

ELECTRICAL CURRENTS

A Newsletter from the Office of L&I Chief Electrical Inspector Wayne Molesworth December 2022

Question of the Month:

Decorative lighting and similar accessories used for holiday lighting and similar purposes shall be _____.

- A) GFCI protected B) Arc fault protected
C) Listed D) Marked

See correct answer on page 2.

Open Equipment Doors and Working Space

According to 2020 NEC 110.26 (C)(2) for large equipment, "Open equipment doors shall not impede the entry to or the egress from the working space." This means that when you have large equipment in a room or area, you have to take in account the obstacle that open equipment doors pose to access and egress.

Equipment doors that swing open must allow for a 2 foot wide, 6 1/2 foot high path so you can access the working space or escape from it if needed. When there is only a single entrance to a room, the code requires unobstructed egress. See the definition for "egress" in WAC [296-46B-100](#).

In the 2023 NEC, considerations for open equipment doors apply to all equipment requiring working space.

Public Hearing Announced for Electrical Rules (SSB 6126 Implementation)

The [Washington State Department of Labor & Industries](#) (L&I) has filed a proposed rule that would provide more opportunities to qualify for journey level electrician (EL01) examination.

L&I filed a [Proposed Rulemaking \(CR-102\)](#) on Nov. 22. A complete text of the proposed rule can be found on the [Electrical Laws, Rules & Policies](#) page under the "Rule Development" tab or the agency's "Rulemaking Activity" page.

A public hearing on the proposed rule is scheduled for **Jan. 4, 2023, at 9 a.m.** at:

[L&I headquarters, 7273 Linderson Way SW, Tumwater, WA.](#)

You can attend the hearing in person, or join by either:

- **Zoom:** [Click here to join the meeting](#) Passcode: Hearing!1
- **Phone:** 1-253-215-8782 Meeting ID: 879 5130 2240 Passcode: 434720791

You can provide testimony or written comments at the above hearing, or send written comments **by 5 p.m. on January 4, 2023**, to Alicia Curry:

- Email: Alicia.Curry@lni.wa.gov | Fax: 360-902-5292
- Mail: Department of Labor & Industries, Field Services & Public Safety Division
PO Box 44400, Olympia, WA 98504-4400

See www.lni.wa.gov/ElectricalApprenticeship to find more information on the new law.

Questions? Contact SSB6126Implementation@lni.wa.gov.

Safety Tip of the Month

A fall from a ladder could kill you or disable you permanently.

- Always use the right ladder for the job. A chair is not a ladder!
- Get help with heavy or long ladders.
- Make certain your footing is good. Check for concealed holes left by moles and gophers.
- Avoid ice, mud, and other slippery conditions.

Review the OSHA ladder bulletin at: <https://www.osha.gov/Publications/OSHA3625.pdf>

This document may contain hyperlinks to internet web pages.

Access this PDF document online at:

<https://lni.wa.gov/licensing-permits/electrical/electrical-currents-newsletter/>

Electrical Section Internet Address: <https://www.lni.wa.gov/> -

Select Licensing & Permits, then Electrical



GFCI Requirements Delayed Until the Adoption of the 2023 NEC

To provide testing laboratories and manufacturers additional time to deal with incompatibility between equipment manufactured in compliance with existing product safety standards and new NEC requirements, L&I is clarifying implementation of several 2020 NEC GFCI requirements:

We are delaying enforcement of the following until the adoption of the 2023 NEC.

- 1) GFCI requirements for outdoor outlets in 2020 NEC 210.8(F). There are still incompatibility issues with GFCI protection and certain outdoor HVAC units. The 2023 NEC provides further delay.
- 2) 2020 NEC 210.8(A)(7) GFCI protection requirements for receptacles rated 30 through 50 amperes within six feet of sinks that are supplied by single-phase branch circuits rated 150 volts to ground or less.

HVAC Equipment Nameplates—Fuse or Circuit Breaker?

There may be confusion about requirements for maximum overcurrent devices called out on HVAC equipment nameplates. UL provides explanation as follows on Page 14 in their Marking Guide - https://code-authorities.ul.com/wp-content/uploads/2014/04/EHCMG_AG.pdf:

“The markings for short-circuit and ground-fault protection always include some indication of the type of protection device as well as the maximum current rating. This is significant since the various types of devices recognized by the NEC to provide this protection do not necessarily provide the same level of protection for all units. Briefly, if the marking plate indicates:

- 1) Only “Fuse,” then only fuses are to be used;
- 2) “Circuit Breaker” and “Fuse,” then either fuses or circuit breakers
- 3) “Fuse or Circuit Breaker” or “Overcurrent Protection,” then fuses or circuit breakers (including “HACR Type”) may be used.”

Manufacturers use other variations. When a forward slash separates two words, the slash means the same thing as “or”. Often, CB is use as an abbreviation for circuit breaker.

“HACR” is an antiquated term. For many years, “HACR” has been part of the standard testing procedure for UL [489](#) breakers. This means new UL 489 breakers are HACR rated.

Click on the nameplate pictured on the right, can you determine what type of overcurrent protection is allowed?



Answer to the Question of the Month

Answer: C) Listed. See NEC 410.160 for the requirement for listing. If not listed as an assembly, all products must be listed and must be assembled and installed in accordance with the manufacturer’s instructions and the NEC. See NEC 590.3(B) to learn more about temporary lighting requirements.

Picture of the Month

An inspector found that a property owner had drilled holes in trusses for all their home runs. Eight corrections were written, including NEC 334.80 for de-rating cables routed through bored holes.

The local building official was also notified of potential structural damage caused by the holes drilled through the trusses.

