



Nassau County Building Department
96161 Nassau Place
Yulee, Florida 32097

Bulletin G-18-04

MEMORANDUM

Date: January 29, 2018

To: All Property Owners and Contractors

From: Terrance Cotter, Deputy Building Official, CBO, CFM,

SUBJECT: Notable Changes to 2014 Edition of the National Electrical Code

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Notable changes to the 2014 Edition of the National Electrical Code which will be in effect on applications received on or after December 31, 2017. For a summary of changes to the NEC please visit:

2014 NEC Summary of Changes – NFPA

- 1) Throughout the 2014 NEC you will find many references where the voltage threshold has been increased from 600-volts to 1000-volts.
- 2) 110.26 (C) (3). Personnel Doors. Entrance/Egress door requirements are now required where equipment rated 800A is installed. (2011 was 1200A)
- 3) 110.26 (E) (2). Dedicated equipment space now required for outdoor electrical equipment.
- 4) 200.4 (B). Where more than one neutral conductor is in an enclosure with different circuit conductors, it shall be identified or grouped with the corresponding ungrounded circuit conductors.
- 5) 210.5 (C) (2). New requirements for identifying branch circuits supplied from DC systems.
- 6) 210.8 (A) (7). GFCI protected receptacles are required within 6ft of all sinks in a dwelling unit.
- 7) 210.8 (A) (9). GFCI protected receptacles are required within 6ft of bathtub and shower stalls.
- 8) 210.8 (A) (10). GFCI protected receptacles are required in all laundry areas.
- 9) 210.8 (D). GFCI protection is required for outlets that supply dishwashers in dwelling units.
- 10) 210.12 (A). Kitchen and laundry areas have been added to the list of rooms requiring AFCI protection.
- 11) 210.12 (B) exception. AFCI protection is not required for an extension of conductors not more than 6ft and does not include any additional outlets or devices. (Extension from a new panel to the old panel, using it as a junction box).
- 12) 210.12 (C). AFCI protection now required for Dormitory Units.
- 13) 210.13. Requirement for Ground Fault Protection of Equipment. Branch circuits 1000A or more and installed on solidly grounded wye systems of more than 210.17. 150 volts to ground and not

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exceeding 600 volts phase-to-phase shall be provided with GFP of equipment in accordance with the provisions of 230.95.

14) 210.17. Outlet(s) installed for the purpose of charging electric vehicles shall be supplied by a separate branch circuit and shall have no other outlets.

15) 210.52 (E) (1) & (2). This is a revised requirement for the outdoor receptacles required at the front and back of 1 & 2 family, and Multifamily dwelling units. The receptacles must be readily accessible from grade and not more than 6-1/2ft above grade level. (Previous language stated they must be accessible while standing at grade level).

16) 210.52 (G) (1). For attached and detached garages with electric power, the branch circuit supplying the garage receptacle(s) will not supply any outlets outside the garage. And at least one receptacle outlet shall be installed for each car space.

17) 210.64. New requirement for the installation of at least one 125-volt 15 or 20A rated receptacle outlet shall be installed within 50ft of the electrical service equipment. (This is for indoor and outdoor equipment, with an exception for 1 & 2 Family dwellings).

18) 215.12 (C) (1) (2). New requirement for the identification of Ungrounded Feeder Conductors. (1) Is for AC feeders supplied from more than one nominal voltage system. (2) Is for DC Feeder Conductors.

19) 230.82 (3). A meter disconnect shall be field marked on its exterior in a manner suitable for the environment as follows: METER DISCONNECT-NOT SERVICE EQUIPMENT. (This would be for a lever bypass inside a self-contained meter socket).

20) 240.87. Arc Energy Reduction. Only applicable to overcurrent devices rated 1200A or higher. (If you are dealing with an installation meeting this criteria, please familiarize yourself with the requirements of this section).

21) 334.40 (B). Non-metallic sheathed cable interconnector devices that are listed shall be permitted to be used without boxes for exposed cable wiring and for repair wiring in existing buildings where the cable is concealed. (An example is the TYCO tap/splice device for NM cable. It can now be used for the repair of existing cable and concealed.)

22) 406.3 (E). Controlled Receptacle Marking. Where non-interlocking 15 and 20A 125-volt receptacles are controlled by an automatic control device as part of an energy management or building automation system, these devices shall be marked with the symbol shown in figure 406.3 (E).

23) 406.9 (B) (1). All 15 and 20A receptacles installed in wet locations shall have an in-use cover installed that is listed and identified as "Extra Duty".

24) 408.55 (C). New requirement for Back Wire Bending Space. This is for conductors entering the back of an enclosure opposite of a removable cover. The bending space must comply with tables 312.6 (A) & (B).

25) 422.51. GFCI protection is required for vending machines not utilizing a cord and plug connection. (Hardwired).

26) 424.66 (A) & (B). Working clearances are clearly defined here for duct heaters both below and in a space above the ceiling.

27) 450.10 (A). A terminal bar for all grounding and bonding conductors shall be installed inside the transformer enclosure, and shall not be mounted on or over any vented portion of the enclosure.

28) 450.11 (B). A transformer shall be permitted to be supplied at the marked secondary voltage, provided the installation is in accordance with the manufactures instructions. (Using a step down transformer as a step up transformer, it must be identified for "reverse wiring" by the manufacture).

29) 517.18 (B), 517.19(B), and 517.19 (C), Changes to these sections of code now require many more receptacles be installed at General Patient Bed locations, Critical Care Areas, and Operating rooms. (If performing this type of work, familiarize yourself with these new requirements).

30) 517.30 (B). The use of the term Emergency System has been removed, leaving simply the Essential Electrical System. This is comprised of 3 branches, life safety, critical, and equipment.

31) 517.30 (G). Overcurrent protective devices service the essential electrical system shall be coordinated for the period of time a faults duration extends beyond 0.1 sec. (with exceptions). This is to allow the downstream device closest to the overcurrent event to open before any upstream device can.

32) 600.6 (A) (1). The disconnect for a sign or outline lighting system shall be located where the feeder of branch circuit enters the sign enclosure or pole and shall disconnect all wiring where it enters the enclosure.

33) 680.21 (C). Outlets supplying pool pump motors connected to single-phase, 120 thru 240-volt branch circuits whether by receptacle or direct connection shall be provided with GFCI protection. (The limitation of 15 & 20A rated circuits has been removed).

34) 680.25 (A) (1) exception. A feeder between a remote panelboard and the service equipment shall be permitted to run in flexible metal conduit or an approved cable assembly provided it includes an "insulated" equipment grounding conductor. (The term existing feeder has been removed. So a pool or hot tub being installed and fed from an existing sub panel will have to comply with the "insulated" equipment grounding conductor requirement).

35) 690.7 (F). New requirement for disconnecting means and overcurrent protection of energy storage device output conductors. (If performing this type of work, familiarize yourself with these new requirements).

36) 690.12. Rapid Shutdown of PV Systems on Buildings. This is a new requirement for the shutdown of the PV Source Circuits for a system mounted on a building. (If performing this type of work, familiarize yourself with these new requirements).

37) 690.47 (D). Additional Auxiliary Electrode for ground and pole mount arrays, as well as those on the building. (If performing this type of work, familiarize yourself with these new requirements).

38) 700.8. Surge Protective Devices are now required on all Switchboards and Panelboards that are part of an emergency system.

39) 700.19. Branch circuits service emergency lighting and power shall not be part of a multiwire branch circuit.

40) 700.28. Selective Coordination for overcurrent devices of Emergency Systems shall be selected by a professional engineer or other qualified person engaged primarily in the design, installation, or maintenance of electrical systems.

41) 702.7 (C). Power Inlet identification. Where a power inlet is used for the temporary connection to a portable generator, a warning sign shall be posted near the inlet to indicate the type of derived system that the system is capable of based on the wiring of the transfer equipment. (If performing this type of work, familiarize yourself with this new requirement and the language that needs to be used).

42) 728. NEW ARTICLE. Fire Resistive Cable Systems.

43) 750. NEW ARTICLE. Energy Management Systems.