

2017 NEC Significant Changes

210.8(B) GFCI Protection in Other than Dwelling Units

This sections applies to non-residential installations

Section 210.8(B) now applies to all single-phase receptacles rated 150 volts (V) to ground or less and 50 amperes (A) or less as well as three-phase receptacles rated 150V to ground or less and 100A or less. The list of locations is expanded to include receptacle outlets in crawl spaces and receptacles in unfinished basements in 210.8(B)(10).

210.12 (A) State of Montana ARM

Subsection 210.12, Arc-Fault Circuit-Interrupter Protection, is amended to delete all references to "kitchen" or "kitchens."

422.16(B)(2) Built-in Dishwashers and Trash Compactors

Flexible cords supplying trash compactors are permitted to be between 3–4 feet long. A longer, flexible cord to facilitate connection for dishwashers in an adjacent space is permitted to be between 3–6½ feet long. The receptacle for a trash compactor must be located in the space occupied by the appliance or adjacent, and the receptacle for a built-in dishwasher must be located in the space adjacent to the space occupied by the dishwasher.

406.12 Tamper-Resistant Receptacles

Section 406.12 now addresses all 125- and 250V, nonlocking-type, 15- and 20-ampere receptacles. New occupancies have been added to the receptacle tamper-resistant requirements: *Preschools and elementary education; business offices; corridors; waiting rooms and the like in clinics, medical and dental offices and outpatient facilities;* assembly occupancies described in Section 518.2; and dormitories.

406.9 Receptacles in wet locations.

Receptacles in Wet locations must be covered with an "Extra Duty" rated cover.

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built-in dishwasher must be located in the space adjacent to the space occupied by the dishwasher.

440.9 Roof top unit wiring must contain a wire type equipment ground.

Section 440.9 now requires a “wire-type” equipment grounding conductor (EGC) for outdoor portions of metallic raceway systems that use non-threaded fittings installed on a roof. Physical damage caused by activities on a roof combined with the weather can cause non-threaded connectors and couplings to open, eliminating the fault return path on the metal raceway.

While this is a significant revision, there will be little impact on the industry because the vast majority of EMT installations include a “wire-type” EGC by specification without regard to where the EMT is installed.

Conductors In parallel 366, 368, 376 and 378

New requirements for conductors connected in parallel are added in the .20 section of articles 366, 368, 376 and 378. Alternating current (AC) circuits connected in parallel must have conductors installed in groups consisting of not more than one conductor per phase, neutral or grounded conductor. The intention is to prevent current imbalance that can create heat and subsequent failure in the paralleled conductors due to inductive reactance.