



HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS

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Subject: Testimony Regarding Adoption of 2023 National Electrical Code

To: Brandee Ganz
Chief Administrative Officer

From: Robert J. Frances, P.E., Director
Department of Inspections, Licenses, and Permits

Date: February 20, 2024

The Department of Inspections, Licenses, and Permits (DILP) has proposed legislation to adopt the 2023 Edition of the National Electrical Code (NEC, a.k.a NFPA 70) as the Howard County Electrical Code. There have been some changes made, mostly corrective language, to maintain current construction practices and life safety.

We have eliminated an amendment from the last cycle addressing ground fault circuit interrupter (GFCI) protection on outside HVAC units, as this is now being properly addressed in the 2023 NEC. Another amendment is being proposed to eliminate confusion as to when a fan electrical box (a special type of structurally supported box) is required. This amendment would require any ceiling outlet box located three (3) feet or more from a wall to be a listed fan outlet box.

These amendments, as proposed, will enable us to stay current with the most up to date electrical code and allows us to maintain our current construction practices.

I have attached a more detailed list of the significant code changes in the 2023 NEC that are different from the 2020 edition which is our current approved code adoption.

Fiscal Impact

There is no fiscal impact to the County as a result of this legislation.

If you have any questions, I can be reached at x3946.

Copy: Donald L. Mock, P.E., Chief, DILP Plan Review (x3948)
Jennifer Sager, County Administration
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Significant changes to the 2023 NEC (NFPA 70):

1. Section 110.26: The requirement for large equipment from 110.26(C)(2) which stated that open equipment doors may not impede access to and egress from the working space was also added to 110.26. This rule will increase the size of electrical rooms with large equipment
2. Section 210.8(A)(6): GFCI protection requirements in dwelling unit kitchens has been expanded to include any 125-volt through 250-volt receptacle in kitchens — not just on countertop surface. Now the NEC will require GFCI protection for all kitchen receptacles; including the wall space receptacles required by 210.52(A), in addition to the kitchen countertop surfaces covered in 210.52(B).
3. Section 210.8(D): A list of specific appliances was added that will require GFCI protection for the branch-circuit or the outlet supplying appliances rated 150V or less to ground and 60A or less. The expansion includes 5 new appliances:
 - Electric range
 - Wall-mounted oven
 - Counter-mounted cooking unit
 - Clothes dryer
 - Microwave oven.
4. Section 210.8 (F): A new exception was added to not require GFCI protection for listed HVAC equipment until September 1, 2026.
5. Section 210.52(C)(2): The requirement for receptacles serving the countertop or work surface of an island or peninsula is made optional; however, if the receptacles are not installed at the time the cabinets and countertops were initially placed, the section requires provisions for a future outlet to be provided.
6. Section 210.52(C)(3): All receptacle outlets in the kitchen serving the countertop surface will no longer be allowed below the countertop or work surface. The receptacles located on the top of the countertop or work surface must be listed for the use.
7. Section 215.15: A new section was added to expand the barrier requirement for feeder taps and transformer secondaries. Barriers are required as to minimize accidental contact.
8. Sections 215.18, 225.42 and 230.67: New language was added to require surge protection devices (SPDs) for both feeders and outside feeders. The need for the protection is to limit damage to electronic devices and equipment which can be rendered inoperable by a surge. The areas where the surge protection is required has been expanded to include:
 - Dwelling units
 - Dormitory units
 - Guest rooms and guest suites of hotels and motels
 - Areas of nursing homes and limited-care facilities used exclusively as patient sleeping rooms
9. Section 225.41: New language now requires a one- and two-family dwelling unit “emergency disconnect” for outside feeders. This requirement was first introduced in section 230.85 in the 2020 NEC for services. The need for the change was to ensure that first responders were always able to shut off the power on the exterior of a dwelling regardless of how the building is supplied.

10. Section 250.140(B)(5): For existing branch-circuit installations only, if an equipment grounding conductor is not present in the outlet or junction box the frame of the range or dryer shall be permitted to be connected to the grounded conductor that is part of a service entrance cable that originates in equipment other than a service. This section helps grounding of new electrical equipment to older homes that don't have a grounding conductor already installed.
11. Section 352.44(B): This was added to address earth movement when installing underground PVC conduit. Expansion fittings are now required to compensate for earth settling or movement, including frost heaving, when underground PVC conduit is installed as a complete run.