

## **2014 National Electrical Code Overview of Changes**

The National Electrical Code (NEC) is published by the National Fire Protection Association and updated every three years by issuing a new edition. The City of College Station is currently operating under the 2011 Edition of the NEC.

The 2014 NEC contains several changes when compared to the 2011 NEC, most of which are designed to provide clarity for existing code provisions. However, there are some new provisions and changes included in the 2014 NEC. The following highlights some of the new additions and significant changes included in the 2014 Edition NEC.

### **New in the 2014 Edition**

210.8 (A) (9) & (10) Ground-Fault Circuit-Interrupter Protection for Personnel. Two areas have been added. (Where receptacles are installed within 6ft of the outside edge of the bathtub or shower stall. All receptacles in laundry areas.)

210.8 (D) Kitchen Dishwasher Branch Circuit. (GFCI protection shall be provided for outlets that supply dishwashers installed in dwelling unit locations.)

210.12 (A) Dwelling Units. (This section requires all 125 volt, 15 and 20 ampere branch circuits supplying outlets or devices installed in dwelling unit to AFCI protected: kitchens and laundry areas have been added)

210.52 (G) (1) Garages. The branch circuit supplying garage receptacles shall not supply outlets outside of the garage and at least one receptacle outlet shall be installed for each car space.

210.64 Electrical Service Areas. (At least one 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed within 50ft of the electrical service equipment.) This excludes one- and two-family dwellings.

517.19 (C) Operating Room Receptacles. (1) Minimum Number and Supply. (Each operating room shall be provided with a minimum of 36 receptacles.

**2014 National Electrical Code  
Proposed Amendments**

**Note:** An asterisk at the beginning of a section identifies a new amendment with the 2014 code edition.

1. Section 210.23 (A) **15- and 20- Ampere Branch Circuits**. Shall be amended to delete the reference to 15 ampere branch circuits. It shall also be amended to include the following sentence after said section:  
  
“However, a circuit of twenty (20) amperes shall not serve more than ten openings.”
2. Table 210.24 **Summary of Branch-Circuit Requirements** shall be amended by placing an asterisk next to all 14 AWG conductors indicated in the table and by adding this footnote at the bottom of the table:  
  
“ special note: Except for fixture wires in UL or other listed fixtures, no conductor of a size smaller than 12 AWG copper is allowed in branch circuit wiring.”
3. Section 210.52 (B) **Small Appliances** shall be amended by adding the following subsection:  
  
“(4) **Separate Circuit Required**. A separate circuit is required for each refrigerator, deep freeze, dishwasher, disposal, trash compactor or any other load exceeding six (6) amperes.”
4. Section 210.52 (C) **Countertops** shall be amended to include after the words ‘...with 210.52 (C) (1) through (C) (5). the following sentence:  
  
“However, a separate circuit is required for microwave ovens or any other counter top appliance with a load exceeding six (6) amperes.”
5. Section 210.52 (F) **Laundry Areas**. Shall be amended to include after the words ‘. . . for the installation of laundry equipment.’ the following sentence:  
  
“However, a separate circuit is required for a washing machine or any other laundry appliance with a load exceeding six (6) amperes.”
6. Section 210.52 **Dwelling Unit Receptacle Outlets**. Shall be amended by adding the following subsection:  
  
“(J) **Other Locations**. A separate circuit is required for each well pump or other outdoor loads exceeding six (6) amperes.”
7. Article 230 **Services**. Shall be amended by adding the following section:  
  
“230.11 **Meter Mounting Heights**. Individual meters shall be mounted at a height not greater than 5'-6” or less than 4'-6" above finished grade, measured to the center line of the meter base. Meter packs shall be mounted with its horizontal centerline not greater than 4'-6” or less than 4'-0" above finished grade.”  
  
“Exception: Meters and meter packs may be mounted at a different height by special permission of the Building Official or his designee when special conditions make the installation at the above heights impractical. “
8. Section 230.70 **General** shall be amended by adding the following subsection:  
  
“(D) **Service Disconnecting Means for Commercial Buildings and Structures**. For commercial buildings and structures, the service disconnecting means shall be installed on the outside of the building or structure. A power operated disconnect switch (shunt trip) shall be permitted for service disconnects rated 1000 amps or more. All shunt trip

disconnecting means shall be of the maintained contact type in an approved, lockable enclosure. All service disconnects shall be clearly marked in a permanent manner.

**Exception:** A power operated disconnect switch (shunt trip) may be allowed on service disconnects rated less than 1000 amps, if the applicant requests an exception from the Electrical Division and Building Official and satisfies the official that one of the following criteria has been met.

- (a) A power operated disconnect switch (shunt trip) may be used for a service disconnect rated less than 1000 amps when the building or structure is served by a single transformer and the transformer is not anticipated to be used for multiple services; or
- (b) A power operated disconnect switch (shunt trip) may be used for a service disconnect rated less than 1000 amps on an existing building or structure when space is not available to mount an external disconnect.

(Reason: This was an existing amendment that was changed to require a maintained contact type, shunt trip.)

9. Article 230 **Services**. Shall be amended by adding the following section:

“230.70 (E) **Outside Disconnect Locking Device**. Factory installed key operated lock shall have an alternate locking mechanism approved by the local jurisdiction.”

(Reason: This amendment gives the City of College Station Electrical Department the ability to lock the electrical service panel in the case of an emergency or delinquent bill.)

10. Section 230.71 (A) **General** shall be amended to include the following sentence after said section:

“Any multi-tenant building larger than 5,000 square feet shall have a service disconnect.”

(Reason: This amendment was added to help correct the problem with multi-tenant lease centers having too many means of disconnect.)

11. Section 250.52 (A) (5) **Rod and Pipe Electrodes** shall be amended by deleting the section in its entirety and replacing with the following:

“**Rod and Pipe Electrodes**. Rod and pipe electrodes shall not be less than eight (8) feet in length, not less than 5/8” in diameter and shall be copper coated.”

12. Section 310.106 (B) **Conductor Material** shall be amended by adding the following Exception:

“**Exception:** Aluminum and copper-clad aluminum is not allowed in branch circuits.”

(Reason: This amendment will allow the use of aluminum wiring for service conductors and feeders.)

13. Section 320.12 **Uses Not Permitted** shall be amended by deleting the section in its entirety and replacing with the following:

“**Uses Not Permitted**. Type AC cable shall not be permitted in commercial buildings as a wiring method.”

14. Section 334.12 (A) **Types NM, NMC, and NMS**. Shall be amended to include the following subsection:

“(11) In educational occupancies as defined by the City’s “adopted building code.”