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Construction Industry News from City Hall

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DRAIN LAYERS AND PLUMBERS

WRAP AROUND SEWERS: CINCH 2007 Issue 2, advised plumbers and drain layers that we would not allow sewers to be wrapped around the structure. This is in accordance with Title 16.04.080. **We continue to have problems in this area.**

Please note the City sewer inspector will turn down any sewer inspection involving a building service line wrapped around a structure. The drain layer, plumber of record or builder has the right to appeal this action by submitting a "Request for Variance" to the City of Wichita Board of Appeals of Plumber's and Gas Fitters. This form may be obtained from the Office of Central Inspection. This variance must be completed and returned to Central Inspection 7 working days prior to the Board meeting. If the Board does not grant a variance, the plumber will be required to make the necessary changes in the plumbing and the drain layer will have to relay the building service line.

NOTE: Information on the location of the City sewer may be obtained by calling the Office of Central Inspection (OCI) at (316) 268-4341. *(It would be wise to check location of the sewer main prior to installing the underground plumbing).*

Combination Inspections

I would like to review how the combination inspection system works. If you are doing a basement finish, room addition or remodel on a one- or two-family dwelling that includes trades, the **trade contractor(s) must request the rough inspections.**

When the job is ready for the rough and framing inspections the general contractor has all trade contractors request their inspections for same day and same A.M. or P.M. preference **and** the general contractor also requests their framing inspection for that same day and time. This allows the inspector to make only one trip for all inspections. When you are ready for the final inspection, only the general contractor requests the final inspection, no trades are required to request final inspections. The purpose of the combination inspection program is to have one inspector make one trip and perform all the required inspections at that trip.

If you are building a new one- or two-family dwelling, each trade contractor must request and have their rough inspections approved prior to the time the general contractor has requested for the framing inspection. The electrical contractor must request their electrical final and have it approved prior to the time the general contractor has requested for their final inspection. However, the plumbing and mechanical do not need to request a final inspection.

Darlene Hultman, Inspection Administrator, Building



Continuing Education Hours Required to Renew Certificate for 2010/2011

You must present proof of completing at least 12 classroom hours of continuing education in order to renew your **Electrical, HVAC, or Plumbing** certificate for 2010/2011.

If you have taken and passed the examination in **2008 or before**, you will need to present documentation that you have completed **12 hours** of continuing education in 2008 and/or 2009 when renewing your certificate for the 2010/2011 cycle. The class hours may have been obtained prior to taking the test, as long as the classes are approved and were attended in 2008.

If you have taken and passed the examination in **2009**, you will need to present documentation that you have completed **6 hours** of continuing education in 2009 when renewing your certificate for the 2010/2011 cycle. The class hours may have been obtained prior to taking the test as long as the classes are approved and were attended in 2009.

If you take and pass the examination in September, October, November or December of 2009, when you come to City Hall to get your City of Wichita journeyman or master certificate, it will be **valid until December 31, 2011.**

The City of Wichita, Office of Central Inspection will start renewing certificates on **September 1, 2009.** For a list of approved classes, check OCI's website at <http://wichita.gov/CityOffices/OCI/>

Administrative Services Division

2008 National Electrical Code Adopted

The City of Wichita has adopted the 2008 National Electrical Code (NEC) with an enforcement date of **January 1, 2009**. Any permit issued starting January 1, 2009 will have to comply with the 2008 NEC and any permit issued prior to January 1, 2009 can be completed per the requirements of the 2005 NEC.

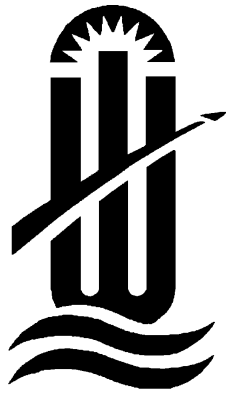
There are several significant changes in the 2008 NEC that you need to be aware of.

- The City will NOT require the expanded use of arc-fault circuit interrupters (AFCI). We made an amendment to leave the requirement as it is in the 2005 NEC. They will continue to be required in bedrooms only, and that is on anything that is 120 volt. The breaker will need to be the combination type AFCI as required in the 2005 NEC. The combination type is a breaker that will sense and react to series as well as parallel faults.
- The exceptions to using single receptacles in unfinished basements and garages instead of protecting the outlets with ground-fault circuit interrupters (GFCI) have been removed. The NEC allows a fire/burglar alarm panel in an unfinished area of the basement to not require GFCI protection and the City created an amendment that GFCI protection shall not be required on a sewage ejector pump or sump pump that is cord and plug connected to a **single receptacle installed on a dedicated circuit**. All other receptacles in unfinished basements and garages are required to be GFCI protected, even those behind appliances or in the ceiling.
- The City created an amendment to not require derating NM cable when two or more conductors are ran through a single hole in a framing member. Remember to derate if you bundle two or more NM cables for twenty-four inches or more.
- Tamper-resistant receptacles are required on all new 120-volt 15- and 20-ampere receptacles used in or on a dwelling or residential accessory structure. This includes the outside receptacles.
- Balconies, decks and porches that are 20 sq. ft. or larger and are accessible from the inside of the dwelling unit shall have at least one receptacle outlet installed within its perimeter and located not more than 6 ½ feet above the balcony, deck or porch surface.
- All 15- and 20-ampere, 120- and 240-volt nonlocking receptacles installed in damp or wet locations shall be listed weather-resistant type. This is for both residential and commercial locations and also for use on construction services. The use of weatherproof covers will remain as currently enforced.
- PVC installed outside and unprotected where it is subject to physical damage will be required to be schedule 80. This is from grade level to a height of 5 feet and includes both vertical and horizontal runs of PVC.

- The ungrounded and grounded conductors of each multiwire branch circuit shall be grouped by wire ties or similar means in at least one location within the panelboard.
- An intersystem bonding bar shall be mounted outside by the electric meter/service equipment or by the ground rod and shall have provisions for connecting at least three intersystem bonding/grounding conductors. This bonding bar shall be connected to the grounding electrode system with a minimum 6 AWG copper conductor. This is required on ALL new buildings and will also be required when the electric service is changed or upgraded.
- The conductor to the concrete-encased electrode (Ufer ground) will need to be sized from Table 250-66. The City has created an amendment to require that conductor to be larger than 4 AWG if the service size is greater than 200 amperes.
- A cable- or raceway-type wiring method installed under metal-corrugated sheet roof decking, shall be installed and supported so the nearest outside surface of the raceway is not less than 1 ½ inch from the nearest surface of the roof decking.
- Conductors installed in conduit or tubing exposed to direct sunlight on rooftops now requires additional temperature adjustment factors in accordance with the values in Table 310.15(B)(2)(c).
- A separate electrical permit shall be required for each building or tenant space with an electric meter, and anytime a separate electric meter is installed.
 - Exception: One- and two-family dwellings or multi-family dwellings when such dwelling units are not individually owned.
- Wire insulation color shall match the proper voltage color on all wire up to and including 6 AWG. Taping is only allowed on conductors 4 AWG and larger.
- You do not have to drill the floor joist in a crawl space, as required in the 2008 NEC; we will allow you to secure the wiring to the bottom of the joist.
- Art. 200.2(B). The continuity of a grounded conductor shall not depend on a connection to a metallic enclosure, raceway or cable armor.
- Switched receptacles no longer count toward the required receptacle outlets in a dwelling unless they are half switched.
- Show windows must have a receptacle within 18 inches above the window for every 12 linear feet or major fraction thereof.
- A grounding conductor shall be installed with ALL feeders, even to detach structures. This is required in addition to the concrete encased electrode, ground rod and water pipe ground.

- Multi-family dwellings, hotels/motels and dormitories shall have the electric panel in each room if there are provisions for permanent cooking equipment. A built-in microwave is considered permanent, but a counter-top microwave is not.
- Everything installed underground is considered a wet location, even the interior of raceways.
- All ceiling boxes that support luminaires must be rated for 50 pounds.
- There is a new article for box fill depending on the type of device you are installing. Be sure to look at article 314.24 of the 2008 NEC.
- Anytime wiring is installed by notching, the entire notched area must be protected by metal.
- Breaker locks are NOT permitted on hot tubs, swimming pool equipment, A/C units, motors (including well or irrigation motors) or anytime the panel is inside a locked structure and the equipment is outside.
- Any wiring ran exposed on the surface of a wall in a basement will need to be in a raceway.
- All breakers in a panel must be labeled, including spare breakers. The identification shall include sufficient detail to allow each circuit to be distinguished from all others. No circuit shall be described in a manner that depends on transient conditions of occupancy.
- All light fixtures must be listed by a testing agency. (No homemade fixtures allowed.)
- The 42 breaker maximum has been removed for panels. 60 and 80 circuit panels are allowed.
- If you are installing swimming pools, hot tubs or fountains, please be sure to read article 680 of the 2008 NEC. There are numerous changes including changes on the bonding. Refer to CINCH 2009 Issue 1 for a drawing on the bonding of vinyl liner pools.

We also made some changes to clarify some of the sections of Title 19, the electrical/elevator ordinance of the City of Wichita. We have copies for sale at OCI or you can download a copy at: <http://wichita.gov/CityOffices/OCI/OCIDocs.htm>



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