



Major Electrical Code Changes for 2023 NEC

Effective July 29, 2024 (This list does not include ALL changes)

Labeling: Throughout the code there are many references for labeling to comply with 110.21 (B). All labeling outdoors will be required to be engraved and permanently affixed with screws/bolts or rivets to properly withstand the environment.

Outlet(s) is used in a number of code references and it is important to remember that an outlet is any point in the wiring system where current is taken to supply power to utilization equipment. Think hard wired installations, not just receptacles.

- 1) Section 110.26 (A) (6) - Grade, Floor, or Working Platform:** The grade, floor, or working platform in the required working space shall be kept clear and the space shall be as level and flat as practical for the entire depth and width.
- 2) Section 210.8 (A) (6) - GFCI Protection for Dwelling Units:** All kitchen receptacles in dwelling units must now be GFCI protected.
- 3) Section 210.8 (B) (7) - GFCI Protection for Other Than Dwellings:**
Receptacles and cord and plug connected fixed or stationary appliances installed within 6ft of a sink shall be GFCI protected.
- 4) Section 210.8 (D) - Specific Appliances:** List of specific appliances in dwelling and non-dwelling installations that must have GFCI protection has been expanded to include: electric ranges, wall mounted ovens, counter mounted cooking units, & microwaves.

{GFCI Protection required for the circuit or outlet supplying these appliances rated 150-V to ground or less and 60-Amps or less both single phase and 3 phase}

5) Section 210.8 (F) - Outdoor Outlets: Outdoor outlets on dwelling units requiring GFCI protection has been expanded to include...

- 1) Garages with a floor located at or below grade level
- 2) Accessory buildings
- 3) Boathouses. (If equipment supplied by an outlet covered under this section is replaced, the outlet shall be supplied with GFCI protection).

Exception No 2 for HVAC equipment still applies until September 1, 2026.

6) Section 210.11 (C) (4) - Branch Circuits Required for Garages:

New Exception 2: Where the 20-amp circuit supplies a single vehicle bay garage, outlets for other equipment within the same garage shall be permitted to be supplied in accordance with 210.23 (A) (1) & (2)

7) Section 210.12 (D) (3). Other Occupancies: Arc Fault Circuit-Interrupter protection has expanded into (3) Areas designed for the use exclusively as sleeping quarters in fire stations, police stations, ambulance stations, rescue stations, & similar locations.

8) Section 210.17 - Guest Rooms & Guest Suites: Guest rooms and guest suites along with a newly added, assisted living facilities, that provide permanent provisions for cooking shall have branch circuits installed to meet the rules for dwelling units.

9) Section 210.23 (A) (1) & (2) - Permissible Loads, Multiple-Outlet Branch Circuits:

(A) -10-amp branch circuits shall meet the requirements of (1) & (2).

(1) Loads Permitted for 10-amp branch circuits. A 10-amp branch circuit shall be permitted to supply one or more of the following:

- 1) Lighting Outlets
- 2) Dwelling unit exhaust fans on bathroom or laundry room lighting circuits
- 3) A gas fireplace unit supplied by an individual branch circuit

10) Section 210.52 (C) (1) - Countertop & Work Surfaces. Wall Spaces.

New Exception: Where the required receptacles cannot be installed in the wall areas behind the sink as shown in Figure 210.52 (C) (1), the receptacle outlet shall be permitted to be installed as close as practicable to the countertop area to be served. The total number of receptacle outlets serving the countertop shall not be less than the number needed to satisfy 210.52 (C) (1). These outlets shall be located in accordance with 210.52 (C) (3).

11) Section 210.52 (C) (2) – Islands, Peninsular Countertops & Work Surfaces:

Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with 210.52 (C) (3). If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, provisions shall be provided at the island or peninsular for future addition of a receptacle outlet to service the island or peninsular countertop or work surface.

12) Section 210.52 (C) (3) - Receptacle Outlet Location: Receptacle outlets shall be located in one or more of the following:

- 1) On or above, but not more than 20in above the countertop or worksurface
- 2) In a countertop using receptacle outlet assemblies Listed for use in countertops
- 3) In a work surface using receptacle outlet assemblies Listed for use in work surfaces or listed for use in countertops.

13) Section 215.15 – Barriers: Barriers shall be placed such that no energized, uninsulated, ungrounded busbar or terminal is exposed to inadvertent contact by persons or maintenance equipment while servicing load terminations in panelboards, switchboards, switchgear, or motor control centers supplied by feeder taps in 240.21 (B) or transformer secondary conductors in 240.21 (C) when the disconnecting device to which the tap conductors terminated, is in the open position.

14) Section 215.18. - Surge Protection. (A) - Surge Protective Device: Where a feeder supplies any of the following, a surge protective device (SPD) shall be installed:

- 1) Dwelling units
- 2) Dormitory units
- 3) Guest rooms and guest suites of hotels and motels
- 4) Areas of nursing homes and limited-care facilities used exclusively as patient sleeping rooms

(Companion Code Sections 225.42 & 230.67, with the same requirements for feeders and services)

15) Section 220.5 (C) - Floor Area Calculations: The floor area for each floor shall be calculated from the outside dimensions of the building, dwelling unit, or other area shall not include open porches or unfinished areas not adaptable for future use as a habitable room or occupiable space. (Attached garages to be included)

16) Section 225.41 - Emergency Disconnects for Branch Circuits & Feeders: For one-and two-family dwelling units, an emergency disconnecting means shall be installed.

(A) General:

- 1) Location. The disconnecting means shall be installed in a readily accessible outdoor location on or within sight of the dwelling unit.
- 2) Rating. The disconnect rating shall have a SCCR equal to or greater than the available fault current.
- 3) Grouping. If more than one disconnecting means is provided, they shall be grouped.

17) Section 230.85. - Emergency Disconnects for Services: For one and two-family dwelling units, and emergency disconnecting means shall be installed.

(A) General.

- 1) Location. The disconnecting means shall be installed in a readily accessible outdoor location on or within sight of the dwelling unit.

18) Section 240.24 (E) – Overcurrent Protective Devices in Bathrooms: Overcurrent protective devices other than supplementary overcurrent protective devices shall NOT be located in bathrooms, showering facilities, or locker rooms with showering facilities.

19) Section 242.9 – Indicating: An SPD shall provide indication that it is functioning properly. (The indication shall be visible without the use of tools)

20) Section 352.44 – Expansion Fittings:

(B) Earth Movement. Expansion fittings for underground runs of direct bury PVC Conduit emerging from the ground shall be provided above grade when required to compensate for earth settling or movement, including frost heave.

(Due to the major temperature swings in our jurisdiction, and effects of frost heave and settling, expansion fittings will be required on all underground horizontal runs of PVC conduit emerging above grade. Expansion fitting to be installed above grade in vertical section of conduit.)

21) Section 406.12 - Tamper Resistant Receptacles: All 15 & 20-ampere 125V and 250V non-locking receptacles in following locations shall be listed tamper-resistant.

The list of locations has been modified and expanded to now include:

(8) Residential care/assisted living facilities, social and substance abuse Rehabilitation facilities, and group homes

(9) Foster care facilities, nursing homes, and psychiatric hospitals.

(10) Areas of Agricultural buildings accessible to the general public & any Common areas.

22) Section 408.4 – Description Required:

(B) Source Supply. All switchboards, switchgear, panelboards, supplied by a feeder in other than one and two- family dwellings shall be permanently marked in accordance with the following:

- 1) With the identification and physical location of where the power originates.
- 2) With a label that is permanently affixed and of sufficient durability to withstand the environment involved.
- 3) Using a method that is not handwritten.
(Engraved label permanently affixed required for outdoor installations)

23) Section 445.18 (A) – Generator Disconnecting Means: The disconnecting means shall be permitted to be located within the generator behind a hinged cover, door, or enclosure panel. Where the generator disconnecting means is located within the generator, a field applied label meeting the requirements of 110.21 (B) shall be provided indicating the location of the generator disconnecting means. (Engraved label permanently affixed required for outdoor installations).

24) Section 551.77. Recreational Vehicle Site Supply Equipment: Recreational vehicle site supply equipment shall be listed for use as recreational vehicle site supply equipment and shall comply with 551.77 (A) through (F).

(If involved in the installation of RV Vehicle site supply equipment please familiarize yourself with these requirements, making sure the equipment is Service rated where required)

25) Section 625.43. Disconnecting Means Location. For EVSE and WPTE rated more than 60-amperes or more than 150V to ground, the disconnecting means shall be provided and installed in a readily accessible location. If the disconnecting means is installed remote from the equipment, a plaque shall be installed on the equipment denoting the location of the disconnecting means. The disconnecting means shall be

lockable in the open position in accordance with 110.25. (Engraved Label permanently affixed required for outdoor installations)

26) Section 680.5 – GFCI and Special Purpose Ground Fault Circuit-Interrupter (SPGFCI) Protection.

(C) Above 150 Volts to Ground. Where required in this article, ground fault protection of receptacles and outlets on branch circuits operating above 150V to ground, not exceeding 480V phase-to-phase, single or 3-phase, shall be provided with SPGFCI protection not to exceed 20-mA ground fault trip current.

27) Section 680.21 (D) - Pool Pump Motor Replacement: Where a pool pump motor in 680.21 (C) is replaced or repaired, the replacement or repaired pump motor shall be provided with ground fault protection complying with 680.5 (B) or (C) as applicable.

28) Section 680.74 - Bonding (Hydromassage Bathtubs)

New Exception No 3: Small conductive surfaces of electrical equipment not likely to become energized, such as the mounting strap or yoke of a listed light switch or receptacle that is grounded, shall not be required to be bonded.

29) Section 701.32 - Selective Coordination. (A) General: Legally required standby systems overcurrent protective devices shall be selectively coordinated with all supply-side and load-side overcurrent devices.

(A) Replacements & (C) Modifications. Where legally required standby systems overcurrent protective devices are replaced or where modifications, additions or deletions to the legally required standby systems occur, selective coordination shall be reevaluated to ensure selective coordination is maintained.

30) Section 760.33 - Supply-Side Overvoltage Protection: A Listed surge protective device (SPD) shall be installed on the supply side of a fire alarm control panel in accordance with Part II of Article.