

SECTION 1529.231 - ELECTRIFIED FENCES

(a) Scope

This article applies to the installation and maintenance of *electrified fences*.

(b) Definitions

(1) Protective Barrier

Permanent fence or wall that restricts direct access to the energized portions of an electrified fence. Permanent shall mean not being able to be removed, lifted or relocated without the use of a tool or equipment.

(2) Electrified Fence

A fence energized with a non-lethal electrical current.

(3) Secure Area

The area bounded by the *electrified fence*.

(c) Plan Exam Required

At the time of permit application(s), an electrical plan exam fee shall be paid in accordance with Parma Codified Ordinance section 185.04 — Fees of the Director of Public Safety.

(d) Permits Required

An electrical permit is required for the installation, repair and alteration of electrified fences. A fence permit is required for the installation of a *protective barrier* and electric fence collectively.

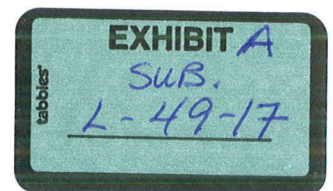
(1) Exceptions:

(a) The repair and replacement of *electrified fence* conductive strands.

(2) Plan Submittal

The electrical permit and fence application for *electrified fences* shall include a minimum of three (3) complete sets of the following:

- (a) Site plan showing the location of the *protective barrier* and the *electrified fence* on the property in relationship to property lines, walkways and existing buildings.
- (b) Fence details showing both the *electrified fence* and *protective barrier*, including all gates.
- (c) Electrical details showing the equipment, wiring diagrams, grounding and other information to insure compliance with Article 250 of the National Electrical Code (NEC).
- (d) Energizer Output Certification Form as prescribed in Section 1535.08.
- (e) The location of the Knox Box or other similar approved device for emergency access.



(e) Location of Electrified Fences

Electrified fences shall not be installed at the following locations:

- 1) Within twenty (20) feet of the public right of way.
- 2) Within one (1) foot of a side or rear property line.
- 3) Within five (5) feet of a building exit.
- 4) Within thirty (30) feet of a hazardous material storage or handling areas.
- 5) On roof tops or within buildings.
- 6) Any residential locations and/or uses.
- 7) In windows, doors, or skylights.

Electrified fences shall only be allowed in Industrial "A", Industrial Park, and Research Manufacturing Zoning Districts, and only for businesses that participate in the Department of Homeland Security's Customs-Trade Partnership Against Terrorism (C-TPAT) Program.

(f) Electrified Fence Height

Electrified fences shall be restricted to a maximum overall height, including any barbed or razor wire, of not more than two (2) feet higher than the non-electric protective barrier. Not more than three strands of barbed wire or razor wire may be installed above the top of the highest electrified strands.

(g) Electrical Equipment Standards

Electrical equipment, wiring and grounding shall comply with the provisions of this code and the following standards:

1. The Energizer output shall comply with section 22.108 of the International Electrotechnical Commission (IEC) 60335-2-76 Standard except as modified by city ordinances.
2. Energizer shall provide pulsed power.
3. AC current shall not be used to energize any electrified fence.
4. The Energizer shall be powered by DC battery not to exceed 12 volts. A trickle charger and solar panels may be used to recharge the battery but shall not directly energize the fence.
5. All ground system cables shall be properly insulated.
6. The electrified fence grounding system shall not be connected to any plumbing systems.
7. Each energizer shall be connected to its own ground system and shall not be connected to any other grounding system.

(h) Energizer Output Certification

The applicant shall certify that the electrified fence energizer output characteristics comply with Section 22.108 of the IEC 60335-2-76 International Standard.

(i) Protective Barrier

The perimeter of the *secure area* shall be protected by an additional non-electrified fence meeting the following standards:

1. The *protective barrier* shall be a permanent fence or wall at least six (6) feet in height and no more than eight (8) feet above the adjacent grade. If chain link fence, it must be vinyl coated.

2. Openings in the *protective barrier* shall not allow for the passage of a two (2) inch diameter sphere. The maximum vertical clearance between grade and the bottom of the *protective barrier* shall be two (2) inches.

Exception: At rolling gates, the maximum vertical clearance between grade and the bottom of the protective barrier shall be four (4) inches.

3. The *protective barrier* shall be separated from the *electrified fence* by a minimum of six (6) inches and a maximum of twelve (12) inches.

Exception: Conductive strands installed at gates installed in *protective barriers* shall be separated from the gate by a minimum of four (4) inches and a maximum of six (6) inches.

(j) Warning Signs

Electrified fences shall be clearly marked with warning signs. The warning signs shall be placed on both sides of the *protective barrier* at each entrance to the *secure area* and at intervals not to exceed thirty (30) feet along the entire perimeter of the fence line. Warning signs shall be located not less than five (5) feet above the adjacent walking surface or grade.

(1) Graphics

Warning signs shall be displayed on both sides in both English and Spanish with the following text: "WARNING ELECTRIC FENCE" and contain the international symbol for electrical shock hazard. Signs shall have a minimum two (2) inch letter height, minimum stroke of one half (½) inch and have a contrasting background.

(k) Knox Box

A Parma Fire Department permitted and approved Knox Box or other similar device approved by the Fire Official shall be installed to provide secure access to the electrical power disconnect switch by public safety personnel. The Knox Box or other similar approved device shall be located at the main entry point to the property in a location approved by the Fire Official.

(l) Commercial Business Hours of Activation

An *electrified fence* shall not be energized during the hours of normal business operation. However, where businesses are operating continuously on a twenty-four (24) hour basis the conductors of an *electrified fence* shall not be energized unless all authorized persons within or entering the *secure area* have been informed of the *electrified fence* location.

(1) Annual License

Electrified fences permitted and installed after the effective date of this ordinance must obtain an annual license each calendar year. The following information must be provided at the time of registration application:

- (a) Business name
- (b) Address of property
- (c) Contact person/representative
- (d) Address and phone number of contact person

Furthermore, an applicant for the annual license must provide a notarized statement from a registered electrician or fence contractor specializing in the installation electrified fences, certifying that the electrified fence and equipment is currently operating in conformance with the provisions of this code. It shall be unlawful to energize an electrified fence in violation of the provisions of this chapter.

An annual license fee shall be paid in accordance with Parma Codified Ordinance section 185.04 — Fees of the Director of Public Safety.

(m) **Emergency Access**

In the event that access by the City of Parma Fire Department and/or Police Department personnel to a property where a permitted electric security fence has been installed and is operating is required due to an emergency or urgent circumstances, and the Knox box or other similar approved device referred to in Section 1535.11 above is absent or non-functional, and an owner, manager, employee, custodian or any other person with control over the property is not present to disable the electric security fence in order to gain access to the property. As a condition of permit issuance, all applicants issued permits to install or use an electric security fence as provided in this Section will agree to waive any and all claims for damages to the electric security fence against the City of Parma and/or its personnel under such circumstances.

(n) **Indemnification**

All applicants issued permits to install or use an electric security fence as provided in this Section shall agree, as a condition of permit issuance, to defend, indemnify and hold harmless the City of Parma and its agents, officers, consultants, independent contractors and employees from any and all claims, actions or proceedings arising out of any personal injury, including death, or property damage caused by the electric security fence.

(o) **Penalty**

Whoever violates any of the provisions of this Code for which no other penalty is provided, or any rule or regulation promulgated thereunder, or fails to comply with this Code or with any written notice or written order issued thereunder, or interferes with, obstructs or hinders any person authorized to inspect, by virtue of Section 1501.07, while such person is lawfully making an inspection is guilty of a misdemeanor of the first degree. A separate offense shall be deemed committed each day during or on which a violation occurs or continues.