



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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● Upcoming Electrical Stakeholders Meetings

Stakeholder meetings will run from now through June 2008 at locations listed below. It is important for you to stay up to date with changes that might affect you. You have an opportunity to get your questions answered and give the Electrical Program your valued input when you attend a stakeholder meeting. Please join us at 6:00 p.m., at one of the remaining stakeholder meetings near you.

Safety Tip of the Month!

You must position metal and non-metal ladders (such as fiberglass) at a height and location that prevents the possibility of you or it contacting a power line.

2007-2008 Remaining Stakeholder Meetings

December 12	Labor and Industries Bldg. 12806 Gateway Dr., Tukwila	February 21	City Council Chambers, Port Angeles
February 20	100 Oyster Bay Ave., Public Works Conference Rm., Bremerton	May 20	3001 W. Broadway, Moses Lake
April 9	Clark County PUD, 1200 Fort Vancouver Way, Vancouver	May 21 (also)	Walla Walla College (tentative), Walla Walla
May 21	Cowlitz County PUD, 961 12 th St., Longview	June 11	Hampton Inn, 3985 Bennett Dr, Bellingham
May 22	Location to be determined, Yakima		

● Submitting Electrical Plans For Review

Plan review is a part of the electrical inspection process. Its primary purpose is to determine that the electrical designer calculated the electrical load properly and included the correct electrical equipment in the design. Plan review also reviews the designation of hazardous areas and the design of emergency and standby systems.

The plan review process is a review, not a quality control tool for submitters. Because of the quality of the plans we are receiving and the long delays taken by submitters to answer questions and make revisions, the reviewers have a significant backlog of work. It is not acceptable for a submitter to give us a plan that is incomplete, inaccurate, or not completely ready for review. If the design is complete and accurate, the review should be straightforward process. The reviewer should be able to quickly evaluate the plans and return them to you approved.

We routinely receive plans that are not ready for review or are in the process of being redesigned. It is unacceptable to do this to gain a placeholder in the reviewer's scheduled work, it is unacceptable. Anyone doing this jeopardizes their project and those of other submitters who are waiting for review.

When a plan review is required (see WAC 296-46B-901(15)), the plans must be submitted early enough to allow time for the review to be completed before the actual work is begun. This should be at least one month prior to going to bid to ensure that the project can proceed without delay. If the plans are not submitted prior to beginning the project or are rejected for any reason during the review process, inspections will not be made on the project. The reviewers screen the plans within one week of receipt. If plans are obviously lacking information, incomplete, or inaccurate, they will be immediately returned to the submitter for revision.

If, during the full review, the plans are returned to the submitter for similar reasons, the inspection process on the job site will stop. When the plans are resubmitted, they will drop to the bottom of the plan review queue. This can cause a significant delay to your review process.

When the plan reviewer is looking at plans, the reviewer may ask questions or ask for corrections so the design will meet code. The reviewer will document the request for information or plan correction in writing to the submitter. When a request is made, the submitter must provide any requested information or corrections within five working days. If the information or correction cannot be provided in that time frame, the review will stop and the plans will be returned to the submitter for modification.

Remember, your submitted plans must be:

- Legible
- Properly identified
- Clearly show the installation is code compliant

- Include panelboard and equipment schedules and one-line diagram
- Include load and fault current calculations
- Show existing loading characteristics if applicable

Do not jeopardize your project by submitting poorly designed plans. Submit your plans only when they are complete, accurate, and ready for final review.

● **New Arc Fault Circuit Interrupter Requirements**

2005 NEC 210.12(B) changes the requirements for Arc Fault Circuit Interrupters (AFCI) effective January 1, 2008. NEC 210.12(A) says, "All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault interrupter, **combination type** installed to provide protection of the branch circuit." Until January 1st, a branch/feeder AFCI is permitted.

We have verified with manufacturers and distributors that the new combination AFCIs are available for use, so there is no need to extend the implementation date required in the NEC.

● **Electrical WAC Rule Revisions & 2008 Legislative Session**

A special edition of the Electrical Currents was published last month for the WAC rule revision process. If you have not read it, you can get a copy on the electrical website at:

<http://www.lni.wa.gov/TradesLicensing/Electrical/WhatsNew/default.asp>

We will be taking electronic proposals from January 1, 2008 through March 31, 2008. If you have a good proposal with justification, send it in. All proposals will be reviewed by the Technical Advisory Committee (TAC). Applications for membership to the TAC committee will be taken during March. This is your chance to be involved in the rule making process.

The 2008 legislative session is rapidly approaching. The short session runs from January through March. The Electrical Program is not proposing any legislation this session. Any bill that was not acted upon by the legislature last year may be reconsidered this year by the legislature. You should keep a close eye on any bill that might affect how you do business. A good way to stay informed is to be signed up for the Electrical Listserv. Through Listserv we will send automatic notices of everything we are aware of that might impact you. You may sign up on the Listserv at:

<http://www.lni.wa.gov/Main/Listservs/Electrical.asp>

● **#1 and #2 Most Frequently Written Electrical Corrections**

The #1 correction continues to be for: no access, not ready, covered prior to inspection, can't locate and other issues that prevent the inspector from doing the inspection. This correction should never have to be written. It is up to the permit purchaser to arrange access, identify the job location, and do whatever is required to make sure the job is available and ready for inspection. This one correction wastes about 45 minutes of each inspector's work day and cost you time and money for additional trip fees.

The #2 correction is for failing to read and follow the manufacturer's instructions. Again, this correction should never need to be written. Instructions are provided for every piece of electrical equipment. If a 20 ampere circuit is required, install a 20 ampere circuit. If a separate circuit is required, install it. Following the manufacturer's instructions is a key component in making a quality and safe installation.

If these two corrections are eliminated, it will give back at least one more hour each day to each inspector for inspections and compliance work. The Electrical Program will begin to be more proactive with contractors who continue to receive these corrections. In order to respond to our legitimate requests for inspections, these corrections need to be eliminated.

● **Question of the Month**

Where installed in raceways, conductors of size ____ AWG and larger shall be stranded?

Answers: A) 10, B) 8, C) 6, D) 4

November's Question was: A trainee may receive (06) limited energy credit for time worked when employed by a (09) telecommunications contractor doing telecommunications work if the work is supervised by a (06) specialty electrician. **False**, see RCW 19.28.161(3). An electrical contractor can only certify hours for the specialty for which they are licensed.