

# ELECTRICAL CURRENTS

A Newsletter from the Office of L&I Chief Electrical Inspector Wayne Molesworth

August 2023

**Question of the Month** - No parts of a cord-connected luminaires, chain-, cable-, or cord -suspended luminaires, pendant, lighting track, ceiling suspended paddle fan, or hanging type fixture can be located within a zone of how many feet horizontally and vertically from the top of a bathtub rim or shower stall threshold?

A) 1', 6'    B) 1 ½', 7'    C) 2', 7 ½'    D) 3', 8'

See the correct answer on Page 2.

## Who Can Place Building Integrated Photovoltaic Equipment?

WAC [296-46B-690](#)(5) states: The entity placing a building integrated cell, module, panel, or array is not subject to the requirements for electrical inspection, licensing, or certification so long as the work is limited to the placement and securing of the device and an electrical work permit has been previously obtained for the electrical work related to the equipment by an entity authorized to do that electrical work.

This rule became necessary because of the proliferation of materials that serve a dual function like building exterior finish materials such as roofing, siding, and windows that include intergraded photovoltaic equipment.

It does not allow non-electrical contractors and uncertified individuals to install PV system materials unless they meet the definition of building integrated and the requirements stated in WAC 296-46B-690. The definition of "building integrated" photovoltaic (PV) panels is from the National Electrical Code, and is defined in rule as follows: WAC 296-46B-690(1) Building integrated: means photovoltaic cells, modules, panels, or arrays that are integrated into the outer surface or structure of a building and serve as the outer protective surface of that building, such as the roof, skylights, windows, or facades.

In general, RCW [19.28.041](#), RCW [19.28.161](#), and RCW [19.28.006](#) definitions of "Equipment" and "Electrical construction trade" require that all parts and components of PV systems be installed and maintained by properly licensed electrical contractors and certified electricians. Construction contractors who are not electrical contractors are not licensed to install PV equipment except in very specific building intergraded applications. All other electrical wiring and equipment for the PV system must be completed by the entity that obtained the electrical work permit.

## TAC Meeting Update

The Technical Advisory Committee meeting was held on July 11, 2023 at the L&I headquarters in Tumwater. We received a lot of great feedback and advice. Thank you to all the members who shared their time and knowledge.

Stay informed of the 2023 NEC code adoption process here:

<https://lni.wa.gov/licensing-permits/electrical/laws-rules-policies#rule-development>.



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Select Licensing & Permits, then Electrical

## Safety Tip of the Month

The underground electrical economy in Washington is real. Protect yourself, your family, and your investment – Make certain you hire a legitimate licensed electrical contractor who:

- Uses certified electricians and;
- Gets the work inspected.

Check any contractor's and electrician's status at [www.lni.wa.gov/Verify](http://www.lni.wa.gov/Verify)



Washington State Department of  
**Labor & Industries**

## Year in Review

In the year ending on June 30, 2023, the electrical program delivered:

264,723 total inspections, 43,350 of them done through our [Virtual Electrical Inspection](#) program

77% of inspections completed within 24 hours of request

89% of inspections completed within 48 hours of request

60,109 corrections written - 62% for serious safety concerns

1.6 million miles driven

181,154 permits sold - 92% are contractor permits

99% of permits purchased online

77% of inspection requests made online

12,145 citations written - about a third are warnings

6,816 of the citations written targeted the underground economy.

3,676 hours of training and outreach done by [ECORE](#)

720 hours of training delivered to new inspectors

3,958 pages reviewed by plans examiners - 100% submitted online

18,247 licensees and certificates processed - 92% on line

7,121 new trainee certificates issued - 90% on line

3.7 million hours of experience reviewed by the technical review team - 2.8 million hours approved, remaining hours were not approved because the applicant had all hours needed to qualify for exam or were denied for cause.

231 reciprocal certificates issued to Oregon journeyman (J) license holders who completed Oregon apprenticeships

This is just a snap shot of all the hard work that the electrical program staff did last year.

## Last Year's Top Eight Corrections

4,947 - No access for inspection - RCW 19.28.101

3,215 - GFCI protection in dwellings - NEC 210.8(A)

2,977 - Notifying the department work was ready for inspection when it was not ready - WAC 296-46B-906(7)(B)

1,912 - Not following the manufacture's instructions - NEC 110.3(B)

1,482 - Failing to install surge-protective devices when required - NEC 230.67

1,465 - Requesting an inspection when previous corrections are incomplete - WAC 296-46B-906(7)(D)

1,249 - Legibly marking the electrical panel - NEC 408.4(A)

1,235 - AFCI requirements in dwelling units - NEC 210.12(A)

## Picture of the Month:

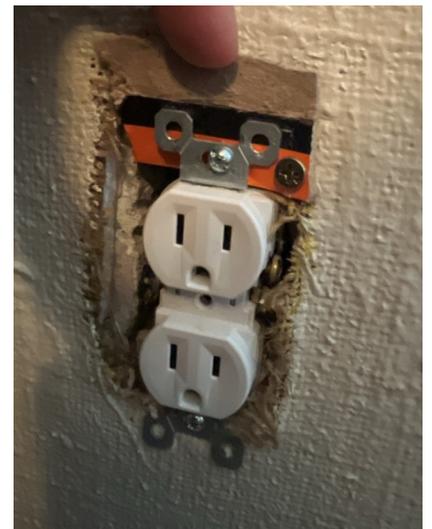
No boxes used when installing new receptacles? Fortunately the inspector spotted this dangerous installation. We issued serious violations to the contractor and the electrician who installed the receptacles.

Learn more about serious violations in WAC [296-46B-915](#)

*If viewing this document online, click on the picture to open a larger image.*

## Answer to Question of the Month:

NEC 410.10(D) – D) 3', 8'



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