below, in the designated octave bands, when measured at any point on or beyond the property line of the land on which the noise originates.

¹ Established by Ordinance 98-35, passed Sept. 22, 1998.

Daytime (7:00 a.m. to 10:00 p.m.):

Octave Band Center Frequency	Maximum Sound Pressure Levels (dB) at Emitter's Property Line		
	(Hertz)	C	B
31.5	75	72	72
63	74	71	71
125	69	65	65
250	64	57	57
500	58	51	51
1000	52	45	45
2000	47	39	39
4000	43	34	34
8000	40	32	32
A-level	61 dB (A)	55 dB (A)	55 dB (A)

NIGHTTIME (10:01 p.m. to 6:59 a.m.):

Octave Band Center Frequency	Maximum Sound Pressure Levels (dB) at Emitter's Property Line		
	(Hertz)	C	B
31.5	69	63	63
63	67	61	61
125	62	55	55
250	54	47	47
500	47	40	40
1000	41	35	35
2000	36	30	30
4000	32	25	25
8000	32	25	25
A-level	51 dB (A)	45 dB (A)	45 dB (A)

14.2-2 No person shall cause or allow the emission of any noise to abutting Class B property from land used as designated below in excess of the levels specified below, in the designated octave bands, when measured at any point on or beyond the property line of the land on which the noise originates.

24 HOURS PER DAY:

Octave Band Center Frequency	Maximum Sound Pressure Levels (dB) at Emitter's Property Line		
	(Hertz)	C	B
31.5	88	79	72
63	83	78	71
125	74	72	65
250	69	64	57
500	63	58	51
1000	57	52	45
2000	52	46	39
4000	48	41	34
8000	45	39	32
A-level	66 dB (A)	62 dB (A)	55 dB (A)

14.2-3 No person shall cause or allow the emission of any noise to abutting Class C property from land used as designated below in excess of the levels specified below, in the designated octave bands, when measured at any point on or beyond the property line of the land on which the noise originates.

24 HOURS PER DAY:

Octave Band Center Frequency (Hertz)	Maximum Sound Pressure Levels (dB) at Emitter's Property Line	
	C	All Other
31.5	88	79
63	83	78
125	78	72
250	73	64
500	67	58
1000	60	52
2000	54	46
4000	50	41
8000	47	39
A-level	70 dB (A)	62 dB (A)

14.3 AIR POLLUTION:

The Village of Lakewood adopts the State of Illinois Environmental Protection Agency Air Pollution Regulations. The State of Illinois Environmental Protection Agency Air Pollution Regulations as adopted by the Illinois Pollution Control Board on April 14, 1972 and published by the Illinois Environmental Protection Agency and all amendments thereto, are hereby adopted by reference and made part of this chapter. One copy of said regulations shall be kept on file in the Village Hall for public inspection. Any person who violates any provision of said regulations shall be subject to the penalties provided for the violation of this Zoning Code.

14.4 WATER POLLUTION:

The Village adopts the State of Illinois Environmental Protection Agency Water Pollution Regulations. The State of Illinois Environmental Protection Agency Water Pollution Regulations as adopted by the Illinois Pollution Control Board on March 7, 1972 and published by the Illinois Environmental Protection Agency and all amendments thereto, are hereby adopted by reference and made part of this Section 14. One copy of said regulations shall be kept on file in the Village Hall for public inspection. Any person who violates any provision of said regulations shall be subject to the penalties provided for the violation of this Zoning Code.

14.5 OPEN BURNING:

The Village of Lakewood adopts the State of Illinois Environmental Protection Agency Open Burning Pollution Regulations. The State of Illinois Environmental Protection Agency Open Burning Regulations as adopted by the Illinois Pollution Control Board on September 2, 1971 and published by the Illinois Environmental Protection Agency and all amendments thereto are hereby adopted by reference and made part of this Section 14. One copy of said regulations shall be kept on file in the Village Hall for public inspection. Any person who violates any provision of said regulations shall be subject to the penalties provided for the violation of this Zoning Code.

14.6 TOXIC OR NOXIOUS MATTER:

No use shall, for any period of time, emit into the atmosphere, store on site, dispose on site or discharge across the boundaries of the lot wherein it is located, toxic or noxious matter in such concentrations as to be detrimental to, or endanger the public health, safety, comfort or welfare, or cause injury or damage to property or business.

14.7 ODORS:

The emission of odorous material in such quantity as to be readily detectable at any point along lot lines, or as to produce a public nuisance or hazard beyond lot lines is prohibited.

14.8 FIRE AND EXPLOSIVE HAZARDS:

The BOCA Basic Fire Prevention Code (current edition) shall be applicable to all buildings, structures and appurtenances thereof.

14.9 VIBRATION:

Any operation or activity which shall cause, at any time and at any point along the nearest adjacent lot line, earth borne vibrations (other than background vibrations produced by some source not under control of this Zoning Code), such as the operation of motor vehicles or other transportation facilities, in excess of the limits set forth in Column I herein, is prohibited. In addition, any operation or activity which shall cause at any time and at any point along a residential boundary line, earth borne vibrations in excess of the limits set for in Column II herein is prohibited. Vibration shall be expressed as displacement in inches and shall be measured with a three component measuring system approved by the Village.

Frequency (Cycles per Second)	I* Displacement (inches)	II* Displacement (inches)
0 to 10	.0008	.0004
10 to 20	.0005	.0002
20 to 30	.0002	.0001
30 to 40	.0002	.0001
40 and over	.0001	.0001
*Steady state vibrations, for the purpose of this Zoning Code, which are continuous or, if in discrete pulses, are more frequent than 100 per minutes. Impact vibrations, that is, discrete pulses which do not exceed 10 impulses per minute, shall not cause in excess of twice the displacements stipulated.		

14.10 GLARE OR HEAT:

No use or activity shall be permitted which causes glare or heat to be transmitted or reflected in such quantities as to be detrimental or harmful to the use of adjacent properties.

14.11 BEEKEEPING is permitted in the Village only in compliance with the following conditions: 2014-01

1. **Density.** Colony density shall not exceed the following densities on the following sized lots:
 - (i) Lot which is one acre or less - two colonies;
 - (ii) Lot which is larger than one acre – three colonies.
2. **Location.** No hives are permitted within the front yard or side yard of a lot. No hive shall be kept or maintained within 25 feet of any property line of a lot upon which it is situated.

Hive entrances shall be oriented so as to direct bee flight away from the vicinity of patios, decks, balconies or entrances to living spaces on adjoining properties.

3. **Management.** All colonies shall be managed by the lot's owner to promote gentleness and mitigate swarming. Any colony exhibiting aggressive behavior without provocation shall be immediately destroyed or re-queened by the beekeeper with a queen bred for gentleness.

Each beekeeper shall ensure that a convenient source of water is available at all times to the bees so that the bees will not congregate at swimming pools, bibcocks, pet water

bowls, birdbaths or other water sources where they may cause human, bird, or domestic pet contact. The water shall be maintained so as not to become stagnant.

All bee colonies shall be kept in inspectable-type hives with removable combs, which shall be kept in sound and usable condition.

4. **Licensing.** Beekeepers shall apply for a Village beekeeping license prior to bringing any colony into the Village. Applications shall be submitted to the Village of Lakewood Code Enforcement Officer. At the time of application for a Village beekeeping license, the applicant shall:

- (i) Submit proof of registration of each colony with the State of Illinois Department of Agriculture; and
- (ii) Be in compliance with the other requirements of this section; and

The Village beekeeping license shall be renewed each year by submitting a renewal application to the Village of Lakewood Code Enforcement Officer no more than two weeks prior to the one year anniversary date of the then current Village beekeeping license. At the time of applying for a renewal Village beekeeping license, the applicant shall submit the same documents and comply with the same requirements as required for the initial Village beekeeping license application.

5. **Prohibited.** The keeping by any person of bee colonies in the Village not in compliance with this section is prohibited. Any bee colony not residing in a hive structure intended for beekeeping, or any swarm of bees, or any colony residing in a standard or homemade hive which, by virtue of its condition, has been abandoned by the beekeeper, is unlawful.

6. **Violation; fine.**

- (A) Any person violating the provisions of this chapter shall be fined not less than one hundred dollars (\$100.00) nor more than five hundred dollars (\$500.00) for each offense, and a separate offense shall be deemed committed upon each and every day such violation continues.
- (B) Any Village beekeeping license shall be mandatorily revoked and no new Village beekeeping license shall be issued to that person, or to any person living on the property where the apiary from which the violation(s) arose was located, for a minimum of one year.

14.12 **LIGHTING** 22-13, 22-10

- A. Purpose. The purpose of this Section is to provide outdoor lighting standards that will improve safety, minimize glare and light trespass and conserve energy for businesses and residents of the Village.

- B. Applicability. Previously approved photometric plans are not required to comply with the requirements of this Section until more than 50 percent of the existing lighting fixtures, standards, and/or elements are changed or removed. When additional lighting elements are proposed to an existing site, a lighting or photometric plan is required to demonstrate that lighting for the entire site shall thereafter be in compliance with this Section. All new applications for permits and new construction shall comply with the provisions of this Section. A photometric plan shall be required to show compliance with the requirements of this Section.
- C. Permit required; exemptions.
1. No new lighting fixture shall be installed until a permit is obtained in accordance with the Section. No permit shall be issued for any lighting unless the lighting is permitted by and complies with the regulations of this Section.
 2. The following types of lighting are exempt from the permit requirement and the regulations of this Section:
 - a. Holiday lighting, provided it is maintained in good repair.
 - b. Flag lighting is allowed and cutoff fixtures are not required as long as shielded and/or directional fixtures are installed and aimed to minimize glare, sky glow, and light trespass.
 - c. Construction lighting so long as it is aimed to minimize glare and light trespass to adjacent properties and turned off at the end of construction hours, unless otherwise approved by the village manager or his/her designee through the construction permit process. Construction lighting must meet the property line foot-candle requirements.
 - d. Temporary special event lighting is exempt when approved by the village manager or his/her designee on a temporary basis.
 - e. Municipal lighting installed for the benefit of public health, safety and welfare.
 - f. Repair, maintenance, and/or replacement of original lighting elements with identical lighting elements, or lighting elements of alternate technologies which produce an equivalent level of illuminance.
 3. The following types of lighting are exempt from regulations of this Section, but shall be subject to the review and approval by the Planning and Zoning Commission:
 - a. Any decorative or architectural accent lighting fixture with lighting elements which produce a combined illuminance of 1,000 lumens or fewer per fixture shall not be required to be of the 100 percent cutoff style, except 100 percent cutoff style decorative or architectural accent lighting fixtures may be required on a case-by-case basis by the Planning and Zoning Commission in situations where lateral light illuminance may create impacts on adjacent land uses or where a direct line-of-sight would exist from adjacent or nearby residential property.
 - b. Recreational sports facility lighting, sports/leisure/entertainment, bridges, publicly zoned properties, public monuments, or other uses not otherwise addressed in this Section will be reviewed as part of the site plan review and the Planning and Zoning Commission review process. Photometric plans that provide average and maximum lighting levels shall be submitted. All of the uses set forth in this subsection must meet property line foot candle requirements and the applicable shall be consulted. Full cutoff lighting for recreational sports facilities is strongly recommended. When full cutoff fixtures are not used, outdoor light fixtures shall include internal and/or

external glare control. Fixtures shall be installed to minimize uplight and offsite light trespass. Lighting used to illuminate sports fields, courts and surfaces shall be turned off within one-hour after the last event of the evening.

- c. Replacement of original lighting fixtures or standards with alternate lighting fixtures or standards of equal illuminance, cut-off style, and shielding.
- D. Design requirements. Lighting fixtures, standards, and elements not otherwise exempted per Subsection C, 2, shall comply with the following design requirements:
1. Cutoff style lighting fixtures shall be installed and maintained to be horizontal to the ground so that the cutoff characteristics of the fixture are maintained.
 2. Lighting installations shall be maintained in good repair and shall comply with the requirements of this Section.
 3. Building mounted wall packs are required to be fully shielded.
 4. Pedestrian bollard lights shall be subject to all the requirements of this section however pedestrian bollard lights shall not be required to feature 100 percent cutoff style fixtures. One hundred percent cutoff style bollard fixtures may be required on a case-by-case basis by the code official in situations where pedestrian-level light illuminance may create impacts on adjacent land uses or where a direct line-of-sight would exist from adjacent or nearby residential property.
 5. The light source of landscaping lighting shall be recessed and/or shielded to avoid adversely affecting the vision of motorists and/or pedestrians in adjacent areas. Line of sight to a light source shall not be permitted five feet or more beyond the edge of the public right-of-way or property line in a residential district by an observer viewing from a position that is level with or higher than the ground below the fixture.
 6. All parking lot pole fixtures are required to be cutoff type with recessed lenses to limit glare and light trespass. Fixtures shall be zero tilt and shall be directed below the horizontal rather than above the horizontal.
 7. Within one-hour after business hours conclude, parking lot lights shall be turned off, or the number of illuminated bulbs reduced by one-half or more, or the overall lighting intensity reduced by at least 50 percent. The Village may designate which of these is acceptable on a case by case basis.
 8. Parking lot floodlights for area illumination are prohibited.
 9. Light source locations shall be chosen to minimize glare.
 10. Canopies.
 - a. The underside of canopies shall have a matte finish to minimize light reflection.
 - b. Canopy lights shall be fully recessed into the canopy. The bottom of each light fixture shall be flush with the ceiling of the canopy so the light source is not visible from or does not cause glare on public right-of-way or adjacent properties.
 - c. Lighting beyond the perimeter of a canopy shall comply with this section for commercial parking areas. Lighting standards for canopies are governed by Table 1.
- E. Lighting levels.
1. Measurement.
 - a. All light fixtures including but not limited to those installed upon standards and poles, those mounted to buildings, and bollard fixtures shall be included in any lighting or photometric plan.

- b. Unless otherwise stated, all illuminance measurements for the purpose of this section shall be made at ground level with the meter oriented horizontally, on the subject property. Shared parking will be considered as one total subject property for the purpose of this Section.
 - c. All light levels at ground level which meet or exceed 0.1 foot-candles shall be depicted upon any lighting or photometric plan.
 - d. The calculation of the uniformity ratio shall include all lighting levels as depicted upon a lighting or photometric plan at equal intervals at ground level which exceed 0.1 foot-candles and areas depicted on a lighting or photometric plan with light levels of less than 0.1-foot-candle shall be excluded from the calculation.
 - e. The minimum light level shall reference the lowest light level within the illuminated area of a site which provides a measurement of 0.1 foot-candles or greater.
 - f. The average light level shall reflect the mean of all light levels across a site which exceed 0.1 foot-candles.
2. Limits. Any use utilizing outdoor illumination, including that which is reflected and illumination from inside a building that is visible from the outside, shall be conducted in accordance with Table 1 and Table 2, below.
 3. Lighting zones. A property may be divided into zones to ensure that localized areas of a property which are intended to feature specialized lighting designs can be accommodated without influencing lighting levels elsewhere upon the property which would otherwise be permitted per ordinance. Establishment of lighting zones shall be subject to approval by the code official and shall be used in application to site lighting designs which attempt to limit lighting levels in areas of a site adjacent to light-sensitive land uses or similar light-sensitive concerns without affecting the uniformity of lighting levels elsewhere upon a given site.
 4. Waivers. Waivers from the average foot-candle, maximum foot-candle, and uniformity ratio requirements contained in Table 1 and the maximum foot-candle levels at lot lines contained in Table 2 be approved by the code official without the need for a zoning hearing or zoning variation when circumstances warrant.

Table 1			
Levels of Activity	Maximum Illuminance Standards in Foot-candles		
	Average FC		Highest uniformity ratio
High			
Drive-up windows (within 20 feet)	20.0		4:1
Illuminated canopies			
Private rights-of-way			
High to medium			
Retail and restaurants	5.0		4:1
Medium			
Offices	2.4		4:1
Industrial			
Hospital			
Low			
Educational facilities	2.0		4:1
Institutional and churches			
Multifamily residential			
Uses that are not listed above, including but not limited to recreational sports facility lighting, sports/leisure/entertainment, bridges, publicly zoned properties or public monuments will be reviewed on a case-by-case basis by the code official.			

Table 2			
The maximum limit of illuminance on the subject property at the lot line shall be as noted when adjacent to the following uses:	Maximum foot-candles (fc)	Maximum fixture height (height is measured from adjacent existing finish grade to the top of the pole or luminaire, whichever is higher)	Maximum fixture height less than 100' from residential
Residential (including buildings primarily devoted to religious worship)	0.1 fc	14' for any fixture which is not fully shielded to prohibit line-of-sight views of any light element from adjacent property	
Limited commercial	0.2 fc	25'	14' for any fixture which is not fully shielded to prohibit line-of-sight views of any light element from adjacent residential property 18' for any fixture which is fully shielded to prohibit line-of-sight views of any light element from adjacent residential property
Business, Hospital and medical, Commercial, Light industrial, Service and Public Lands	2.0 fc	25'	14' for any fixture which is not fully shielded to prohibit line-of-sight views of any light element from adjacent residential property 18' for any fixture which is fully shielded to prohibit line-of-sight views of any light element from adjacent residential property

Automotive dealerships	5.0 fc	25'	14' for any fixture which is not fully shielded to prohibit line-of-sight views of any light element from adjacent residential property 18' for any fixture which is fully shielded to prohibit line-of-sight views of any light element from adjacent residential property
Public or Private Roadway Rights-of-way	5.0 fc	N/A	N/A

F. Prohibitions. High-intensity, special-purpose lighting is prohibited, including, but not limited to the below:

1. Aerial lasers;
2. Searchlight style lights;
3. Flickering or flashing lighting;
4. It is unlawful for any person to illuminate his or her property with floodlights or other lights which shine or glare into or toward any private dwelling house of another or into any street or avenue. All lights used for the illumination of property shall be directed toward the ground or toward the property to be illuminated, and should be equipped with reflectors and shields which shall prevent glare in the direction of any private dwelling house of another or into any street.
5. Outdoor light projectors, except any light projector used for signage purposes otherwise expressly authorized by the hearing body.
6. Any lighting that creates a public nuisance or hazard can be ordered removed or altered by the village manager or his/her designee.