Recommended Amendments to the 2008 National Electrical Code

North Central Texas Council of Governments Region

REGIONAL AMENDMENTS*

**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.

<u>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.</u>

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. This also allows designers more flexibility in the placement of electrical meters and main service disconnects.

**Section 300.11 add an exception.

300.11 Securing and Supporting.

(A) Secured in Place. Raceways, cable assemblies, boxes, cabinets, and fittings shall be securely fastened in place. Support wires that do not provide secure support shall not be permitted as the sole support wires and associated fittings that provide secure support and that are installed in addition to the ceiling grid support wires shall be permitted as the sole support. Where independent support wires are used, they shall be secured at both ends. Cables and raceways shall not be supported by ceiling grids.

Exception: Ceiling grid support wires may be used for structural supports when the associated wiring is located in that area, not more than two raceways or cables supported per wire, with a maximum nominal metric designation 16 (trade size ½").

REASON FOR CHANGE: To provide limited support of raceways and cables by ceiling grid support wire.

**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, 220.61, and 230.42 are met. This Section shall not be used in conjunction with 220.82.

*NOTE: <u>Underlining</u> indicates new words and phrases to be added to the 2008 National Electrical Code. Strikeouts indicate existing words and phrases to be deleted. REASON FOR CHANGE: To provide a more reasonable margin of safety for dwelling service and feeder conductor allowable ampacities.

**Section 500.8(A)(3) changed to read as follows:

500.8 Equipment.

Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

FPN No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

FPN No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

FPN No. 3: Low ambient conditions require special consideration. Explosion proof or dust-ignition proof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

- (A) Suitability. Suitability of identified equipment shall be determined by one 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. an engineering judgment signed and sealed by a qualified Registered Professional Engineer.

FPN: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

REASON FOR CHANGE: To better define the qualifications for an engineering judgment.

505.7 Special Precaution.

Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

FPN No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations. FPN No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

(A) Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by qualified persons Registered Professional Engineer.

REASON FOR CHANGE: To better identify who is qualified to implement Zone Classification Systems.

**Section 680.25(A) changed to read as follows:

*NOTE: <u>Underlining</u> indicates new words and phrases to be added to the 2008 National Electrical Code. Strikeouts indicate existing words and phrases to be deleted.

^{**}Section 505.7(A) changed to read as follows:

680.25 Feeders.

These provisions shall apply to any feeder on the supply side of panelboards supplying branch circuits for pool equipment covered in Part II of this article and on the load side of the service equipment or the source of a separately derived system.

(A) Wiring Methods. Feeders shall be installed in rigid metal conduit, intermediate metal conduit, liquidtight flexible nonmetallic conduit, rigid polyvinyl chloride conduit, or reinforced thermosetting resin conduit. Electrical metallic tubing shall be permitted where installed on or within a building, and electrical nonmetallic tubing shall be permitted where installed within a building, or nonmetallic-sheathed cable or type SE cable shall be permitted where installed within or on the building served. Aluminum conduits shall not be permitted in the pool area where subject to corrosion.

Exception: An existing feeder between an existing remote panel board and service equipment shall be permitted to run in flexible metal conduit or an approved cable assembly that includes an equipment grounding conductor within its outer sheath. The equipment grounding conductor shall comply with 250.24(A)(5).

REASON FOR CHANGE: To allow for more flexibility of wiring methods associated with this type of installation.

END

