

2023 NEC Significant Code Changes

Residential

- **210.8(A)(7) Added:** Areas with sinks and permanent provisions for food preparation, beverage preparation, or cooking. *This expands GFCI requirements for these areas.*
- **210.52 (c) (2 & 3)** Islands and Peninsular Countertops and Work Surfaces- Receptacle outlets, if installed to serve an island or peninsula 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 peninsula countertop or work surface, provisions shall be provided at the island or peninsula for future addition of a receptacle outlet to serve the island or peninsula countertop or work surface.

Receptacle outlet location - Receptacle outlets shall be located in one or more of the following: On or above, but not more than 20 inches above a countertop or workspace. In a countertop using receptacle outlet assemblies listed for use in countertops. In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops. *This allows the option to only be prewire ready; however, if receptacle(s) are installed, it would have to meet the requirements, including listed work surface devices.*

- **220.57** Electric Vehicle Supply Equipment (EVSE) Load- The EVSE load shall be calculated at either 7200 watts or the nameplate of the equipment, whichever is greater. *Added to specify a minimum for EVSE (VA) for load calculations. Must be calculated by the larger of 7200VA or nameplate.*
- **230.85** Emergency disconnects - For one- and two-family dwelling units, an emergency disconnecting means shall be installed.

Location - The disconnecting means shall be installed in a readily accessible outdoor location on or within sight of the dwelling (is visible and not more than 50 foot from dwelling)

Rating - The disconnecting means shall have a short-circuit current rating equal or greater than the available fault current.

Grouping - If more than one disconnecting means is provided, they shall be grouped.

Disconnects - Each disconnect shall be one of the following: Service disconnect, A meter disconnect integral to the meter mounting equipment not marked as suitable only for use as service equipment installed in accordance with 230.82, Other listed disconnect switch or circuit breaker that is marked suitable for use as service equipment,

but not marked as suitable only for use as service equipment, installed on the supply side of each service disconnect.

Replacement - Where service equipment is replaced, all of the requirements of this section shall apply

Identification of Other Isolation Disconnects - Where equipment for isolation of other energy source systems is not located adjacent to the emergency disconnect required by this section, a plaque or directory identifying the location of all equipment for isolation of other energy sources shall be located adjacent to the disconnecting means required by this section.

Marking Text - The disconnecting means shall be marked as follows: Service disconnect: EMERGENCY DISCONNECT, SERVICE DISCONNECT. Meter disconnects installed in accordance with 230.82 (3) marked as follows: EMERGENCY DISCONNECT, METER DISCONNECT, NOT SERVICE EQUIPMENT. Other listed disconnect switches or circuit breakers on the supply side of each service disconnect that are marked suitable for use as service equipment and marked as follows: EMERGENCY DISCONNECT, NOT SERVICE EQUIPMENT

Marking Location and Size - Markings shall comply with 110.21 (B) and both of the following: The marking or labels shall be located on the outside front of the disconnect enclosure with red background and white text, the letters shall be at least ½ inches high.

These revisions were mainly to reorganize and better align with NEC formatting layout and to clarify requirements.

Commercial

- **110.16 (B)** A permanent arc flash label shall be field or factory applied to service equipment and feeder supplied equipment rated 1000 amperes or more. The arc flash label shall be in accordance with the applicable industry practice and include the date the label was applied.
- **210.12 (D)** Other occupancies. - All 120-volt, single-phase, 10-, 15-, and 20-ampere branch circuits supplying outlets or devices installed in the following locations shall be protected by any of the means described in 210.12(A) (1) through (A) (6). : Guest rooms and guest suites of hotels and motels. Areas used exclusively as patient sleeping rooms in nursing homes and limited-care facilities. Areas designed for use exclusively as sleeping quarters in fire stations, police stations, ambulance stations, rescue stations, ranger stations, and similar locations.

- **210.17** Guest Rooms and Guest Suites. - Guest rooms and guest suites in the following occupancies that are provided with permanent provision for cooking shall have branch circuits installed to meet the rules for dwelling units: Hotels, Motels and Assisted living facilities.
- **210.62** Show Windows. - At least one 125-volt, single phase, 15- or 20-ampere-rated receptacle outlet shall be installed within 18" of the top of each show window. No point along the top of the window shall be farther than 6 ft from a receptacle outlet.

Residential and Commercial

- **110.26(A)(6)** Grade, Floor, or Working Platform. - The grade, floor, or platform in the required working space shall be kept clear, and the floor, grade, or platform in the working space shall be as level and flat as practical for the entire required depth and width of the working space.
- **110.33 (A)** Open equipment doors shall not impede access to and egress from the working space. Access or egress is impeded if one or more simultaneously opened equipment doors restrict working space access to be less than 24 inches wide and 6½ ft high.
- **210.8 (D)** Specific appliances. - GFCI protection shall be provided (no matter if hardwired or plug and cord) for the branch circuit supplying the following appliances rated 150 volts or less to ground and 60 amperes or less, single- or 3-phase: Automotive vacuum machines, drinking water coolers and bottle fill stations, high-pressure spray washing machines, tire inflation machines, vending machines, sump pumps, dishwashers, electric ranges, wall-mounted cooking units, clothes dryers and microwave ovens.
- **210.70** Lighting outlets required - Lighting outlets shall be installed where specified in 210.70 (a), (b), (c). The switch or wall-mounted control device shall not rely exclusively on a battery unless a means is provided for automatically energizing the lighting outlets upon battery failure.
- **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 are terminated, is in the open position

- **215.18** Surge Protection Device - Where a feeder supplies any of the following, a surge-protection device (SPD) shall be installed: Dwelling units, Dormitory units, Guest rooms and guest suites of hotels and motels, Areas of nursing homes and limited-care facilities used exclusively as patient sleeping rooms.

Location - The SPD shall be installed in or adjacent to distribution equipment, connected to the load side of the feeder, that contains branch circuit overcurrent protective device(s) that supply the locations specified above.

Type - The SPD shall be a Type 1 or 2 SPD

Replacement - Where the distribution equipment supplied by feeder is replaced, all of the requirements of this section shall apply.

Ratings - SPDs shall have a nominal discharge current rating of not less than 10kA

- **220.5 (c)** Floor area - The floor area for each floor shall be calculated from the outside dimensions of the building, dwelling unit, or other area involved. For dwelling units the calculated floor shall not include open porches or unfinished areas not adaptable for future use as a habitable room or occupiable space.

APPLICABLE ENERGY CODE

Commercial

- In new construction commercial buildings, half of the receptacles will need to be automatic receptacle controls. Receptacles will be identified as required in section 406.3(F) of the NEC. The intent is for the receptacle to power down during non-business hours.

Residential

- All interior lighting control dimmer or occupancy control for all permanently installed lighting fixtures.
- ❖ **Exceptions will be for bathrooms, hallways, exterior lighting, and lighting designed for safety and security.**