# 210.8. Ground Fault Circuit Interrupter Protection For Personnel. (A)(2). Dwelling Units.

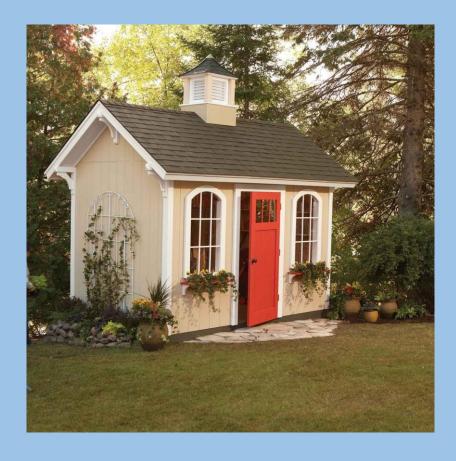
Change here is the expansion of GFCI protection to 250-volt receptacles. This will be required for receptacles in the following locations:

(2) Garages and accessory structures (Attached or Detached)





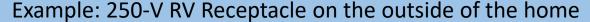




# 210.8. Ground Fault Circuit Interrupter Protection For Personnel. (A)(3). Dwelling Units.

Change here is the expansion of GFCI protection to 250-volt receptacles. This will be required for receptacles in the following locations:

(3) Outdoors





# 210.8. Ground Fault Circuit Interrupter Protection For Personnel. (A)(5). Dwelling Units.

Change here is the expansion of GFCI protection to 250-volt receptacles. This will be required for receptacles in the following locations:

(5) Basements (Entire basement, not just unfinished spaces and applies to all receptacles, 120V & 250V)





# 210.8. Ground Fault Circuit Interrupter Protection For Personnel. (A)(7). Dwelling Units.

Change here is the expansion of GFCI protection to 250-volt receptacles. This will be required for receptacles in the following locations:

(7) Sinks (Within 6ft of the inside edge of the bowl includes 120V and 250V receptacles)



250V receptacle for the range would be required to be GFCI protected if within 6FT of the inside edge of the sink.

# 210.8. Ground Fault Circuit Interrupter Protection For Personnel. (A)(10). Dwelling Units.

Change here is the expansion of GFCI protection to 250-volt receptacles. This will be required for receptacles in the following locations:

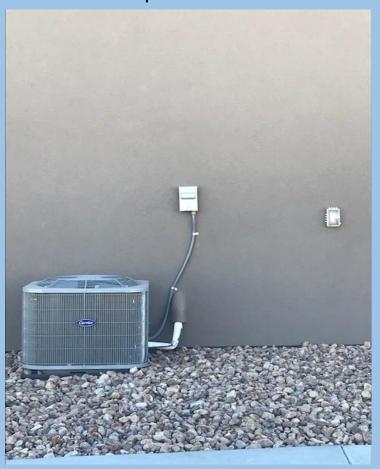
(10) Laundry areas (120 and 250V)





# 210.8. (F). Outdoor Outlets. Outdoor outlets for dwellings. (250V 50-Amp or less)

250-volt A/C disconnect required To be GFCI protected



Exception: GFCI protection shall not be required on lighting outlets other than those covered in 210.8 (C) (Crawl spaces)



### 210.52. (C) (2) (a). Island and Peninsular Countertops and Work Surfaces.

(a) At least one receptacle shall be installed for the first 9sqft or fraction thereof, of the countertop or work surface, and an additional receptacle for each additional 18sqft or fraction thereof.





This island is approximately 57sqft in size.

$$57 - 9 = 48$$

$$48 \div 18 = 2.66$$

1 recept for the first 9sqft, and an additional 3 recepts for the remaining 48sqft So 4 receptacles are required to be installed. Under the 2017 Code only 1 is required and they have installed 4, so this is already compliant with the 2020 Code.

### 210.52. (C) (2) (b). Island and Peninsular Countertops and Work Surfaces.

(b) At least one receptacle outlet shall be installed within 2ft of the outer end of a peninsular countertop or work surface. Additional outlets required, shall be permitted to be located as determined by the installer, designer or owner.

Wall Counter space not a peninsula, so the 2X4 receptacle spacing would be applicable.





Recept required within 2FT of the outer end of the penisula.

#### 230.67 (A) – (D). Surge Protection

- (A) Surge-Protective Device. All Services supplying dwelling units shall be provided with a surge-protective device. (SPD)
- **(B) Location**. The SPD shall be an integral part of the service equipment or shall be located immediately adjacent thereto.
- (C) Type. The SPD shall be a Type 1 or Type 2 SPD.
- (D) Replacement. Where service equipment is replaced, all of the requirements of this section shall apply.

#### Type1:

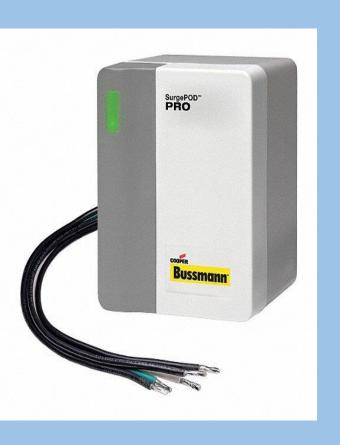
Permanently connected, hard-wired SPDs which can be installed between the secondary side of the utility service transformer and the line side of the main service equipment overcurrent protective device, as well as the load side of the main service equipment.

#### Type2:

SPDs intended for installation on the load side of the main service equipment overcurrent protective device ONLY. These SPDs may also be installed at the service entrance point, but must be installed on the load side of the main service overcurrent protective device.

#### 230.67 (A) – (D). Surge Protection

Add on style to exterior of panel









#### 230.67 (A) – (D). Surge Protection

This type plugs onto the buss like a breaker







For one and two-family dwelling units, all service conductors shall terminate in a disconnecting means installed at a readily accessible outdoor location. If more than one disconnect is provided, they shall be grouped. Each disconnect shall be one of the following:

- 1) Service disconnect marked as follows: EMERGENCY DISCONNECT, SERVICE DISCONNECT (Only Option within RBD Jurisdiction)
- 2) Meter disconnects marked as follows: EMERGENCY DISCONNECT, METER DISCONNECT, NOT SERVICE EQUIPMENT (NOT USED)
- 3) Other Listed disconnect switches or circuit breakers on the supply side of each service disconnects that are suitable for use as service equipment and marked as follows:

  EMERGENCY DISCONNECT, NOT SERVICE EQUIPMENT (NOT USED)

1) Service disconnect marked as follows:

EMERGENCY DISCONNECT SERVICE DISCONNECT







1) Service disconnect marked as follows:

EMERGENCY DISCONNECT SERVICE DISCONNECT

Label would be located on front cover of main breaker panel.



1) Service disconnect marked as follows:

EMERGENCY DISCONNECT SERVICE DISCONNECT

Label would be located on front cover of main breaker panel even for disconnects that are not located on the structure.

In this case, another disconnect would not be required to be located on the outside of the structure. A main breaker panel inside is acceptable.

2) Meter disconnect marked as follows:

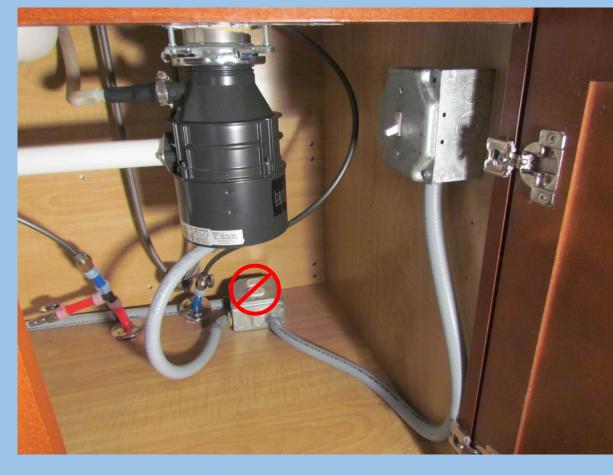
This option isn't one we would see or that utility will allow.

This arrangement This arrangement might probably includes a include a service service disconnect. disconnect. Disconnect ahead of the meter without overcurrent protection. Not considered the service disconnect. Meter socket with Meter socket, 480Y/277V, with unfused meter main breaker, 120/240V, hot disconnect switch, cold sequence sequence

#### 406.5 (G) (1) & (2). Receptacle Orientation

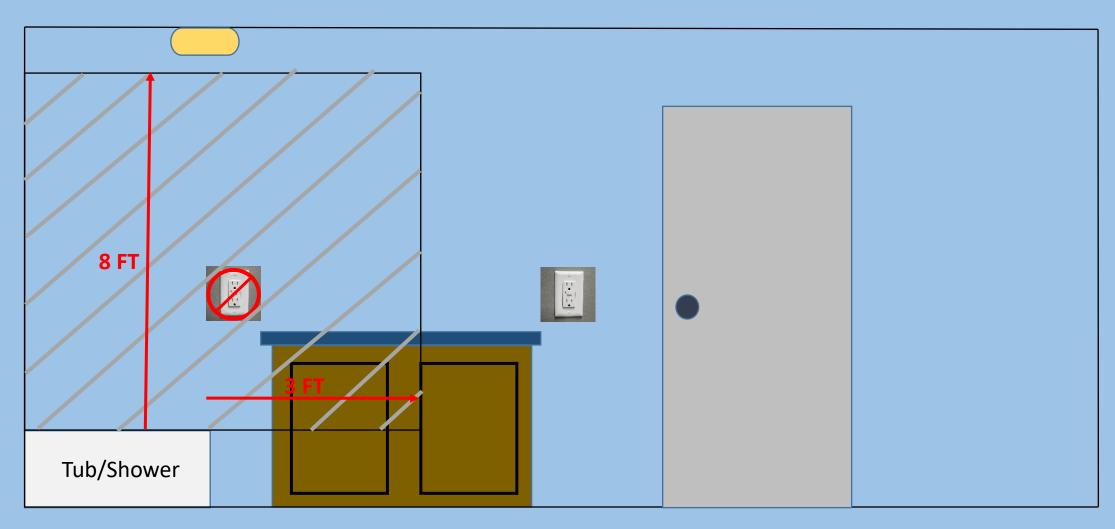
Receptacles are no longer allowed to be in the face up position in the area below a sink.





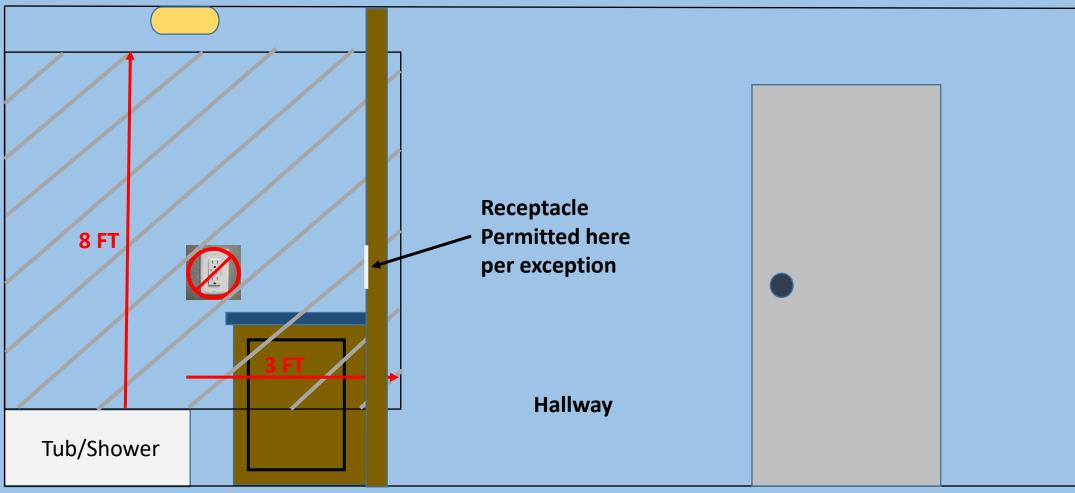
#### 406.9 (C). Bathtub and Shower Space

Receptacles shall not be installed within a zone measured 3FT horizontally and 8FT vertically from the top of the tub rim or shower threshold.



#### 406.9 (C). Bathtub and Shower Space

Exception: In bathrooms with less than the required zone, the receptacle(s) permitted to be installed opposite the tub rim or shower threshold on the farthest wall within the room.



#### 422.16 (B) (2). Built in Dishwashers

Flexible cord passing thru an opening shall be protected against damage by a bushing, grommet, or other approved means.

