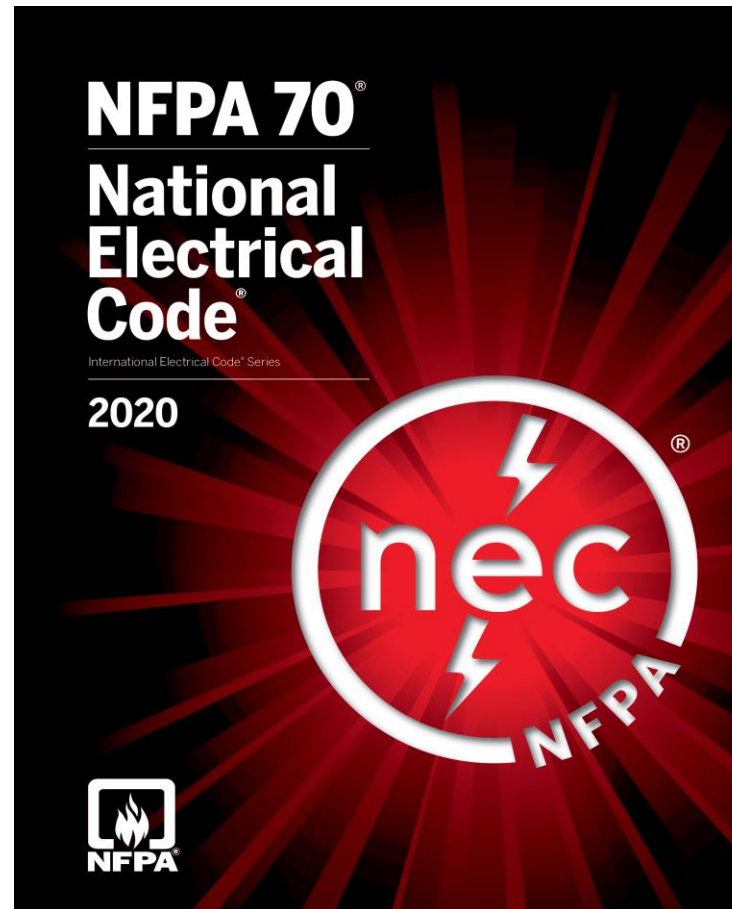


2020 NEC Highlights



210.8(A) GFCI protection

- GFCI protection is required for all 125-volt to 250-volt.
- Laundry areas, Kitchen, Bathrooms, indoor damp or wet locations.
- Basements finished or not.

Bathrooms

Washers and Dryers



Kitchens

**Ranges within 6 ft of
sink**



210.8(D) GFCI protection required for

vending machines

Dishwashers

Water dispensers



210.8(F) GFCI protection required for ALL outdoor outlets.

mini splits * state may exclude

not included



210.11(C)(4) receptacles in garage

At least 1 – 20amp receptacle per bay with no other receptacles in that ckt, except for outside of garage



210.5(C) Kitchen walls are also subject to receptacle spacing.



210.52(C)(1) (C)(2) (C)(3) Island outlets

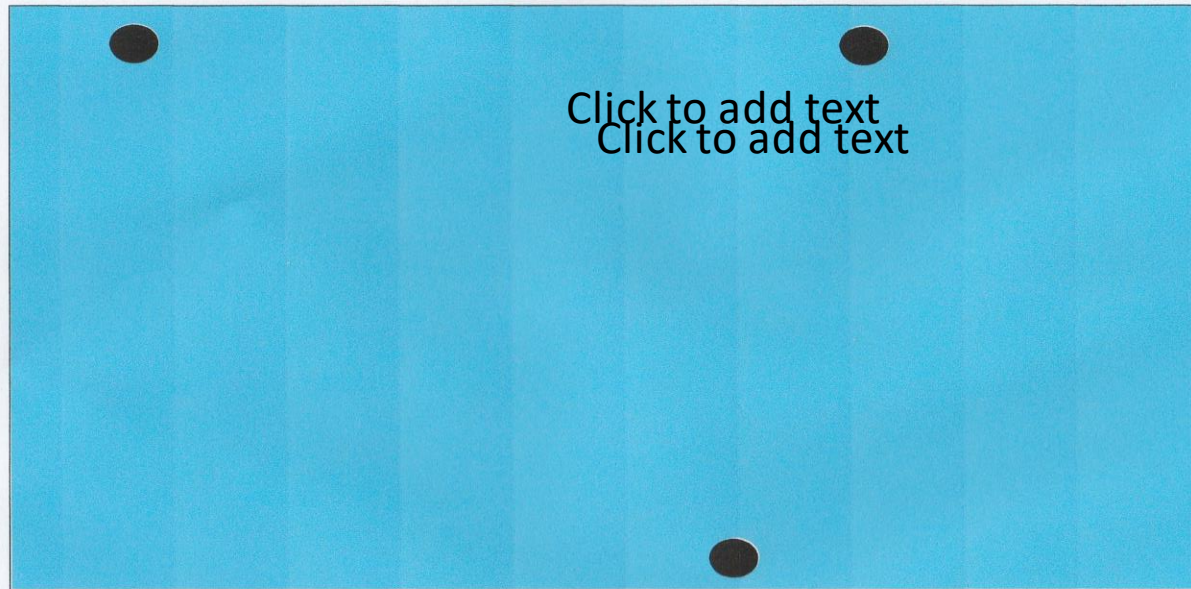


At least one receptacle shall be provided for the first 9 ft sq. Or fraction thereof and a receptacle for every additional 18 ft sq. Or fraction thereof of the island

7 ft by 4 ft = 28 ft sq.
28 ft sq. - 9 ft sq. = 19 ft sq.
19 ft sq. - 18 ft sq. = 1 ft sq.

3 receptacles required

7 feet



4 feet

230.67 Surge protection for ALL dwelling units



230.85 Exterior emergency disconnect(s) for dwelling units

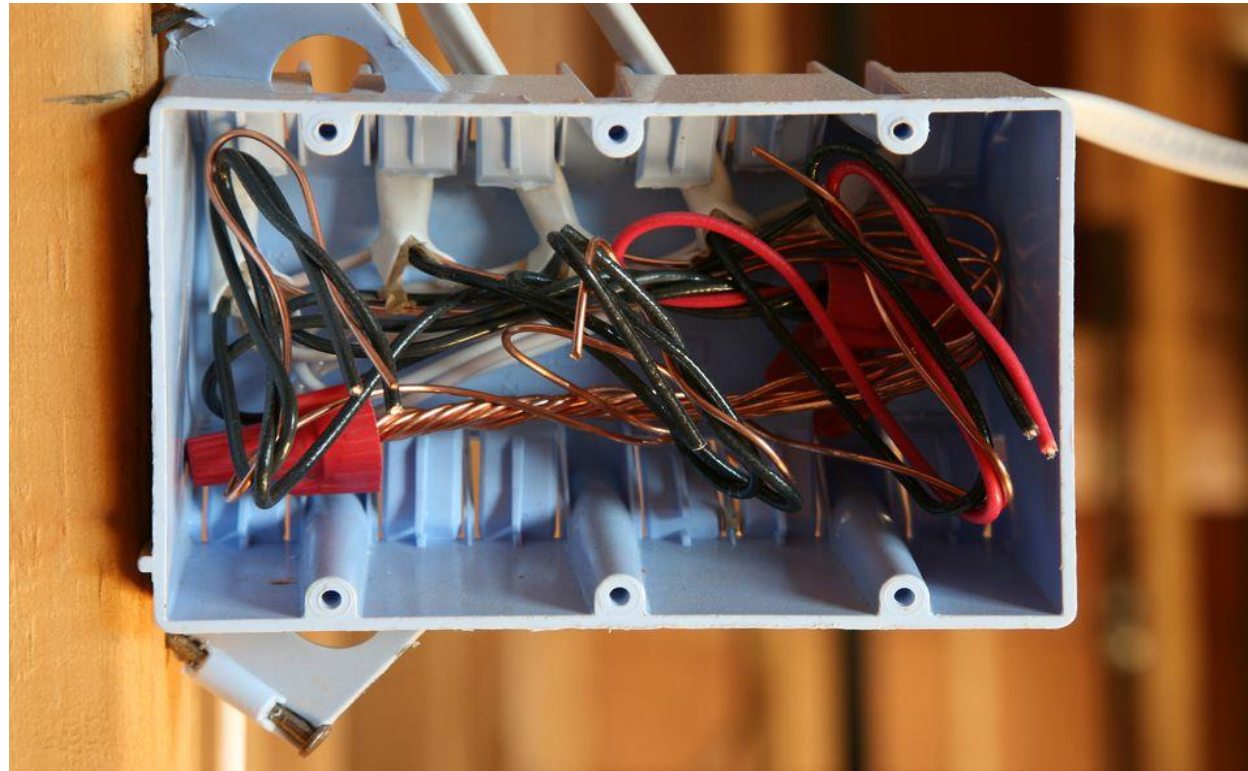
no more



disconnects for all



314.16(B)(5) box fill calculations

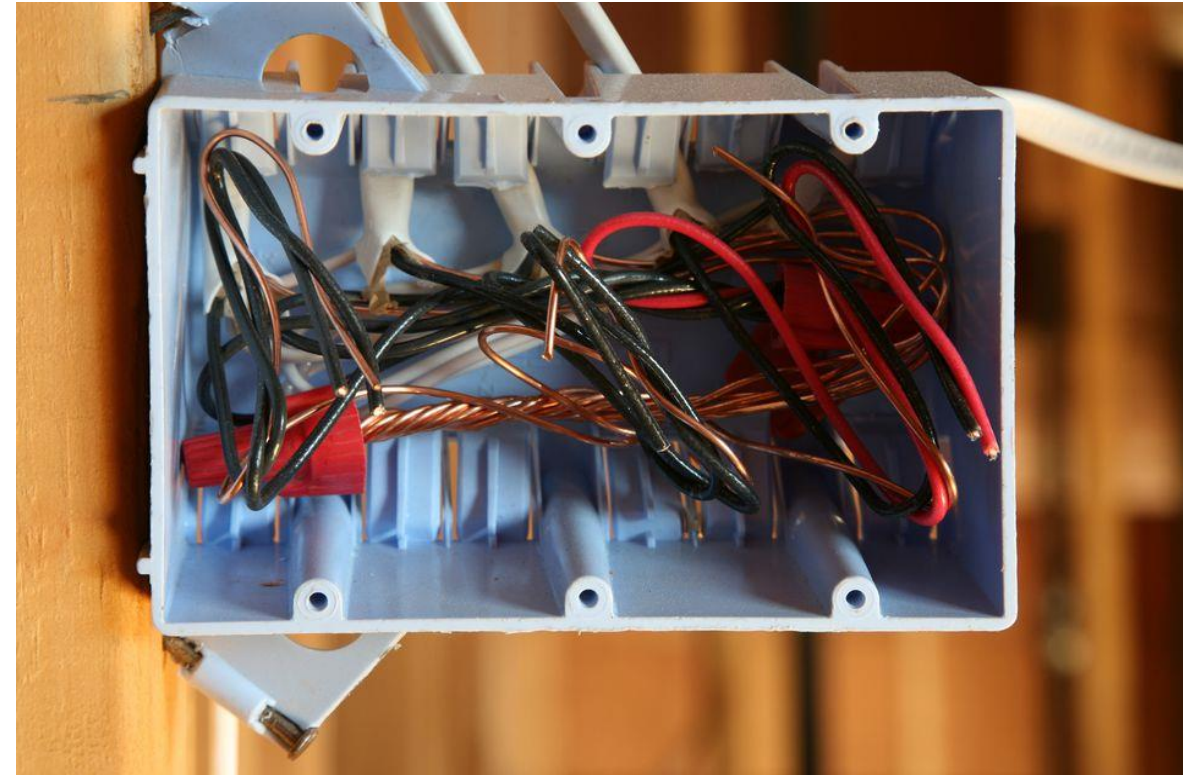


Grounds are now treated as follows ;
first four - as 1 conductor
each other as 1/4 conductor

2.0 cu in
.25 cu in

total for box 20 cu in conductors
12 cu in devices
2.25 cu in grounds

total 34.25 cu in fill in box



406.4(D) (4) Replacement receptacles

If a receptacle outlet is located and replaced in any area specified in 210.12(A) (B) or ©, a replacement receptacle at this outlet must be AFCI protected.

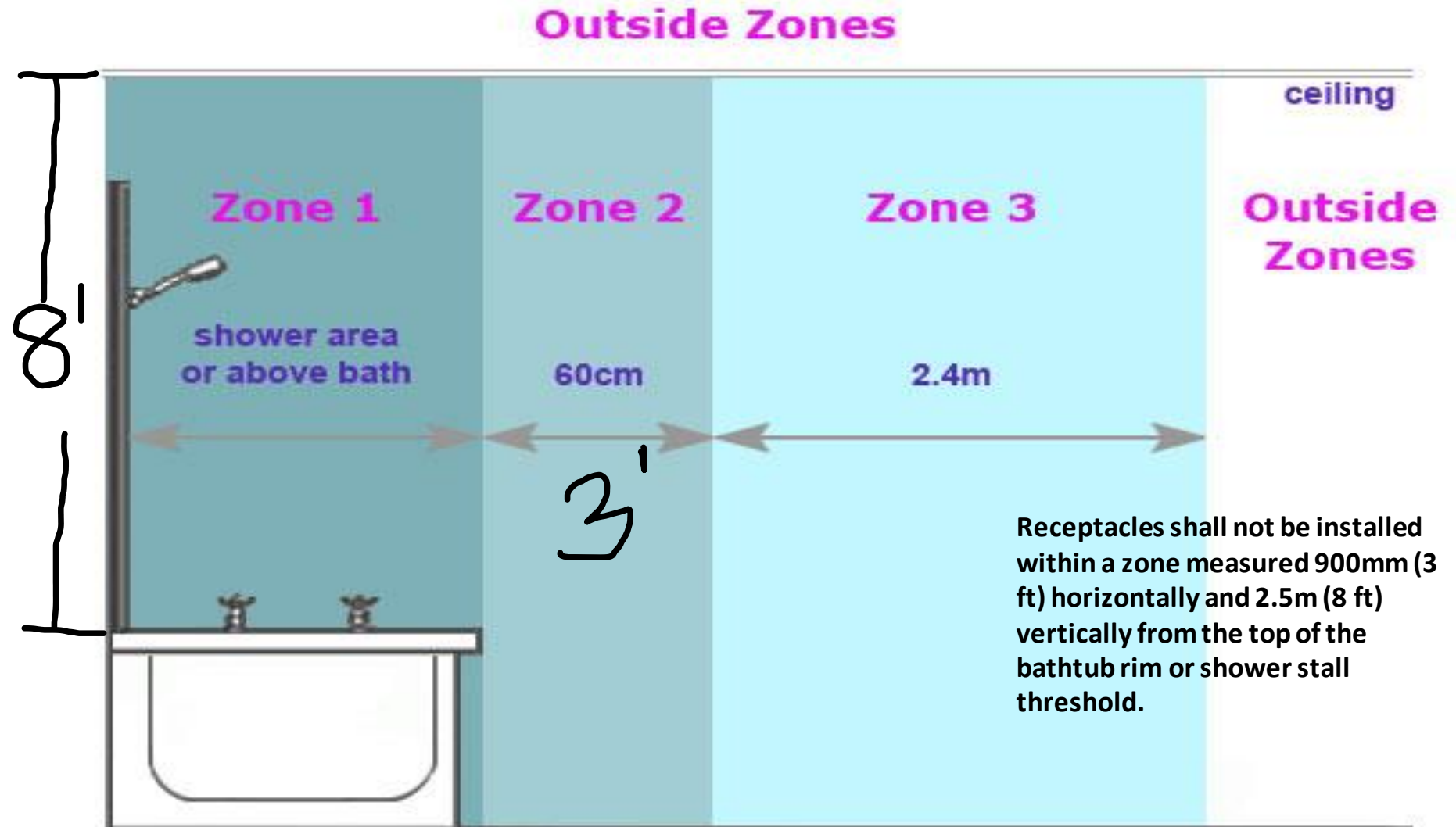


406.4(D) (7) Replacement of Automatically Controlled receptacles

All nonlocking-type 125 volt, 15-20 amperes receptacles controlled by an automatic control device, energy management system, or building automation shall be marked "Controlled Receptacle Marking Symbol".



406.9(C) Bathtub shower space



406.12 Tamper –Resistant Receptacles;

- 1) TR receptacles added to Accessory buildings to dwelling units
- 2) Common areas of multifamily dwelling and common areas of guest rooms and guest suites of hotels and motels
- 3) Assisted living facilities



445.18 (D) Generator Emergency shut down for one and two family dwelling units.

1) emergency shutdown of prime mover



680.269(B) (2) © Copper grid for perimeter surfaces.

1) Where reinforcement steel is not enclosing pool a #8 awg solid copper conductor or structural reinforcing steel (rebar or wire mesh) in the concrete shall serve as an equipotential bonding.

2) This is required for in concrete, under decks, under pavers or unpaved surfaces.
The # 8 awg bare conductor shall be buried 4-6 inches below subgrade within 3 ft from pool .



Questions ?



The
End