Department of Commerce

BBS MEMO

Ohio Board of Building Standards | May 3, 2024 | 6606 Tussing Road, P.O. Box 4009, Reynoldsburg, Ohio 43068-9009

2023 NEC Adoption in the Residential Code of Ohio

Effective April 15, 2024, the Board of Building Standards (Board) adopted the 2023 edition of NFPA 70 National Electrical Code (NEC), for 1-, 2- & 3- family dwellings as modified by provisions in Chapter 34 of the Residential Code of Ohio (RCO).

GFCI Protection Requirements

Included in the Ohio modifications to the NEC in RCO Chapter 34 were changes to NEC § 210.8(A) to exclude Ground-Fault Circuit-Interrupter (GFCI) protection for personnel where the branch circuit is providing voltage in excess of 125 Volts and 20-amperes. This same modification was not made NEC § 210.8(D) which retains GFCI requirements for specific appliances listed in the section, creating inconsistencies between the two.

The intention of the Board was to exclude Ground-Fault Circuit-Interrupter (GFCI) protection for personnel where the branch circuit is providing voltage in excess of 125 Volts and 20-amperes. The typical electrical appliances found in a home such as ranges, dryers, ovens, etc. that are powered by 2-pole branch circuits were not intended to be included as requiring GFCI protection.

The list of specific appliances to which GFCI protection is required was based on the list of specific appliances identified under NEC § 422.5 as modified under RCO Chapter 34 and is intended to be used as the more limited list of specific appliances.

The Board will address the lack of coordination between NEC §§ 210.8(A) and 210.8(D) in the next amendment package to the RCO. Until the rule is revised, building departments should only require GFCI protection for appliances listed in NEC § 422.5 as described above.

Understanding Ohio Modifications to the 2023 NEC

Ohio modifications to the 2023 NEC are noted in amended RCO Chapter 34 effective April 15, 2024. As the published rule retains language that was struck from the previous edition of the rule, the rule has caused confusion regarding which specific provisions of the 2023 NEC have been modified. The following is a summary of the Ohio modifications made to the 2023 NEC.

- Limits GFCI protection for personnel to branch circuits up to 125 V, 20 amps.
- Exempts a single receptacle in a garage ceiling to power a garage door opener from GFCI protection.
- Exempts a single receptacle serving a sump pump from GFCI protection provided a duplex receptacle with GFCI protection is within 6 ft.
- Removes expiration of GFCI exception for outlets supplying listed outdoor HVAC equipment
- Makes surge suppression an option not a requirement.

When comparing RCO Chapter 34 changes to the 2023 NEC, the following is the complete list of Ohio modifications to the code adopted by the Board:

Modify Section 210.8(A) to read:
(A) Dwelling units. All 125-volt, single phase, 15- and 20-ampere receptacles installed in locations specified in 210.8(A)(1) through (A)(12) are to have ground-fault circuit-interrupter protection for personnel.

Modify Section 210.8(A)(2) to read:
(2) Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use except for the receptacle located to serve a garage door opener when the device is a single receptacle and located in the ceiling.

Add Exception (5) under Section 210.8(A) to read:
Exception No 5: A single receptacle located to serve a sump pump shall not be required to have ground-fault circuit-interrupter protection when there is a duplex receptacle with ground-fault circuit-interrupter protection within six (6) feet of the sump pump.

Modify Section 210.8(F) to read:
(F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8(A), Exception No. 1, garages with floor level at or below grade, accessory buildings and boathouses, where the outlets are supplied by single-phase branch circuits rated 150 volts or less to ground, and 50 amperes or less, are to be provided with ground-fault circuit-interrupter protection for personnel.

If equipment supplied by an outlet covered under the requirements of this section is replaced, the outlet is to be supplied with GFCI protection.

Exception No. 1: GFCI protection is not required on lighting outlets other than those covered in 210.8(C)

Exception No. 2: GFCI protection is not required for listed HVAC equipment.

Modify Section 215.18(A) to read:
(A) Surge-Protection Device. Where provided as part of feeder supplies for the dwelling or dwelling unit, a surge-protection device (SPD) is to be installed in accordance with this section.

Modify Section 225.42(A) to read:
(A) Surge-Protection Device. Where provided as part of feeder supplies for the dwelling or dwelling unit, a surge-protection device (SPD) is to be installed in accordance with this section.

Modify Section 230.67(A) to read:
(A) Surge-Protection Device. Where provided as part of the service supplying the dwelling or dwelling unit, surge-protection devices (SPD) are to be installed in accordance with this section.

Delete Item (6) Sump Pumps under Section 422.5.