**NNICC 2024 NEC (Electrical) Code Adoption Committee Meeting Minutes**

1/30/2024, 2:00 PM PST

Zoom Video Meeting

Join: <https://cityofsparks-us.zoom.us/j/87957185629?pwd=JfrRWOJUNEbDCeO7ihXpb6VaHwehC3.1>

Meeting ID: 879 5718 5629

Passcode: 100415

Open to Public

Invited video conference attendees:

Pennington, Jon <jpennington@cityofsparks.us> Chairman & Voting Member (Jurisdiction)

Gerald Jensen <gerald@jeneng.com > Secretary & Voting Member (Industry)

Carl Wojtkowiak <wojtkowiakc@reno.gov> Voting Member (Jurisdiction)

Ted Spinelli <tspinelli@Washoecounty.gov> Voting Member (Jurisdiction)

Joey Ganser <jganser@pkelectrical.com> Voting Member (Industry)

Ashley Maisel <AMaisel@washoecounty.gov>

Ray Brown < ray.brown@churchillcountynv.gov>

Mike McQuain <mmcquain@douglasnv.us>

Craig Carroll <ccarroll@pkelectrical.com>

Mike Stone <Mike.Stone@Nema.org>

Shannon Behl <shannon@brightlifeelectricnv.com>

Don Iverson <don.iverson@se.com>

John McCamish <johnamccamish@eaton.com>

Jesse Olson <jesse.o@thehappyoutlet.com>

Gerry O’Connor gerryjoconnor@eaton.com

Call to Order by Chairman.

Continue review of code amendments:

# 1.

# 210.52(A)(2) Wall Spacing

*Amend Section 210.52(A)(2) of Section* ***210.52(A) General Provisions*** *to read as follows:*

**210.52(A)(2) Wall Spacing.** As used in this section, a wall space shall include any of the following:

1. Any space 600 mm (2 ft) or more in width (including space measured around corners) and unbroken along the floor line by doorways and similar openings, fireplaces, and fixed cabinets that do not have countertops or similar work surfaces.
2. The space occupied by fixed panels in walls, excluding sliding panels.

*Exceptions*

1. *The space afforded by fixed room dividers, such as free‐standing bar‐type counters or railings. The space behind operable doors.*
2. *Vestibules, hallways, and similar areas less than 5 ft wide in bedrooms.*

**Committee Recommendations for NEC 210.52(A)(2) Wall Spacing:**

 **Proposed modifications:**

 **Delete part of 210.52(A)(2)**

 **Add part 210.52(A)(3) and link to IRC Code**

**Proposed amendment form provided by committee member Craig Carroll.**

**Vote on recommendation to accept modification to amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 2.

# 225.32 Locations

*Amend Section 225.32 to read as follows:*

* 1. **Location.** The disconnecting means shall be ~~installed either inside or~~ attached to the outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means shall be at a readily accessible location nearest the point of entrance of the conductors. For the purposes of this section, the requirements in 203.6 shall be utilized.

## Exceptions

* + 1. *For installations under single management, where documented safe switching procedures are established and maintained for disconnection, and where the installation is monitored by qualified individuals, the disconnecting means shall be permitted to be located elsewhere on the premises.*
		2. *For buildings or other structures qualifying under the provisions of Article 685, the disconnecting means shall be permitted to be located elsewhere on the premises.*
		3. *For towers or poles used as lighting standards, the disconnecting means shall be permitted to be located elsewhere on the premises.*
		4. *For poles or similar structures used only for support of signs installed in accordance with Article 600, the disconnecting means shall be permitted to be located elsewhere on the premises.*
		5. *The disconnecting means shall be located independent of the building or structure served, in direct line of sight, but not to exceed thirty feet (30’).*
		6. *The service disconnecting means may be installed within a building when an external remote shunt switch is provided. All shunt trip switches shall be located at seven feet (7’) above finish grade at a location approved by the fire department. All shunt trip switches shall be located within a twelve inch (12”) equilateral triangle, red in color.*

# Committee Recommendation for NEC 225.32 Locations:

 **Proposed modifications:**

 **Adjust code reference to match new code 225.31(B)**

**Proposed amendment form provided by committee chair Jon Pennington.**

**Vote on recommendation to accept modification to amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 3.

# 230.70(A)(1) Readily Accessible Location

*Amend Section 230.70(A)(1) of Section* ***230.70 General*** *to read as follows:*

**230.70 (A)(1) Readily Accessible Location.** The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure ~~or inside~~ nearest the point of entrance of the service conductors. The disconnecting means may be located independent of the building or structure served, in direct line of sight, but not to exceed thirty feet (30’).

***Exception:*** *The service disconnecting means may be installed within a building when an external remote shunt switch is provided. All shunt trip switches shall be located at seven feet (7’) above finish grade at a location approved by the fire department. All shunt trip switches shall be located within a twelve inch (12”) equilateral triangle, red in color.*

# Committee Recommendation for NEC 230.70(A)(1) Readily Accessible Location:

 **Proposed modifications:**

**Verify that new code references match references in original amendment - Verified**

**This amendment to be moved forward as-is for inclusion in new amendments package.**

**Vote on recommendation to adopt existing amendment unchanged:**

 **Jon Pennington (Jurisdiction) Yes, to Adopt as written**

**Carl Wojtkowiak (Jurisdiction) Yes, to Adopt as written**

**Ted Spinelli (Jurisdiction) Yes, to Adopt as written**

**Gerald Jensen (Industry) Yes, to Adopt as written**

**Joey Ganser (Industry) Yes, to Adopt as written**

**Resolved; No new amendment form is provided by electrical sub-committee, since this amendment is to remain unchanged.**

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# 4.

# 240.51(B) Replacement Only

*Amend Section 240.51(B) of Section* ***240.51 Edison‐Base Fuses*** *to read:*

**240.51(B) Replacement Only.** Plug fuses of the Edison‐base type shall be used only for replacements in existing installations where there is no evidence of overfusing or tampering. In any existing building where alterations or additions are made to **aby** of the premises wiring, all fuse holders shall comply with Article 240.54.

# Committee Recommendation for NEC 240.51(B) Replacement Only:

#  Proposed modifications:

**Verify that new code references match references in original amendment - Verified**

**This amendment to be moved forward as-is for inclusion in new amendments package.**

**Vote on recommendation to adopt existing amendment unchanged:**

 **Jon Pennington (Jurisdiction) Yes, to Adopt as written**

**Carl Wojtkowiak (Jurisdiction) Yes, to Adopt as written**

**Ted Spinelli (Jurisdiction) Yes, to Adopt as written**

**Gerald Jensen (Industry) Yes, to Adopt as written**

**Joey Ganser (Industry) Yes, to Adopt as written**

**Resolved; No new amendment form is provided by electrical sub-committee, since this amendment is to remain unchanged.**

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**5**

# 250.118(A) Types of Equipment Grounding Conductors

*Amend Section 250.118(4) of Section 250.118 Types of Equipment Grounding Conductors to read as follows:*

**250.118 Types of Equipment Grounding Conductors**

**(4)** Electrical metallic tubing with the exception of where the metallic raceway is subject to either damage or likely to be disturbed in the future under normal operating conditions, this determination shall be made by the Authority Having Jurisdiction.

FPN: An example of “subject to damage” is a surface installed conduit running along a traffic path. An example of “likely to be disturbed” is a surface installed conduit running across a rooftop, where future re‐roofing operations will require the conduit to shifted, damaged, removed or relocated.

# Committee Recommendation for NEC 250.118(A) Types of Equipment Grounding Conductors:

 **Proposed modifications:**

 **Adjust code reference to match new code 225.31(B)**

**Proposed amendment form provided by committee member Joey Ganser**

**Vote on recommendation to accept modification to amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 6.

# 250.120 Equipment Grounding Conductor Installation

*Amend Section 250.120 to read as follows:*

**250.120 Equipment Grounding Conductor Installation.** ~~An equipment grounding conductor shall be installed in~~ ~~accordance with 250.120(A), (B), and (C).~~ All raceways installed on roofs shall contain an equipment grounding conductor sized per Table 250.122 installed with the circuit conductors.

***Exception****: Low voltage, communication and similar type systems unless required elsewhere in the Code.*

# Committee Recommendation for NEC 250.120 Equipment Grounding Conductor Installation:

 **Proposed modifications:**

 **Verify code reference matches new code section numbers.**

 **Add new section (D) to clarify requirements for conduits on roofs.**

**Proposed amendment form to be provided by committee chair Jon Pennington.**

**Vote on recommendation to accept modification to amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 7.

# 314.17(C) Nonmetallic Boxes and Conduit Bodies

*Amend Section 314.17(C) of Section* ***314.17 Conductors entering Boxes, Conduit Bodies, or Fittings*** *to read as follows:*

**314.17(C) Nonmetallic Boxes and Conduit Bodies.** Nonmetallic boxes and conduit bodies shall be suitable for the lowest temperature‐rated conductor entering the box. Where nonmetallic boxes and conduit bodies are used with messenger‐supported wiring, open wiring on insulators, or concealed knob‐and‐tube wiring, the conductors shall enter the box through individual holes. Where flexible tubing is used to enclose the conductors, the tubing shall extend from the last insulating support to not less than 6 mm (1/4 in.) inside the box and beyond any cable clamp. Where non‐metallic sheathed cable or multiconductor Type UF cable is used, the sheath shall extend not less than 6 mm (1/4 in.) inside the box and beyond any cable clamp. In all instances, all permitted wiring methods shall be secured to the boxes.

***Exception:*** *where non‐metallic sheathed cable or multiconductor Type UF cable is used with ~~single gang~~ boxes ~~not~~ ~~larger than a nominal size 57 mm x 100 mm (2 ¼ in. x 4 in.)~~ mounted in walls or ceilings, and where the cable is fastened within 200 mm (8 in.) of the box measured along the sheath and where the sheath extends through a cable knockout not less than 6 mm (1/4 in.), securing the cable to the box shall not be required. Multiple cable entries shall be permitted in a single cable knockout opening.*

# Committee Recommendation for NEC 314.17(C) Nonmetallic Boxes and Conduit Bodies:

 **Proposed modifications:**

 **Delete amendment.**

**Vote on recommendation to delete previous amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Delete**

**Carl Wojtkowiak (Jurisdiction) Yes, to Delete**

**Ted Spinelli (Jurisdiction) Yes, to Delete**

**Gerald Jensen (Industry) Yes, to Delete**

**Joey Ganser (Industry) Yes, to Delete**

**Resolved; electrical sub-committee recommends that this amendment be deleted.**

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# 8.

# 358.12 Uses Not Permitted

*Amend Section 358.12 to read as follows:*

* 1. **Uses Not Permitted.** EMT shall not be used under the following conditions:
		1. Where subject to severe physical damage.
		2. For the support of luminaires or other equipment except conduit bodies no larger than the largest trade size of the tubing.
		3. In direct contact with earth.

# Committee Recommendation for NEC 358.12 Uses Not Permitted (EMT):

 **Proposed modifications:**

**Adjust code and reference to match new code section number 358.10(A).**

**Proposed amendment form to be provided by committee member Joey Ganser.**

**Vote on recommendation to accept modification to amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 9.

# 690.7(D) General Requirements (New)

# Committee Recommendation for NEC 690.7(D) General Requirements:

 **Proposed modifications:**

**Add changes to 690.7(D) which describe additional requirements for permanent and legible labels.**

**Proposed amendment form provided by committee chair Jon Pennington.**

**Vote on recommendation to adopt new amendment:**

 **Jon Pennington (Jurisdiction) Yes, to Adopt as New**

**Carl Wojtkowiak (Jurisdiction) Yes, to Adopt as New**

**Ted Spinelli (Jurisdiction) Yes, to Adopt as New**

**Gerald Jensen (Industry) Yes, to Adopt as New**

**Joey Ganser (Industry) Yes, to Adopt as New**

**Resolved; new amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 10.

# 700.10(D) Fire Protection

*Amend Section 700.10(D) of Section* ***700.10 Wiring, Emergency System*** *to read as follows:*

**700.10(D) Fire Protection.** Emergency systems shall meet the additional requirements in (D)(1) through (D)(3) in the following occupancies:

1. Assembly occupancies for not less than 1000 persons
2. Buildings above ~~23 m (75 ft)~~ 55 ft in height
3. Health care occupancies where persons are not capable of self‐preservation.
4. Educational occupancies with more than 300 occupants

# Committee Recommendation for NEC 700.10(D) Fire Protection:

 **Proposed modifications:**

**Adjust code reference to match new code section number 700.10(D)(1).**

**Proposed amendment form to be provided by committee Member Craig Carroll**

 **Vote on recommendation to accept modification to amendment reference:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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# 11.

# 700.12 General Requirements

*Amend Section 700.12 to read as follows:*

* 1. **General Requirements.** Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both shall be available

within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (E). Unit equipment in accordance with 700.12(F) shall satisfy the applicable requirements of this article.

In selecting an emergency source of power, ..... so as to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism.

Equipment for sources of power as described in 700.12(A) through (E) shall be installed either in spaces fully protected by approved automatic fire suppression systems (sprinklers, carbon dioxide systems, and so forth) or in spaces with a ~~1‐hour~~ 2‐hour fire rating where located within the following:

* + 1. Assembly occupancies for more than 1000 persons.
		2. Buildings above ~~23 m (75 ft)~~ 55 feet in height with any of the following occupancy classes‐ assembly, educational, residential, detention and correctional, business, and mercantile
		3. Health care occupancies where persons are not capable of self‐preservation
		4. Educational occupancies with more than 300 occupants

# Committee Recommendation for NEC 700.12 General requirements:

 **Proposed modifications:**

**Adjust code reference to match new code section number 700.12(B)(2).**

**Proposed amendment form provided by committee Member Craig Carroll**

**Vote on recommendation to accept modification to amendment reference:**

 **Jon Pennington (Jurisdiction) Yes, to Accept**

**Carl Wojtkowiak (Jurisdiction) Yes, to Accept**

**Ted Spinelli (Jurisdiction) Yes, to Accept**

**Gerald Jensen (Industry) Yes, to Accept**

**Joey Ganser (Industry) Yes, to Accept**

**Resolved; amendment form to be forwarded to Steering Committee by Electrical Sub-Committee Chairman Jon Pennington**

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Evaluation of existing amendments is complete.

Evaluation of any proposed new amendments to be continued at the next committee meeting.

Next committee meeting to be in-person Lunch meeting with Steering Committee Chairman Bob Flores

Meeting adjourned.

Next meeting:

TBD Lunch meeting. Time & location to be decided as members are available.

Zoom Video Meeting

Join: <https://cityofsparks-us.zoom.us/j/87957185629?pwd=JfrRWOJUNEbDCeO7ihXpb6VaHwehC3.1>

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