DEPARTMENT OF LABOR AND INDUSTRY

2023 NEC Changes

Important: Please refer to the 2023 National Electrical Code for detailed information

Revised Oct. 6, 2025

1. **Section 110.26:** The requirement for "large equipment" from 110.26(C)(2) which stated that open equipment doors may not impede access to and egress from the working space was also added to 110.26. This rule now requires that when open equipment doors result in an egress path that is less than 24 inches wide or 6 feet, 6 inches high, the opening must be increased to prevent the equipment doors from obstructing the egress path. In addition, the language clarifies that the space in front of equipment must be unobstructed by fixed cabinets, walls, or partitions.

2. **Section 110.26(A)(4):** Since the 2014 NEC, the NEC has required working clearances and opening dimensions for safe access to electrical equipment in spaces with limited access. In the 2023 NEC, language was added to (4) to address the workspace area for safely servicing electrical equipment with limited access. The new requirement will **not allow** for the placement of fixed cabinets, walls, or partitions below the limited access opening. The space below the opening is required to be **unobstructed to the floor** and free from any obstacles that may hinder equipment access.

3. **Section 210.8(A)(6):** Expanded GFCI Protection in Dwelling Unit Kitchens: The 2023 NEC update removed the phrase "where the receptacles are installed to serve the countertop surfaces" from Section 210.8(A)(6). This change broadens the GFCI protection requirement to include all 125V through 250V receptacles in kitchens—not just those serving countertops. As a result, GFCI protection in kitchens now also applies to:

   - Wall space receptacles per NEC 210.52(A)
   - Countertop receptacles per NEC 210.52(B)

   Appliances incompatible with GFCI protection:
   If after the appliance proves incompatible after installation and inspection, the contractor or homeowner must:
   - Submit a GFCI Unwanted Tripping Incident Report to NEMA: https://www.nema.org/membership/products/gfci-unwanted-tripping-report

   Once submitted, the GFCI protection may be removed, however, the contractor or homeowner must provide evidence that the NEMA report was filed. This verification must be

available upon request and uploaded to the electronic permit system. If a solution is determined by either the breaker or appliance manufacturer, it is the contractor or homeowner's responsibility to make the necessary repairs to ensure the appliance is properly equipped with GFCI protection.

4. **Sections 210.8(A)(7) and 210.8(B)(3):** The revised language will require GFCI protection for receptacles located in "areas with sinks and permanent provisions for food preparation, beverage preparation, or cooking". These areas are used similarly to a kitchen, but do not meet the definition. The change could affect an area that includes a "sink" such as a recreation room wet-bar, or a convenience store where beverages or food is prepared. For the purposes of determining the area where receptacle(s) are required to have GFCI protection, the area includes the contiguous countertop or work surface that contains the sink.

5. **Section 210.8(B)(4):** For the 2023 NEC, GFCI protection will be required for "other than dwelling unit" receptacles in buffet serving areas. The intent of the language was to include serving areas where you have either permanent provisions for food serving, beverage serving, or cooking. The department will enforce the GFCI protection requirements for receptacles located in areas of buildings where liquids or beverages are present or dispensed. The intended areas may include but are not limited to buffet tables or buffet areas which contain water wells used for heating food, smoothie bars, juice bars, coffee bars, and soda dispensing. GFCI protection will not be required for appliances located in buffet areas that do not contain, dispense, or use liquids (beverages or water) and are used exclusively for warming and heating food. Those heating appliances may include pizza warmers, hot dog rollers/cookers, heat lamps, etc.

6. **Section 210.8(D):** A list of "specific appliances" was added that will require GFCI protection for the branch-circuit or the "outlet" supplying appliances rated 150V or less to ground and 60A or less. The section clarifies that these appliances must have GFCI protection provided whether they are hardwired, or cord- and plug-connected. The expansion also included 5 new appliances:
    - Electric range
    - Wall-mounted oven
    - Counter-mounted cooking unit
    - Clothes dryer
    - Microwave oven

7. **Section 210.8 (F):** A new exception was added to not require GFCI protection for listed HVAC equipment until September 1, 2026. Garages, accessory buildings, and boathouses were added to dwelling unit outdoor outlets and will require GFCI protection. In addition, GFCI protection must be added for <u>existing</u> outdoor equipment that is replaced.

    210.8(F) is not applicable to:

- Outdoor outlets that are not readily accessible such as a submersible well pumps, sewer lift pumps, load management controllers, surge protection devices, or similar equipment.
- Outdoor lighting outlets

8. **Section 210.52(C)(2):** The requirement for receptacles serving the countertop or work surface of an island or peninsula is made optional; however, if the receptacles are not installed at the time the cabinets and countertops were initially placed, the section requires provisions for a future outlet to be provided. The provision must include a wiring method (conduit, raceway, or cable) to be extended to the island or peninsula and terminated into a junction box with cover.

9. **Section 210.52(C)(3):** In the same section, all receptacle outlets in the kitchen serving the countertop surface will no longer be allowed below the countertop or work surface. The receptacles, or outlet assemblies, located on the top of the countertop or work surface must be listed for the use.

   For purposes of this section, receptacles shall not be located within 24 inches below a countertop or worksurface. Receptacles below the countertop or worksurface shall not be used for "serving the countertop or worksurface". USB device(s) that do not contain a receptacle(s) are allowed to be installed below the countertop surface.

   **If receptacle placement is according to Informational Annex J and with ADA guidelines, please contact the local AHJ to discuss options for granting "special permission" in accordance with section 90.4(C).

10. **Section 210.70(A)(1):** Laundry areas were added to the list of rooms that are required to have at least one lighting outlet controlled by listed wall mounted control device when you enter the room. In addition, exception number one (1) was revised to clarify that the laundry area could not utilize a switched receptacle for the lighting outlet. The lighting outlet and switch requirement would not apply to laundry rooms or areas that are in small closets or rooms only large enough for the laundry equipment, if the light source located in the adjacent space provides illumination.

11. **Section 215.15:** A new section was added to expand the barrier requirement for feeder taps and transformer secondaries. Barriers shall be placed such that no energized, uninsulated, ungrounded busbar or terminal is exposed to inadvertent contact by persons 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 are terminated, is in the open position.

12. **Sections 215.18, 225.42 and 230.67:** New language was added similar to section 230.67 to require surge protection devices (SPDs) for both feeders and outside feeders. The need for the protection is to limit damage to electronic devices and equipment which can be rendered inoperable by a surge. The areas where the surge protection is required has been expanded and will now include new installations as well as replacement distribution equipment located in:

(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

The Type 1 or Type 2 SPD must be installed in or adjacent to the distribution equipment connected to the load side of the feeder that contains branch circuit overcurrent protective device(s). In addition, the SPD shall have a nominal discharge current rating (In) of not less than 10kA.

Below are specific conditions determined to meet the intent of the section. For other types of installations, please consult with your local inspector.

Residential Pole-Mounted Service Disconnects or Panelboards: Surge protection is required under NEC 230.67. However, Exception (B) allows the SPD to be installed in the first downstream feeder panel within the dwelling unit. This also applies when a service disconnect (without a panelboard) is mounted directly on the dwelling—the SPD **may** be located in the feeder supplied panelboard downstream.

Service Panelboards with Extended Busbars (Service/Feeder Combo Panels): These panels, commonly called "farm panels" or "farm feed-through panels," act as both service and feeder equipment. When mounted on the dwelling, they require surge protection in all cases, in accordance with NEC 230.67 and 225.42.

SPD Placement Based on Panelboard Location: Surge protection installed at the exterior service or feeder supplied panelboard mounted on the dwelling, additional downstream SPDs may or may not be necessary under the following conditions:

- **No additional SPD is required** if the downstream distribution equipment is located nearest point of entry.
- **Additional SPD is required** if the panelboard is located further inside the structure away from the distribution equipment.
- Any additional feeder panelboards located in adjacent room or area away from the main distribution equipment **would require an SPD.** An example would be a mechanical room panelboard with an SPD supplying an attached garage or upper addition panelboard.

Single-Equipment Disconnects (e.g., for A/C or Hot Tubs): SPDs are not required for disconnects serving only one piece of equipment. However, if the disconnect also provides overcurrent protection and supplies additional loads (e.g., a convenience receptacle alongside a hot tub), it now functions as a feeder supplied panelboard—and surge protection becomes necessary.

13. **Section 225.41:** New language now requires a one- and two-family dwelling unit "emergency disconnect" for outside feeders. This requirement was first introduced in section 230.85 in the 2020 NEC for services. The need for the change was to ensure that first responders were always able to shut off the power on the exterior of a dwelling regardless of how the building is supplied.

    An emergency disconnect covered in section 225.41 ***would not be required*** when replacing a panelboard supplied by an existing outside feeder.

    In addition, section 225.41(B) requires the identification of the location of other isolation disconnects for other power sources where those disconnects are not located adjacent to the emergency disconnect. For purposes of applying the emergency disconnect requirements in 225.41 and 230.85, the Department will allow an exterior utility provided disconnect as the emergency disconnect if the following conditions are met: the disconnect is located outdoors, readily accessible, and visible from the dwelling it supplies.

14. **Section 230.85**: In order to provide first responders with a safe method of disconnecting power from a structure, one-family and two-family dwellings are required to have an **emergency disconnect** installed outdoors, within sight, and in a readily accessible location. The emergency disconnect must be rated for the available fault current. Generally, to achieve a short circuit current rating, an unfused disconnect switch constructed to UL 98, would be required to contain overcurrent protection or the installer must provide the overcurrent protection ahead of or adjacent to the equipment. In addition, this requirement will impact service panels that are being replaced. If you have questions regarding the limitations and use of an unfused disconnect - please contact the local AHJ.

    See 230.85(E) for the equipment marking requirements. The NEC does not prohibit locking the disconnect in the "On" position. First responders are well equipped to cut off or remove any locking devices that impede the ability to operate the emergency disconnect.

    For the purposes of applying the exception, "replacement" is installing new meter enclosures, terminal boxes, raceways, or service entrance cables (including overhead to underground), to existing electrical installations without changing the service equipment.

15. **Section 250.140(B)(5)**: For existing branch-circuit installations only, if an equipment grounding conductor is not present in the outlet or junction box the frame of the range or dryer shall be permitted to be connected to the grounded conductor that is part of a Type SE service-entrance cable that originates in equipment **other than a service**. The grounded conductor shall be insulated, or field covered within the supply enclosure with listed insulating material, such as tape or sleeving to prevent contact of the uninsulated conductor with any normally non-current-carrying metal parts. Note: Prior editions of the NEC only allowed the existing branch-circuit installation to use the grounded conductors as the equipment ground if it originated in a service panelboard.

16. **Section 352.44(B):** A new (B) was added to address earth movement when installing **underground** PVC conduit. Expansion fittings are now required to compensate for earth settling or movement, including frost heaving, when underground PVC conduit is installed as a complete run (300.18(A)), and emerges from grade. Short sections of PVC conduit installed for physical protection of direct buried cables shall comply with requirements in 300.5(J).

17. **Section 406.9:** The 2020 NEC addressed receptacles prohibited from being installed inside a tub or shower or within a zone measured 3 feet horizontally from any outside edge and 8' vertically above the top of the bathtub rim or shower stall threshold. In the 2023 NEC, the language was changed to clearly include the space from the floor to 8 ft above the bathtub or shower threshold. In addition, some new exceptions were added. Exception No. 1: Receptacles installed in accordance with 680.73 (receptacles for hydromassage bathtubs) are allowed. Exception No. 4: to allow a single receptacle for an electronic toilet or personal hygiene device such as an electronic bidet seat. The receptacle is required to be readily accessible and not located in the space between the toilet and the bathtub or shower.

18. **Section 440.14:** The revised text clarifies that the required air-conditioning and refrigeration equipment disconnecting means located within sight from and readily accessible, shall meet the working space requirements of 110.26(A).

19. **Section 445.19(C):** New language clarified that an "Emergency Shutdown of Prime Mover" shall be provided for one -and- two-family dwelling unit generators. For other than cord-and-plug-connected portable generators, an emergency shutdown device shall be located outside the dwelling unit at a readily accessible location and shall also meet the requirements of 445.19(A)(1) and (A)(2).

    An emergency shutdown device mounted on the exterior of the generator enclosure shall be permitted to satisfy the requirements of this section. The shutdown device shall be marked as the Generator Emergency Shutdown, and the label shall meet the requirements of 110.21(B).

20. **Section 625.42 and 750.30(C)**. Can *Tesla - Electric Vehicle Supply Equipment (EVSE)* be adjusted and marked at an ampacity less than the maximum current rating on the equipment in accordance with 750.30(C)?

    Yes. The adjustment to a lower value would comply with Section 750.30(C) once the initial commissioning of the EVSE is completed and the equipment is labeled/marked. Future adjustments of the current setting can only be done by removing the cover to access the QR code inside the equipment. The department's position is that the removal of the cover to access the QR code, meets the requirements of Section 750.30(C)(3)(1). When the EVSE equipment is adjusted to a lower ampacity other than the max rating, the equipment shall be marked in accordance with 750.30(C)(4). See Sections: 625.41, 625.42, 750.6 and 750.30.

21. **Section 725.31:** This section was revised, and the acceptable wiring methods were relocated to section 724.31. This section covers the additional protection requirements for a safety control circuit where failure or damage would introduce a direct fire or life hazard. “Safety Circuit” is defined in the 2023 NEC as “the part of a control system containing one or more devices that perform a safety-related function.” It is the department’s position that inverters, ESS, and other related systems, that use power limited signal circuits to activate an external emergency switch or disconnect be considered safety circuits. All conductors shall be installed in rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit, electrical metallic tubing, Type MI cable, or Type MC cable, or be otherwise suitably protected from physical damage.