

## **CITY OF SAINT PAUL**

DEPARTMENT OF SAFETY AND INSPECTIONS 375 JACKSON STREET, SUITE 220 ST. PAUL, MINNESOTA 55101-1806 Phone: 651-266-8989 Fax: 651-266-9124 Visit our Web Site at www.stpaul.gov/dsi

- 1. The 2017 National Electrical Code (NEC) will go into effect in the State of Minnesota on July 1, 2017. The 2017 NEC will be enforced in the City of St. Paul on all electrical permits obtained on or after that date. The following NEC code references are a synopsis of the significant changes found in the 2017 NEC. The exact text and other code changes can be found in the 2017 NEC code book.
  - a. NEC 110.14(D) A torqueing tool is required for equipment terminations that specify torque values on the equipment, or in the installation instructions.
  - b. NEC 210.8(B) GFCI protection in "other than dwellings" is now required on newly installed single-phase receptacles rated 150V to ground or less and rated 50 amps or less; and on three-phase receptacles 150V to ground or less and 100 amps or less, in the areas listed in this section. This includes unfinished portions of basements and crawl spaces.
  - c. NEC 210.8(E) GFCI protection is required for 120V lighting outlets in crawl spaces for all occupancies.
  - d. NEC 210.11(C)(4) At least (1) 120V, 20 amp branch circuit shall supply the receptacle outlet(s) in a garage, this circuit shall have no other outlets. This change will require a multi-wire branch circuit to a new detached garage with electric power.
  - e. NEC 210.12(C) AFCI protection is required for the branch circuits supplying all newly installed 120V, single-phase, 15 and 20 amp outlets and devices in guest rooms/guest suites (in hotels and motels).
  - f. NEC 210.71 New requirements were added for the minimum number of nonlocking-type, 125V, 15 or 20 amp receptacles in a meeting room 1000 sq. ft. or less. One requirement states the minimum number of receptacles in fixed walls shall be installed in accordance with 210.52(A)(1) through (A)(4). The other requirement is for additional floor receptacles based on the square footage of the room. Please refer to the code text to determine how many floor receptacles may be required and there location(s).
  - g. NEC 336.10(9) Type TC-ER Cable with power and control wiring can be used in the interior of 1 & 2 family dwellings when installed to Article 334.
  - h. NEC 406.12 Tamper-Resistant receptacle requirements were expanded, they includes 15 & 20 amp 125V/250V non-locking type receptacles in all the areas listed in this article. New areas added to this article include, but are not limited to, preschools, elementary schools, medical and dental offices, outpatient facilities, assembly occupancies, and dormitories.
- 2.All electrical work, other than minor repair as defined by State Law, requires an electrical permit **<u>before the job is started</u>** [SPLC 33.03(d)]. There are no exceptions for any City projects. Electrical Permits can be obtained online, for most properties, by electrical contractors. Homesteaded homeowners of single-family homes will need to come to our office to purchase an electrical permit because a signed affidavit is required to obtain this type of permit.

- 3.**Call for trench inspections!** Note Section 3801.3770 of the Minnesota Regulations which states that if work is covered without an inspection the person responsible for covering/enclosing the wiring is responsible for all costs incurred with removing the cover for inspection. This section also covers wallcovering installed without a rough-in inspection.
- 4.**Call for final inspections!** Note that under Section 3801.3780 subpart 2 of the Minnesota Regulation, all electrical permits with a fee of \$250 or less are void after 1 year and a new permit must be obtained to complete the work. Subpart 1 also requires a request, from the permit holder, for final inspection when the work is completed, and prior to the wiring being utilized by the intended user.
- 5.If you want to know the status of an electrical permit obtained in the City of St. Paul visit our website at <u>www.stpaul.gov/dsi</u>. On the front page click the box marked Look Up Property/ Permit Information, then enter the appropriate information when prompted. Also the Electrical page on the above website has helpful residential checklists, and informational documents on garage wiring and smoke detector installations to name a few.
- 6.When the finish is removed from walls and/or ceilings as part of a project, the open areas need to be wired to the current NEC in force at the time the electrical permit is obtained.
- 7.On final inspections, we are finding clothes washers, dryers, and other appliances encroaching on the required working clearances of NEC 110.26 for service panelboards. It is the contractor's responsibility to ensure that the planned location of such appliances will not violate these clearances. Also when replacing service panelboards the current NEC requirements for clearances are required, even if the existing panelboard being replaced did not have the proper clearances. New or replacement service/sub-panel installations must meet current NEC, and cannot be located in bathrooms or closets.
- 8.When making modifications or additions to circuits, the corresponding changes need to be noted on the circuit directory (NEC 408.4). The branch circuits feeding unit equipment emergency lights is required to be clearly identified at the circuit directory, and shall be on the same circuit that is serving the normal lighting in the area [NEC 700.12(F)].
- 9.NEC 250(A)(3) is the section that requires a concrete-encased electrode as part of the grounding electrode system when present. If new footings are constructed with reinforced steel rebar (uncoated), installed in continuous lengths 20 ft. or more in length as part of the project, this electrode must be properly connected to the grounding electrode system. This requirement originated in the 2005 NEC so there are no exceptions. If the footings (with rebar) are poured without this connection, the footing will be required to be opened up to make the connection.
- 10. NEC 406.4(D) is the code section that applies to receptacle outlet replacement. A receptacle replaced for whatever reason must be replaced to this code reference. Replaced receptacle outlets may require GFCI, AFCI, tamper-resistant, and/or weather-resistant protection if this protection is required in the current NEC elsewhere in the code.
- 11. The Electrical Page on the Department of Labor and Industry's website is another excellent resource for electrical licensing information and educational documents. The link to that webpage is <a href="https://www.dli.mn.gov/CCLD/Electrical.asp">https://www.dli.mn.gov/CCLD/Electrical.asp</a>.

The above information is for guidance only and should not be construed as formal interpretations of the National Electrical Code, nor is the information contained in this Bulletin necessarily applicable in any jurisdiction other than St. Paul. These general guidelines are not a complete list, but are indicative of some of the more common violations found by inspectors. Other requirements pertinent to any electrical installation are contained in the 2017 National Electrical Code as adopted by the State of Minnesota as part of the State Building Code.