

ARMADA TOWNSHIP

MACOMB COUNTY, MICHIGAN

ORDINANCE NO. 1202

ARMADA TOWNSHIP ELECTRICAL ORDINANCE

TITLE

AN ORDINANCE securing the public health, safety and general welfare of the residents and property owners of Armada Township by adopting by reference the 1996 edition of the National Electrical Code, NFPA-70, with technical amendments approved and recommended by the Reciprocal Electrical Council, Inc. and approved by the Bureau of Construction Codes, and repealing Ordinance Numbers 1200 and 1201 and any and all Ordinances or Resolutions in conflict with the provisions of this Ordinance.

THE TOWNSHIP BOARD OF THE TOWNSHIP OF ARMADA,  
MACOMB COUNTY, MICHIGAN ORDAINS:

**SECTION 1.      SHORT TITLE**

This Ordinance shall be known and cited as the Armada Township Electrical Ordinance.

**SECTION 2.      PURPOSE**

The purpose of this Ordinance is to protect the public health, safety and welfare of the property and persons in Armada Township by the adoption of the 1996 edition of the National Electrical Code and Technical Amendments approved and recommended by the Reciprocal Electrical Council, Inc. and the Bureau of Construction Codes and providing penalties for the violations of such code and amendments.

**SECTION 3.        ADOPTION OF CODE**

Pursuant to the provisions of Act 230, Public Acts of 1972, as amended, the Township Board of the Township of Armada elects to adopt, by reference, the 1996 National Electrical Code as promulgated and adopted by the National Fire Protection Association, with Technical Amendments, approved and recommended by the Reciprocal Electrical Council, Inc. and approved by the Bureau of Construction Codes, as fully set forth in Section 4, as the applicable electrical code for the Township of Armada. Copies of the 1996 National Electrical Code are on file in the office of the Armada Township Building Department, and the office of the Armada Township Clerk, and are available for public inspection during regular business hours.

**SECTION 4.        AMENDMENTS TO 1996 NATIONAL ELECTRICAL CODE**

The 1996 edition of the National Electrical Code, as recommended by the Reciprocal Electrical Council, Inc and approved by the Bureau of Construction Codes, is hereby amended by the following provisions:

**RULE 1.        CIRCUIT INTERCONNECTION.**  
Section 210-11 is added as follows:

210-11. Circuit interconnection. Neutral and ungrounded circuit conductors for two, three, or four-wire circuits shall originate at the same outlet or panel. Neutral and/or ungrounded conductors for circuits, shall not be tapped or spliced from different locations in the wiring system.

**RULE 2. SERVICE ENTRANCE CONDUCTOR SETS.**  
Section 230-40 is amended to read as follows:

230-40. Number of Service-Entrance Conductor Sets. Each service drop or lateral shall supply only one set of service-entrance conductors.

Exception No. 1: Buildings with more than one occupancy shall be permitted to have one set of service-entrance conductors run to each occupancy or to a group of occupancies.

Exception No. 2: Where two to six service disconnecting means in separate enclosures are grouped at one location and supply separate loads from one service drop or lateral, one set of service-entrance conductors shall be permitted to supply each or several such service equipment enclosures.

Exception No. 3: Deleted

**RULE 3. GROUPING OF DISCONNECTS.**  
Section 230-72(a) is amended to read as follows:

230-72. Grouping of disconnects: (a) General. The two to six disconnects as permitted in Section 230-71 shall be grouped. Each disconnect shall be marked to indicate the load served.

Exception No. 1: One of the two to six service disconnecting means permitted in Section 230-71, where used only for a water pump also intended to provide fire protection, shall be permitted to be located remote from the other disconnecting means.

Exception No. 2: A service disconnect(s) for separately metered outdoor electric space conditioning equipment for one and two-family dwellings, shall be permitted to be located immediately adjacent to the outdoor meter cabinet. A permanent plaque or directory shall be installed at each service disconnect location denoting all other services, feeders, and branch circuits supplying that building or structure and the area served by each. The feeder or branch circuit permitted by this exception shall not enter or pass through the structure or building served.

**RULE 4. OUTSIDE FEEDER TAPS.**  
Section 240-21(m) is amended to read as follows:

(m) Outside Feeder Taps. Outside conductors shall be permitted to be tapped to a feeder or to be connected at the transformer secondary, without overcurrent protection at the tap or connection, where all the following conditions are met:

- (1) The conductors are suitably protected from physical damage.
- (2) The conductors terminate at up to six (6) circuit breakers or six (6) sets of fuses, that will limit the load to no more than 125% of the ampacity of the conductors. The calculated load shall not exceed the allowable ampacity of the conductors.
- (3) The tap conductors are installed outdoors, except at the point of termination.
- (4) The overcurrent device for the conductors is an integral part of a disconnecting means or shall be located immediately adjacent thereto.
- (5) The disconnecting means for the conductors are installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the conductors.

**RULE 5. RACEWAYS AS GROUNDING MEANS.**

Section 250-91(b) is amended to read as follows:

250-91. Material. (b) Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following: (1) a copper or other corrosion-resistant conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or busbar of any shape; (2) rigid metal conduit; (3) intermediate metal conduit; (4) electrical metallic tubing; (5) armor of Type AC cable; (6) the copper sheath of mineral-insulated, metal-sheathed cable; (7) the metallic sheath or the combined metallic sheath and grounding conductors of Type MC cable; (8) cable trays as permitted in Sections 318-3(c) and 318-7; (9) cablebus framework as permitted in Section 365-2(a); (10) other electrically continuous metal raceways listed for grounding.

Section 350-14 is amended to read as follows:

350-14 Grounding. Flexible metal conduit shall not be permitted as a grounding means. Where an equipment bonding jumper is required around flexible metal conduit, it shall be installed in accordance with Section 250-79.

Section 351-9 is amended to read as follows:

351-9. Grounding. Liquidtight flexible metal conduit shall not be permitted as a grounding means. Where an equipment bonding jumper is required around liquidtight flexible metal conduit, it shall be installed in accordance with Section 250-79.

**RULE 6. TYPE NM AND NMC CABLES; USED NOT PERMITTED**  
Section 336-5 is amended to read as follows:

336-5. Uses Not Permitted. (a) Types NM, NMC and NMS. Types NM, NMC and NMS cables shall not be used:

- (1) As service-entrance cable
- (2) In commercial garages having hazardous (classified) locations as provided in Section 511.3.
- (3) In theaters and similar locations, except as provided in Article 518, Places of Assembly.
- (4) In motion picture studios.
- (5) In storage battery rooms.
- (6) In hoistways.
- (7) Embedded in poured cement, concrete, or aggregate.
- (8) In any hazardous (classified) location, except as permitted by Sections 501-4(b), Exception: 502-4(b) Exception: 504-20.

**RULE 7. SPACE HEATING EQUIPMENT(OTHER THAN ELECTRIC HEAT).**  
Section 422-21(c) is added as follows:

422-21(c) Space heating equipment other than electric heat. A readily accessible disconnect switch shall be mounted on the exterior of the heating equipment or on a surface adjacent to the heating equipment.

**RULE 8. CIRCUITS IN ANESTHETIZING LOCATIONS.**  
Section 517-61(a) is amended to read as follows:

517-61. Wiring and Equipment.  
(a) Within Anesthetizing Locations.

- (1) Except as permitted in Section 517-160, each power circuit within, or partially within, an anesthetizing location as referred to in Section 517-60 shall be isolated from any distribution system by the use of an isolated power system.

Exception: An area in a health care facility which does not use flammable inhalation anesthetics or analgesia, such as dental operatories, clinics and outpatient facilities.

**RULE 9. FIRE ALARM SUPERVISION.**  
Section 760-16 is added as follows:

Supervision. All fire-protective circuits shall be electrically or electronically supervised so that any malfunction of the system such as an electrical open, a ground fault or any short circuit fault on the main power supply, signaling line, or alarm initiating devices, will indicate a visual and audible signal at the alarm panel when proper alarm operation would be prevented.

Exception: Interconnecting circuits of household fire-warning equipment that are wholly within a dwelling unit.

**SECTION 5. PENALTY**

Any person, firm or corporation who shall fail to comply with any of the provisions of this Ordinance, upon conviction thereof, shall be guilty of a misdemeanor and subject to a penalty not to exceed Five Hundred Dollars (\$500.00) or imprisonment in the Macomb County Jail not to exceed Ninety (90) days, or both such fines and imprisonment.

**SECTION 6. REPEAL OF CONFLICTING PROVISIONS.**

All Resolutions, Ordinances or parts thereof in conflict with the provisions of this Ordinance are to the extent of such conflict repealed.

**SECTION 7. SEVERABILITY.**

If any section, paragraph, clause or provision of this Ordinance is for any reason held to be invalid or unconstitutional, the invalidity or unconstitutionality of such section, paragraph, clause or provision shall not effect any of the remaining provisions of this Ordinance.

**SECTION 8.        PUBLICATION**

This Ordinance, or a summary thereof, shall be published in full in the Armada Times, a newspaper of general circulation in the Township of Armada, within Thirty (30) days after its adoption.

**SECTION 9.        EFFECTIVE DATE**

This Ordinance shall take effect Thirty (30) days from and after the date of publication of a true copy in the Armada Times, as provided by Section 8.

CERTIFICATE OF TOWNSHIP CLERK

I certify that the foregoing constitutes a true and complete copy of an Ordinance duly adopted by the Township Board of the Township of Armada, Macomb County, Michigan, at a meeting held on the 10th day of September, A.D., 1997.

I further certify that the following Township Board Members were present at the meeting:

\_\_\_\_\_  
\_\_\_\_\_

and the following Township Board members were absent:

\_\_\_\_\_

I further certify that Member \_\_\_\_\_ moved for the adoption of the Ordinance, and that motion was supported by Member \_\_\_\_\_

I further certify that the following Armada Township Board Members voted for the adoption of the Ordinance:

\_\_\_\_\_  
\_\_\_\_\_

and that the following Armada Township Board Members voted against adoption of the Ordinance:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
DIANE BERNIER  
ARMADA TOWNSHIP CLERK



CERTIFICATE OF PUBLICATION

I, the undersigned Township Clerk of the Township of Armada, do hereby certify that on \_\_\_\_\_, 1997, the foregoing Ordinance or Summary thereof was duly published in the Armada Times, a newspaper having general circulation within the Township of Armada.

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DIANE BERNIER  
ARMADA TOWNSHIP CLERK

