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Chapter Comm 16

ELECTRICAL

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Note: Chapter ILHR 16 as it existed on October 31, 1984 was repealed and a new chapter ILHR 16 was created effective November 1, 1984; Chapter ILHR 16 as it existed on February 29, 1988 was repealed and a new chapter ILHR 16 was created effective March 1, 1988; Chapter ILHR 16 as it existed on October 31, 1990, was repealed and a new chapter ILHR 16 was created effective November 1, 1990. Chapter ILHR 16 was renumbered chapter Comm 16 under s. 13.93 (2m) (b) 1., Stats., and corrections made under s. 13.93 (2m) (b) 7., Stats., Register, August, 1996, No. 488.

Note: Chapter Comm 17 was repealed effective October 1, 1999. Sections Comm 16.60 to 16.67 were created to replace ch. Comm 17.

Subchapter I — Administration and Enforcement

Comm 16.01 Purpose. (1) PRACTICAL SAFEGUARDING. Pursuant to ss. 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 101.865, Stats., the purpose of this chapter is the practical safeguarding of persons and property from hazards arising from the installation and use of electricity.

Note: Hazards often occur because of overloading of wiring systems by methods or usage not in conformity with this chapter. This occurs because initial wiring did not provide for increases in the use of electricity. An adequate initial installation and reasonable provisions for system changes will provide for future increases in the use of electricity.

(2) CODE INTENTION. This chapter is not intended as a design specification or as an instruction manual.

Note: The Wisconsin state electrical code is issued and administered by the department and by the public service commission in 2 chapters of the Wisconsin administrative code. The department has the responsibility for issuance and administration of this chapter, and the public service commission has the responsibility for issuance and administration of ch. PSC 114.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.02 Scope. (1) COVERED. This chapter covers:

(a) Installations of electric and communication conductors and equipment in places of employment, within or on public and private buildings or other structures, including mobile homes, recreational vehicles, and floating buildings; and other premises such as yards, carnivals, parking and other lots, mines, trenches and tunnels, and industrial substations.

(b) Installations of conductors and equipment that connect to the supply of electricity.

(c) Installations of other outside conductors and equipment on the premises.

(d) Installations of optical fiber cable.

(e) Installations in buildings used by the electric utility, such as office buildings, warehouses, garages, machine shops and recreational buildings, that are not an integral part of a generating plant, substation or control center.

(f) Inspections of electrical construction of farms, public buildings and places of employment.

(2) NOT COVERED. This chapter does not cover:

(a) Installations of electric conductors and equipment in ships, watercraft other than floating buildings, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles.

(b) Installations of electric conductors and equipment for generation, transformation or distribution of power used exclusively by railways for signaling and communication purposes.

(c) Installations of communication equipment under exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.

(d) Installations, including associated lighting, under the exclusive control of electric utilities for the purpose of communications, metering, generation, control, transformation, transmission or distribution of electric energy. Such installations shall be located in buildings used exclusively by utilities for such purposes; outdoors on property owned or leased by the utility; on or along public highways, streets, roads or similar public thorough-

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fares; or outdoors on private property by established rights such as easements.

(e) Installations for the purpose of street or area lighting owned and under exclusive control of electrical utilities or municipal electric departments where located outdoors on property owned or leased by the utility; on or along public highways, streets, roads or similar public thoroughfares; or outdoors on private property by established rights such as easements, where such installations are in compliance with ch. PSC 114.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. (1) (b) and (c), Register, March, 1994, No. 459, eff. 4−1−94; cr. (1) (e), r. and recr. (2) (d), (e), Register, August, 1996, No. 488, eff. 9−1−96; cr. (1) (f), Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: am. (2) (e) Register April 2003 No. 568, eff. 5−1−03.

Comm 16.03 Application of rules. (1) TYPES OF INSTALLATIONS. The provisions of this chapter apply to all new installations, reconstructions, alterations and extensions.

(2) TESTING. Rooms which are used exclusively for routine or special electrical test work and are under the supervision of a qualified person, shall comply with this chapter where practicable for the character of the testing done.

(3) EXISTING INSTALLATIONS. Existing electrical installations shall conform to the electrical code that applied when the installations were installed. An existing electrical installation may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the installation.

(4) REPAIRS. Repairs to electrical installations shall conform to the electrical code that applied when the installations were installed. A repair may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the repair.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; CR 02−072: r. and recr. (3), cr. (4) Register April 2003 No. 568, eff. 5−1−03.

Comm 16.04 Authority. (1) DEPARTMENT AUTHORITY. The department shall have the authority and responsibility for interpreting this chapter and the National Electrical Code, and granting special permission as specified in this chapter. A formal interpretation of this chapter shall remain in effect until rescinded or changed or until the edition of the National Electrical Code is changed in s. Comm 16.12.

(2) MUNICIPAL AUTHORITY. Municipalities may exercise jurisdiction over inspection of electrical construction covered by the scope of this chapter. For public buildings and places of employment, s. Comm 16.64 (2) specifies the conditions required for municipalities to exercise this jurisdiction.

Note: Section Comm 20.02 (1) (a) prohibits any municipality from adopting an ordinance establishing restrictions on the electrical construction of one− and two−family dwellings covered by the Uniform Dwelling Code.

Note: Subsection (2) provides municipalities with the authority to enforce this chapter and the National Electrical Code. See sub. (1) for the authority for interpreting the rules of this chapter and the National Electrical Code.

Note: Section Comm 61.03 (4) (b) prohibits any municipality from adopting an ordinance establishing restrictions on the electrical construction of multifamily dwellings as defined in s. Comm 62.0202.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. (1), Register, August, 1996, No. 488, eff. 9−1−96; am. (2) and r. (3), Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.05 Petition for variance. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.

Note: Chapter Comm 3 requires the submittal of a petition for variance form (SBD−9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter Comm 3 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: Form SBD−9890 is available at no charge from the department at the Safety and Buildings Division, P.O. Box 2509, Madison WI 53701, telephone 608/266−1818 or 608/264−8777 (TTY), or at the Safety and Buildings web site: www.commerce.state.wi.us.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. and recr., Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.06 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.02 (12) and (13), or s. 101.88 (3), Stats.

Note: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.25, Stats. For each violation, failure or refusal, the employee, owner or other person must forfeit and pay into the state treasury a sum not less than $10 nor more than $100 for each violation.

Note: Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.

Note: Section 101.88 (3), Stats., states that except as provided under s. 101.865 (2), Stats., whoever violates subchapter IV of chapter 101, Stats., or any rule promulgated under that subchapter shall forfeit to the state not less than $25 nor more than $500 for each violation. Each day that the violation continues shall constitute a separate offense. Section 101.865 (2), Stats., states that any person who violates the provisions of s. 101.865, Stats., shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than $25 nor more than $100, or by imprisonment in the county jail not less than 30 days nor more than 6 months.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am., Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.065 Fees. Fees for petitions for variance, electrical plan review and electrical inspections issued under this chapter shall be submitted as specified in ch. Comm 2.

History: Cr., Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: am. Register April 2003 No. 568, eff. 5−1−03.

Comm 16.07 Appeals. (1) APPEAL OF LOCAL ORDER. Any person affected by a local order which may be in conflict with a provision of this chapter may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the provision of this chapter. All appeals shall be acted on and a decision in writing shall be issued by the department within 30 business days of receiving an appeal.

Note: Section 101.01 (l) (f), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of aldermen, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.

(2) PETITION OF ADMINISTRATIVE RULE. Pursuant to s. 227.12, Stats., any municipality, corporation or any 5 or more persons having an interest in an administrative rule may petition the department requesting the adoption, amendment or repeal of the rule.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Subchapter II — General Requirements

Comm 16.08 Construction and operation. (1) GENERAL. All electrical power and communication equipment and lines shall be constructed, installed, operated and maintained so as to minimize hazards to life and property. All electrical installations shall conform to the National Electrical Code, incorporated by reference in this chapter, and the requirements specified in this chapter.

Note: The federal and state Fair Housing Acts, the federal Americans with Disabilities Act and the Wisconsin Commercial Building Code (chs. Comm 60 to 66) contain requirements relating to making buildings accessible to and usable by people with disabilities. Some of those requirements apply to the installation of various electrical devices. For example, in the federal fair housing accessibility guidelines, devices such as light switches, electrical outlets, thermostats and other environmental controls would meet the requirements if operable parts of the controls are located no higher than 48 inches, and no lower than 15 inches, above the floor. If the reach is over an obstruction between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach; or 46 inches for side approach, provided the obstruction is no more than 24 inches in depth. Complete copies of the federal Fair Housing Accessibility Guidelines or the federal Americans with Disabilities Act Accessibility Guidelines can be obtained from the Superintendent of Documents, New Orders, P.O. Box 371954, Pittsburgh, PA 15250−7954.

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(2) INSTALLATIONS OVER 600 VOLTS. Installations over 600 volts shall, in addition to the requirements of this chapter, comply with ch. PSC 114.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.09 Inspection and maintenance. All electrical installations and equipment shall be cleaned and inspected at intervals as experience has shown to be necessary. Any equipment or electrical installation known to be defective so as to endanger life or property shall be promptly repaired, permanently disconnected, or isolated until repairs can be made. Construction, repairs, additions and changes to electrical equipment and conductors shall be made by qualified persons only.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.10 Electrical inspection of public buildings and places of employment. Inspection of electrical construction relating to public buildings and places of employment shall comply with the requirements of subch. IV.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am., Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.11 Use of approved materials and construction methods. (1) MATERIALS. Materials, equipment and products which do not comply with the requirements of this chapter shall not be used unless approved in writing by the department. Approval of materials, equipment and products shall be based on sufficient data, tests and other evidence that prove the material, equipment or product meets the intent of the requirements of this chapter. Data, tests and other evidence shall be provided by a qualified independent third party.

Note: Examples of a qualified independent third party include a nationally recognized testing laboratory and a professional engineer.

(2) METHODS OF INSTALLATION. Methods of installation which do not comply with the regulations of this chapter shall not be used unless approved by the department.

(3) NEW PRODUCTS, CONSTRUCTIONS OR MATERIALS. The incorporated National Electrical Code may require new products, constructions or materials which may not be available at the time this chapter is adopted. In such event, the department may permit the use of the products, constructions or materials which comply with a previous edition of the National Electrical Code.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; CR 02−072: r. and recr. (1) Register April 2003 No. 568, eff. 5−1−03.

Comm 16.12 Adoption of standards by reference. The National Electrical Code, NEC−2005, subject to the changes, additions or omissions specified in subch. III, is hereby incorporated by reference into this chapter.

Note: Copies of the National Electrical Code are on file in the offices of the department, the secretary of state and the legislative reference bureau.

Note: Copies of the National Electrical Code can be obtained from the National Fire Protection Association, Fulfillment Center, 11 Tracy Drive, Avon, MA 02322−9908, telephone 1−800−344−3555.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. (1), Register, March, 1994, No. 459, eff. 4−1−94; am. (1), Register, August, 1996, No. 488, eff. 9−1−96; r. and recr., Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: r. (1), renum. (2) to be Comm 16.12 and am. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

Subchapter III — Changes, Additions or Omissions to NEC

Comm 16.15 Changes, additions or omissions to NEC. Changes, additions or omissions to the National Electrical Code (NEC) are specified in this subchapter and are rules of the department and not requirements of the NEC.

Note: The referenced NEC article or section number, located in brackets, will follow the Comm designation and title and precede the text of the rule. Example: Comm 16.18 [NEC 110.3]

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.155 Administration and enforcement [NEC 80]. History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 90— INTRODUCTION

Comm 16.16 Purpose, scope and enforcement [NEC 90]. The following sections of the NEC do not apply in Wisconsin.

(1) PURPOSE [NEC 90.1].

(2) SCOPE [NEC 90.2].

(3) ENFORCEMENT [NEC 90.4].

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

ARTICLE 100— DEFINITIONS

Comm 16.17 Definitions [NEC 100]. (1) ADDITIONS. The following are department definitions in addition to the definitions in NEC Article 100:

(a) "Department" means the department of commerce.

(b) "Floors" means stories as specified in chs. Comm 60 to 66.

(c) "Private sewage system" has the meaning specified under s. 145.01 (12), Stats.

Note: Under s. 145.01 (12), Stats., "private sewage system" means a sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure. This term also means an alternative sewage system approved by the department including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure. A private sewage system may be owned by the property owner or a special purpose district.

(2) SUBSTITUTIONS. The following department definitions are substitutions for the respective definitions in NEC Article 100:

(a) "Building" means a structure which stands alone or which is separated from adjoining structures by fire walls having not less than a 3−hour fire−resistance rating with all openings in the wall protected with 3−hour rated fire door assemblies.

Note: Electrical generating equipment is not considered a structure.

Note: See chs. Comm 60 to 66 for fire−resistance standards.

(b) "Special permission" means the written consent of the department.

Note: Special permission is different from a petition for variance. The use of the special permission procedure is only allowed where specifically stated in this chapter or the NEC.

(3) OMISSIONS. The definition of "structure" in NEC Article 100 does not apply in Wisconsin.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. and recr., Register, August, 1996, No. 488, eff. 9−1−96; cr. (1) (c), Register, September, 1999, No. 525, eff. 10−1−99; CR 01−139: am. (1) (b) Register June 2002 No. 558, eff. 7−1−02; CR 02−072: am. (2) (a), cr. (3) Register April 2003 No. 568, eff. 5−1−03; **CR 06−120: am. (1) (a), Register February 2008 No. 626, eff. 3−1−08.**

ARTICLE 110— REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

Comm 16.18 Installation and use [NEC 110.3]. Substitute the following wording for NEC 110.3 (B):

Listed or labeled equipment shall be installed or used, or both, in accordance with any instructions included in the listing or labeling, provided the instructions, listing or labeling do not conflict with this chapter.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. and recr., Register, August, 1996, No. 488, eff. 9−1−96.

ARTICLE 210— BRANCH CIRCUITS

Comm 16.185 Identification for branch circuits [NEC 210.5]. This is a department informational note to be used under NEC 210.5 (C):

Note: For 277/480 volt systems, the recommended wire colors are brown, orange and yellow. For 120/208 volt systems, the recommended wire colors are black, red and blue.

History: Cr. Register, March, 1994, No. 459, eff. 4−1−94; CR 05−010: am. (intro.) Register August 2005 No. 596, eff. 9−1−05.

Comm 16.20 Ground−fault circuit−interrupter protection for personnel [NEC 210.8]. (1) DWELLING UNITS

[NEC 210.8 (A)]. Substitute the following wording for NEC 210.8 (A) (7):

Laundry, utility, bedroom and wet bar sinks, where the receptacles are installed within 6 feet of the outside edge of the sink.

(2) OTHER THAN DWELLING UNITS [NEC 210.8 (B)]. Substitute the following wording for NEC 210.8 (B):

In units other than dwelling units, all 125−volt, single phase, 15− and 20−ampere receptacles installed in the following locations shall have ground−fault circuit−interrupter protection for personnel:

(a) Bathrooms.

(b) Commercial and industrial kitchens, where the receptacles are installed to serve the countertop surfaces. For the purposes of this paragraph, a kitchen is an area with a sink and permanent facilities for food preparation and cooking.

(c) Outdoors, except as provided in subds. 1. to 3.

1. Receptacles that are not readily accessible and are supplied from a dedicated branch circuit for electric snow−melting or deicing equipment shall be permitted to be installed in accordance with the applicable provisions of Article 426.

2. A single receptacle or a duplex receptacle for 2 appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord−and−plug connected in accordance with NEC 400.7 (A) (6), (A) (7) or (A) (8) shall not be required to have ground−fault circuit−interrupter protection.

3. A receptacle installed in a parking area for the purpose of connecting motor vehicle block/tank heaters shall not be required to have ground−fault circuit−interrupter protection.

(d) Commercial garages, repair areas and storage areas where electrical diagnostic equipment, electrical hand tools, or portable lighting equipment are to be used.

(e) Sinks, where receptacles are installed to serve countertop surfaces and are located within 6 feet of the outside edge of the sink, except that a single receptacle or a duplex receptacle for 2 appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord−and−plug connected in accordance with NEC 400.7 (A) (6), (A) (7), or (A) (8) shall not be required to have ground−fault circuit−interrupter protection.

History: CR 02−072: r. and recr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. and recr. (1), am. (2) (b) Register August 2005 No. 596, eff. 9−1−05.

Comm 16.205 Branch circuits required [NEC 210.11]. This is a department rule in addition to the requirements of NEC 210.11:

Where an air conditioner sleeve is provided in a building wall, a receptacle outlet shall be located within 4 feet of the sleeve. If a circuit is not run to the outlet, a raceway shall be provided. When the air conditioner is installed in the sleeve, it shall be supplied by an individual branch circuit. A receptacle outlet installed for an air conditioner shall not be counted as one of the receptacles required by NEC 210.52 (A).

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. Register, August, 1996, No. 488, eff. 9−1−96; correction made under s. 13.93 (2m) (b) 7., Stats., Register, September, 1999, No. 525; CR 02−072: renum. from Comm 16.23 Register April 2003 No. 568, eff. 5−1−03.

Comm 16.21 Arc−fault circuit−interrupter protection [NEC 210.12]. NEC 210.12 does not apply in Wisconsin.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.215 Common area branch circuits [NEC 210.25]. This is a department rule in addition to the requirements of NEC 210.25:

For service upgrades for existing 2−family dwellings only, separation of common area branch circuits will not be required.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03.

Comm 16.22 Dwelling unit receptacle outlets [NEC 210.52]. History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (1), Register, March, 1994, No. 459, eff. 4−1−94; am. (2), Register, August, 1996, No. 488, eff. 9−1−96; CR 05−010: r. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.225 Lighting outlets required [NEC 210.70]. Substitute the following wording for NEC 210.70 (A) (1):

At least one wall switch−controlled lighting outlet shall be installed in every habitable room, kitchen and bathroom.

History: Cr., Register, September, 1999, No. 525, eff. 10−1−99.

ARTICLE 220 −−
BRANCH−CIRCUIT, FEEDER, AND SERVICE CALCULATIONS

Comm 16.23 Branch−circuit, feeder, and service calculations [NEC 220]. (1) GENERAL [NEC 220.10]. Substitute the following wording for NEC 220.10:

Branch−circuit loads shall be calculated as shown in NEC 220.12, 220.14 and 220.16, or under the supervision of a Wisconsin professional engineer, architect or designer of electrical systems, circuit load calculations may use a lower unit load than identified in Table 220.12 when energy codes restrict lighting loads to an amount lower than the table values.

(2) GENERAL [NEC 220.40]. This is a department exception in addition to the requirements in NEC 220.40:

Exception: Under the supervision of a Wisconsin professional engineer, architect or designer of electrical systems, the feeder or service size may be computed using diversity factors or historical data of a similar type of building, other than one− and 2−family dwelling units.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 225—
OUTSIDE BRANCH CIRCUITS AND FEEDERS

Comm 16.24 Outside branch circuits and feeders [NEC 225]. (1) CLEARANCE FROM GROUND [NEC 225.18]. This is a department rule in addition to the requirements of NEC 225.18:

Conductors of not over 600 volts nominal shall have a clearance of at least 24.5 feet over track rails of railroads.

(2) CLEARANCES FROM BUILDINGS FOR CONDUCTORS NOT OVER 600 VOLTS [NEC 225.19]. Substitute the following wording for NEC 225.19 (A) Exception No. 4:

Exception No. 4. The requirement for maintaining the vertical clearance 3 feet from the edge of the roof shall not apply to the final conductor span to the building.

(3) NUMBER OF SUPPLIES [NEC 225.30]. This is a department rule in addition to NEC 225.30 (A):

Multi−occupancy buildings or structures shall be permitted to have one set of branch circuit conductors installed from a dwelling unit to the second building or structure's respective occupied space.

(4) LOCATION [NEC 225.32]. This is a department rule in addition to the requirements of NEC 225.32:

The building disconnect required by NEC 225.31 shall be located in accordance with s. Comm 16.25 (4).

Note: See ch. PSC 114 regarding clearances of conductors of over 600 volts and for prohibition of constructing dwellings under or near overhead lines.

(5) CLEARANCES OVER ROADWAYS, WALKWAYS, RAIL, WATER, AND OPEN LAND [NEC 225.60]. Substitute the following wording for the note to NEC 225.60 (C):

Note: For clearances of conductors of over 600 volts, see ch. PSC 114.

(6) CLEARANCES OVER BUILDINGS AND OTHER STRUCTURES [NEC 225.61]. Substitute the following wording for the note to NEC 225.61 (B):

Note: See ch. PSC 114 regarding clearances of conductors of over 600 volts and for prohibition of constructing dwellings under or near overhead lines.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am (1) (a), r. (2) (a), r. and recr. (2) (b), Register, March, 1994, No. 459, eff. 4−1−94; am. (1) (b), Register, August, 1996, No. 488, eff. 9−1−96; cr. (3) and (4), Register, September, 1999, No.

525, eff. 10−1−99; CR 02−072: renum. (1) (a) to be (1) and (1) (b) to be (5) and am., renum. (2) (b) to be (2) and (2) (c) to be (6) and am. Register April 2003 No. 568, eff. 5−1−03.

**ARTICLE 230—
SERVICES**

Comm 16.25 Services [NEC 230]. (1) NUMBER OF SERVICES [NEC 230.2]. (a) These are department informational notes to be used under NEC 230.2 (intro.):

Note: See definition of building in s. Comm 16.17.

Note: It is recommended that the electric utility or cooperative supplying electric current be contacted prior to service equipment installations for any special requirements.

(b) Substitute the following wording for NEC 230.2 (B)(2):

Two or more service drops or laterals for the same class of service if located more than 150 feet apart, measured in a straight line, and provided that all electrical wiring supplied by each service has no common raceway or connection with any other service.

(c) This is a department rule in addition to the requirements of NEC 230.2 (B):

For a building which is not more than 3 stories in height and which contains only 3 or more attached, vertically separated, side−by−side or back−to−back dwelling units, with each dwelling unit served by an individual exterior exit within 6 feet of the exit discharge grade, a separate service drop or lateral shall be permitted for each 2 attached units.

(2m) NUMBER OF SERVICE–ENTRANCE CONDUCTOR SETS [NEC 230.40]. NEC 230.40 Exception No. 3 does not apply in Wisconsin.

(4) LOCATION [NEC 230.70 (A)]. This is a department rule in addition to the requirements of NEC 230.70 (A):

(a) Except as provided in par. (b), raceways containing service conductors or cables, or service entrance cable not contained within a raceway, shall not extend longer than 8 feet into a building to the service disconnect or the first service disconnect of a group of disconnects as permitted by NEC 230.71. The raceways or conductors shall be considered to have entered the building at the point where they pass through the outer surface of the building exterior, except as permitted by NEC 230.6.

(b) Service entrance busway shall be permitted to exceed 8 feet.

(5) GENERAL [NEC 230.70]. This is a department rule in addition to the requirements of NEC 230.70:

Disconnecting means shall be provided to disconnect the utility wiring from the premises wiring at any point where utility wiring terminates and premises wiring extends overhead or underground to more than one building or structure.

(6) MAXIMUM NUMBER OF DISCONNECTS [NEC 230.71]. These are department rules in addition to the requirements in NEC 230.71 (A):

(a) Individual dwelling units shall have a single main disconnecting means for each metered service, except services rated 300 amperes or more shall be permitted to have 2 service disconnecting means.

(b) Additional disconnecting means installed on individual dwelling units as permitted for different uses, such as for different rate schedules, permitted by NEC 230.2 (D), shall be allowed to remain should subsequent changes in use occur.

(c) Not more than 6 circuit breakers shall be permitted to be installed in existing dual or split bus service panelboards installed prior to February 1, 1968.

(7) RATING OF SERVICE DISCONNECTING MEANS [NEC 230.79]. This is a department rule in addition to the requirements of NEC 230.79:

(b) *Two− or multi−family dwellings.* Except as provided in par. (c), for 2−family or multi−family dwellings, the service equipment shall have a rating of not less than 150 amperes, 3−wire or 4−wire. Where the combined rating of all service disconnecting means is 150 amperes or larger, the service or feeder equipment rating for each dwelling unit shall have a rating of not less than 60 amperes.

(c) *Exception.* Service equipment having a rating of not less than 100 amperes, 3−wire or 4−wire, shall be permitted to be installed in an existing 2−family dwelling only where both of the following conditions are complied with:

1. The load computed in accordance with NEC 220 does not exceed 80 amperes.

2. Specific written approval is granted by the municipal inspection department having jurisdiction.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (8), Register, March, 1994, No. 459, eff. 4−1−94; r. and recr. (1) (a), (4), am. (1) (b), (c), (6) (intro.), r. (2), cr. (2m), Register, August, 1996, No. 488, eff. 9−1−96; am. (1) (b), (c), (4) (intro.), (a) and (7) (intro.) and r. (3) and (7) (a), Register, September, 1999, No. 525, eff. 10−1−99; CR 01−139: am. (1) (c) Register June 2002 No. 558, eff. 7−1−02; CR 02−072: am. (1) (a) (intro.), (6) and (7) (intro.) and (b) Register April 2003 No. 568, eff. 5−1−03.

**ARTICLE 250—
GROUNDING AND BONDING**

Comm 16.257 Grounding electrode system [NEC 250.50]. Substitute the following wording for NEC 250.50 and Exception:

If available on the premises at each building or structure served, each item in NEC 250.52 (A)(1) through (A)(6) shall be bonded together to form the grounding electrode system. Where none of these electrodes are available, one or more of the electrodes specified in NEC 250.52 (A)(4) through (A)(7) shall be installed and used.

History: CR 05−010: cr. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.26 Grounding electrode system installation [NEC 250.53]. These are department rules in addition to the requirements of NEC 250.53 (D) (2):

(1) BONDING TO SERVICE–ENTRANCE CONDUCTOR. For services supplying one− or two−family dwelling units, the supplemental electrode shall be bonded to the grounded service−entrance conductor within a service equipment enclosure. Where the service equipment is at different locations, this bond shall be made at a location common to both services or at each service equipment location.

(2) TWO SUPPLEMENTAL ELECTRODES. Where the supplemental electrode required by NEC 250.53 (D) (2) consists of made electrodes specified in NEC 250.52 (A) (5), not less than 2 supplemental made electrodes shall be installed.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; renum. from s. 16.27 and am., Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: am. (intro.) and (2) Register April 2003 No. 568, eff. 5−1−03.

Comm 16.27 Bonding for other systems [NEC 250.94]. This is a department rule in addition to the requirements of NEC 250.94:

Bonding to other systems shall not be done on or within a metering enclosure unless a means of bonding, intended for intersystem bonding, is furnished as part of a listed joint−use metering enclosure.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. Register, August, 1996, No. 488, eff. 9−1−96; renum. from s. 16.26 and am., Register, September, 1999, No. 525. eff. 10−1−99; CR 05−010: am. (intro.) Register August 2005 No. 596, eff. 9−1−05.

Comm 16.275 Types of equipment grounding conductors [NEC 250.118]. This is a department rule in addition to the requirements of NEC 250.118:

A metallic raceway installed in direct contact with earth, in concrete slabs or floors poured on earth, or in exterior concrete walls below grade shall be augmented with a supplemental equipment grounding conductor identified in NEC 250.118 (1). This

supplemental conductor shall be sized in accordance with NEC 250.122. An aluminum equipment grounding conductor used for this purpose shall be insulated.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 300—
WIRING METHODS

Comm 16.28 Electrical requirements for private sewage systems [NEC 300]. These department rules apply to private sewage systems and are in addition to the requirements of NEC 300:

(1) WIRING METHODS. All effluent pump circuit wiring shall comply with the approved wiring methods as specified in NEC 300 and the following requirements:

(a) Effluent pumps shall be supplied by a separate branch circuit supplying no other loads;

(b) Alarm wiring shall not be connected to the pump circuit;

(c) All aboveground cables and flexible cords shall be enclosed to protect against physical damage; and

(d) The neutral conductor shall not be common to both alarm and pump circuits.

Note: This prohibits use of a multi−wire branch circuit to supply both the alarm and pump.

Note: See NEC 430.102 for location of disconnects.

(4) GROUND−FAULT CIRCUIT PROTECTION. A single receptacle located at the pump chamber that has an alarm or pump connected to it does not require ground−fault circuit−interrupter protection.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. (2) (intro.), Register, March, 1994, No. 459, eff. 4−1−94; am. (intro.), (2) (a), Register, August, 1996, No. 488, eff. 9−1−96; r. (2) and (3), Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.29 Protection against physical damage [NEC 300.4]. NEC 300.4 (D) does not apply in Wisconsin.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.294 Underground installations [NEC 300.5]. NEC 300.5 (D) (3) does not apply in Wisconsin.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 310—
CONDUCTORS FOR GENERAL WIRING

Comm 16.30 Ampacities for conductors rated 0–2000 volts [NEC 310.15]. (1) ADJUSTMENT FACTORS [NEC 310.15 (B) (2)]. This is a department exception in addition to the exceptions specified in NEC 310.15 (B) (2) (a):

Exception No. 6: The derating factors shown in Table 310.15 (B) (2) (a) do not apply to branch circuits supplying an individual dwelling unit.

(2) 120/240−VOLT, 3−WIRE, SINGLE−PHASE DWELLING SERVICES AND FEEDERS [NEC 310.15 (B) (6)]. This is a department rule in addition to the requirements of NEC 310.15 (B) (6):

When using Table 310.15 (B) (6) and the conductors are installed in a raceway, the raceway trade size shall be a minimum of one inch in diameter.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (1) (a), am. (2), Register, March, 1994, No. 459, eff. 4−1−94; r. and recr., Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: am. (1) Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 312 −−
CABINETS, CUTOUT BOXES, AND METER SOCKET ENCLOSURES

Comm 16.31 Cabinets, cutout boxes, and meter socket enclosures [NEC 312.5]. (1) CABLES [NEC 312.5 (C)]. Substitute the following wording for NEC 312.5 (C) Exception (intro.):

Exception: Cables with entirely nonmetallic sheaths shall be permitted to enter an enclosure through one or more nonflexible raceways of not less than 12 inches and not more than 10 feet in length, provided all of the following conditions are met:

(2) OMISSION [NEC 312.5 (C) EXCEPTION]. NEC 312.5 (C) Exception paragraph (b) does not apply in Wisconsin.

(3) FITTING [NEC 312.5 (C) EXCEPTION]. Substitute the following wording for NEC 312.5 (C) Exception paragraph (c):

A fitting is provided on each end of the raceway to protect the cable(s) from abrasion.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; CR 02−072: renum. from Comm 16.36 and am. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. and recr. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 314—
OUTLET, DEVICE, PULL AND JUNCTION BOXES;
CONDUIT BODIES; FITTINGS; AND MANHOLE ENCLOSURES

Comm 16.32 Conductors entering boxes, conduit bodies, or fittings [NEC 314.17]. This is a department exception in addition to the requirements of NEC 314.17 (B) and (C):

Exception: Nonmetallic sheathed cable shall not be required to be secured to the box or conduit body where it is installed in accordance with the wiring method specified in s. Comm 16.31.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; am. Register, August, 1996, No. 488, eff. 9−1−96; CR 02−072: renum. from Comm 16.34 and am. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.325 Outlet boxes [NEC 314.27]. This is a department rule in addition to the requirements of NEC 314.27 (A):

In a dwelling unit, a ceiling outlet box installed for use as a lighting fixture outlet in a habitable room or kitchen and located where a ceiling fan could be installed shall be a type listed for ceiling fan support.

History: Cr. Register, August, 1996, No. 488, eff. 9−1−96; am., Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: renum. from Comm 16.355 and am. Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 334
NONMETALLIC−SHEATHED CABLE: TYPES NM, NMC, AND NMS

Comm 16.327 Uses permitted [NEC 334.10]. Substitute the following wording for NEC 334.10 (intro.) (3):

Other structures permitted to be of Types III, IV and V construction except as prohibited in NEC 334.12.

History: CR 05−010: cr. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 358 −−
ELECTRICAL METALLIC TUBING: TYPE EMT

Comm 16.33 Uses permitted [NEC 358.10]. This is a department rule in addition to the requirements of NEC 358.10:

Electrical metallic tubing shall not be used in direct contact with earth, in concrete slabs or floors poured on earth, or in exterior concrete walls below grade.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; correction made under s. 13.93 (2m) (b) 7., Register, September, 1999, No. 525; CR 02−072: am. Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 400 −−
FLEXIBLE CORDS AND CABLES

Comm 16.37 Uses not permitted [NEC 400.8]. This is a department exception in addition to the exception in NEC 400.8 (4):

Exception No. 2: Flexible cords and cables permitted by NEC 400.7 (A) that are connected to sources other than busways shall be permitted to be attached to adequately supported equipment or building surfaces provided the type of cord or cable, the attach-

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http://docs.legis.wisconsin.gov/code/admin_code

ment to the building and equipment, and the support comply with the provisions of NEC 368.56 (B).

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 430 −−
MOTORS, MOTOR CIRCUITS, AND CONTROLLERS

Comm 16.38 Location [NEC 430.102]. Substitute the following wording for NEC 430.102 (B) and Exception:

A separate disconnecting means shall be located in sight from the motor location and the driven machinery location.

Exception: A disconnecting means, in addition to the controller disconnecting means as required in accordance with NEC 430.102 (A), shall not be required for the motor where the disconnecting means for the controller is individually capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 450—
TRANSFORMERS AND TRANSFORMER VAULTS

Comm 16.39 Transformers and transformer vaults [NEC 450]. (1) OVERCURRENT PROTECTION [NEC 450.3]. This is a department rule in addition to NEC Table 450.3 (A) Note 3:

The qualified person can be either an employee at that location or an employee contracted for this purpose who is readily available.

(3) LOCATION [NEC 450.41].. Substitute the following wording for NEC 450.41:

Vaults containing oil−insulated transformers shall be located where they can be ventilated to the outside air without using flues or ducts, except where special permission is granted.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (2), Register, March, 1994, No. 459, eff. 4−1−94; r. (1), Register, August, 1996, No. 488, eff. 9−1−96; CR 02−072: cr. (1) Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 511 −−
COMMERCIAL GARAGES, REPAIR AND STORAGE

Comm 16.392 Classifications of locations [NEC 511.3]. NEC 511.3 (A) (5) does not apply in Wisconsin.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: am. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.395 Circuit disconnects [NEC 514.11]. History: Cr. Register, August, 1996, No. 488, eff. 9−1−96; CR 02−072: am. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 547—
AGRICULTURAL BUILDINGS

Comm 16.42 Agricultural buildings [NEC 547]. (2) EQUIPOTENTIAL PLANES AND BONDING OF EQUIPOTENTIAL PLANES [NEC 547.10]. NEC 547.10 (A) does not apply in Wisconsin.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (2) and (3), Register, March, 1994, No. 459, eff. 4−1−94; cr. (2), (3), Register, August, 1996, No. 488, eff. 9−1−96; am. (1) and (2) and r. (3), Register, September, 1999, No. 525, eff. 10−1−99; CR 02−072: am. (1), r. and recr. (2) Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. (1), am. (2) Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 620—
ELEVATORS, DUMBWAITERS, ESCALATORS, MOVING WALKS, WHEELCHAIR LIFTS, AND STAIRWAY CHAIR LIFTS

Comm 16.435 Wiring methods [NEC 620.21]. This is a department exception in addition to the requirements of NEC 620.21 (A) (1):

Exception: The hoistway storm water sump pump motor and the hoist oil recovery pump motor shall be permitted to be cord connected. The cord shall be a hard usage oil resistant type and shall be routed where not subject to physical damage.

History: Cr., Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.436 Branch circuits for other utilization equipment [NEC 620.25]. This is a department informational note to be used under NEC 620.25:

Note: See NEC 620.53, 620.54 and 620.55 for additional requirements.

History: CR 05−010: cr. Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 675 −−
ELECTRICALLY DRIVEN OR CONTROLLED IRRIGATION MACHINES

Comm 16.438 Disconnecting means [NEC 675.8]. This is a department rule in addition to the requirements of NEC 675.8:

A service disconnecting means with overcurrent protection shall be provided at the service point in accordance with NEC 230 VI.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03.

ARTICLE 700—
EMERGENCY SYSTEMS

Comm 16.45 Emergency systems [NEC 700].

(1) WIRING, EMERGENCY SYSTEM [NEC 700.9].

(b) This is a department rule in addition to the requirements of NEC 700.9 (B):

1. Except as provided in subd. 2., emergency circuit wiring shall be in listed raceways or Type MC cable.

2. Emergency lighting fixtures may use flexible cord connections for the following 2 types of fixtures:

a. The fixture shall be the high intensity discharge type with instant restrike or quartz lighting. The fixture shall be provided with internal control to ensure the area is lighted. The fixture mounting height shall exceed 15 feet. The fixture operating voltage shall be 208 volts or greater. The cord cap and receptacle shall be of the twist−lock type.

b. The fixture shall be a listed electric discharge type. The fixture shall incorporate cord and canopy connection.

(2) GENERAL REQUIREMENTS [NEC 700.12]. This is a department rule in addition to the requirements in NEC 700.12 (intro.):

The enclosure of the alternate source of power located outdoors for emergency systems shall be located at least 10 feet from a combustible wall and at least 20 feet from an outdoor electrical transformer or normal power distribution equipment. These dimensions may be reduced by one−half where a noncombustible barrier is installed that extends at least 3 feet beyond each side of the transformer. The height of the barrier shall be at least one foot above the top of the transformer or alternate power source, whichever is higher.

(3) GENERAL REQUIREMENTS [NEC 700.12]. NEC 700.12 (B) (3) does not apply in Wisconsin.

Note: See chs. Comm 60 to 66 for further requirements.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; r. (2) (a), (4) (b), r. and recr. (2) (b) 2., cr. (2) (c), am. (4) (a) 1., Register, August, 1996, No. 488, eff. 9−1−96; r. (1) and (2) (c), September, 1999, No. 525, eff. 10−1−99; CR 01−139: am. (4) (a) 1. to 3. (intro.) Register June 2002 No. 558, eff. 7−1−02; CR 02−072: r. (4) Register April 2003 No. 568, eff. 5−1−03; CR 05−010: renum. (2) to be (1), cr. (2) Register August 2005 No. 596, eff. 9−1−05.

ARTICLE 701—
LEGALLY REQUIRED STANDBY SYSTEMS

Comm 16.48 Legally required standby systems [NEC 701.11]. (1) ADDITION. This is a department rule in addition to the requirements in NEC 701.11 (intro.):

The enclosure of the alternate source of power located outdoors for legally required standby systems shall be located at least 10 feet from a combustible wall and at least 20 feet from an outdoor electrical transformer or normal power distribution equip-

ment. These dimensions may be reduced by one−half where a noncombustible barrier is installed that extends at least 3 feet beyond each side of the transformer. The height of the barrier shall be at least one foot above the top of the transformer or alternate power source, whichever is higher.

(2) DELETION. NEC 701.11 (B) (3) does not apply in Wisconsin.

Note: See chs. Comm 60 to 66 for further requirements.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90; CR 05−010: r. and recr. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.49 Optional standby systems [NEC 702]. History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03; CR 05−010: r. Register August 2005 No. 596, eff. 9−1−05.

Comm 16.51 Electric fences. These are department rules in addition to the requirements of the NEC:

(1) ELECTRIC FENCE CONTROLLERS. (a) Electric fence controllers shall be of a type listed by a nationally recognized testing laboratory.

Note: The department recognizes UL 69—Electric Fence Controllers as acceptable standards that satisfy the requirements of par. (a). Copies are available from U.L. Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062.

(b) Electric fence controllers shall be installed and used in the exact manner and for the exact purpose indicated by the manufacturer's instructions, markings, listings or labels.

(2) GROUNDING. Electric fence controllers shall be grounded as specified in NEC 250, except that where stray voltages in dairy barns or milking parlors create physical problems to the animals, the use of a single made electrode shall be permitted.

History: Cr. Register, October, 1990, No. 418, eff. 11−1−90.

Comm 16.52 Electrical plan review. Upon request, the department may perform electrical plan review for dwellings, public buildings, places of employment, and electrical services.

History: CR 02−072: cr. Register April 2003 No. 568, eff. 5−1−03.

Subchapter IV — Electrical Inspection

Comm 16.60 Purpose. Pursuant to s. 101.82, Stats., the purpose of this subchapter is to establish rules for the inspection of electrical construction of farms, public buildings and places of employment.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.61 Scope. This subchapter specifies the electrical construction to be inspected, the inspection procedures to be followed and the procedures for connection of electric service.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.62 Application. This subchapter applies to persons, independent inspection agencies, municipalities and state governmental agencies engaged in the inspection of electrical construction for the purposes of administering and enforcing this chapter on farms and in public buildings and places of employment, and to companies or utilities providing connection of electric service.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.63 Definitions. In this subchapter:

(1) "Certified inspector" means a certified commercial electrical inspector.

(2) "Commercial electrical inspector" means a person who conducts inspections of electrical construction of farms, public buildings and places of employment.

(3) "Department" means the department of commerce.

(4) "Electrical construction" means the installation of electrical wiring.

(5) "Electrical contractor" means any person, firm or corporation engaged in the business of erecting, installing, altering, repairing, servicing or maintaining electrical wiring.

(6) "Electrical wiring" means all equipment, wiring, material, fittings, devices, appliances, fixtures and apparatus used for the production, modification, regulation, control, distribution, utilization or safeguarding of electrical energy for mechanical, chemical, cosmetic, heating, lighting or similar purposes as covered by the scope of this chapter.

(7) "Farm" means a place where farming is conducted.

(8) "Farming" has the meaning specified under s. 102.04 (3), Stats.

Note: Under s. 102.04 (3), Stats., "farming" means the operation of farm premises owned or rented by the operator. "Farm premises" means areas used for operations herein set forth, but does not include other areas, greenhouses or other similar structures unless used principally for the production of food and farm plants.

Note: Section 102.04 (3), Stats., states that the operation of farm premises shall be deemed to be the planting and cultivating of the soil thereof; the raising and harvesting of agricultural, horticultural or arboricultural crops thereon; the raising, breeding, tending, training and management of livestock, bees, poultry, fur–bearing animals, wildlife or aquatic life, or their products, thereon; the processing, drying, packing, packaging, freezing, grading, storing, delivering to storage, to market or to a carrier for transportation to market, distributing directly to consumers or marketing any of the above−named commodities, substantially all of which have been planted or produced thereon; the clearing of such premises and the salvaging of timber and management and use of wood lots thereon, but not including logging, lumbering or wood cutting operations unless conducted as an accessory to other farming operations; the managing, conserving, improving and maintaining of such premises or the tools, equipment and improvements thereon and the exchange of labor, services or the exchange of use of equipment with other farmers in pursuing such activities.

(9) "Independent inspection agency" means any corporation, partnership or sole proprietor, other than a municipal corporation, that performs inspections of buildings.

(10) "Municipality" means a city, village, town or county in this state.

(11) "Person" includes all partnerships, associations, and bodies politic or corporate.

(12) "Place of employment" has the meaning specified under s. 101.01 (11), Stats.

Note: Under s. 101.01 (11), Stats., "place of employment" includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming. "Farming" includes those activities specified in s. 102.04 (3), and also includes the transportation of farm products, supplies or equipment directly to the farm by the operator of said farm or employees for use thereon, if such activities are directly or indirectly for the purpose of producing commodities for market, or as an accessory to such production. When used with relation to building codes, "place of employment" does not include an adult family home, as defined in s. 50.01 (1), or, except for the purposes of s. 101.11, a previously constructed building used as a community−based residential facility, as defined in s. 50.01 (1g), which serves 20 or fewer residents who are not related to the operator or administrator.

(13) "Public building" has the meaning specified under s. 101.01 (12), Stats.

Note: Under s 101.01 (12), Stats., "public building" means any structure, including exterior parts of such building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy or use by the public or by 3 or more tenants. When used in relation to building codes, "public building" does not include a previously constructed building used as a community−based residential facility as defined in s. 50.01 (1g) which serves 20 or fewer residents who are not related to the operator or administrator or an adult family home, as defined in s. 50.01 (1).

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.64 Authority. (1) DEPARTMENTAL AUTHORITY. Pursuant to ss. 101.82 and 101.84, Stats., the department is granted the authority and jurisdiction over the inspection of electrical construction of farms, public buildings and places of employment.

(2) MUNICIPAL AUTHORITY. (a) *Jurisdiction conditions.* Pursuant to s. 101.86 (1), Stats., municipalities may exercise jurisdiction over inspection of electrical construction in public buildings and places of employment by passage of ordinances, providing all of the following conditions are complied with:

1. The municipality's ordinances meet the minimum requirements of this subchapter.

2. The municipality notifies the department at least 30 days prior to the date upon which the municipality intends to assume the jurisdiction.

3. The municipality provides the department with a copy of its electrical ordinances and subsequent revisions to the ordinances.

4. The municipality's ordinances adopt this chapter in its entirety.

5. The municipality employs or contracts with certified inspectors or independent inspection agencies to perform electrical inspection functions.

6. The municipality provides the department with the names of its certified inspectors or independent inspection agencies employed or contracted by the municipality.

7. The municipality provides the department with any information requested by the department relative to the electrical inspection of public buildings and places of employment.

Note: Section 13.48 (13), Stats., exempts state buildings from local ordinances or regulations relating to building construction, permits and similar restrictions.

(b) *Joint jurisdiction.* Municipalities may jointly exercise the jurisdiction granted in par. (a).

(c) *Municipal contracts.* A municipality may contract with a certified inspector, independent inspection agency or the department for those inspection services which the municipality does not perform under par. (a) or (b).

(d) *County.* 1. Ordinances enacted by a county under this subsection establishing electrical inspection functions shall apply to all municipalities within that county which have not assumed jurisdiction.

2. Ordinances enacted by a county under this subsection establishing county electrical inspection functions may not prevent or prohibit a municipality within that county from assuming those functions at any time.

(e) *Relinquishing of jurisdiction.* The municipality shall notify the department, in writing, at least 30 days prior to the date upon which the municipality intends to relinquish jurisdiction responsibilities.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.65 Inspections. (1) PERSONS AUTHORIZED TO PERFORM INSPECTIONS. (a) *General.* Inspections performed for a municipality, independent inspection agency or the department for the purpose of administering and enforcing this chapter shall be performed by a certified inspector.

(b) *Right of entry.* A certified inspector performing inspections under par. (a) may, during reasonable hours, enter any building or premises in the discharge of his or her official duties for the purpose of making inspections, re−inspections or testing of electrical construction.

Note: Section Comm 5.63 contains requirements pertaining to the certification of commercial electrical inspectors.

(2) MUNICIPAL INSPECTIONS. (a) *Electrical wiring requiring inspection.* Municipalities exercising jurisdiction under s. Comm 16.64 (2) shall provide for inspection of all electrical wiring in all of the following:

1. New construction, additions, alterations and changes of use of public buildings and places of employment requiring submittal of building plans under s. Comm 61.30 for the classes of occupancies specified under sub. (4) (a).

2. Such other installations as required by the municipality.

(b) *Inspection types.* Inspections required to be performed shall be of all of the following types for the purpose of determining if the electrical construction complies with this chapter:

1. An inspection before the construction is concealed.

2. Re−inspections, as necessary, to confirm compliance and satisfactory completion of all electrical construction.

3. A final inspection.

(c) *Permit required.* 1. Except as provided in subd. 2., no electrical wiring specified in par. (a) may be installed unless an application for a permit and the required fees have been submitted to the municipality exercising jurisdiction under s. Comm 16.64 (2).

2. Under emergency conditions, the necessary electrical construction may be commenced without submitting an application for a permit; however, the person performing the emergency construction shall report the construction to the municipality no later than the next business day. The emergency installation shall conform to this chapter.

(d) *Inspection.* 1. Upon completion of the electrical wiring required to be inspected under par. (a) or before any electrical wiring is to be hidden from view, the person, firm or corporation installing the electrical wiring shall notify the municipality that the installation is ready for inspection.

2. The certified inspector responsible for the inspection shall perform the requested inspection within 2 business days after receiving notification.

3. If upon inspection, it is found that the installation is fully in compliance with this chapter and the municipal ordinances, the certified inspector shall approve the installation and authorize concealment of the electrical wiring or connection of electric service. For connection of electric service, the certified inspector shall issue the certificate required in s. Comm 16.66 (1).

4. If the installation is incomplete or not in compliance with this chapter or the municipal ordinances, orders to correct shall be issued in accordance with the municipal ordinances.

(3) INDEPENDENT AGENCY INSPECTIONS. (a) *Municipalities.* Independent inspection agencies performing inspections for municipalities exercising jurisdiction under s. Comm 16.64 (2) shall provide inspections in accordance with the requirements of sub. (2) for municipalities.

(b) *Department.* Independent inspection agencies performing inspections for the department shall provide inspections as specified in the contract with the department.

(4) DEPARTMENT INSPECTION PROGRAM. (a) *Specific inspections.* The department may inspect all electrical wiring in new construction, additions, alterations and change of use of public buildings and places of employment requiring submittal of building plans under s. Comm 61.30 in all of the following occupancies that are not within the boundaries of municipalities exercising jurisdiction:

1. Nursing homes and health care facilities.

2. Hotels, motels, and other buildings that provide overnight accommodations.

3. Day care centers and schools.

4. Community−based residential facilities.

5. Restaurants having a capacity of 100 or more occupants.

6. All indoor theaters.

(b) *Random inspections.* The department may perform random inspections of electrical wiring in any new construction, additions, alterations and change of use of public buildings and places of employment, that are not within the boundaries of municipalities exercising jurisdiction.

(c) *Requested or complaint inspections.* The department may perform inspection of electrical construction in public buildings or places of employment in any municipality upon written request or complaint.

(d) *Farm inspections.* The department may inspect electrical construction on farms.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99; CR 01−139: am. (2) (a) 1. and (4) (a) (intro.) Register June 2002 No. 558, eff. 7−1−02.

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http://docs.legis.wisconsin.gov/code/admin_code

Comm 16.66 Connection of electric service. Pursuant to s. 101.865, Stats., the company or utility furnishing electric current shall obtain proof that electrical wiring complies with this chapter before furnishing the service, as follows:

(1) CERTIFICATE REQUIRED. The electrical wiring required to be inspected under s. Comm 16.65 (2) (a) may not be connected for use until a certificate is filed with the company or utility furnishing electric current. The certified inspector authorized to perform the inspection shall complete and file the certificate with the company or utility.

(2) STATEMENT REQUIRED. Electrical wiring not requiring a certificate under sub. (1) may not be connected for use until a written statement is filed with the company or utility furnishing electric current indicating that the electrical wiring complies with this chapter. The electrical contractor or other person doing the wiring shall complete and file the written statement with the company or utility.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.

Comm 16.67 Technical assistance. The department shall provide technical assistance to the extent possible with the available resources to any person, upon written request, regarding interpretation and application of this chapter. The technical assistance may consist of telephone, written, in−office or on−site review of specific problems.

History: Cr. Register, September, 1999, No. 525, eff. 10−1−99.