

Question of the Month – If an electrical certification examination candidate fails the open-book examination, what is the maximum number of times the candidate may retake the exam or portion of the exam within their one-year examination period? – *See correct answer on page 2.*

Receptacles in Cabinets Under Sinks

Questions have arisen regarding receptacles installed in cabinets under sinks, specifically in the kitchen, in accordance with revised requirements in NEC® 210.8. Ground-Fault Circuit-Interrupters (GFCIs) must be installed in a readily accessible location. 210.8(A)(7) requires GFCI protection for all 125-volt, single-phase, 15- and 20- ampere receptacles installed within six feet of the outside edge of a sink. 210.8(D) requires GFCI protection for outlets that supply dishwashers installed in dwelling units.

Question 1: Is a GFCI installed in a cabinet under a sink considered to be in a readily accessible location? Answer: Probably. As long as the receptacle is visible and can be accessed without using tools to remove an obstruction, it will be considered in a readily accessible location. Care must be taken during rough-in installation to prevent the GFCI from being located behind plumbing or equipment such as a waste disposal. The presence of easily removable items such as cleaning supplies to access the GFCI for testing will not rule out the location as not being readily accessible.

Question 2: Is a 125-volt, 15- or 20-ampere receptacle installed in a cabinet under a sink required to be GFCI protected. Answer: Yes, if it is within six feet of the outside edge of the sink. There was much discussion by Code Making Panel 2 in the Report on Proposals and the Report on Comments for the 2014 NEC® regarding how the six foot measurement should be taken. The panel rejected proposals to exempt receptacles installed in cabinets under sinks, and in the end, the requirement was published to require GFCI protection where receptacles are installed within 6 feet of the outside edge of the sink. This means that receptacles installed in a cabinet under the sink, for equipment such as a dishwasher, waste disposal, or hot water tap must be GFCI protected as well as being Arc-Fault Circuit-Interrupter (AFCI) protected in accordance with 210.12. This may be a great use for a dual-function GFCI/AFCI circuit breaker.

New Identity Verification of Permit Purchasers Provides Protection for Electrical Contractors

Beginning July 1, 2015, to prevent issuing fraudulent electrical work permits, Electrical Contractors purchasing L&I electrical permits using the paper application form must print their name and mark their affiliation with the company on the permit application. The customer service representative will check the electrical contractor's license information to verify the person purchasing the permit is authorized under [WAC 296-46B-901\(3\)](#) to do so.

If a permit purchaser is someone other than the assigned administrator, master electrician, owner, principal of the corporation, or a documented authorized signer, the customer service representative will not sell the permit.

WAC 296-46B-901(3) states:

"...Each electrical work permit application must be signed by the electrical contractor's administrator (or designee) or the person, or authorized representative of the firm, partnership, corporation, or other entity that is performing the electrical installation or alteration. Permits purchased electronically do not require a handwritten signature. An entity designated to sign electrical permits must provide written authorization of the purchaser's designation when requested by the department or city that is authorized to do electrical inspections."

Do you need to update principals or authorized signers? If the members of the firm shown on your electrical contractor license are not current, you can update this information using the Electrical – Telecommunication Principal/Member/Owner Update Request form [F500-124-000](#).

Safety Tip of the Month

Proper fall protection can save your life. In the first three months of 2015, three construction workers in Washington died from falls. Read a story at this [link](#) about a worker whose fall protection system saved him from a potential 30-foot fall.

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<http://www.ElectricalCurrents.lni.wa.gov>

Electrical Section Internet Address: <http://www.ElectricalProgram.Lni.wa.gov>

Note: Before updating your license, we will verify that the members of the firm match what is on file with the Master Business License service and/or Secretary of State.

To add someone as an authorized signer for your company, the owner or principal must submit a signed request in writing to us on company letterhead.

In addition, changes have been made to the permit fee worksheets to make them more user-friendly. These changes are the result of suggestions for improvement by a group of customer service representatives from across the state. The fee prices will not change.

Notice of Proposed Changes to the Factory Assembled Structures (FAS) Rules:

The Factory Assembled Structures (FAS) program is planning amendments to sections of Chapter [296-150M](#) WAC for manufactured homes. For more information, visit the [2015 FAS rule development](#) page on the L&I website.

If you have any preliminary input on the proposed rules, please send to Alicia Curry at Alicia.Curry@lni.wa.gov. We would appreciate your comments by Monday, August 3, 2015. You will have the opportunity to provide your comments during the public comment period.

The FAS Advisory committee members will meet to review the proposed rule changes and provide advice to the department on August 20, 2015 at 1 p.m., [L&I Tumwater](#), Room S129.

Insulating Over Concealed Knob-and-Tube Wiring

NEC® 394.12(5) prohibits concealed knob-and-tube wiring in hollow spaces of walls, ceiling, and attics where such spaces are insulated by loose, rolled, or foamed-in-place insulating material that envelops the conductors. Washington has a rule in place to allow insulation to be installed in contact with concealed knob-and-tube wiring under very limited circumstances. [WAC 296-46B-394](#) allows the installation of **loose or rolled** thermal insulating material in spaces containing existing knob-and-tube wiring, under specified conditions. It is important to note that the WAC rule does not allow dense-pack insulation. This is a method of insulating within existing walls using a pressurized application method that would create displacement of the concealed knob-and-tube wiring and could cause overheating and damage to the wiring in those spaces. **Dense-pack insulation is not permitted in spaces containing existing concealed knob-and-tube wiring.**

The conditions whereby insulation may be installed in spaces containing existing knob-and-tube wiring are:

- (1) The wiring must be surveyed by an appropriately licensed electrical contractor who must certify in writing to the department that the wiring is in good condition with no evidence of improper overcurrent protection, conductor insulation failure or deterioration, and with no improper connections or splices. The electrical inspector must inspect all repairs, alterations, or extensions to the electrical system.
- (2) The insulation must meet Class I specifications as identified in the Uniform Building Code, with a flame spread factor of twenty-five or less as tested using ASTM E84-81a. Foam insulation may not be used with knob-and tube wiring.
- (3) All knob-and-tube circuits must have overcurrent protection in compliance with NEC® Table 310.15(B)(16), 60 degree centigrade column. Overcurrent protection must be either circuit breakers or Type S fuses.

Ugly Picture: This is an online ad placed by an aspiring entrepreneur looking to drum up some business. Unfortunately for him, he did not possess an electrical contracting license. [RCW 19.28.041](#) requires those who advertise to perform electrical work to be licensed electrical contractors, and when the [E-CORE](#) inspector finished with him, placing the ad cost him \$500.00.

Need Electric work done?! Look no further!

I am an apprentice electrician (about to get my residential card) offering up my skills for hire. I can do most things needed but if I cannot do it myself, I have multiple journeyman electricians who would help. Send me an email (or call [REDACTED]) with a detailed description of the work you need done, as well as any pictures you can provide and I will get back to you as swiftly as possible.

- do NOT contact me with unsolicited services or offers

Answer to Question of the Month – [WAC 296-46B-960 \(9\)-\(10\)](#) Five – If the individual makes a failing score, the individual must wait two weeks before being eligible to retest. If the individual fails an exam three times within a one-year period, the individual must wait three months to retake the failed portion of the examination. For more information, see the exam article in the [April 2015](#) newsletter.

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