

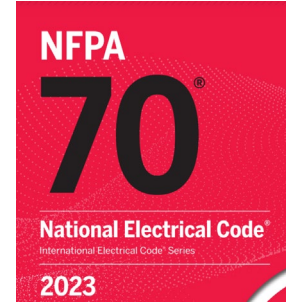
# IOR Training 2025 California Electrical Code (CEC) Updates

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# CEC 2025 Code Updates:

## 2023 NFPA 70 updates

- New Style Manual (NEC)
- Code changes



## California Amendments

- Housekeeping items
- Healthcare Microgrids



## Combo changes NFPA 70 and CEC






## CEC 2025 Adopts 2023 NFPA 70 (NEC)

**2023 NEC, updates include:**

- **Added code sections**
- **All definitions moved to Chapter 1**
- **New Style Manual conformity**
- **Miscellaneous**
- **Grammar/Editorial changes**

# New Articles Added:

<b>ARTICLE 235</b>	<b>Branch Circuits, Feeders and Services Over 1000 Volts ac, 1500 Volts dc, Nominal</b>		
<b>ARTICLE 245</b>	<b>Overcurrent Protection for Systems Rated Over 1000 Volts ac, 1500 Volts dc</b>		
<b>ARTICLE 305</b>	<b>General Requirements for Wiring and Systems Materials for Systems Rated Over 1000 Volts ac, 1500 Volts dc</b>		
<b>ARTICLE 315</b>	<b>Medium Voltage Conductors, Cable, Cable Joints and Cable Terminations</b>		
<b>ARTICLE 335</b>	<b>Instrumentation Cable Tray</b>		
<b>ARTICLE 369</b>	<b>Insulated Bus Pipe (IBP)/Tubular Covered</b>		
<b>ARTICLE 371</b>	<b>Flexible Bus Systems</b>	<b>Key</b>  New medium voltage sections  New product sections  New power limited circuits sections	
<b>Article 495</b>	<b>Equipment Over 1000 Volts ac, 1500 Volts dc, Nominal</b>		
<b>ARTICLE 512</b>	<b>Cannabis Oil Equipment and Cannabis Oil Systems Using Flammable Materials</b>		
<b>ARTICLE 722</b>	<b>Cables for Power-Limited Circuits and Fault managed Power Circuits</b>		
<b>ARTICLE 724</b>	<b>Class 1 Power limited Circuits and Class 1 power-Limited Remote-Control and Signaling Circuits</b>		
<b>ARTICLE 726</b>	<b>Class 4 Fault-Managed Power Systems</b>		

# Article 100

## Definitions – relocated to Article 100:

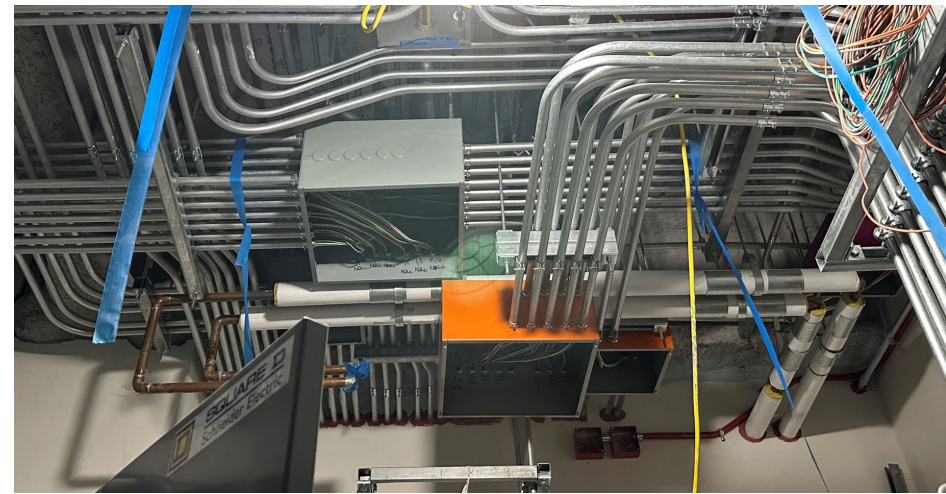
### Patient Care Space Category.

Any space of a health care facility wherein patients are intended to be examined or treated.

**[99:3.3.140] (517) (CMP-15)**

# Article 100

## Modified Definitions:



### Accessible (as applied to wiring methods).

Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in **or blocked** by the structure, **other electrical equipment, other building systems**, or finish of the building. (CMP-1)

### Appliance.

Utilization equipment, generally other than industrial, that is **fastened in place, stationary, or portable**; is normally built in a standardized **size or type**; and is installed or connected as a unit to perform one or more functions such as clothes washing, air-conditioning, food mixing, deep frying, and so forth. (CMP-17)

## NFPA 70E – Standard for Electrical Safety in the Workplace

### 130.5(H) Equipment Labeling.

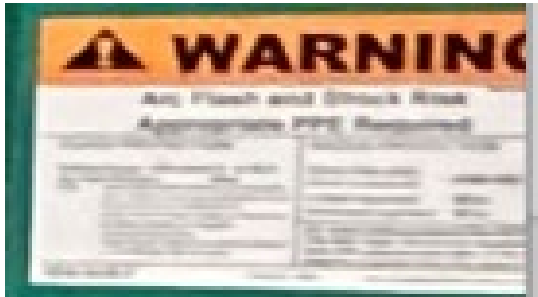
Electrical equipment such as switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers that are in other than dwelling units and that are likely to require examination, adjustment, servicing, or maintenance while energized shall be marked with a label containing all the following information:

- (1) Nominal system voltage
- (2) Arc flash boundary
- (3) At least one of the following:
  - a. Available incident energy and the corresponding working distance, or the arc flash PPE category in **Table 130.7(C)(15)(a)** or **Table 130.7(C)(15)(b)** for the equipment, but not both
  - b. Minimum arc rating of clothing
  - c. Site-specific level of PPE

## 110.16 Arc-Flash Hazard Warning.

### (B) Service Equipment and Feeder Supplied Equipment.

In other than dwelling units, in addition to the requirements in **110.16(A)**, 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 applicable industry practice and include the date the label was applied. The label shall meet the requirements of **110.21(B)**. (sufficiently durable, effective, permanent)





## 110.22 Identification of Disconnecting Means.

### (A) General.

Each disconnecting means shall be legibly marked to indicate its purpose unless located and arranged so the purpose is evident. In other than one- or two-family dwellings, the marking shall include the identification and location of the circuit source that supplies the disconnecting means unless located and arranged so the identification and location of the circuit source is evident. The marking shall be of sufficient durability to withstand the environment involved.

## Part II. 1000 Volts, Nominal, or Less

### 110.26 Spaces About Electrical Equipment.

Working space, and access to and egress from working space, shall be provided and maintained about all electrical equipment to permit ready and safe operation and maintenance of such equipment. 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 610 mm (24 in.) wide and 2.0 m (6½ ft) high.



Table 110.26(A)(1) Working Spaces

Nominal Voltage to Ground	Minimum Clear Distance		
	Condition 1	Condition 2	Condition 3
0–150	900 mm (3 ft)	900 mm (3 ft)	900 mm (3 ft)
151–600	900 mm (3 ft)	1.0 m (3 ft 6 in.)	1.2 m (4 ft)
601–1000	900 mm (3 ft)	1.2 m (4 ft)	1.5 m (5 ft)

## Part II. 1000 Volts, Nominal, or Less

### 110.26 Spaces About Electrical Equipment.

#### (A) Working Space.

##### 4) Limited Access.

Where equipment operating at 1000 volts, nominal, or less to ground and likely to require examination, adjustment, servicing, or maintenance while energized is required by installation instructions or function to be located in a space with limited access, all of the following shall apply:

...

(4) The space in front of the enclosure shall comply with the depth requirements of [Table 110.26\(A\)\(1\)](#) and shall be unobstructed to the floor by fixed cabinets, walls, or partitions. Space reductions in accordance with [110.26\(A\)\(1\)\(b\)](#) shall be permitted. The maximum height of the working space shall be the height necessary to install the equipment in the limited space. A horizontal ceiling structural member or access panel shall be permitted in this space provided the location of weight-bearing structural members does not result in a side reach of more than 150 mm (6 in.) to work within the enclosure.



## Part II. 1000 Volts, Nominal, or Less

### 110.26 Spaces About Electrical Equipment.

#### (A) Working Space.

##### (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



## Part II. 1000 Volts, Nominal, or Less

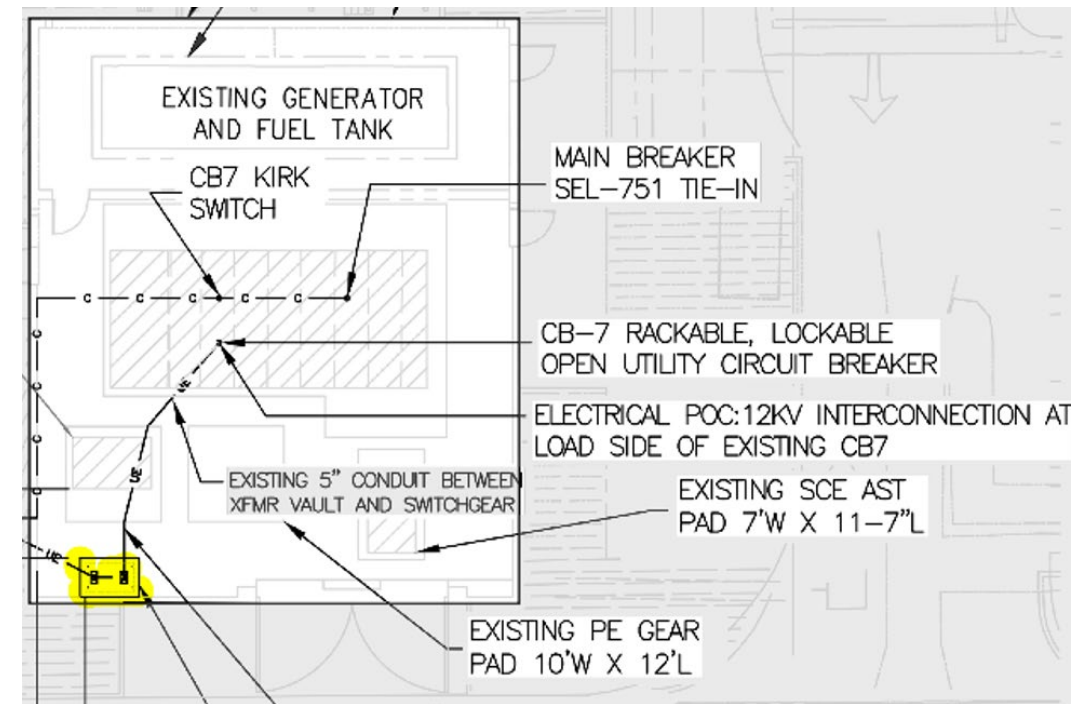
### 110.26 Spaces About Electrical Equipment.

...

#### (C) Entrance to and Egress from Working Space.

##### (3) Personnel Doors

Where equipment rated 800 amperes or more that contains overcurrent devices, switching devices, or control devices is installed and there is a personnel door(s) intended for entrance to and egress from the working space less than 7.6 m (25 ft) from the nearest edge of the working space, the door(s) shall open at least 90 degrees in the direction of egress and be equipped with listed panic hardware or listed fire exit hardware.



## 110.29 In Sight From (Within Sight From, Withing Sight)..

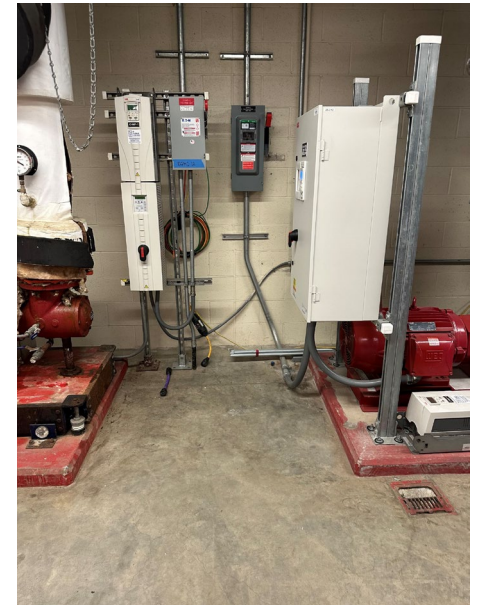
Where this *Code* specifies that one equipment shall be “in sight from,” “within sight from,” or “within sight of,” and so forth, another equipment, the specified equipment is to be visible and not more than 15 m (50 ft) distant from the other. (CMP-1)

### Definition

#### **In Sight From (Within Sight From) (Within Sight).**

Equipment that is visible and not more than 15 m (50 ft) distant from other equipment is *in sight from* that other equipment. (CMP-1)

Informational Note: See [110.29](#) for additional information.



## Part III. Over 1000 volts, Nominal

### 110.33 Entrance to Enclosures and Access to Working Space.

#### (A) Entrance.

At least one entrance to enclosures for electrical installations as described in [110.31](#) not less than 610 mm (24 in.) wide and 2.0 m (6½ ft) high shall be provided to give access to the working space about electrical equipment.

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 610 mm (24 in.) wide and 2.0 m (6½ ft) high

#### (3) Personnel Doors

Where there are personnel doors intended for entrance to and egress from the working space less than 7.6 m (25 ft) from the nearest edge of the working space, the doors shall open at least 90 degrees in the direction of egress and be equipped with listed panic hardware or listed fire exit hardware.

## Part III. Over 1000 volts, Nominal

### 110.34 Work Space and Guarding.

#### (A) Working Space.

Except as elsewhere required or permitted in this *Code*, equipment likely to require examination, adjustment, servicing, or maintenance while energized shall have clear working space in the direction of access to live parts of the electrical equipment and shall be not less than specified in [Table 110.34\(A\)](#). Distances shall be measured from the live parts, if such are exposed, or from the enclosure front or opening if such are enclosed. **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 depth and width of the working space.**

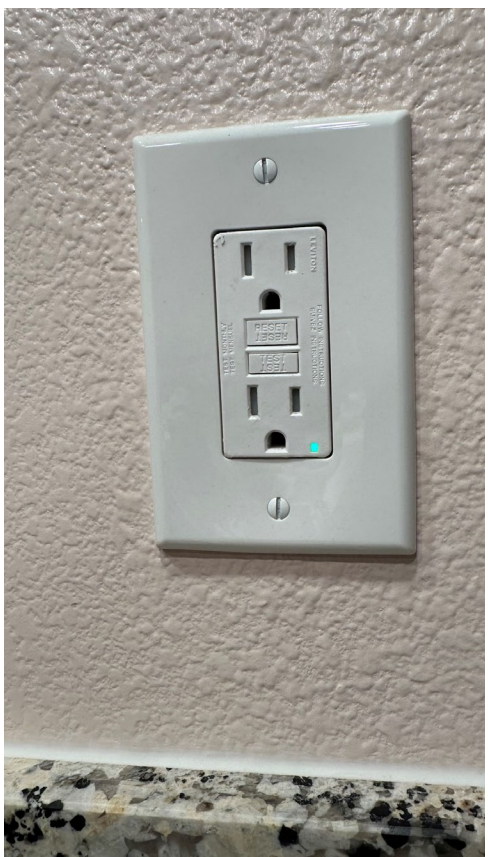
**210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.** A listed Class A GFCI shall provide protection in accordance with 210.8(A) through (F). The GFCI shall be installed in a readily accessible location.

**(B) Other Than Dwelling Units.**

All 125-volt through 250-volt receptacles supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the following locations shall be provided with GFCI protection:

**(B) Other Than Dwelling Units.**

- (1) Bathrooms
- (2) Kitchens
- (3) Areas with sinks and permanent provisions for food preparation, beverage preparation, or cooking
- (4) Buffet serving areas with permanent provisions for food serving, beverage serving, or cooking
- (5) Rooftops
- (6) Outdoors
- (7) Sinks where receptacles or cord-and-plug-connected fixed or stationary appliances are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink
- (8) Indoor damp or wet locations
- (9) Locker rooms with associated showering facilities
- ...
- (14) Laundry areas
- (15) Bathtubs and shower stalls where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall



“Photo courtesy of Eaton”

## 210.12 Arc-Fault Circuit-Interrupter Protection.

Arc-fault circuit-interrupter (AFCI) protection shall be installed in accordance with 210.12(B) through (E) by any of the means described in 210.12(A)(1) through (A)(6). The AFCI shall be listed and installed in a readily accessible location.

...

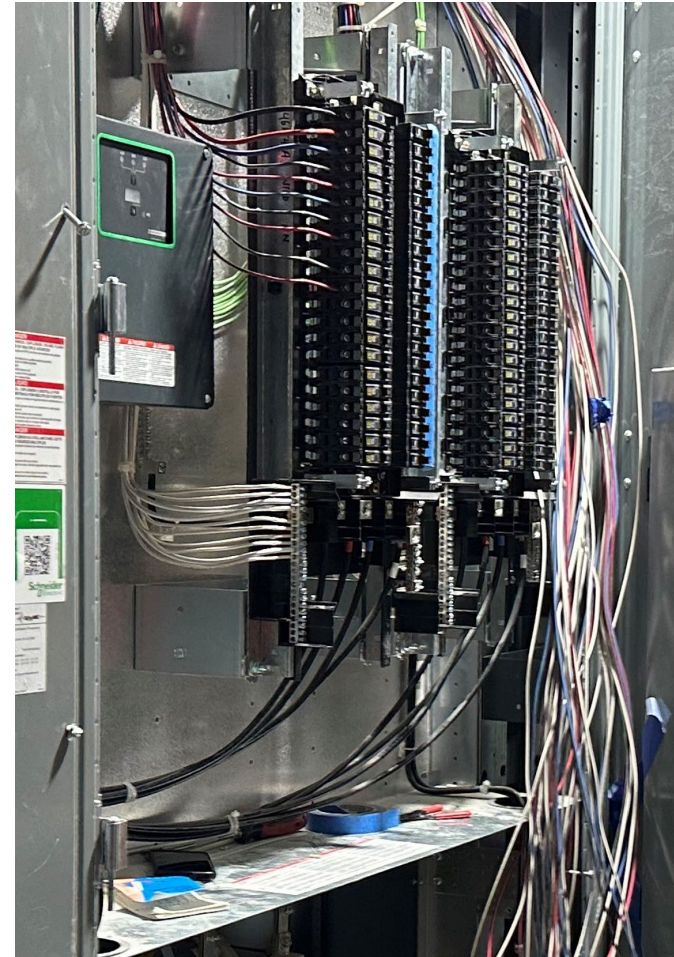
### **(D) Other Occupancies**

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):

- (1) Guest rooms and guest suites of hotels and motels
- (2) Areas used exclusively as patient sleeping rooms in nursing homes and limited-care facilities
- (3) Areas designed for use exclusively as sleeping quarters in fire stations, police stations, ambulance stations, rescue stations, ranger stations, and similar locations

## 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.



## 210.23 Permissible Loads, Multiple-Outlet Branch Circuits.

### (A) 10-Ampere Branch Circuits

A 10-ampere branch circuit shall comply with the requirements of [210.23\(A\)\(1\)](#) and [\(A\)\(2\)](#).

#### (1) Loads Permitted for 10-Ampere Branch Circuits.

A 10-ampere 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

#### (2) Loads Not Permitted for 10-Ampere Branch Circuits.

A 10-ampere branch circuit shall not supply any of the following:

- (1) Receptacle outlets
- (2) Fixed appliances, except as permitted for individual branch circuits
- (3) Garage door openers
- (4) Laundry equipment



“Photo courtesy of Eaton”

## Table 210.24(1) & 210.24(2) Summary of Branch-Circuit Requirements — Copper (Aluminum and Copper-Clad Aluminum) Conductors

Circuit Rating	10 A	15 A	20 A	30 A	40 A	50 A
Conductors (min. size):						
Circuit wires	14 (12)	14 (12)	12 (10)	10(8)	8 (6)	6 (4)
Taps	14 (12)	14 (12)	14	14	12	12
Fixture wires and cords			See 240.5.			
<b>Overcurrent Protection</b>						
	10 A	15 A	20 A	30 A	40 A	50 A
Outlet devices:						
Lampholders permitted	Any type	Any type	Any type	Heavy duty	Heavy duty	Heavy duty
Receptacle rating <sup>1</sup>	Not applicable <sup>2</sup>	15 max. A	15 A or 20 A	30 A	40 A or 50 A	50 A
<b>Maximum Load</b>						
	10 A	15 A	20 A	30 A	40 A	50 A
Permissible load	See 210.23(A).	See 210.23(B).	See 210.23(B).	See 210.23(C).	See 210.23(D).	

## 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 room

### (B) 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 in 215.18(A).



“Photo courtesy of Eaton”

## 230.67 Surge Protection.

### (A) Surge-Protective Device.

All services supplying the following occupancies shall be provided with a surge-protective device (SPD):

- (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

### (B) Location.

The SPD shall be an integral part of the service equipment or shall be located immediately adjacent thereto.

# Article 242 Overvoltage Protection

## Part II. Surge-Protective Devices (SPDs), 1000 Volts or Less

### 242.9 Indicating.

An SPD shall provide indication that it is functioning properly



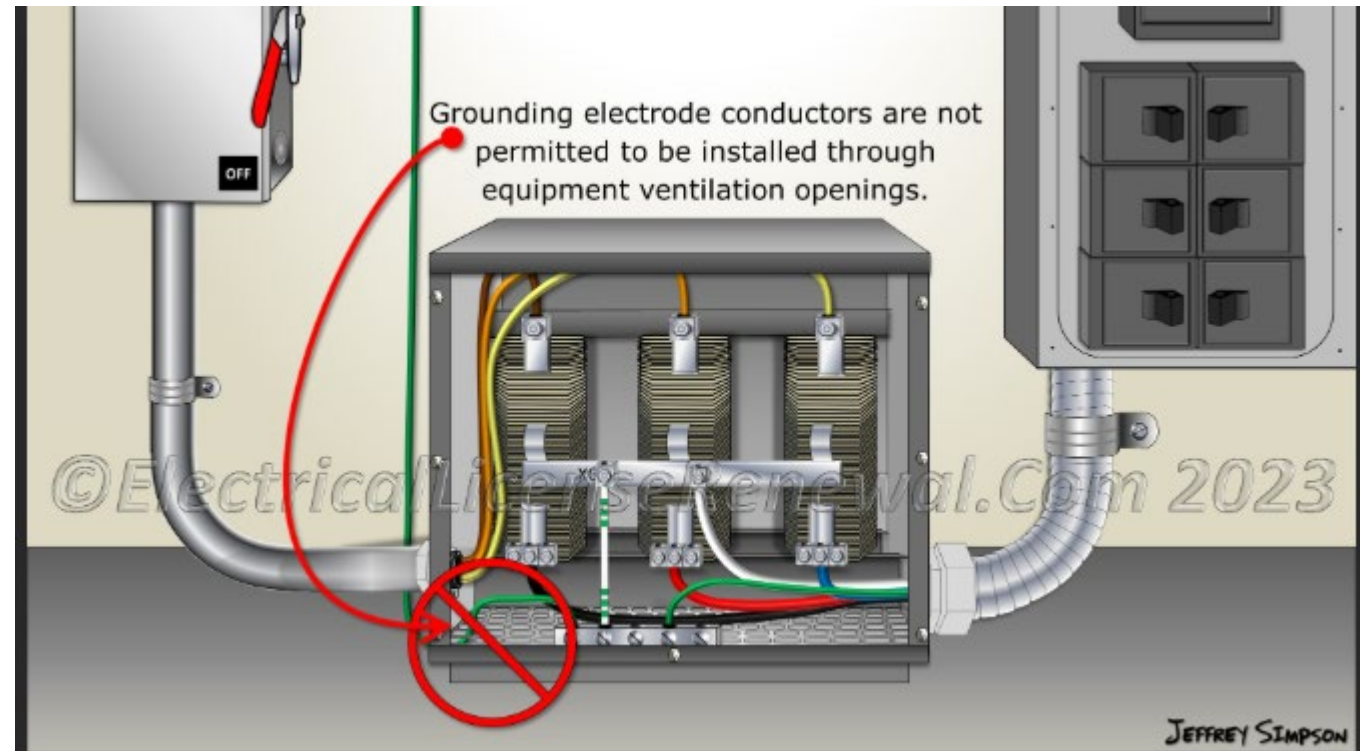
“Photo courtesy of Eaton”

## Article 250 Grounding and Bonding

### 250.64 Grounding Electrode Conductor Installation.

Grounding electrode conductors at the service, at each building or structure where supplied by a feeder(s) or branch circuit(s), or at a separately derived system shall be installed as specified in [250.64\(A\)](#) through (G).

**(G) Enclosures with Ventilation Openings.** Grounding electrode conductors shall not be installed through a ventilation opening of an enclosure



## Article 300 General Requirements for Wiring Methods and Materials

### 300.25 Exit Enclosures (Stair Towers).

Where an exit enclosure is required to have a fire resistance rating, only electrical wiring methods serving equipment permitted by the authority having jurisdiction in the exit enclosure shall be installed within the exit enclosure.

*Exception: Where egress lighting is required on outside exterior doorways from the exit enclosure, luminaires shall be permitted to be supplied from the inside of the exit enclosure.*

## 406.12 Tamper-Resistant Receptacles.

All 15- and 20-ampere, 125- and 250-volt nonlocking-type receptacles in following locations shall be listed tamper-resistant receptacles:

(1) All dwelling units, boathouses, mobile homes and manufactured homes, including their attached and detached garages, accessory buildings, and common areas

...

(5) Within clinics, medical and dental offices, and outpatient facilities, the following spaces:

a. Business offices accessible to the general public

b. Lobbies, and waiting spaces

c. Spaces of nursing homes and limited care facilities covered in [517.10\(B\)\(2\)](#)

(6) Places of awaiting transportation, gymnasiums, skating rinks, fitness centers, and auditoriums

(7) Dormitory units

(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 and any common areas locations shall be listed tamper-resistant receptacles.

## Article 408 Switchboards, Switchgear, and Panelboards

### 408.4 Descriptions Required.

#### (A) Circuit Directory or Circuit Description.

Every circuit and circuit modification shall be provided with a legible and permanent description that complies with all of the following conditions as applicable:

- (1) Located at each switch or circuit breaker in a switchboard or switchgear
- (2) Included in a circuit directory that is located on the face of, inside of, or in an approved location adjacent to the panel door in the case of a panelboard
- (3) Clear, evident, and specific to the purpose or use of each circuit including spare positions with an unused overcurrent device
- (4) Described with a degree of detail and clarity that is unlikely to result in confusion between circuits
- (5) Not dependent on transient conditions of occupancy
- (6) Clear in explaining abbreviations and symbols when used

#### (B) Description of Source of Supply.

All switchboards, switchgear, and panelboards supplied by a feeder(s) in other than one- or 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



## Article 445 Generators

### 445.19 Emergency Shutdown of Prime Mover.

#### (B) Remote Emergency Shutdown.

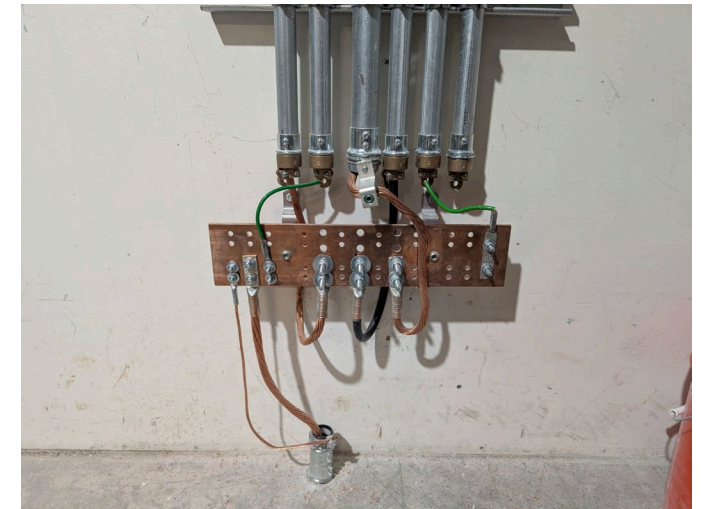
For other than one- and two-family dwelling units, generators with greater than 15 kW rating shall be provided with a remote emergency stop switch to shut down the prime mover. The remote emergency stop switch shall be located outside the equipment room or generator enclosure at a readily accessible location and shall also meet the requirements of [445.19\(A\)\(1\)](#) and (A)(2).

The remote emergency stop switch shall be permitted to be mounted on the exterior of the generator enclosure. The remote emergency stop switch shall be labeled Generator Emergency Shutdown, and the label shall meet the requirements of [110.21\(B\)](#)

## 517.14 Panelboard Bonding.

The equipment grounding terminal buses of the normal and essential branch-circuit panelboards serving the same individual patient care vicinity shall be connected together with an insulated continuous copper conductor not smaller than 10 AWG. Where two or more panelboards serving the same individual patient care vicinity are served from separate transfer switches on the essential electrical system, the equipment grounding terminal buses of those panelboards shall be connected together with an insulated continuous copper conductor not smaller than 10 AWG. **This conductor shall be permitted to be broken in order to terminate on the equipment grounding terminal bus in each panelboard.**

***Exception: The insulated continuous copper conductor not smaller than 10 AWG shall be permitted to be terminated on listed connections to aluminum or copper busbars not smaller than 6 mm thick × 50 mm wide (1/4 in. thick × 2 in. wide) and of sufficient length to accommodate the number of terminations necessary for the bonding of the panelboards. The busbar shall be securely fastened and installed in an accessible location.***



## 700.3 Tests and Maintenance.

### **(A) Commissioning Witness Test.**

The authority having jurisdiction shall conduct or witness the commissioning of the complete system upon installation and periodically afterward. Informational Note:

See NECA 90, *Standard for Commissioning Building Electrical Systems.*

## Commissioning Plan

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**~~517.22~~** (Relocated to 517.8) [~~OSHPD 1, 2, 3, 4 & 5~~]

**~~Artificial Lighting. ...~~**

**~~517.24~~** (Relocated to 517.9) [~~OSHPD 1, 1R, 2, 3, 4 & 5~~]

**~~Mobile Medical Facilities. ...~~**

**517.8 [OSHPD 1, 2, 3, 4 & 5] Artificial Lighting. ...**

**517.9 [OSHPD 1, 1R, 2, 3, 4 & 5] Mobile Medical  
Facilities. ...**

## 517.30 Sources of Power. (continued)

**(B) Power Sources for the EES.** Power sources for the EES shall be permitted to be any of those specified in 517.30(B)(1) through (B)(5).

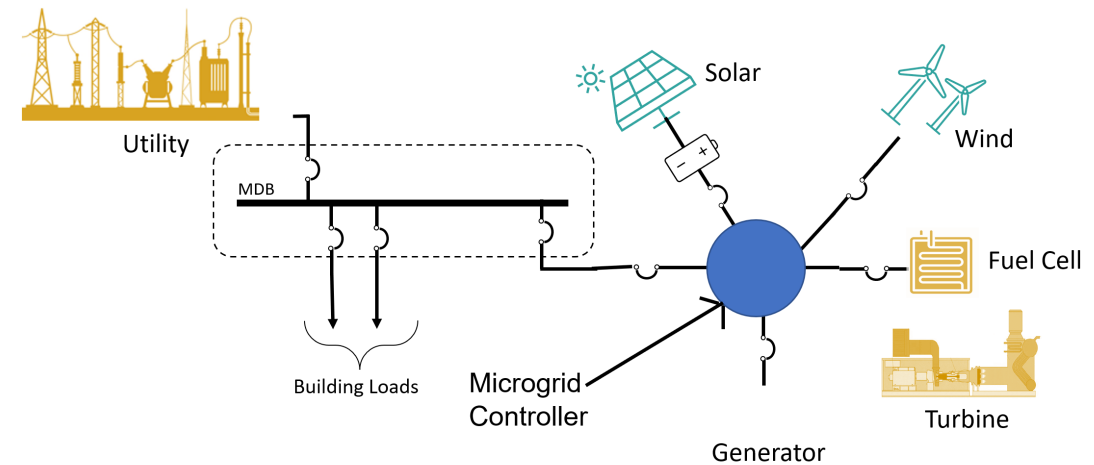
**(1) Utility Supply Power. ...**

**(2) Generating Units. ...**

**(3) Fuel Cell Systems. ...**

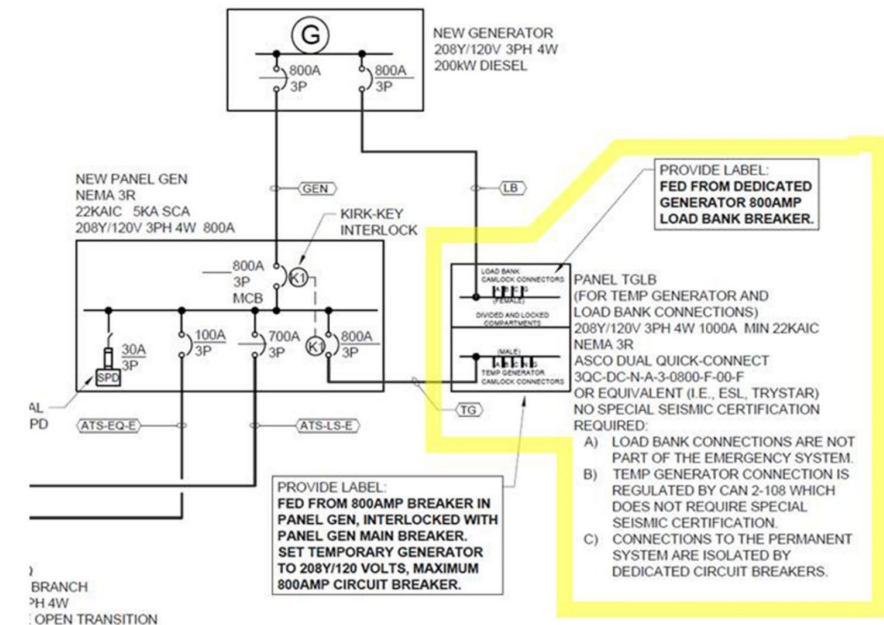
**(4) Energy Storage Systems. ...**

**(5) Health Care Microgrid.... [OSHPD 1, 2, 3 (Surgical Clinics only), 4 & 5] EES Health Care Microgrids shall meet the installation and commissioning requirements called out in NFPA 99 Section 6.10.7**



## 517.30 Sources of Power. (continued)

**(D) [OSHPD 1, 4, & 5]: Temporary Source of Power for Maintenance or repair of the Alternate Source of Power. The Essential Electrical System (EES) shall include permanent switching means to connect temporary or permanent on-site resources (energy sources or stored energy power supply systems) configured and sized adequately to provide power for the EES, such that additional resources can be connected (without rewiring) to meet essential power requirements for individual equipment replacement, failures or maintenance.**



## 517.31 Requirements for the Essential Electrical System....

...

**(H) [OSHPD 1, 4 & 5] On-site energy storage systems and fuel supply.** The on-site Essential Electrical System (EES) sources (or set of sources) shall have sufficient resources on-site to provide continuous essential power as follows:

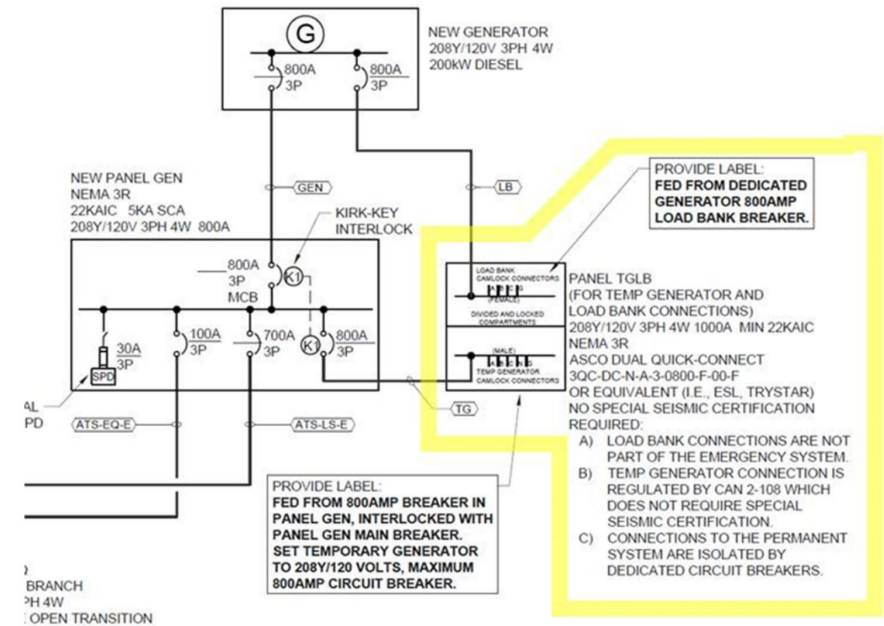
**(1) [SFM, OSHPD 1 & 4] For correctional treatment centers that provide optional services, resources shall be available at all times sufficient to support not less than 24 hours full-demand operation. For acute care hospital facilities required to meet NPC-5, the on-site resources shall be sufficient for no less than 72 hours at full output of the required Emergency Power Supply System (EPSS). On-site fuel for redundant power sources is not required (i.e., for N+1 generators fuel is required for N generators only.)**

**(2) [SFM, OSHPD 4 & 5] For the following health facilities of seven or more beds: correctional treatment centers that provide only basic services and acute psychiatric hospitals, on-site resources shall be available at all times sufficient to support not less than 6 hours at full output of the required Emergency Power Supply System (EPSS). On-site fuel for redundant power sources is not required (i.e., for N+1 generators fuel is required for N generators only.)**

## 517.41 Required Power Sources. (Continued)

**(C) [OSHPD 2, 4 & 5] Power Sources for the EES. Power sources for the EES shall be permitted to be any of those specific in 517.30(B)(1) through (B)(5).**

**(D) [OSHPD 2, 4 & 5] Permanent Connection(s) Points for ESS Maintenance and Repairs. Permanent connection(s) points shall be provided for the connection of temporary or permanent on-site storage or power sources configured and sized adequately to provide power for the EES, such that additional resources can be connected (without rewiring) to meet essential power requirements for equipment failures or maintenance.**



### **517.123 [OSHPD 1, 2, 3, 4 & 5] Call Systems**

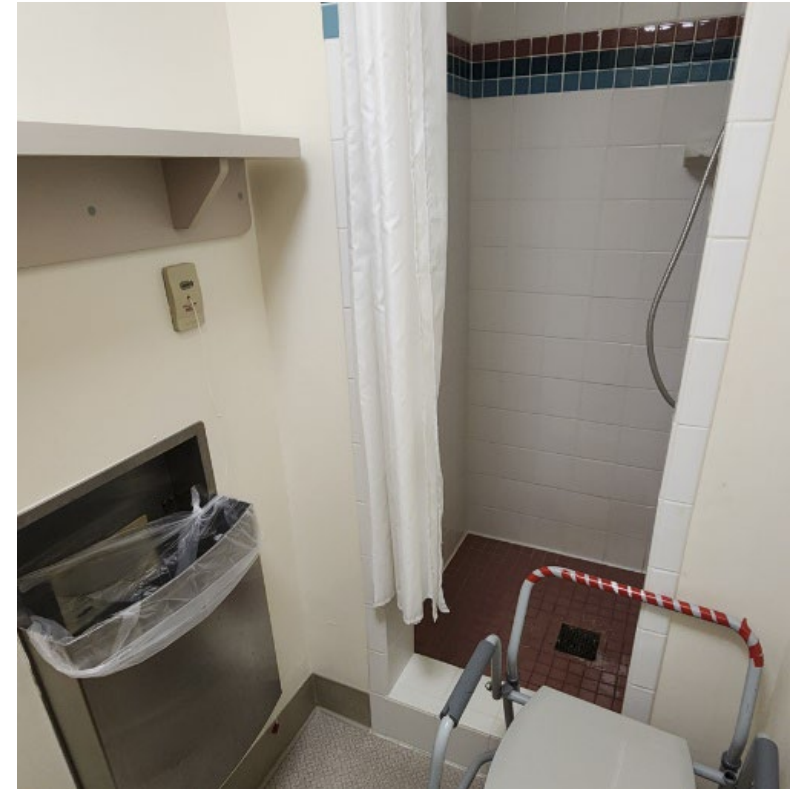
**(C) Bath Stations.** Bath stations shall meet the following requirements:

(1) Shall be accessible to a patient lying on the floor. Pull cords shall be provided that extend to within 12 inches (304.8 mm) of the floor.

(2) The call may be reset only at the location where it was initiated.

(3) In shower stalls and tubs, the station shall be located between 5 and 6 feet (1524 to 1829 mm) above the floor, within normal view of the user ~~and within reach of staff without the need to step into the stall or tub.~~

(4) At toilets, the call station shall be located to the side, within 12 inches (304.8 mm) of the front of the toilet bowl and shall maintain a clearance of 12 inches (304.8 mm) above the horizontal grab bar.



## 517.42 Essential Systems for Nursing Homes and Limited Care Facilities.

***(G) [SFM, OSHPD 2, 4 & 5] On-site energy storage systems and fuel supply. The on-site Essential Electrical System sources (or set of sources) shall have sufficient resources on-site to provide continuous essential power as follows:***

***(1) [SFM, OSHPD 2, 4 & 5] For the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities, on-site resources shall be available at all times sufficient to support not less than 6 hours at full output of the required Emergency Power Supply System (EPSS). On-Site fuel for redundant power sources is not required (i.e., for N+1 generators fuel is required for N generators only).***

***(2) [SFM, OSHPD 2] For skilled nursing facilities that have an alternate source of power that is independent of the EES that provides power for mechanical equipment required to maintain safe temperatures, life-saving equipment and oxygen generating devices to meet requirements of CEC 517.1(B), sufficient onsite fuel (or contractual arrangement) shall be provided to operate the EPSS for 96 hours.***

## 517.45 Essential Electrical Systems for Other Health Care Facilities. ...

~~(E.1) [OSHPD 3 (Surgical Clinics only)]. Ambulatory surgical clinics shall be provided with a generator with on-site fuel. The essential electrical systems for Ambulatory Surgical Clinics shall be as described in 517.29 through 517.35.~~

...

~~(G) [OSHPD 3] Ambulatory Surgical Clinics. The essential electrical systems for Ambulatory Surgical Clinics shall be as described in 517.29 through 517.35.~~

~~(H)...~~

**(H) [SFM, OSHPD 3 (Surgical Clinics only)] For ambulatory surgical clinics, sufficient resources on-site and shall be available at all times to provide not less than 4 hours at full output of the required Emergency Power Supply System (EPSS).**

## 700.12 General Requirements . . . . (continued)

~~Exception No. 1: [SFM, OSHPD 1, 2, 3, 4 & 5] The on-premises fuel supply shall be sufficient for not less than 24 hours full-demand operation in acute general care hospitals and correctional treatment centers that provide optional services. For acute care hospital facilities required to meet NPC-5, the on premise fuel supply shall be sufficient for no less than 72 hours full-demand operations.~~

~~Exception No. 2: [SFM, OSHPD 1, 2, 3, 4 & 5] The on-premises fuel supply shall be sufficient for not less than 6 hours full-demand operation in the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities.~~

~~Exception No. 3: [SFM, OSHPD 1, 2, 3, 4 & 5] The on-premises fuel supply shall be sufficient for not less than 4 hours full-demand operation in ambulatory surgical clinics.~~

## 700.11 Wiring, Class-2-Powered Emergency Lighting Systems.

### (A) General.

Line voltage supply wiring and installation of Class 2 emergency lighting control devices shall comply with [700.10](#). Class 2 emergency circuits shall comply with [700.11\(B\)](#) through (D).

### (B) Identification.

Emergency circuits shall be permanently marked so they will be readily identified as a component of an emergency circuit or system by the following methods:

(1) All boxes and enclosures for Class 2 emergency circuits shall be permanently marked as a component of an emergency circuit or system.

(2) Exposed cable, cable tray, or raceway systems shall be permanently marked to be identified as a component of an emergency circuit or system, within 900 mm (3 ft) of each connector and at intervals not to exceed 7.6 m (25 ft).

### (C) Separation of Circuits.

Class 2 emergency circuits shall be wired in a listed, jacketed cable or with one of the wiring methods of Chapter [3](#). If installed alongside nonemergency Class 2 circuits that are bundled, Class 2 emergency circuits shall be bundled separately. If installed alongside nonemergency Class 2 circuits that are not bundled, Class 2 emergency circuits shall be separated by a nonconductive sleeve or nonconductive barrier from all other Class 2 circuits. Separation from other circuits shall comply with [725.136](#).

### (D) Protection.

Wiring shall comply with the requirements of [300.4](#) and be installed in a raceway, armored or metal-clad cable, or cable tray.

*Exception No. 1: Section 700.11(D) shall not apply to wiring that does not exceed 1.83 m (6 ft) in length and that terminates at an emergency luminaire or an emergency lighting control device.*

*Exception No. 2: Section 700.11(D) shall not apply to locked rooms or locked enclosures that are accessible only to qualified persons.*



**QUESTIONS?**