

Question of the Month

What is the minimum size of ungrounded copper feeder conductors allowed to supply a 200 amp, 120/240 Volt, 3-wire, 1Ø manufactured home from a mobile home pedestal that also supplies a well and a septic system?

Note from the Chief

It is important to make certain your work is inspected. To fulfill our mandate of Keeping Washington Safe, we ensure that all appropriate inspections are made. An inspection request must be made within three business days of fully completing the job or within one business day after energizing any work - see [WAC 296-46B-901\(9\)\(a\)](#). Progress inspections must also be made prior to covering any portion of the installation.

We have been finding many expired permits where an inspection request has never been made. The permit purchaser has the responsibility of ensuring the work is properly completed and that an inspection request is made. Failing to request the inspection puts the permit purchaser and consumers at risk. We have been working to ensure that all inspections are requested and made.

If the permit purchaser has let the permit expire without the appropriate inspection, a new permit must be purchased and an inspection requested. In addition, the permit purchaser is likely to receive an electrical citation(s) for failing to request the inspection. Be proactive and avoid these problems by verifying the inspection status of your permits before compliance action is necessary. Most permits need at least a progress inspection shortly after the permit is purchased. It is the permit purchaser's obligation to ensure inspections are requested.

Inspection history and information is available for every permit by visiting the [Permits, Fees & Inspections](#) page of our website.

Rulemaking Update – Expansion of Maintenance Specialty to Include Load Bank Connection

Last month's newsletter addressed a possible rule change proposal and as anticipated, a group of external stakeholders has submitted a proposal to amend [WAC 296-46B-920](#) to allow the 07 nonresidential maintenance specialty the ability to connect temporary load banks and their associated cables to existing premises wiring. Currently, WAC 296-46B-920 requires that a 01 general electrical contractor employing 01 general journey level electricians perform new electrical work of this nature. The Electrical Board will review and make recommendations on the proposal at their next regular meeting before filing the CR-102 which will establish a public comment period and public hearing date.

Visit the electrical program [Rule Development](#) page on a regular basis to stay apprised of new developments in this process.

Safety Tip of the Month!

If enjoying the outdoors this summer involves the use of a portable generator, take special care, misuse can lead to injury or worse. Tips include:

Keep the generator dry.

Assure extension cords are rated for the load, free of damaged insulation, and have the third grounding prong.

Plug larger loads directly into the generator.

Do not overload the generator.

Assure the area is not enclosed and well ventilated, internal combustion engines produce deadly carbon monoxide.

Use a ground fault circuit interrupter (GFCI). Portable GFCIs are inexpensive and require no tools to install.

Assure the generator is properly grounded and bonded. (Use only cord and plug connected equipment through the receptacles mounted on the generator. Verify all the noncurrent-carrying metal parts of the generator and the generators receptacle's equipment grounding terminals are bonded to the generator's frame).

In-Class Education Required Before Approval for Electrician Examination

Applicants for journey level, or specialty electrician examination whose applications are received on or after July 1, 2013, or that have been previously denied must demonstrate they have completed approved in-class training required in [RCW 19.28.205](#) and [WAC 296-46B-945\(1\)](#) as follows:

Applicants for 2000 hour specialty certificates: 24 hours of in-class education

Applicants for 4000 hour specialty certificates: 48 hours of in-class education

Applicants for general journey-level certificates: 96 hours of in-class education

Why? – Stakeholders worked with the legislature resulting in the passage of [Senate Bill 6133](#).

What qualifies? – Any of or a combination of the following:

Washington in-class hours: (e.g. someone who has the prescribed number of hours of [Washington approved in-class training](#) in RCW/WAC, NEC, or electrical theory)

Washington electrical construction trade apprenticeship graduate: (e.g. someone who has the prescribed number of hours of [Washington approved in-class training](#) in RCW/WAC, NEC, or electrical theory reported by their training director)

Other electrical construction trade apprenticeship: an apprenticeship completion certificate or letter from the registered training director of the apprenticeship outlining the curriculum in NEC or electrical theory and number of in-class hours.

Nationally recognized contractor/labor organization in the electrical construction trade: a course completion certificate or letter from the registered training director of the program outlining the curriculum in NEC or electrical theory and number of in-class hours.

Public community or technical colleges or not-for-profit nationally accredited trade or technical school: a notarized transcript from the office of the registrar listing the course names, hours, and credits of in-class NEC or electrical theory training completed by the applicant.

WAC 296-46B-406 Exceptions to NEC 406.11 for Tamper Resistant Receptacles

Effective on March 31, 2013, [WAC 296-46B-406](#) was amended to allow five exceptions to the NEC 406.11 requirements for tamper resistant receptacles in dwelling units.

Receptacles in the following locations will not be required to be tamper-resistant: receptacles located more than 5 ½ feet above the finished floor; receptacles that are part of a luminaire or appliance; a single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and is cord and plug connected in accordance with NEC 400.7(A)(6), (A)(7), or (A)(8); non-grounding receptacles used for replacements as permitted in NEC 406.4(D)(2)(a); or receptacles located above a countertop where required by NEC 210.52(C).

Ugly Installations: Online readers - click on the picture to open larger images.

Violation: [RCW 19.28.101](#) Electrical work completed and energized without obtaining a permit or an inspection. This service was approved by L&I with one light and one receptacle connected. When it caught fire, it had several additional circuits and feeders that had been installed. This fire may have been prevented if the additional work had been properly permitted and inspected.

Answer to Question of the Month: NEC Table 310.15(B)(6) - 2/0. 310.15(B)(6) states the conductors are to supply *“all loads that are part or associated with the dwelling unit”*, it would seem the well and septic would be associated loads and Table 310.15(B)(6) would not apply. However, the manufactured home itself is a dwelling unit with all the typical dwelling unit diversities; therefore, it is acceptable to use Table 310.15(B)(6) to size the feeder to the home.



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