



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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## ● Electrical Inspector Don Holland Passes Away

Donald Holland passed away at the age of 56 years old on August 17, 2009 in Everett, WA. Don was born April 7, 1953, in Yakima to Joe and Tressie Holland. After High School, Don served in the U.S. Marine Corp, completed Perry Technical Institute, and became an electrician. Don worked as an electrician for 20 years in the Yakima Valley. In 1999, he moved to Arlington, Washington where he was employed as an L&I Electrical Inspector in the Everett area. It was there that he found many new friends and shared laughs with his co-workers. Don will be deeply missed.

## ● New Publications for Homeowners

Homeowners may be unaware of requirements that help ensure safe electrical installations are made on their property. New publications are available to assist homeowners in making informed decisions. The best way to ensure the work done on your property is safe is to make certain that it is permitted and inspected. There is very little electrical work that is exempt from permitting and inspection. The new publications are available at:

<http://www.lni.wa.gov/IPUB/500-078-000.pdf> and <http://www.lni.wa.gov/IPUB/500-115-000.pdf>

## ● Electrical Permit Fees

The fees listed in WAC 296-46B-906 must always support the number of progress inspection trips requested by the permit holder and the amount of time necessary to perform the inspection. All inspections are based upon ½ hour of inspection time. Each progress trip or ½ hour, whichever is more, is charged at \$36.40. Any fee less than \$72.80 must have no more than ½ hour of inspection time.

If a permit purchaser buys a permit for less than \$72.80 and schedules the work so two separate progress inspections are needed, the initial fee does not support the cost of the inspections. An additional trip fee (\$36.40) will be added to the original fee to support the second inspection request.

Electrical permit fees must cover the time and number of trips required for all progress inspections (e.g. ditch cover, concrete encased electrodes, slab, cover, service, etc.). Requests for multiple progress inspections may result in the assessment of additional trip fees.

If corrections have been issued during a progress inspection, the department does not charge for the first return trip to verify the safety corrections have been made. If the corrections are not made or were made in a way that is not code compliant, the next return trip will be assessed a \$36.40 trip fee because the work is not ready for inspection.

When a final inspection is called, all work should be complete and code compliant. The cost of the initial final inspection is included in the initial base fee. The department does not charge for the initial final inspection. If deficiencies are noted during the final inspection, additional fees will be assessed because the work is not ready for inspection.

## ● Unlisted Low Voltage Devices And Equipment Must Be Fed From A Listed Class 2 Transformer

For some types of low voltage systems (30 volts or less) it can be difficult or impossible to find listed low voltage devices and equipment. Field evaluation is always an option for unlisted equipment, but in many cases the cost of the evaluation far exceeds the cost of the equipment. For some low voltage equipment there is an alternative.

### Safety Tip of the Month!

Avoid backing accidents by parking your vehicle so that backing is not required when you leave.

Positioning your vehicle while hazards and obstacles are in view will reduce the chances of an accident when you leave.

Unlisted low voltage utilization equipment or devices will be approved if they receive their power from a listed Class 2 transformer or power supply and comply with all of the following.

- The Class 2 transformer is listed and used in accordance with the manufacturer instructions.
- The wiring method used complies with NEC 725.
- The secondary voltage of the Class 2 transformer/power supply does not exceed 30 volts.
- The secondary side of the Class 2 transformer/power supply is protected by a 5-ampere maximum fuse, or a fuse derived by dividing 100 VA by the secondary voltage whichever is less.
- A permanent marking is affixed as near as practicable to the transformer/power supply and must indicate the size and type of replacement fuse, or the fuse must be integrated into the transformer/power supply assembly requiring replacement of the unit.
- The Class 2 circuit does not supply life safety equipment or emergency egress, such as: fire alarm, rescue systems, and classified (hazardous) locations.
- The equipment and devices must be located exclusively within the Class 2 circuit (i.e. isolated from all other electrical circuits).

### ● Wiring Methods for Luminaires In Patient Care Areas

The health care facility administrator, with oversight from the Department of Health, is responsible for determining which areas of a medical facility are patient care areas. Corridors, storage rooms, lounges, dining rooms, or similar areas are not usually classified as patient care areas.

In patient care areas, NEC 517.13(A) requires that all branch circuits are provided with an effective ground-fault current path by installation in a metal raceway system or in a cable with a metallic armor or sheath that is listed for grounding. A separate equipment grounding conductor, installed in a non-metallic raceway or in a cable, that lacks a metallic armor or sheath listed for grounding is not a substitute for this requirement.

An additional insulated equipment grounding conductor described in NEC 517.13(B) is required only if the luminaires are lower than 7½ feet above the floor or have switches located in the patient care vicinity

The patient care vicinity is generally defined as anywhere within 6 feet of a patient's bed up to a height of 7½ feet above the floor.

### ● Are You Celebrating A Birthday This Fall? Save Money and Renew Online!

Renewing your license or certificate online is quick and easy. You will receive it much faster and save money at the same time. You can renew as early as 90 days before your expiration date at:

<http://lni.wa.gov/TradesLicensing/LicensingReq/Legal.asp>

You are only permitted to renew if all of your continuing education requirements are met. Your licensing information including your continuing education credits can be viewed at at:

<https://fortress.wa.gov/lni/bbip/Search.aspx> .

A Washington approved continuing education provider is responsible for posting your course credits to the system within seven days of course completion. If you have attended a Washington approved course and have not been properly credited, please contact the course provider to resolve the matter.

If you are looking for a continuing education class or basic classroom education course to fulfill your education requirements, here is the link to the list of Washington approved courses:

<http://lni.wa.gov/TradesLicensing/Electrical/LicenseExamEd/Education/default.asp>

### ● Electrical Question of the Month

**This Month's Question:** Are main breakers still required for temporary power service panels?

**A)** Always, **B)** Never, **C)** Only when there are more than six service disconnects

**August's Question:** How many voting members comprise the Washington State Electrical Board?? **A)** 13, **B)** 14, **C)** 15, **D)** 16. The answer is: **B)** 14 voting members (RCW 19.28.311).