AMENDMENTS TO THE 2023 NATIONAL ELECTRICAL CODE

4-4-2: AMENDMENTS TO THE 2023 NATIONAL ELECTRICAL CODE

The following articles of the 2023 National Electrical Code, adopted by reference as set forth in Section 4-4-1, are amended as follows:

ARTICLE 80 TITLE AND ADMINISTRATION is added as follows:

80.1 Title. These regulations shall be known as the "Mesa Electrical Code," may be cited as such, and will be referred to herein as "this Code." For administration of this Code, refer to Title 4, Chapter 1, Mesa Administrative Code.

ARTICLE 100 DEFINITIONS

AUTHORITY HAVING JURISDICTION (AHJ). The Authority Having Jurisdiction shall be construed to be the Building Safety Director or designee who is responsible for administering and enforcing the Mesa Electrical Code.

ELEVATOR DISCONNECT ROOM OR CLOSET. An enclosed room or closet, with full-height door, located outside the hoistway, intended to be accessed with or without full bodily entry that is dedicated to electrical and/or mechanical equipment used directly in connection with the elevator when the elevator controller is located in the hoistway. The elevator disconnect required in 620.51(A), and the other elevator related disconnects, overcurrent devices, lighting, receptacles, etc. required by 620.22, 620.23, and 620.25 shall be located in this room or closet. In other than one- and two-family dwellings, and unless special permission is granted, the room or closet shall be located on the same level as the controller, within 50 feet of travel distance from the hoistway, shall be accessed directly from the corridor, and shall be accessible to qualified persons only. A label shall be provided at the elevator controller location identifying the location of the elevator disconnect room or closet. In one- and two-family dwellings only, an elevator disconnect room or closet shall not be required where the disconnecting means is located outside the hoistway in a readily accessible location and accessible to qualified persons only by being lockable in both the open and closed position and labeled in accordance with 110.22(A). The provisions for locking shall remain in place with or without the lock installed. The other disconnects, overcurrent devices, lighting, and receptacles required by 620.22, 620.23, and 620.25 shall be located adjacent to the disconnect required in 620.51(A).

ARTICLE 210 BRANCH CIRCUITS NOT OVER 1000 VOLTS AC, 1500 VOLTS DC, NOMINAL

210.52(C)(2) Island and Peninsular Countertops and Work Surfaces. At least one receptacle shall be installed at each island and peninsular countertop space with a long dimension of 24 inches (610 mm) or greater and a short dimension of 12 inches (305 mm) or greater. A peninsular countertop is measured from the connected perpendicular wall.

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 20 inches (508 mm) above, a countertop or work surface.

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.

Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or rangetops as covered in 210.52(C)(1), Exception No. 1, or appliances occupying assigned spaces shall not be considered as these required outlets.

Exceptions:
1. Construction for the physically impaired.

2. Receptacle outlets shall be permitted to be mounted not more than 12 inches (305 mm) below the countertop or work surface where the countertop or work surface extends 6 inches (152 mm) or less beyond its base cabinet support.

210.52(G)(1) Garages. In each attached garage and in each detached garage with electric power, at least one receptacle outlet shall be installed in each vehicle bay at not less than 18 inches and not more than 66 inches (1,677 mm) above the floor.

Exception:
Garage spaces not attached to an individual dwelling unit of a multifamily dwelling shall not require a receptacle outlet in each vehicle bay.

ARTICLE 230 SERVICES

230.70(B) Marking. Each service disconnect shall be permanently marked to identify it as a service disconnect. Markings shall be of sufficient durability to withstand the environment involved. Identifying labels required for disconnecting means shall have engraved or raised letters and be secured by screws or rivets (plastic tape shall not be considered durable material).

ARTICLE 250 GROUNDING AND BONDING

Article 250.118(A) Permitted is partially amended as follows:
250.118(A) Permitted. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

4. Electrical metallic tubing with an additional equipment grounding conductor.

ARTICLE 620 ELEVATORS, DUMBWAITERS, ESCALATORS, MOVING WALKS, PLATFORM LIFTS, AND STAIRWAY CHAIRLIFTS

620.6(B) Machine Rooms, Control Spaces, Machinery Spaces, Control Rooms, Elevator Disconnect Rooms or Closets, and Truss Interiors. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in machine rooms, control spaces, machinery spaces, control rooms, elevator disconnect rooms or closets, and truss interiors shall have listed Class A ground-fault circuit-interrupter protection for personnel.

620.22(A) Car Light Receptacles, Auxiliary Lighting, and Ventilation. A separate branch circuit shall supply the car lights. The car lights branch circuit shall be permitted to supply receptacles (alarm devices, emergency responder radio coverage (ERRC), car ventilation purification systems, monitoring devices not part of the control system), auxiliary lighting power source, car emergency signaling, communications devices (including their associated charging circuits), and ventilation on each elevator car or inside the operation controller. The overcurrent device protecting the branch circuit shall be located in the elevator machine room, control room, machinery space, or control space. Where there is no machine room, control room, machinery space, or control space outside the hoistway, the overcurrent device shall be located outside the hoistway in an elevator disconnect room or closet and accessible to qualified persons only.

Required lighting shall not be connected to the load side of a ground-fault circuit interrupter.

620.22(B) Air-Conditioning and Heating Source. A separate branch circuit shall supply the air-conditioning and heating units on each elevator car. The overcurrent device protecting the branch circuit shall be located in the elevator machine room, control room, machinery space, or control space. Where there is no machine room, control room, machinery space, or control space outside the hoistway, the overcurrent device shall be located outside the hoistway in an elevator disconnect room or closet and accessible only to qualified persons.

620.23(A) Separate Branch Circuits. The branch circuits supplying the lighting for machine rooms, control rooms, machinery spaces, control spaces, elevator disconnect rooms or closets, or truss interiors, where required, shall be separate from the branch circuits supplying the receptacles in those places. These circuits shall supply no other loads.

Required lighting shall not be connected to the load side of a ground-fault circuit interrupter.

620.23(B) Lighting Switch. The machine room, control room/machinery space, or control space, or elevator disconnect room or closet lighting switch shall be located at the point of entry.

620.23(C) Duplex Receptacle. At least one 125-volt, single-phase, 15- or 20-ampere duplex receptacle shall be provided in each machine room, control room and machinery space, control space, elevator disconnect room or closet, and in truss interiors where required.

620.25(B) Overcurrent Devices. The overcurrent devices protecting the branch circuit(s) shall be located in the elevator machine room, control room, machinery space, or control space. Where there is no machine room, control room, machinery space, or control space outside the hoistway, or for escalator and moving walk applications, the overcurrent device shall be located outside the hoistway in an elevator disconnect room or closet and accessible only to qualified persons.

620.51(C) Location. The disconnecting means shall be located where it is readily accessible to qualified persons.

620.51(C)(1) On Elevators Without Generator Field Control. On elevators without generator field control, the disconnecting means shall be located within sight of the motor controller. Where the motor controller is located in the elevator hoistway, the disconnecting means required by 620.51(A) shall be located outside the hoistway in an elevator disconnect room or closet and accessible to qualified persons only. An additional fused or non-fused, enclosed, externally operable motor-circuit switch that is lockable open in accordance with 110.25 to disconnect all ungrounded main power-supply conductors shall be located within sight of the motor controller. The additional switch shall be a listed device and shall comply with 620.91(C).

Driving machines or motion and operation controllers not within sight of the disconnecting means shall be provided with a manually operated switch installed in the control circuit to prevent starting. The manually operated switch(es) shall be installed adjacent to this equipment.

Where the driving machine of an electric elevator or the hydraulic machine of a hydraulic elevator is located in a remote machine room or remote machinery space, a single means for disconnecting all ungrounded main power-supply conductors shall be provided and be lockable open in accordance with 110.25.

ARTICLE 625 ELECTRIC VEHICLE POWER TRANSFER SYSTEM

625.43 Disconnecting Means. For EVSE and WPTE rated more than 60 amperes or more than 150 volts to ground, the disconnecting means shall be provided and installed not less than 15 feet (4,572 mm) or more than 50 feet (9,144 mm) from the equipment, a plaque shall be installed on the equipment denoting the location of the disconnecting means. The disconnecting means shall be lockable open in accordance with 110.25.