

Recommended Amendments to the 1999 National Electrical Code

REGIONAL AMENDMENTS*

****Section 230-2(a) add a sixth Special Condition.**

230-2. Number of Services. A building or other structure served shall be supplied by only one service unless permitted in (a) through (d). For the purpose...{text unchanged}...shall be considered to be supplying one service.

(a). Special Conditions. Additional services shall be permitted to supply

(1) Fire Pumps

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(6) In supplying electrical service to multifamily dwellings, two or more laterals or overhead service drops shall be permitted to a building when both of the following conditions are met:

a. The building has six or more individual gang meters and all meters are grouped at the same location.

b. Each lateral or overhead service drop originates from the same point of service.

REASON FOR CHANGE: This is currently the accepted installation practice of the region. No noteworthy complaints have surfaced. It is more reasonable than the current NEC requirements. It allows more than six disconnects grouped at one location, without having to divide the structure into multiple buildings by using area separation walls. This also allows designers more flexibility in the placement of electrical meters and main service disconnects.

****Section 230-71(a) add an Exception.**

230-71. Maximum Number of Disconnects.

(a) General. The service disconnecting means for each service permitted by Section 230-2, or for each set of service-entrance conductors permitted by Section 230-40, Exception Nos. 1 or 3, shall consist of not more than six switches or six circuit breakers mounted in a single enclosure, in a group of separate enclosures, or in or on a switchboard. There shall be no more than six disconnects per service grouped in any one location. For the purpose...{text unchanged}...shall not be considered a service disconnecting means.

Exception: Multi-occupant Buildings. Individual service disconnecting means is limited to six for each occupant. The number of individual disconnects at one location may exceed six.

REASON FOR CHANGE: The same reasoning as for multi-family dwellings in Section 230-2 here being applied to multi-occupant buildings.

***NOTE:** Underlining indicates new words and phrases to be added to the 1999 National Electrical Code. ~~Strikeouts~~ indicate existing words and phrases to be deleted.

****Section 250-50 add a fifth paragraph.**

250-50. Grounding Electrode System. If available on the premises at each building or structure served, each item (a) through (d), and any made electrodes...{text unchanged}...interconnect electrodes that are part of the grounding electrode system.

Exception: In industrial ...{text unchanged}...conductor is exposed.

Where a metal underground water pipe, as described in item (a), is not present, a method of grounding as specified in (b) through (d) below shall be used.

(FPN): See Sections...{text unchanged}... agriculture buildings.

REASON FOR CHANGE: Sometimes metal underground water pipe is not available for use as a grounding electrode system. Therefore, to provide a more positive approach for grounding electrical premise systems for safety, a method as specified in (b), (c), or (d) shall be used. This will eliminate the need to depend solely on a driven rod or pipe as specified in Section 250-52.

****Section 250-104(b) change to read as follows:**

250-104. Bonding of Piping Systems and Exposed Structural Steel.

***(b) Metal Gas Piping.** Each ~~interior~~ aboveground portion of a metal gas piping system upstream from the equipment shutoff valve shall be electrically continuous and bonded to the grounding electrode system. The bonding jumper shall be sized in accordance with Table 250-122 using the rating of the circuit that may energize the gas piping.

REASON FOR CHANGE: The revisions further clarify what portions of the gas piping system must be bonded. Without a revision to this section (depending on bond sizing chosen), it was possible to violate Section 250-52(a), which prohibits using a metal underground gas piping system as a grounding electrode. The sentence added gives guidance to proper sizing to ensure the gas system will be brought to the same potential as a grounding electrode system when an inspector perceives a reasonable possibility that the gas system may become energized.

****Section 310-15(b)(6) change to read as follows:**

310-15. Ampacities for Conductors Rated 0 to 2000 Volts.

(b) Tables.

(6) 120/240-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders. For dwelling units, conductors, as listed in Table 310-15(b)(6), shall be...{text unchanged}...conductors. The grounded conductor shall be permitted to be smaller than the ungrounded conductors, provided the requirements of Sections 215-2, 220-22, and 230-42 are met. This Section shall not be used in conjunction with Section 220-30.

REASON FOR CHANGE: To provide a more reasonable margin of safety for dwelling service and feeder conductor allowable ampacities.

****Section 336-5(a)(1) add an Exception; Section 336-5(a) add a tenth restriction.**

336-5. Uses Not Permitted.

(a) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be used in the following:

(1) In any multifamily dwelling or other structure exceeding three floors above grade

For the purpose of this article, the first floor of a...{text unchanged}...vehicle parking, storage, or similar use shall be permitted.

Exception: An additional level shall be permitted in multifamily dwellings where the entire structure is protected throughout by an approved automatic sprinkler system.

(2) As service-entrance cable.

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(10) In non-residential metal frame structures.

REASON FOR CHANGE: To allow a reasonable expansion for NM cable use in dwelling occupancies, while somewhat limiting the use of NM cable in occupancies where it is more vulnerable to physical damage and where use is somewhat limited by the NEC and building codes. This allows nonmetallic sheathed cable as a wiring method in four story single or multifamily dwellings provided they are fully sprinkled throughout the entire building. It allows designers to be more cost effective in their designs of wiring methods.

REGIONAL INTERPRETATIONS

220-36. Optional Calculation -- New Restaurants.

[This specification may apply to restaurants regarding new occupancy, new buildings, change of occupancy in existing building, or upgrading existing buildings to new electrical load requirements.]

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