

Introduced 03.04.2024
Public Hearing 03.18.2024
Council Action 04.01.2024
Executive Action 04.03.2024
Effective Date 06.03.2024

County Council of Howard County, Maryland

2024 Legislative Session

Legislative Day No. 3

Bill No. 11 -2024

Introduced by: The Chairperson at the request of the County Executive

Short Title: Adopting the 2023 National Electrical Code and local amendments.

Title: AN ACT adopting the 2023 National Electrical Code as the Electrical Code for Howard County; regulating the design, construction, alteration, improvement or modification to electrical equipment; adopting certain local amendments to the Electrical Code; making certain technical corrections; and generally relating to the electrical code in Howard County.

Introduced and read first time March 4, 2024. Ordered posted and hearing scheduled.
By order Michelle Harrod
Michelle Harrod, Administrator

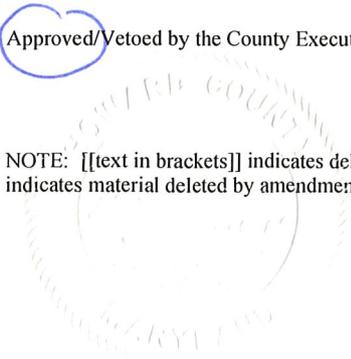
Having been posted and notice of time & place of hearing & title of Bill having been published according to Charter, the Bill was read for a second time at a public hearing on March 18, 2024.
By order Michelle Harrod
Michelle Harrod, Administrator

This Bill was read the third time on April, 2024 and Passed ✓, Passed with amendments ✓, Failed _____.
By order Michelle Harrod
Michelle Harrod, Administrator

Sealed with the County Seal and presented to the County Executive for approval this 2 day of April, 2024 at 2⁰⁰ a.m./p.m.
By order Michelle Harrod
Michelle Harrod, Administrator

Approved/Vetoed by the County Executive April 3, 2024
Calvin Ball
Calvin Ball, County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; ~~Strike-out~~ indicates material deleted by amendment; Underlining indicates material added by amendment.



1 **Section 1. Be It Enacted** by the County Council of Howard County, Maryland, that the
2 Howard County Code is amended as follows:

3 *By repealing and reenacting:*

- 4 *Title 3. Buildings.*
- 5 *Section 3.214. Adoption of National Electrical Code.*

6
7 **Title 3. Buildings.**
8 **Subtitle 2. Electrical Regulations.**
9

10 **SECTION 3.214. ADOPTION OF NATIONAL ELECTRICAL CODE.**

- 11 (A) (1) THE 2023 EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), WITH
12 AMENDMENTS AS LISTED IN SUBSECTION (B) OF THIS SECTION, IS HEREBY
13 ADOPTED AS THE ELECTRICAL CODE FOR HOWARD COUNTY, AS IF THE
14 NATIONAL ELECTRICAL CODE WERE SET OUT IN FULL IN THIS SECTION.
- 15 (2) A PERSON PERFORMING OR CAUSING THE PERFORMANCE OF ELECTRICAL
16 WORK SHALL CONFORM TO THE HOWARD COUNTY ELECTRICAL CODE AND
17 TO THE PROVISIONS OF THE HOWARD COUNTY BUILDING CODE ADOPTED IN
18 TITLE 3, SUBTITLE 1 OF THIS CODE.
- 19 (3) IF A CONFLICT EXISTS BETWEEN THE HOWARD COUNTY BUILDING CODE
20 AND THE HOWARD COUNTY ELECTRICAL CODE, THE CODE REQUIRING THE
21 MORE STRINGENT STANDARD SHALL GOVERN.

22 (B) THE FOLLOWING AMENDMENTS MODIFY CERTAIN PROVISIONS OF THE ADOPTED CODE:

- 23 (1) *SECTION 90.4. ENFORCEMENT.*
24 ADD A SENTENCE AT THE END OF SUBSECTION (A) AS FOLLOWS: "IF THERE
25 IS A CONFLICT BETWEEN THIS SECTION AND ANY OTHER PROVISION OF THIS
26 SUBTITLE, THE REQUIREMENT OF THE OTHER PROVISION SHALL GOVERN."
- 27 (2) *ARTICLE 100. DEFINITIONS.*
28 DELETE THE SENTENCE FOLLOWING "AUTHORITY HAVING JURISDICTION
29 (AHJ)." AND SUBSTITUTE THE FOLLOWING, "THE AUTHORITY HAVING
30 JURISDICTION IS THE BUILDING OFFICIAL AS SET FORTH IN SECTION
31 3.101(A)(2) OF THIS CODE.

1 (3) *SECTION 230.85. EMERGENCY DISCONNECTS.*

2 ADD EXCEPTION TO ITEM (A)(1) AS FOLLOWS: "EXCEPTION NO. 2: WHERE
3 PHYSICAL AND PRACTICAL LIMITATIONS PREVENT AN OUTDOOR
4 DISCONNECT, THE AHJ MAY APPROVE AN ALTERNATIVE LOCATION".

5 (4) *SECTION 240.21. LOCATION IN CIRCUIT.*

6 AMEND SUBSECTION (B)(1), TAPS NOT OVER 3 M (10FT) LONG, BY ADDING A
7 SECOND EXCEPTION TO ITEM (1) UNDER SUBSECTION (B)(1) AND A NEW
8 EXCEPTION TO SUBSECTION (B)(2), TAPS NOT OVER 7.5 M (25 FT) LONG AS
9 FOLLOWS:

10 "EXCEPTION: IN METER ROOMS, THE CONDUCTORS WITHIN THE AUXILIARY
11 GUTTER THAT SUPPLIES THE METER SHALL NOT COUNT AS A PART OF THE
12 TOTAL LENGTH."

13 ~~(5) *SECTION 250.52. GROUNDING ELECTRODES.*~~

14 ~~— ADD THE FOLLOWING TO THE BEGINNING OF SUBSECTION 250.52(A)(3):~~

15 ~~— "CONCRETE ENCASED ELECTRODES: EXCEPT AS OTHERWISE APPROVED BY
16 THE AHJ, THE PRINCIPAL GROUNDING ELECTRODE FOR A NEW STRUCTURE IS
17 A CONCRETE ENCASED ELECTRODE INSTALLED IN ACCORDANCE WITH THIS
18 SUBSECTION."~~

19 ~~(5) *SECTION 250.50. GROUNDING ELECTRODE SYSTEM.*~~

20 ~~IN THE EXCEPTION, AFTER THE LAST SENTENCE, INSERT:~~

21 ~~"THIS EXCEPTION SHALL NOT APPLY TO NEW BUILDINGS UNDER
22 CONSTRUCTION.~~

23 (6) *SECTION 310.3. CONDUCTORS.*

24 IN SUBSECTION (A) MINIMUM SIZE OF CONDUCTORS, AFTER "14 AWG
25 COPPER OR", DELETE "12" AND SUBSTITUTE "4".

26 (7) *SECTION 314.27. OUTLET BOXES*

27 ADD THE FOLLOWING TO SUBSECTION 314.27(C), SECOND PARAGRAPH,
28 AFTER "CEILING-SUSPENDED (PADDLE) FAN", INSERT "OR WITHIN 3FT OFF
29 OF THE NEAREST WALL."

30 (8) *ANNEX H. ADMINISTRATION AND ENFORCEMENT.*

1 ONLY THE PROVISIONS OF SUBSECTION 80.9 ARE ADOPTED. THE REMAINDER
2 OF ANNEX H IS SPECIFICALLY AND INTENTIONALLY NOT ADOPTED.

3
4 ***Section 2. And Be It Further Enacted*** by the County Council of Howard County,
5 *Maryland, that this Act shall become effective 61 days after its enactment.*

Amendment 1 to Council Bill No. 11-2024

**BY: The Chairperson at the Request
of the County Executive**

**Legislative Day 4
Date: April 1, 2024**

Amendment No. 1

(This Amendment substitutes a local amendment related to grounding electrodes. The Board of Electrical Examiners recommended this change.)

- 1 On page 2, strike lines 13 through 18, inclusive and in their entirety, and substitute:
2 “(5) SECTION 250.50. GROUNDING ELECTRODE SYSTEM.
3 IN THE EXCEPTION, AFTER THE LAST SENTENCE, INSERT:
4 “THIS EXCEPTION SHALL NOT APPLY TO NEW BUILDINGS UNDER CONSTRUCTION.”.

I certify this is a true copy of
Am 1 to CB 11-2024
passed on April 1, 2024
Michelle Harrod
Council Administrator

Introduced 03-04-2024
Public Hearing 03-14-2024
Council Action _____
Executive Action _____
Effective Date _____

County Council of Howard County, Maryland

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Introduced and read first time Mar 4, 2024. Ordered posted and hearing scheduled.
By order Michelle Harrod
Michelle Harrod, Administrator

Having been posted and notice of time & place of hearing & title of Bill having been published according to Charter, the Bill was read for a second time at a public hearing on March 14, 2024.
By order Michelle Harrod
Michelle Harrod, Administrator

This Bill was read the third time on _____, 2024 and Passed _____, Passed with amendments _____, Failed _____.
By order _____
Michelle Harrod, Administrator

Sealed with the County Seal and presented to the County Executive for approval this ____ day of _____, 2024 at ____ a.m./p.m.
By order _____
Michelle Harrod, Administrator

Approved/Vetoed by the County Executive _____, 2024

Calvin Ball, County Executive

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HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS

3430 Court House Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2433

Robert J. Frances, P.E., Director

FAX 410-313-3322

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
T:\PRSEC\2024 Code Adoption\NEC 2023 testimony.docx

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.

Office of the County Auditor
Auditor's Analysis

Council Bill No. 11-2024

Introduced: March 4, 2024

Auditor: Rebecca Gold

Fiscal Impact:

There is no anticipated fiscal impact from the passage of this legislation. Paper copies of the National Electrical Code (NEC), costing approximately \$1,000, and training materials have already been appropriated and expended in the Department of Inspections, Licenses and Permits' (DILP) Fiscal Year 2024 budget.

Purpose:

Council Bill 11-2024 proposes that the County adopt the 2023 Edition of the NEC (also called the NFPA 70) as its standard. This code regulates the design, construction, alteration, improvement, and modification to electrical equipment.

Other Comments:

The NEC was previously updated with the passage of CB54-2020, which aligned County standards with the 2020 Edition of the NFPA 70.

Updates to other codes (such as the International Residential Code and International Mechanical Code) are anticipated from the International Code Council towards the end of Calendar Year 2024, according to the Director of the DILP.

BY THE COUNCIL

This Bill, having been approved by the Executive and returned to the Council, stands enacted on April 3, 2024.

Michelle Harrod
Michelle R. Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, having been passed by the yeas and nays of two-thirds of the members of the Council notwithstanding the objections of the Executive, stands enacted on _____, 2024.

Michelle R. Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, having received neither the approval nor the disapproval of the Executive within ten days of its presentation, stands enacted on _____, 2024.

Michelle R. Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, not having been considered on final reading within the time required by Charter, stands failed for want of consideration on _____, 2024.

Diane Schwartz Jones, Administrator to the County Council

BY THE COUNCIL

This Bill, having been disapproved by the Executive and having failed on passage upon consideration by the Council stands failed on _____, 2024.

Michelle R. Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, the withdrawal of which received a vote of two-thirds (2/3) of the members of the Council, is withdrawn from further consideration on _____, 2024.

Michelle R. Harrod, Administrator to the County Council