

**CHAPTER 12
PERFORMANCE STANDARDS**

Section 1200.00 Performance Standards

Section 1200.01 Purpose

This Resolution permits specific uses in specific districts. These performance standards are designed to limit, restrict, and prohibit the effects of those uses outside their premises or district. Points of measurement to determine compliance with the performance standards of this Resolution shall be the property line, unless otherwise specified. All structures, lands, air and waters shall hereafter, in addition to their use, site and sanitary regulations, comply with the following performance standards:

Section 1200.02 Noise

All sources of noise (except those not under direct control of occupant of use, such as vehicles) must comply with the following standards:

- A. The level of sound can not exceed the values specified in Schedules 1200.02.1 and 1200.02.2 when measured at the property line.
- B. Between the hours of 11:00 P.M. to 7:00 A.M., the permissible sound levels for a commercial or industrial use at a Residential Zoning District boundary or where adjoining to a residential use, shall be reduced by ten (10) decibels in each octave band for impact noises designated in Schedule 1200.02.2.
- C. Method of Measurement

The maximum permitted sound levels for each type of land use, measured in decibels at property lines, shall not exceed the following values:

**Schedule 1200.02.1
Maximum Permitted Sound Levels (Decibels) for Residential and Other Non-Commercial and Non-Industrial Uses**

Octave band, cycles/second	No residential or non-commercial or non-industrial activity or use shall produce a sound level at property lines that exceed the following
0-75	72
75-150	67
150-300	59
300-600	52
600-1200	40
1200-2400	46
2400-4800	34
Over 4800	32

Schedule 1200.02.2

Maximum Permitted Sound Levels (Decibels) for Commercial and Industrial Uses

Octave band, cycles/second	Adjoining Residential District Boundaries or Residential Uses	Along Industrial Building Lot Lines within an Industrial Zoning District
0-75	72	79
75-150	67	74
150-300	59	66
300-600	52	59
600-1200	46	53
1200-2400	40	47
2400-4800	34	41
Over 4800	32	39

Section 1200.03 Vibration

No vibration shall be permitted which is discernible beyond the lot line to the human sense of feeling for:

- A. Three minutes or more duration in any one hour of the day between the hours of 7:00 A.M. and 7:00 P.M.
- B. The product of displacement in inches times the frequencies in cycles per second of earth borne vibrations from any activity shall not exceed the values specified in Schedule 1200.03.C when measured at the points indicated.
- C. Method of Measurement

Earth borne vibrations shall be measured by means of a three component recording system, capable of measuring vibration in three mutually perpendicular directions. The displacement shall be the maximum instantaneous vector sum of the amplitude in the three directions.

Schedule 1200.03.C

Maximum Permitted Vibrations (Inches per Second) Area of Measurement

Type of Vibration	At residential boundaries	At all other lot lines
Continuous	.003	.015
Impulsive 100/min or less	.006	.030
Less than 8 pulses per 24 hours	.015	.075

Section 1200.04 Glare or Heat

Any use or activity in any district, which produces an intense glare or heat, shall be performed within a completely enclosed building or shielded in such a manner as not to create a public nuisance or hazard along lot lines.

Section 1200.05 Air Pollution

Any use or activity that emits smoke, fly ash, dust, particulate, vapors, mists, gases or other substances in quantities or in a manner that exceeds established state or federal standards or that is harmful or potentially harmful to human health, to animals, to vegetation or to other property shall be considered a public nuisance and is prohibited.

Method of Measurement

- A. No emission of smoke from any source shall be permitted to exceed a greater density than that density described as No. 1 on the Ringlemann Chart.
- B. However, smoke may be emitted, which is equal to but not darker than No. 2 on the Ringlemann Chart, for not more than four minutes in any thirty-minute period.
- C. For the purpose of grading the density of smoke, the Ringlemann Chart, as published by the U.S. Bureau of Mines, shall be the standard.

Section 1200.06 Water Pollution

No use or activity within the Township shall locate, store, discharge or permit the discharge of any liquid, gaseous, or solid materials into surface or subsurface waters so as to contaminate, pollute, or harm such waters or cause nuisances.

In addition, no use or activity shall withdraw water or discharge any liquid or solid materials that exceed the minimum standards of the Ohio or Federal EPA, Ohio Revised Code, or other applicable accepted standards.

Section 1200.07 Radioactivity

Radiation, including radioactive materials and electro-magnetic radiation such as that emitted by the x-ray process or diathermy, shall not be emitted to exceed quantities established as safe by the National Institute of Standards and Technology when measured at the property line.

Section 1200.08 Electrical Interference

No use, activity, or process shall be conducted which produces electromagnetic interference with radio or television reception.

Section 1200.09 Fire or Explosive Hazards

All uses and activities involving the manufacturing, utilization, processing, or storage of flammable and explosive materials shall ensure that adequate safety devices are installed to protect against the hazard of fire and explosion and shall include fire fighting and suppression equipment as defined by the Ravenna Township Fire Department requirements, and devices that are standard in the industry.

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Method of Measurement

- A. The storage, use or manufacture of solid materials or products ranging from incombustible to moderate burning is permitted.
- B. The storage, use or manufacture of solid materials or products ranging from free to active burning to intense burning is permitted provided the following condition is met:
 - 1. The said materials are stored, used or manufactured within a completely enclosed building having incombustible exterior walls and protected throughout by an automatic fire extinguishing system; or
 - 2. The said materials are stored outdoors in conformance with the regulations of the Fire Prevention Code of the American Insurance Association, and such storage shall have 50 feet clearance from all property lines.
- C. The storage, use or manufacture of flammable liquids or materials which produce flammable or explosive vapors or gases shall be permitted in accordance with Schedule 1200.09.C.

**Schedule 1200.09.C
Total Capacity in Gallons of Flammable Materials* Permitted**

Type of Industry	Above Ground	Below Ground
A. Businesses/Industries Engaged in Storage and Distribution		
1. Materials having a closed cup flash point over 187 Degrees F.	100,000	400,000
2. From and including 105 degrees F. to and including 187 degrees F.	50,000	200,000
3. Materials having a closed cup flash point of less Than 105 degrees F.	20,000	100,000
B. Businesses/Industries Engaged in Use or Manufacture of Flammable Materials		
1. Materials having a closed cup flash point over 187 Degrees F.	50,000	400,000
2. From and including 105 degrees F. to and including 187 degrees F.	10,000	200,000

* When flammable gases are stored, used, or manufactured and measured in cubic feet, the quantity in Cubic feet (at Standard Pressure and Temperature) permitted shall not exceed 300 times the quantities listed.

Section 1200.10 Outdoor Lighting

Light pollution, which includes misdirected light, avoidable reflected light, light during hours when it is not needed, and light levels in excess of what is necessary for the task shall be

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considered a public nuisance and is prohibited.

Exposed sources of light shall be shielded so as not to create a nuisance across lot lines and to minimize the direct light emitted above the horizontal plane.

- A. Shielded light sources and careful fixture placement shall be required to facilitate compliance with this section.
- B. Exterior lighting fixtures (except street lights) shall be oriented so that the lighting element or shield does not spill light onto neighboring properties. Light rays shall not be directed into the road right-of-way (except for safety purposes such as to illuminate points of ingress and egress) or upwards into the atmosphere.

C. Minimum Lighting Standards

- 1. All commercial, institutional, multi-family and industrial vehicular parking, loading, and circulation areas that are used for any such purpose after sunset shall provide artificial illumination at a minimum intensity of 0.4 foot-candles, exclusive of approved anti-vandal lighting, for such areas. These lights shall be equipped with automatic timing devices.
- 2. Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.
- 3. The direct light emissions of any upward directed architectural, landscape and decorative lighting shall not be visible above the roofline.
- 4. Recreational and sports facility lighting shall comply with I.E.S. (Illuminating Engineering Society) recommendations and be shielded whenever possible.

D. Intensity of Illumination

- 1. The intensity of illumination, measured at the property line, of spill over light shall not exceed: 0.1 foot-candles on residentially zoned property, or 0.5 foot-candles on business or industrial zoned property in a vertical plane.
- 2. Street Lighting: Average I.E.S. luminance recommendations shall not be exceeded. IES average to minimum luminance uniformity ratios are to be used as a guide for designing safe and adequate roadway lighting.
- 3. Outdoor Parking Facilities: Luminance requirements shall be determined by the level of activity for the types of parking uses and luminance levels indicated in Schedule 1200.10.D.3.

**Schedule 1200.10.D.3
Permitted Intensity of Illumination for Parking Facilities**

Type of Activity	Level of Luminance	General Parking Areas	Pedestrian Ways
Normal	Minimum Level Luminance	2.4 Foot-Candles	0.6 Foot-Candles
High	Maximum Level Luminance	3.6 Foot-Candles	2.4 Foot-Candles

Examples of levels of activity for types of parking uses:

- a. High Activity Levels: Sports facilities, auto dealerships, etc.
 - b. Normal: All other than high levels of activity shall be considered normal.
4. Light fixtures shall not be permitted within required buffer yards.
 5. Flashing, flickering, and other similar lighting that distracts motorists or cyclists is prohibited.
 6. Lighting which creates or becomes a public nuisance is not permitted.
 7. Accent lighting and low voltage lighting (12 volts or less) is exempt from these requirements.
 8. Nonconforming lighting: All lighting fixtures approved prior to the adoption of this Resolution shall be treated as and regulated as legal nonconforming uses.

Section 1200.11 Burial of Waste

No waste of any kind shall be buried on the property. All waste must be properly disposed of according to OEPA, State, and County Health Codes. Home based composting of organic refuse will be allowed provided that such use is incidental to the residence and is not conducted as, or part of a business and provided it does not become a public nuisance.