

Important Changes to Residential Electric

2011 N.E.C.

January 1, 2015 Adoption

1. 110.26(D) A Light is required above the Electrical Panel location.
2. 210.8: Ground-fault (GFCIs) receptacles must be accessible.
(They cannot be located behind anything). (No Exceptions)
3. 210.8(A)(7): Receptacles located in laundry rooms must be a Ground-fault (GFCI) protected, and must be accessible. (No Exceptions).
(This includes washing machine receptacle).
4. 210.12(B): When adding receptacles to a room, new receptacles must be a Arc-fault (AFCI) protected, and must be accessible. (No Exceptions).
SEE DIAGRAM TO RIGHT →
5. 210.52(E)(3): Ground-fault (GFCI) receptacle required on ALL balconies, decks, and porches.
6. 210.52(G): At least one Ground-fault (GFCI) receptacle is required on sheds and buildings with electrical power.
(If you have electric in shed you must have a (GFCI) receptacle).
7. 210.52(I): Receptacles are required in Large Foyers.
(When Foyer is larger than 60 Square feet receptacles must be installed).
8. 225.27/ 230.8: Underground BRANCH/ SERVICE conduits require foam sealing around wiring if entering a building.
9. 406.4(D)(5): Receptacles being changed must be a tamper-resistant type.
10. 406.4(D)(6): Outside receptacles being changed must be a weather-resistant and tamper resistant type.
(Receptacle will have a WR stamped on face).
11. 406.9(B)(1): Outside receptacles in use covers must be a extra-duty type.
(Cover must be metal and stamped with extra-duty).
(Cover must be able to lock closed over plugged in cords).

QUESTIONS CALL:

Fayette County Building Department

121 E. East St., Washington Courthouse, OH 45136

(740)-335-2212

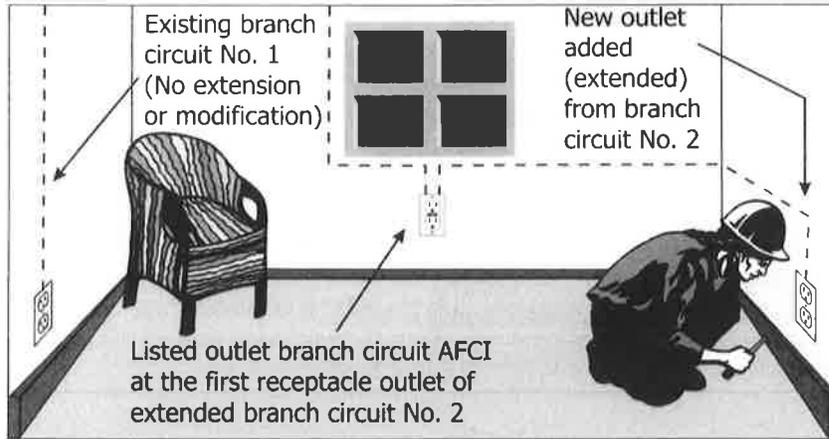
← SEE #4

2

210

Copyright © IAEI 2011

210.12(B) AFCI - Extensions or Modifications



In any of the areas specified in 210.12(A), where branch-circuit wiring is modified, replaced or extended, the branch circuit shall be protected by:

- (1) A listed combination AFCI located at the origin of the branch circuit, or
- (2) A listed outlet branch-circuit AFCI located at the first receptacle outlet of the existing branch circuit

Analysis and Effect

A new item (B) was added to 210.12 to address arc-fault circuit-interrupter (AFCI) protection for branch circuit extensions or modifications at existing dwelling units. This new change will allow listed outlet branch-circuit AFCI devices to be located at the first receptacle outlet of the existing branch circuit to address some of the problems that can be encountered on renovations when the existing branch circuit is extended or modified. Particularly at older existing dwelling units, it is not always possible to install a listed combination AFCI overcurrent device at the existing service or panelboard without a complete overhaul of the existing panelboard with a new, more modern panelboard that is compatible with today's listed combination AFCI overcurrent devices. This concept is not new to the *NEC* as current requirements in 220.87, 250.130(C) and 406.4(D), to name a few, address modifications to existing installations.

This change will hopefully allow for the future development and expansion of listed outlet branch-circuit AFCI devices. The first receptacle outlet was specified as to the location in an effort to limit confusion if the first outlet on the existing branch circuit happens to be a luminaire or smoke alarm outlet. If there are no receptacle outlets on the branch circuit that is to be extended, then a listed outlet branch-circuit AFCI device will need to be installed at the first receptacle outlet of the extension to the existing branch circuit. Debate ensued among CMP-2 members as to the location of the outlet branch-circuit AFCI device. Should it be installed at the point of the extension (new wiring only) or at the first receptacle outlet of the existing branch circuit to provide AFCI protection for as much of the branch circuit as possible. Previous substantiation supported the latter due to the high percentage of fires at older dwelling units. AFCI protection of the new extended wiring

210.12(B)

Proposal 2-179

Comment 2-90

