ELECTRICAL CURRENTS

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

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SPECIAL EDITION

Significant Changes –WAC 296-46B – Effective April 1, 2024

In this issue, we review of some of the significant changes in the electrical rules - WAC <u>296-46B</u>. The rule changes and the 2023 <u>National Electrical Code</u> (NEC) became effective April 01, 2024. Changes of most interest are included in this issue.

We would like to thank everyone that submitted rule proposals, the Technical Advisory Committee (TAC) comprised of contractors, electricians, engineers, manufacturers and city inspectors, and the Washington State Electrical Board for sharing their advice and expertise with us throughout the rule development process.

View all rule changes: https://www.lni.wa.gov/rulemaking-activity/AO23-09/2309Adoption.pdf.

Find 2023 NEC Code Update courses: https://lni.wa.gov/licensing-permits/ docs/Code-Update-Courses1252023.pdf.

How Rules and the 2023 NEC Apply to Electrical Permits

According to WAC <u>296-46B-010(1)</u>: Generally, new codes will apply if the electrical permit is issued on or after the adoption date of new codes with two exceptions: (a) New one- and two-family dwellings or multifamily dwellings where the issue date of building permits for the premises is before the adoption date; or (b) New installations where plan review is required by WAC <u>296-46B-900</u> when plans are received and accepted for review before the adoption date.

New Sections

WAC 296-46B-235 Branch circuits, feeders, and services over 1,000 volts ac, 1,500 volts dc nominal.

Provides an exception to not restrict service wiring methods when proper customer owned overcurrent protection is provided.

WAC 296-46B-692 Fuel cell systems and 296-46B-710 Standalone systems.

Installers of fuel cell systems now required to provide a system design review defined under WAC

Amended Sections

WAC 296-46B-100 General definitions.

Adds a new definition to define the meaning of "equivalent apprenticeship program".

Amends the definitions of "WAC" and "RCW" to clarify that printable copies of the electrical laws and rules are available from L&I and the Office of the Code Reviser in an electronic format.





WAC 296-46B-210 Wiring and protection—Branch circuits.

Subsection (8): Amends NEC 210.52(C)(2): If receptacle outlets are not installed to serve an island or peninsular countertop or work surface, no future provisions to do so are required.

Subsection (9): For the purposes of NEC 210.63, when equipment requiring servicing is located outdoors, accessible locations for receptacle outlets do not include locations accessed through doors or windows.

WAC 296-46B-230 Wiring and protection – Services.

Adds an exception in subsection (7) to not restrict wiring methods for service conductors within a building or structure when protected by customer owned supply side overcurrent protection.

Subsection (11) replaces NEC 230.85(C). When service equipment suppling one- and two-family dwellings is replaced, an emergency disconnecting means must be installed whenever the service ampacity is increased or decreased, or when any of the following are relocated: Service disconnects, meter bases, overhead service masts, or underground service risers.

WAC <u>296-46B-240</u> Overcurrent protection

Subsection (1) revised to no longer allow overcurrent protection equipment enclosures on roofs to be installed less than 24 inches above the roof surface.

New subsections (3) and (4) require documentation of testing required by NEC 240.67 and NEC 240.87.

WAC 296-46B-250 Wiring and protection—Grounding and bonding

Adds Exception (2) in subsection (2) to clarify when concrete encased electrode connection requirements apply when additions are made to existing foundations.

WAC 296-46B-314 Wiring methods and materials- Outlet, device, pull, and junction boxes

Adds subsection (3) to clarify the locations acceptable for installing ceiling-suspended (paddle) fans as follows: For the purposes of NEC 314.27(C), locations acceptable for the installation of ceiling-suspended (paddle) fans include all ceiling areas of habitable rooms of dwelling occupancies except: Areas within four feet of walls, soffits, or fixed cabinetry; or areas directly above permanently installed island or peninsular countertop surfaces.

WAC 296-46B-334 Wiring methods and materials- Nonmetallic-sheathed cable

New subsection (7) clarifies wet or damp locations and conditions for installing non-metallic sheath (NM) cables.

WAC 296-46B-550 Special occupancies- Mobile homes, manufactured homes and mobile home parks

Adds new subsection (2)(a) to allow for mounting of service equipment on mobile/manufactured homes if approved by the manufacturer.

WAC <u>296-46B-555</u> Special occupancies- Marinas, boatyards, floating buildings, and commercial and noncommercial docking facilities

Amends subsection (4) to clarify the meaning of "corrosion resistant" and provide information for what is acceptable.



WAC 296-46B-690 Solar photovoltaic systems

Adds new language to clarify that the design review defined under WAC <u>296-46B-100</u> must be available at the installation site for the inspector until the inspection process is complete.

WAC 296-46B-694 Wind electric systems.

A design review defined under WAC <u>296-46B-100</u> must be available at the installation site for the inspector until the inspection process is complete.

WAC <u>296-46B-700</u> Emergency systems

Subsection (5) clarifies requirements for selective coordination when overcurrent devices are replaced for consistency with new 2023 NEC 700.32 requirements.

WAC 296-46B-701 Legally required standby systems

Subsection (2) clarifies requirements for selective coordination when overcurrent devices are replaced for consistency with new 2023 NEC 701.32 requirements.

WAC <u>296-46B-702</u> Optional standby systems

Amends the requirements pertaining to placing signs for consistency with the 2023 NEC.

WAC <u>296-46B-705</u> Interconnected electric power production sources

New subsection (3) added requiring installers to provide a system design review defined under WAC <u>296-46B-100</u> for interconnected electric power production sources.

WAC <u>296-46B-908</u> Class B permits. Class B electrical work permit - Use

Subsection (9) amended to allow more time for completing installations in one- or two-family residential structures. Labels are now valid for 120 days after the label is validated.

WAC <u>296-46B-920</u> Electrical/telecommunications license/certificate types and scope of work.

Reorganized the (06A) and (06B) scope of work descriptions in subsection (2)(f) to provide more clarity about the scope of work for each.

WAC 296-46B-942 Training certificate required. General

Subsection (7)(d) clarifies that affidavits must be received by the department within 180 days after the expiration date of an electrical training certificate.

WAC 296-46B-960 Administrator and electrician certificate of competency examinations. General

Subsection (5) added to streamline the process to request a special accommodation for applicants with Limit English Proficiency.

Repealed Sections

WAC 296-46B-440 Air conditioning and refrigerating equipment

Repeals the rule requiring disconnects for equipment to align with NEC 440.8 that consider split systems a "single machine" under certain conditions.