

Stephen Thornton, Chief Electrical Inspector

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Note From the Chief – Want to be an Electrical Inspector?

Do you enjoy a challenge? Have you ever thought about becoming an Electrical Inspector for L&I? The time may be right if you enjoy serving customers and interacting with electrical contractors, electricians, and the public. If you want to help ensure electrical safety in Washington and help licensed electrical contractors and certified electricians by enforcing laws related to the underground electrical economy, this could be just what you are looking for. It is a great job with a great benefit package. Inspectors have a challenging workload inspecting a wide variety of interesting and complex electrical installations. You can get more information and apply for these positions by visiting www.careers.wa.gov. Select “Look for Jobs”, then under Department, check “Dept. of Labor & Industries” and use the keyword search for “inspector”. Get your resume together and keep watching, as openings will be posted for upcoming positions.

New Look for Credit Card Payment Screen

Later this month, the department will be changing the credit card vendor they have been using for many online services. What does this mean for you the customer? It means when you purchase a permit or renew your license online the credit card payment information screen will look differently. When selecting credit card as your method of payment, you will see a message that will say click “Pay Now” to process your credit card payment with our third party vendor, [First Data Payeezy Gateway](#). After selecting “Pay Now”, the page will be displayed for you to enter your credit card information.

Legislative Update

Lawmakers have been considering several bills that may affect the electrical program as discussed in the [February 2015](#) edition of the newsletter. Various cutoffs and deadlines have left only two of those bills still active. They are [ESSB 5282](#), which would exempt certain low-voltage security system installations from permit and inspection requirements, and [HB 1590](#), which would require completion of an apprenticeship to become a certified (01) or (02) electrician. None of this legislation is sponsored by L&I. Take this opportunity to review the bills and comment if you desire. A comment button is located to the right of the bill number on the webpage for each bill.

You may also contact your legislator to share your opinion about any legislation by visiting the legislative website at: <http://www.leg.wa.gov/LIC/Pages/hotline.aspx>.

Electrical Board Opportunity

There will be an opening on the Electrical Board in July to fill one of the certified electrician seats. The electrical board meets four times per year and plays a vital role in advising the department on all matters concerning Washington’s electrical laws, rules, and policies. Anyone interested in applying for this position must hold a current Washington electrical certificate of competency. You can submit an application using the [form](#) on the Governor’s website. Application must be made using the Governor’s form. Your application must be received by April 30 to be considered. Send your resume and

Safety Tip of the Month DO NOT WORK ON AN ENERGIZED CIRCUIT!!!

Sorry for shouting, but as highly skilled electricians who know how to mitigate the hazards of working around dangerous electricity, we sometimes make foolish decisions. An [OSHA report](#) from 2013 indicates 71 construction workers died that year from electrocution. Even seemingly minor work such as replacing light switches or changing luminaire ballasts, if done while the circuit is energized, could result in an accident and cause serious injury or even death! Take the time to de-energize every circuit you are working on.

Don’t ruin your life and the lives of your loved ones by taking shortcuts and risks with electricity.

any additional information you would like considered, such as letters of recommendation in a separate email to the Boards and Commissions mailbox at: GovernorBoardsandCommissions@gov.wa.gov. If you have questions about the positions or the Electrical Board, contact Bethany Rivera at 360-902-5249.

GFCI Protection Required for Fixed Electrical Equipment in Showers and Near Bathtubs

In July 2014, the department adopted a new requirement in [WAC 296-46B-210\(2\)](#) that requires all fixed electrical equipment with exposed grounded metal parts within an enclosed shower area or within five feet of the top inside edge of a bathtub to have ground-fault circuit-interrupter (GFCI) protection. This was done because the NEC® did not specify GFCI protection for installations such as an exhaust fan in an enclosed shower or an electric fireplace installed on the ledge of a bathtub within easy reach of someone in the tub. For equipment located near bathtubs, the measurement is taken in all directions (vertically and horizontally) from the top inside edge of the tub.

What Happens if I Fail My Open-Book Electrical Examination?

Electricians who are very familiar with the National Electrical Code® (NEC®) and other electrical reference materials are more apt to make safer installations for consumers and save their employer time and money by doing better work that does not require callbacks for repairs. They are also more likely to pass their open-book electrical examination on their first attempt. Each exam is unique and made up of questions selected randomly from a question pool covering basic electrical theory, NEC®, and Washington laws and rules.

Electrician examination candidates have one year to pass all sections of their examination beginning on the date they are approved for the examination. Administrator examination candidates have a year to pass their exam starting from the date of their first attempt. If you fail to pass your examination, the conditional allowance to retest is found in [WAC 296-46B-960\(8\)-\(10\)](#). If a candidate makes a failing score, they must wait two weeks before being eligible to retest. Within the one year examination period, candidates have to retake only the sections they failed to pass. If a candidate fails three times within a one-year period, they must wait three months to retake any failed sections of the examination. This three-month waiting period will apply to all subsequent attempts. The waiting period is a great opportunity to prepare for another attempt by taking advantage of additional classroom training. If all sections are not successfully completed within the one-year period, the candidate must begin a new examination period and retake all sections.

Exam pass rates show candidates need to be better prepared before attempting an examination. At [Electrical Board](#) meetings, the department reports information about exam pass and failure rates. The report relates the number of applicants who attempted to take an exam, which type of exam, how many attempts an applicant has made, and whether the applicants passed or failed. Last year for example, there were almost 1200 candidates for the (01) general electrician certification exam. 124 applicants attempted the exam four or more times. One applicant failed to pass the exam on the twentieth attempt.

The legislature sets minimum hours of [basic classroom instruction](#) required to [qualify for examination](#) in RCW [19.28.205](#). Washington's requirements are much less than those in our neighboring states (Oregon and Idaho). Those states require those learning the electrical trade to complete 144 - 180 hours of in-class training every year they are in training. For example, (01) general journey level examination candidates in Washington must complete 96 hours of in-class training. Candidates in Oregon and Idaho are required complete a minimum of 576 hours of in-class education.

Beginning July 1, 2015 exams will be based on the 2014 NEC® as described in the [February 2015](#) edition of this newsletter.

Ugly Picture: Click on the picture to open a larger image. An inspector discovered this badly corroded and broken ground clamp at a house built in 1979. Connections to the grounding electrodes are very important. You must expose all connection points at the time of inspection so inspectors are able to visually verify the integrity of the connections and electrodes. NEC® 250.70 requires ground clamps to be listed for use with the materials of the grounding electrode and the grounding electrode conductor and, where used on buried electrodes, be listed for direct burial or concrete encasement.



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