

**Recommended Amendments to the
2002 National Electrical Code**
North Central Texas Council of Governments Region

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 230.2(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 the following:

(1) Fire Pumps

.
.
.

(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 230.2, or for each set of service-entrance conductors permitted by 230.40, Exception Nos. 1, 3, 4, or 5, shall consist of not more than six switches or sets of 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 sets of 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 2002 National Electrical Code.
~~Strikeouts~~ indicate existing words and phrases to be deleted.

****Section 250.52 add a paragraph.**

250.52 Grounding Electrodes.

(A) Electrodes Permitted for Grounding.

Where a metal underground water pipe, as described in item (1), is not present, a method of grounding as specified in (2) through (4) below shall be used.

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 250.52(A)(2), (3), and (4) shall be used. This will eliminate the need to depend solely on a driven rod, plate, or pipe as specified in Section 250-52(A)(5) and (6).

****Section 300.11(A)(1) change to read as follows:**

300.11 Securing and Supporting.

(A) Secured in Place.

(1) Fire-Rated Assemblies. Wiring located within the cavity of a fire-rated floor-ceiling or roof-ceiling assembly shall not be secured to, or supported by, the ceiling assembly, including the ceiling support wires- unless tested as part of a fire-rated assembly. An independent means of secure support...{text unchanged}...are part of the fire-rated design.

(delete exception)

REASON FOR CHANGE: If luminaries were intended to be covered, it could have been conveyed in a different manner than to introduce them in the exception. Based upon the International Building Code (IBC), the recommendations by the Ceilings & Interior Systems Construction Association (CISCA) to separately support luminaries is not mandated.

****Section 300.11(A)(2) change to read as follows:**

300.11 Securing and Supporting.

(A) Secured in Place.

(2) Non-Fire-Rated Assemblies. Wiring located within the cavity of a non-fire-rated floor-ceiling or roof-ceiling assembly shall not be secured to, or supported by, the ceiling assembly, including the ceiling support wires- unless authorized by, and installed in accordance with, the ceiling system manufacturer's instructions. An independent means of secure support shall be provided.

(delete existing exception)

Add exception: From the last point of independent support or base for connections within an accessible ceiling to luminaire(s) (lighting fixture(s)) or equipment, branch circuit or fixture whip wiring shall be allowed to be supported by the ceiling support wires.

***NOTE:** Underlining indicates new words and phrases to be added to the 2002 National Electrical Code. ~~Strikeouts~~ indicate existing words and phrases to be deleted.

REASON FOR CHANGE: *Delete existing exception* - Based upon the IBC, the recommendations by CISCA to separately support luminaries is not mandated. *Add exception* - To allow for a reasonable manner in which cables and conduits may be secured up off suspended ceilings of the removable panel type.

****Section 310.15(B)(6) change to read as follows:**

310.15 Ampacities for Conductors Rated 0-2000 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}...provided the requirements of 215.2, 220.22, and 230.42 are met. This Section shall not be used in conjunction with 220.30.

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

****Section 334.10 change to read as follows:**

334.10. Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two-family dwellings.
- ~~(2) Multifamily dwellings permitted to be of Types III, IV, and V construction except as prohibited in 334.12.~~
- ~~(3) Other structures permitted to be of Types III, IV, and V construction except as prohibited in 334.12. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.~~
- (2) In any multifamily dwelling not exceeding three floors above grade.
Exception: An additional level shall be permitted in multifamily dwellings where the entire structure is protected throughout by an approved automatic sprinkler system.
- (3) Other structures not exceeding 3 stories in height.

Note: In parr. 2 & 3 above: For the purpose of this article, the first floor of a building shall be that floor that has 50 percent or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage, or similar use shall be permitted.

REASON FOR CHANGE: Historically NM cable has been limited to a 3-story or less wiring method since 1975. The allowance to increase the use of NM cable to buildings in the 3-6 story range in the 2002 NEC has come about as a result of an appeal action by the Multi-National Housing Council to the NFPA Standards Council and not as a result of the normal code revision action through NEC Code-Making Panel 7, the NEC Technical Committee, and the positive vote of the NFPA membership at the NFPA Annual Meeting. In that the NCTCOG Electrical Advisory Board believes that the current language in the NEC Section 334.10 may again be revised in the 2005 NEC edition, due to the need for basic consistency of regulations, and due to the fact that there is no evidence that the current installation allowances for NM cable do not adequately serve the needs of the local electrical industry and citizens alike, the NCTCOG Electrical Advisory Board believes the use of NM cable in the area served by the NCTCOG would best be benefited by the installation rules as recommended over the past 3 NEC code cycles.

***NOTE:** Underlining indicates new words and phrases to be added to the 2002 National Electrical Code. ~~Strikeouts~~ indicate existing words and phrases to be deleted.

****Section 334.12 add another use not permitted, (11):**

334.12 Uses Not Permitted.

(A) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be used as follows:

(1) As open runs...{text unchanged}

:
:
:

(11) In non-residential metal frame structures.

REASON FOR CHANGE: Limiting the use of NM cable in non-residential metal frame construction is suggested due to the inherent problems with soft jacketed wiring methods in buildings that utilized mainly metal stud and other metal frame construction with sharp edges of unknown proportion. It is believed that the potential safety issues against the use of allowing a soft jacketed wiring method in such construction far outweighed any positive benefits.

****Section 500.8(A)(1) change to read as follows:**

500.8 Equipment.

(A) Approval for Class and Properties.

(1) Equipment shall be identified...{text unchanged}...the maximum surface temperatures specified in 503.1.

FPN: Luminaries (lighting fixtures) and other heat-producing apparatus...{text unchanged}...see Exception No. 3 to 500.8(B).

~~Suitability of identified equipment shall be determined by any of the following: (1) Equipment listing or labeling (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an owner's engineering judgment.~~

REASON FOR CHANGE: "Identified" is already defined in Chapter 1.

****Section 600.21 (E) change to read as follows:**

600.21 Ballasts, Transformers, and Electronic Power Supplies.

(E) Attic and Soffit Locations.

Ballasts, transformers, and electronic power supplies shall be permitted to be located in attics and soffits, provided there is an access door at least 900 mm by 600 mm (3 ft by 2 ft) and a passageway of at least 900 mm (3 ft) high by 600 mm (2 ft) wide with a suitable permanent walkway at least ~~300 mm (12 in.)~~ 600 mm (2 ft) wide extending from the point of entry to each component.

***NOTE:** Underlining indicates new words and phrases to be added to the 2002 National Electrical Code. ~~Strikeouts~~ indicate existing words and phrases to be deleted.

REASON FOR CHANGE: To allow a more reasonable and safer width for the required walkway and to make the requirement consistent with the International Mechanical Code (IMC).

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.]

END

***NOTE:** Underlining indicates new words and phrases to be added to the 2002 National Electrical Code.
~~Strikeouts~~ indicate existing words and phrases to be deleted.