WAC 296-46B-010 General.

Adopted standards.

(1) The 2023 edition of the National Electrical Code (NFPA 70 - 2023) including Annex A, B, C, and subsequent Errata and Tentative Interim Amendments issued by the National Fire Protection Association; the latest published versions of Commercial Building Telecommunications Cabling Standard (ANSI/TIA-568); Commercial Building Standard for Telecommunications Pathway and Spaces (ANSI/TIA-569); Commercial Building Grounding and Bonding Requirements for Telecommunications (ANSI/TIA-607); Residential Telecommunications Cable Standard (ANSI/TIA-570); and the latest published version of the National Electrical Safety Code (NESC excluding Appendixes A and B) are hereby adopted by reference as part of this chapter.

Effective December 31, 2026, the 2026 edition of the National Electrical Code (NFPA 70-2026) including Annex A, B, and C is adopted in this chapter by reference and replaces the 2023 edition of the NFPA 70.

This chapter will be followed where there is any conflict between this chapter and the above adopted standards.

The National Electrical Code will be followed where there is any conflict between the National Electrical Code and, ANSI/TIA-568, ANSI/TIA-569, ANSI/TIA-607, ANSI/TIA-570, or the NESC.

Adopted standards apply to installations when issue dates of electrical permits are on and after adoption dates of standards except for:

(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 of standards; or

(b) New installations where plan review is required by WAC 296-46B-900 when plans are received and accepted for review before the adoption date of standards.

Inspections - General.

(2) Electrical inspectors will give information as to the interpretation or application of the standards in this chapter, but will not lay out work or act as consultants for contractors, owners, or users.

(3) A variance from the electrical installation requirements of chapter 19.28 RCW or this chapter may be granted by the department or the city that has electrical inspection jurisdiction when it is assured that equivalent objectives can be achieved by establishing and maintaining effective safety.

(a) Any electrical permit holder may request a variance.

(b) The permit holder must make the request in writing, using a form provided by the department, to the chief electrical inspector or to the city that has electrical inspection jurisdiction. The request must include:

(i) A description of the installation as installed or proposed;

(ii) A detailed list of the applicable code violations;

(iii) A detailed list of safety violations;

(iv) A description of the proposal for meeting equivalent objectives for code and/or safety violations; and

(v) Appropriate variance application fee as listed in chapter 296-46B WAC, Part C.

(4) Electrical wiring or equipment subject to this chapter must be sufficiently accessible, at the time of inspection, to allow the inspector to visually inspect the installation to verify conformance

with the NEC and any other electrical requirements of this chapter with the exception of not more than eight feet of electrical conduit in a foundation of a one- or two-family dwelling or residential outbuilding for use as service entrance raceway.

(5) All required equipment grounding conductors installed in concealed cable or flexible conduit systems must be completely installed and made up at the time of the rough-in cover inspection.

(6) The installation of all structural elements and mechanical systems (e.g., framing, plumbing, ducting, etc.) must be complete in the area(s) where electrical inspection is requested. Prior to completion of an exterior wall cover inspection, either:

(a) The exterior shear panel/sheathing nail inspection must be completed by the building code inspector and, where siding nails or fasteners which penetrate into the wall cavity are to be used, all siding must be installed; or

(b) All wiring and device boxes must be a minimum of 2 1/2 inches from the exterior surface of the framing member; or

(c) All wiring and device boxes must be protected by a steel plate a minimum of 1/16 inch thick and of appropriate width and height installed to cover the area of the wiring or box.

(7) In order to meet the minimum electrical safety standards for installations, all materials, devices, appliances, and equipment, not exempted in chapter 19.28 RCW, must conform to applicable electrical product standards recognized by the department, be listed, or field evaluated. For any equipment that requires an amusement operating permit under chapter 67.42 RCW, the operating permit is prima facie evidence of an appropriate standard. Other than as authorized by the chief electrical inspector or a city authorized to do electrical inspection, equipment must not be energized until such standards are met.

(8) The state department of transportation is recognized as the inspection authority for telecommunications systems installations within the rights of way of state highways provided the department of transportation maintains and enforces an equal, higher or better standard of construction, and of materials, devices, appliances, and equipment than is required for telecommunications systems installations by chapter 19.28 RCW and this chapter.

Inspection move on buildings and structures.

(9) All buildings or structures relocated into or within the state:

(a) Other than residential, wired inside the United States (U.S.) must be inspected to ensure compliance with current requirements of chapter 19.28 RCW and the rules developed by the department.

(b) Wired outside the U.S. or Canada must be inspected to ensure compliance with all current requirements of chapter 19.28 RCW and the rules developed by the department.

(10) Residential buildings or structures wired in the U.S., to NEC requirements, and moved into or within a county, city, or town must be inspected to ensure compliance with the NEC requirements in effect at the time and place the original wiring was made. The building or structure must be inspected to ensure compliance with all current requirements of chapter 19.28 RCW and the rules developed by the department if:

(a) The original occupancy classification of the building or structure is changed as a result of the move; or

(b) The building or structure has been substantially remodeled or rehabilitated as a result of the move.

(11) Residential buildings or structures wired in Canada to Canadian Electrical Code (CEC) standards and moved into or within a county, city, or town, must be inspected to ensure compliance with the following minimum safety requirements:

(a) Service, service grounding, and service bonding must comply with the current chapter 19.28 RCW and rules adopted by the department.

(b) Canadian Standards Association (CSA) listed Type NMD cable is allowed with the following qualifications:

(i) CSA listed Type NMD cable, American Wire Gauge #10 and smaller installed after 1964 utilizing an equipment grounding conductor smaller than the phase conductors, must be:

(A) Replaced with a cable utilizing a full-size equipment grounding conductor; or

(B) Protected by a ground fault circuit interrupter protection device.

(ii) CSA listed Type NMD cable, #8 AWG and larger, must:

(A) Utilize an equipment grounding conductor sized according to the requirements of the NEC in effect at the time of the installation;

(B) Be protected by a ground fault circuit interrupter protection device; or

(C) Be replaced.

(c) Other types of wiring and cable must be:

(i) Replaced with wiring listed or field evaluated in accordance with U.S. standards by a laboratory approved by the department; or

(ii) Protected by a ground fault circuit interrupter protection device and arc fault circuit protection device.

(d) Equipment, other than wiring or panelboards, manufactured and installed prior to 1997 must be listed and identified by laboratory labels approved by the department or CSA labels.

(e) All panelboards must be listed and identified by testing laboratory labels approved by the department with the following qualifications:

(i) CSA listed panelboards labeled "suitable for use as service equipment" will be considered to be approved as "suitable for use only as service equipment."

(ii) CSA listed panelboards used as panelboards as described in the NEC, must meet all current requirements of the NEC and this chapter.

(f) Any wiring or panelboards replaced or changed as a result of the move must meet current requirements of chapter 19.28 RCW and this chapter.

(g) The location, type, and ground fault circuit interrupter protection of receptacles and equipment in a bathroom, kitchen, basement, garage, or outdoor area must meet the Washington requirements in effect at the time the wiring was installed.

(h) 4, 15-ampere, kitchen small appliance circuits will be accepted in lieu of two, 20-ampere, kitchen small appliance circuits. Receptacles will not be required to be added on kitchen peninsular or island counters.

(i) Spacing requirements for all other receptacles must meet the Washington requirements in effect at the time the wiring was installed.

(j) Receptacles installed above baseboard or fixed wall space heaters must be removed and the outlet box covered with a blank cover. The receptacle is required to be relocated as closely as possible to the existing location.

(k) Lighting outlet and switch locations must meet the Washington requirements in effect at the time the wiring was installed.

(l) Dedicated 20-ampere small appliance circuits are not required in dining rooms.

(m) Electric water heater branch circuits must be adequate for the load.

(n) The location, type, and circuit protection of feeders must meet the Washington requirements in effect at the time the wiring was installed.

Wiring methods for designated building occupancies.

(12) Wiring methods in educational or institutional facilities as defined in this chapter must be metallic or nonmetallic raceways, MI, MC, or AC cable. Places of assembly located within these facilities must comply with NEC 518.4(A) and (B).

(13) Assisted living facility generator systems may be wired and installed per NEC 517.

(14) Lawfully installed existing electrical installations that do not comply with the provisions of this chapter and remain in compliance with the code at the time of the installation, will be permitted to be continued without change (i.e., without circuitry or occupancy change). Additions, alterations, modifications, or repairs to the electrical system must conform to the current requirements of this chapter.

Traffic management systems.

(15) The department or city authorized to do electrical inspections will perform the electrical inspection and acceptance of traffic management systems within its jurisdiction. A traffic management system includes:

(a) Traffic illumination systems;

(b) Traffic signal systems;

(c) Traffic monitoring systems;

(d) The electrical service cabinet and all related components and equipment installed on the load side of the service cabinet supplying electrical power to the traffic management system; and

(e) Signalization system(s) necessary for the operation of a light rail system.

A traffic management system can provide signalization for controlling vehicular traffic, pedestrian traffic, or rolling stock.

(16) The department or city authorized to do electrical inspections recognizes that traffic signal conductors, pole and bracket cables, signal displays, traffic signal controllers/cabinets and associated components used in traffic management systems are acceptable for the purpose of meeting the requirements of chapter 19.28 RCW provided they conform with the following standards or are listed on the Washington state department of transportation (WSDOT) qualified products list.

(a) WSDOT/APWA standard specifications and plans;

(b) WSDOT *Design Manual*;

(c) International Municipal Signal Association (IMSA);

(d) National Electrical Manufacturer's Association (NEMA);

(e) Federal Standards 170/Controller Cabinets;

(f) Manual for *Uniform Road, Bridge, and Municipal Construction*;

(g) Institute of Transportation Engineers (ITE); or

(h) Manual of *Uniform Traffic Control Devices (MUTCD)*.

(17) Associated induction detection loop or similar circuits will be accepted by the department or city authorized to do electrical inspections without inspection.

(18) For the licensing requirements of chapter 19.28 RCW, jurisdictions will be considered owners of traffic management systems when doing electrical work for another jurisdiction(s) under a valid interlocal agreement, as permitted by chapter 39.34 RCW. Interlocal agreements for traffic management systems must be filed with the department or city authorized to do electrical inspections prior to work being performed for this provision to apply.

(19) Jurisdictions, with an established electrical inspection authority, and WSDOT may perform electrical inspection on their rights of way for each other by interlocal agreement. They may not perform electrical inspection on other rights of way except as allowed in chapter 19.28 or 39.34 RCW.

(20) Underground installations.

(a) In other than open trenching, raceways will be considered "fished" according to the NEC and do not require visual inspection.

(b) The department or city authorized to do electrical inspections will conduct inspections in open trenching within its jurisdiction. The electrical work permit purchaser must coordinate the electrical inspection. A written request (e.g., letter, email, fax, etc.) for inspection, made to the department or city authorized to do electrical inspections office having the responsibility to perform the inspection, must be made a minimum of two working days prior to the day inspection is needed (e.g., two working days 10:00 a.m. Tuesday request for a 10:00 a.m. Thursday inspection, excluding holidays and weekends).

If, after proper written request, the department or city authorized to do electrical inspections fails to make an electrical inspection at the time requested, underground conduit may be covered after inspection by the local government jurisdiction's project inspector/designee. Written documentation of a local government jurisdiction inspection must be provided to the department or city authorized to do electrical inspections when requested. Written documentation will include:

(i) Date and time of inspection;

(ii) Location;

(iii) Installing firm;

(iv) Owner;

(v) Type of conduit;

(vi) Size of conduit;

(vii) Depth of conduit; and

(viii) Project inspector/designee name and contact information.

(21) Identification of traffic management system components. Local government jurisdictions or WSDOT may act as the certifying authority for the safety evaluation of all components.

(a) An electrical service cabinet must contain only listed components. The electrical service cabinet enclosure is not required to be listed but will conform to the standards in subsection (16) of this section.

(b) The local government jurisdiction must identify, as acceptable, the controller cabinet or system component(s) with an identification plate. The identification plate must be located inside the cabinet and may be attached with adhesive.

(22) Conductors of different circuits in same cable, enclosure, or raceway. All traffic management system circuits will be permitted to occupy the same cable, enclosure, or raceway without regard to voltage characteristics, provided all conductors are insulated for the maximum voltage of any conductor in the cable, enclosure, or raceway.

[Statutory Authority: Chapter 19.28 RCW, RCW 19.28.031, and 19.28.251. WSR 25-23-069, s 296-46B-010, filed 11/18/25, effective 12/19/25; WSR 24-05-085, § 296-46B-010, filed 2/21/24, effective 4/1/24; WSR 20-11-053 and 20-14-083, § 296-46B-010, filed 5/19/20 and 6/30/20, effective 10/29/20; WSR 19-15-117, § 296-46B-010, filed 7/23/19, effective 8/23/19. Statutory Authority: Chapter 19.28 RCW, RCW 19.28.010 and 19.28.031. WSR 17-12-021, § 296-46B-010, filed 5/30/17, effective 7/1/17. Statutory Authority: Chapter 19.28 RCW. WSR 14-11-075, § 296-46B-010, filed 5/20/14, effective 7/1/14; WSR 13-03-128, § 296-46B-010, filed 1/22/13, effective 3/1/13. Statutory Authority: RCW 19.28.006, 19.28.010, 19.28.031, 19.28.041, 19.28.061, 19.28.101, 19.28.131, 19.28.161, 19.28.171, 19.28.191, 19.28.201, 19.28.211, 19.28.241, 19.28.251, 19.28.281, 19.28.311, 19.28.321, 19.28.400, 19.28.420, 19.28.490, 19.28.551. WSR 08-24-048, § 296-46B-010, filed 11/25/08, effective 12/31/08; WSR 06-24-041, § 296-46B-010, filed 11/30/06, effective 12/31/06; WSR 06-05-028, § 296-46B-010, filed 2/7/06, effective 5/1/06; WSR 05-10-024, § 296-46B-010, filed 4/26/05, effective 6/30/05. Statutory Authority: RCW 19.28.006, 19.28.010, 19.28.031, 19.28.041, 19.28.061, 19.28.101, 19.28.131, 19.28.161, 19.28.171, 19.28.191, 19.28.201, 19.28.211, 19.28.241, 19.28.251, 19.28.271, 19.28.311, 19.28.321, 19.28.400, 19.28.420, 19.28.490, 19.28.551, 2003 c 399, 2003 c 211, 2003 c 78, and 2003 c 242. WSR 04-12-049, § 296-46B-010, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 19.28.006, 19.28.010, 19.28.031, 19.28.041, 19.28.061, 19.28.101, 19.28.131, 19.28.161, 19.28.171, 19.28.191, 19.28.201, 19.28.211, 19.28.241, 19.28.251, 19.28.271, 19.28.311, 19.28.321, 19.28.400, 19.28.420, 19.28.490, 19.28.551, 2002 c 249, chapters 34.05 and 19.28 RCW. WSR 03-09-111, § 296-46B-010, filed 4/22/03, effective 5/23/03.]