

ORDINANCE

FOR THE PURPOSE OF ADOPTING THE NATIONAL ELECTRICAL CODE (2017 Edition), ALONG WITH LOCAL AMENDING PROVISIONS AS THE CALVERT COUNTY ELECTRICAL CODE.

RECITALS

WHEREAS, pursuant to the Maryland Annotated Code, General Provisions Article, Section 13-910, the County Commissioners of Calvert County, Maryland (hereinafter, the "County Commissioners") may adopt and amend the Electrical Code for Calvert County;

WHEREAS, the County Commissioners desire to adopt the Electrical Code of Calvert County;

WHEREAS, implementation of an effective electrical code promotes the health, safety, and welfare of the citizens of Calvert County;

WHEREAS, the provision of minimum standards for the protection of consumers and electricians provides a benefit to all citizens of Calvert County;

WHEREAS, the National Electrical Code (2017 Edition) provides greater universality of standards with neighboring jurisdictions and adopts methods that have been proven effective on a nationwide basis;

WHEREAS, providing for specific exceptions to the National Electrical Code (2017 Edition) allows Calvert County to customize certain provisions of the national standards to its own specific needs to address circumstances peculiar to the County;

WHEREAS, the Calvert County Board of Electrical Examiners, after thorough review and discussion, recommends that the Board of County Commissioners of Calvert County adopt the National Electrical Code (2017 Edition) in its entirety along with certain local special provisions;

WHEREAS, a public hearing was duly advertised in a newspaper of general circulation in Calvert County for two consecutive weeks before the public hearing held on July 17, 2018, at which time the Board of County Commissioners received public comment; and

WHEREAS, upon due consideration of the comments of the public and staff and in furtherance of the public health, safety and welfare, the Board of County Commissioners finds that it is in the best interest of the public health, safety and welfare of the citizens of Calvert County, Maryland to adopt the National Electrical Code (2017 Edition), including all annexes, as adopted by the National Fire Protection Association, as amended by certain local provisions set forth below.

NOW, THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Calvert County, that the National Electrical Code (2017 Edition) hereinafter the "Code", including annexes A, B, C, D, E, F, G and I, as adopted by the National Fire Protection Association, as amended by certain local provisions set forth below, is hereby adopted as the Calvert County Electrical Code, and it is incorporated by reference hereto with the same force and effect as though set out in full herein.

BE IT FURTHER ORDAINED by the Board of County Commissioners of Calvert County, that the following local amendments to the Code are hereby adopted:

ARTICLE 70: LOCAL AMENDMENTS

70.13 Authority

- (A) Except as otherwise provided herein, the authority having jurisdiction of enforcement of this Code and the rules and regulations promulgated there under shall be the Board of Electrical Examiners and Supervisors for Calvert County (hereinafter, the "Electrical Board"). Said Electrical Board shall have the responsibility for making interpretations of the code and rules, for deciding upon the approval of equipment and materials, and for granting the special permission contemplated in the code and rules and regulations.
- (B) The Inspection Authority shall have the authority to interpret the code in field situations. Any disputed interpretations of the code or its rules and regulations may be appealed to the Electrical Board in writing and the Electrical Board shall hold a special meeting if a quorum of the Electrical Board can be obtained within four (4) working days of the receipt of the appeal. If a quorum cannot be obtained within the specified time the Electrical Board shall convene a special meeting at the earliest opportunity that a quorum of the Electrical Board can be obtained.

70.14 Entry powers.

- (A) Any building, structure or premises except private dwellings.
 - (1) The Building Code Official or an authorized representative shall be authorized without the consent of the occupant, to enter and examine at any time during business or operating hours for the purpose of enforcing this code.
- (B) Multiple dwelling occupancy buildings.
 - (1) The Building Code Official or an authorized representative shall be authorized, without the consent of the occupant to enter and examine only those spaces to which the public is ordinarily admitted, such as corridors, stairways, basements and similar spaces at any time during business or operating hours for the purpose of enforcing this code.
- (C) Private dwellings.
 - (1) The building code official or an authorized representative at all reasonable times shall be authorized with the consent of the occupant to enter and examine for the purpose of enforcing this code.
 - (2) Without the consent of the occupant the building code official or an authorized representative shall obtain an administrative search warrant approved by a court of competent jurisdiction before entering.

(D) Emergencies.

- (1) Where an emergency exists that constitute an immediate danger to human life, property or public safety the building code official or an authorized representative shall be authorized to enter and examine any building, structure, premises and private dwellings.

70.15 It shall be unlawful for any person to hinder, impede, or interfere with an official or employee of the Inspection Authority in the discharge of official duties.

70.19 Permits, Approvals and Inspections. No person shall perform or start any electrical work covered by the code unless all licenses, permits and inspection requirements have been complied with. Permits and approvals shall conform to the following provisions (A) through (K).

- (A) No electrical work shall be done without first obtaining a permit from the inspection authority unless specifically exempted from permit requirements elsewhere in this code.
 - (1) All electrical work as outlined in the preceding paragraph which requires a permit must be reported by application to the inspection authority at least twenty-four (24) hours prior to commencing work.
 - (2) All permit applications must be signed by the Master Electrician obtaining the permit.
 - (3) All permit applications must include a description of work and include equipment and device counts.
 - (4) All permit applications for other than single family dwelling installations shall include electrical plans that include the following:
 - (a) Plans shall include the physical address of the work location, the total square footage, an electrical power plan, an electrical lighting plan, light fixture schedule, electrical one-line riser diagram, panel schedule and ratings with demand loads and total service demand load.
 - (b) Submitted plans shall be legible and a minimum of 8 ½" x 10".
 - (c) Submitted plans shall be stamped and signed by a Professional Engineer registered with the State of Maryland, except as may be waived at the discretion of the Board.
 - (d) Review and approval of submitted plans and permit applications shall not relieve the applicant of the responsibility of compliance with this code.
 - (5) A copy of the permit shall be posted or otherwise readily accessible at each work site.
 - (6) Under normal circumstances there can be only one (1) electrical permit for electrical work on a given jobsite except for the wiring of different systems (i.e. security, sound, elevators, etc.) which require separate permits.
- (B) It shall be unlawful for any person to install, alter, maintain, service or repair electrical equipment in or on any building, structure or part thereof or any premises, that does not conform to the code and rules and regulations promulgated there under.
 - (1) No repairs or additions to existing installations shall be made unless the service is adequate to safely carry the existing and additional load. Additions to all types of

electrical work regardless of occupancy are to be inspected by process of an application being submitted to the inspection authority for this County.

- (C) Master Electricians shall be responsible only for work done by them or their agents or employees.
- (1) No licensee shall commence work on another licensee's work unless the original licensee has withdrawn or has been removed from such work. A letter of explanation from the homeowner or contractor, as appropriate, and the licensee shall be sent to the Board explaining the circumstances of the case.
- (D) Permit Fees: Permit fees shall be paid in accordance with the schedule of fees as established by the Calvert County Board of County Commissioners.
- (1) The inspection authority shall have the right to waive fees subject to approval of the Board of County Commissioners.
- (2) Additional Permit Fees: Additional permit fees shall be required on all one-time inspection jobs that require additional inspections. Also, additional fees will be required if more than one inspection is required on any violation notice and for special inspections required for the investigation of any violations. The additional fees shall be required in accordance with the schedule of fees for any and all work performed that was not reported on the original application.
- (F) Any permit issued shall become invalid if the authorized work is not started within twenty-four (24) months from the date of issuance of the permit or if the authorized work is suspended or abandoned for a period of twelve (12) months. The Electrical Board shall have the authority to cancel, suspend or revoke any permit, after a hearing by the Electrical Board, at which time the licensee shall be afforded the opportunity to be present.
- (G) No installations shall be covered until the inspection authority has inspected and approved same.
- (1) When any portion of the electrical installation will be concealed from view, the Master Electrician shall schedule an inspection with the Inspection Authority, and such electrical installation shall not be concealed until it has been inspected and approved by the Electrical Inspector.
- (H) The Master Electrician shall meet the electrical inspector on the job site for any re-inspection, including swimming pool electrical installations including all bonding required for steel, deck, fence, ladder, etc.
- (K) **Revocation of Permits and Approvals.** The Inspection Authority shall be permitted to revoke a permit or approval issued if any violation of this Code is found upon inspection or in case there have been any false statements or misrepresentations made, submitted in the application, or plans on which the permit or approvals was based.

70.20 Emergency Work With. Whenever there is an emergency disconnect and the Master Electrician is unable to contact the inspection authority, a Master Electrician shall have the authority to notify the local power company when there is a breakdown of service and to make emergency repairs for the reconnection of service. The Master Electrician shall secure a permit on the next working day.

70.21 It shall be unlawful for any owner, agent or tenant of any building, lot or premises or any other persons to knowingly employ any person to do electrical work unless such person so employed has in his possession the necessary license that is required by this Board.

70.23 Violations:

- (A) When any electrical wiring or equipment is found upon inspection to be in violation of this title, the Inspection Authority shall notify the holder of the electrical permit of the nature of the violation in writing.
- (1) The person responsible for the electrical wiring and equipment shall make any change or repairs necessary to comply with this code.
 - (2) All violations shall be corrected within 30 days of the notice or within another period specified by the Electrical Board.
 - (3) If any person fails to comply with a notice to correct a violation of the code within thirty (30) days or any other period that may be specified after receipt of such notice, the inspection authority shall be empowered to notify the power company supplying the electricity of such violations and to have the property, structure or premises, as appropriate, disconnected from its source of electrical supply.
 - (a) In such cases, the notice to the power company shall state the reason for the service being disconnected and copies of the notice shall be sent to the owner or occupant of the property, structure or premises, as appropriate, and the party responsible for the violation, if such party be known. If the owner is unknown, notice may be sent to the owner as shown on the records of the Department of Assessments and Taxation at such address as is shown in the records of the Assessment Department.
 - (b) If a licensed electrician fails to make corrections of a violation within the time specified in the notice, they shall be refused any further permits to do electrical work within Calvert County until such corrections are made. If such party is not a licensed electrician, that party shall be prosecuted as well as being subject to other sanctions as deemed proper by the Electrical Board.
- (B) **Dangerous Conditions:** Whenever the Inspection Authority finds any use of electrical equipment or its installation or defects to be dangerous or hazardous to persons or property, the Building Code Official shall give written notice to the owner or lessee of the property on which the installation is located. The notice shall specify the nature of the dangerous condition.
- (1) The person served with the notice shall make or cause to make the changes or repairs necessary to eliminate the dangerous conditions.
 - (2) The dangerous or hazardous condition shall be corrected within fifteen (15) days of the notice or within the time specified by the Building Code Official, which ever is longer.
 - (3) If a person fails to comply with a notice issued under this section, the Inspection Authority shall:
 - (a) Revoke any electrical permit issued for the installation.
 - (b) Revoke or refuse to issue a cut-in certificate to the Power Company supplying power to the installation.

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- (c) Notify the Power Company to disconnect its electrical supply to the electrical equipment.
 - (1) On receipt of notice from the Building Code Official the Power Company shall disconnect electrical supply to such equipment or installation within twenty four (24) hours or as otherwise prescribed by law.
- (d) It shall be unlawful for any person to reconnect the electrical equipment to its source of electrical supply, or to use, or permit to be used electrical power in any such electrical equipment until such causes for the disconnection have been remedied to the satisfaction of the Inspection Authority.

70.23 (C) Emergency Disconnection of Equipment. When the use of any electrical equipment or its installation is found to be dangerous to persons or property, or whenever it may interfere with the fire protection service of a fire department, the Building Code Official shall be empowered to have the premises disconnected from its source of electrical supply immediately without notice to the owner.

- (1) When such equipment or installation has been so condemned or disconnected, a notice shall be placed thereon listing the causes for the condemnation, the disconnection or both. Written notice shall be given to the owners, the occupant, or both, of such building, structure, or premises.
- (2) It shall be unlawful for any person to remove said notice, to reconnect the electrical equipment to its source of electrical supply, or to use or permit to be used electrical power in any such electrical equipment until such causes for the condemnation or disconnection have been remedied to the satisfaction of the Inspection Authority.

70.23(D) Imminent Hazards. The Inspection Authority shall be permitted to order the immediate evacuation of any occupied building deemed unsafe when such building has hazardous conditions that present imminent danger to building occupants.

70.24 Stop Work The inspection authority shall have the authority to stop any work on any building or structure that is being prosecuted contrary to the provisions of this code or in an unsafe and dangerous manner. The authority shall stop any person from performing electrical work who does not have in their possession an electrical license issued by the Board of Electrical Examiners and Supervisors for Calvert County, Maryland or who has failed to obtain the required permit for work being done.

70.30 In the event that a holder of a master class license employed by a Company, Firm, Partnership, Corporation or any other entity severs their connection with such Company, Firm, Partnership, Corporation or entity, it shall be the duty of both the licensee and the entity in question to notify the Board and inspection authority within thirty (30) days.

70.40 A Master Electrician shall have at least one (1) Journeyman licensed in Calvert County on the job at all times if he (the Master) cannot be present.

70.100 Any area of a dwelling that meets the criteria of a habitable room, according to the Calvert County Building Code, is to be wired accordingly.

ARTICLE 100: DEFINITIONS

100 Inspection Authority: Is the Division of Inspections and Permits.

ARTICLE 110 --- REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

110.5 Conductors. Conductors normally used to carry current shall be of copper or aluminum unless otherwise provided in this Code. Where the conductor material is not specified, the sizes given in this Code shall be applied to the copper conductors. Where other materials are used, the size shall be changed accordingly. No aluminum conductors smaller than number six (6) A.W.G. shall be installed in any installation in Calvert County. This includes copper clad aluminum conductors.

110.11(A) No electric wiring or equipment shall be installed in a structure until the structure is weather tight. All windows and doors, skylights, roof shingles and subsiding shall be installed before any electric wiring or equipment is installed. Garage door openings shall be suitably protected with an approved barrier to protect the interior of the structure from moisture during construction until garage doors are installed.

110.26(C)(1)(a) In other than dwelling units, equipment operating at 200 volts phase to phase or greater installed on platforms, balconies, or mezzanine floors or in attic or roof rooms or spaces shall be readily accessible.

ARTICLE 210 --- BRANCH CIRCUITS

210.59(A) All receptacles shall be a minimum of thirty inches (30") horizontally from the tub or shower space.

210.59(B) Smoke detectors and carbon monoxide detectors shall be located at least three feet (3') away from HVAC supply and return vents.

ARTICLE 230 --- SERVICES

230.61 Split bus panels shall not be used as service equipment in Calvert County.

230.79(C) The smallest sized electrical service to be installed for any dwelling is to be one hundred amperes (100 amps).

230.79(C)(1) Electric services for residential dwellings having an electric heat or furnaces of 20 kW or larger shall have at least a 300-amp service.

ARTICLE 250 --- GROUNDING AND BONDING

250.53(A) The use of two (2) 8-ft. ground rods on all electrical services except for temporary pole services shall be permitted. Grounding is to be connected together either at the panels or the grounds rod. This is in addition to and does not relieve the requirements of Article

250.50. Rod, pipe and plate electrodes shall meet the requirements of 250.53(A)(1) through (A)(3).

ARTICLE 320 ARMORED CABLE: TYPE AC

320.10(6) The use of armored cable shall be restricted to dry installations or normally dry areas only.

ARTICLE 410 --- LUMINARIES, LAMPHOLDERS AND LAMPS

410.10(A)(1) Lights installed in crawl spaces shall not be GFCI protected by the GFCI device protecting crawl space receptacle outlets.

410.116(B) All recessed fixtures installed in ceilings with insulation shall be Types IC rated or the equivalent.

ARTICLE 422 --- APPLIANCES

422.10(C) **Fixed in Place** Microwaves shall be connected to a minimum of a dedicated 20amp circuit. This circuit shall serve no other outlet.

422.13(A) All hot water heaters in Calvert County shall have a disconnecting means within sight and shall be within 50 feet (50') of the hot water heater.

422.29 Fire-stats (high temperature cut off switch) shall be installed for attic fans.

ARTICLE 550 --- MOBILE HOMES, MANUFACTURED HOMES AND MOBILE HOME PARKS

550.4(E) All modular homes entering Calvert County shall have a Maryland State approved electrical certificate and seal.

ARTICLE 555 --- MARINAS AND BOATYARDS

555.1 **Scope** This article covers the installation of wiring and equipment in the areas comprising fixed or floating piers, wharves, docks, and other areas in marinas, boatyards, boat basins, boathouses, yacht clubs, boat condominiums, docking facilities associated with any residential occupancy or structure including one-family dwellings, two-family dwellings, multi-family dwellings and residential condominiums, any multiple docking facility, or similar occupancies, and facilities that are used, or intended for use, for the purpose of repair, berthing, launching, storage, or fueling of small craft and the mooring of floating buildings.

555.17(B) **Location** The disconnecting means shall be readily accessible, located not more than thirty inches (30") from the receptacle it controls, and shall be located in the supply circuit ahead of the receptacle. Circuit breakers or switches located in marine power outlets complying with this section shall be permitted as the disconnecting means. For residential piers only, the location of the disconnecting means shall be within sight of the shore power outlet.

ARTICLE 680 --- SWIMMING POOLS, FOUNTAINS AND SIMILAR INSTALLATIONS

680.26(B)(2)(6) The parts specified in 680.26(B)(1) through (B)(7) shall be bonded together using solid copper conductors, insulated covered, or bare, not smaller than 8 AWG or with rigid metal conduit of brass or other identified corrosion resistant metal. Connection to bonded parts shall be made in accordance with 250.8. An 8 AWG of larger solid copper bonding conductor provided to reduce voltage gradients in the pool area shall not be required to be extended or attached to remote panelboards, service equipment, or electrodes. Bond wires for swimming pools in Calvert County shall be a continuous unbroken line between all metal parts.

680.26(B)(2)(6) Metal wire mesh located within five feet (5') of swimming pools shall be bonded to each other by a split-bolt type connector. The split-bolt type connector shall be listed for use for swimming pools and shall be made of stainless steel, brass or copper.

ARTICLE 708 --- CRITICAL OPERATIONS POWER SYSTEMS (COPS)

708.1 Scope. The provisions of this article apply to the installation, operation, monitoring, control, and maintenance of the portions of the premises wiring system intended to supply, distribute, and control electricity to designated critical operations area (DCOA) in the event of disruption to elements of the normal system.

Critical operations power systems are those systems so classed by municipal, state, federal, or other codes by any governmental agency having jurisdiction or by facility engineering documentation establishing the necessity for such a system. These systems include but are not limited to power systems, HVAC, fire alarm, security, communications, and signaling for designated critical operations areas.

This Article shall only apply to a project or part of a project funded in whole or in part by the County Commissioners where the County Commissioners expressly state that Article 708 shall apply.

BE IT FURTHER ORDAINED by the Board of County Commissioners of Calvert County, Maryland that, where there shall be any conflict between the Calvert County Electrical Code and any other federal, state or county laws, rules, regulations, or ordinances, the more strict law, rule, regulation or ordinance shall be applicable, except as may pertain to the applicability of Article 708 of the National Electrical Code (2017) edition to projects, or parts of projects, funded in whole or part by the County Commissioners.

BE IT FURTHER ORDAINED by the Board of County Commissioners of Calvert County, Maryland that, where there shall be any conflict between the NEC and the locally adopted provisions, the locally adopted provisions shall apply.

BE IT FURTHER ORDAINED by the Board of County Commissioners of Calvert County, In the event any portion of this Ordinance is found to be unconstitutional, illegal, null or void, by a court of competent jurisdiction, it is the intent of the Board of County Commissioners of Calvert County to serve only the invalid portion or provision, and that the remainder of the Ordinance shall be enforceable and valid, unless deletion of the invalid portion would defeat the

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clear purpose of the ordinance, or unless deletion of the invalid portion would produce a result inconsistent with the purpose and intent of the Board of County Commissioners of Calvert County in enacting this Ordinance.

BE IT FURTHER RESOLVED AND ORDAINED, by the Board of County Commissioners of Calvert County, Maryland that the foregoing recitals are adopted as if fully rewritten herein.

BE IT FURTHER RESOLVED AND ORDAINED, by the Board of County Commissioners of Calvert County, Maryland that this Resolution shall be effective upon recordation and publication of a fair summary.

DONE, this 31st day of July, 2018, by the Board of County Commissioners of Calvert County, Maryland, sitting in regular session.

Aye: 5

Nay: 0

Absent/Abstain: 0

ATTEST:

**BOARD OF COUNTY COMMISSIONERS
OF CALVERT COUNTY, MARYLAND**

Maureen Frederick
Maureen Frederick, Clerk

Evan K. Slaughterhaupt Jr.
Evan K. Slaughterhaupt Jr., President

Tom Hejl
Tom Hejl, Vice President

Approved for form and legal sufficiency:

Mike Hart
Mike Hart

Pamela R. Lucas, Associate
John B. Norris III, County Attorney

Pat Nutter
Pat Nutter

Steven R. Weems
Steven R. Weems

Received for Record..... 8-1, 2018
at 9:50 o'clock..... A, M. Same day
recorded in Liber KPS No. 55,
Folio..... 232 COUNTY COMMISSIONERS
ORDINANCES AND RESOLUTION.

Garry P. Smith