Division 251
ELECTRICAL AND ELEVATOR ADMINISTRATION AND DEFINITIONS

918-251-0090
Board-Created Definitions

For purposes of OAR chapter 918, divisions 251 through 311, unless otherwise specified, the following apply:

(1) "Appliance" as applied to the limited maintenance specialty contractor license established by ORS 479.630, means any built-in or permanently-connected electrical utilization equipment, not including lighting fixtures, other than industrial, that is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, food mixing, deep frying, etc.

(2) "Approved" when referring to electrical product certification means approved in Oregon or for Oregon by the Electrical and Elevator Board.

(3) "Balance of system" as it relates to renewable electrical energy systems are those products, equipment, and systems for the conversion, control and storage of electrical energy.

(4) "Board" means Electrical and Elevator Board.

(5) "Building" means a structure that stands alone or that is isolated from adjoining structures by area separation walls as identified in Chapter 7 of the Oregon Structural Specialty Code adopted in OAR chapter 918, division 460, with all openings therein protected by approved fire doors as required.

(6) "Certification Mark" is identification on an electrical product indicating that the product has been certified under ORS 479.760.

(7) "Certified Electrical Product" is an electrical product certified under ORS 479.760 to which a label or other identifying mark.

(8) "Continuously Employ" means a person, including a person leased from a worker leasing company licensed under ORS 656.850, during time periods when electrical work for which they are responsible is performed, devotes their entire time of employment to tasks of supervising, designing, laying out, planning, controlling, and making electrical installations for the electrical contractor for which the supervisor is registered as signing supervisor.

(9) "Custom Made" means electrical products that are designed for a specific purpose and location.

(10) "Document" means prepare records itemizing what was checked, why it was checked, when it was done, how it was checked, what was determined, and who did the work.

(11) "Electrical Specialty Code" means the National Electrical Code with Oregon amendments.

(12) "Electrical Specialty Code Inspector," formerly referred to as "A-Level Electrical Inspector," is a person certified to inspect under the Oregon Electrical Specialty Code.

(13) "Energy generation," as it relates to renewable electrical energy generation equipment, are those products, equipment, and systems in renewable electrical energy systems that produce or convert electrical energy.

(14) "Engineer" is an individual who has completed a minimum four-year degree program in electrical engineering or electrical technology with power specialty, from an accredited college or university and has received a Bachelor of Science degree.

(15) "Field Evaluation" means the evaluation of electrical products by an approved field evaluation firm.

(16) "Indorsement" is a designation within the restricted energy electrical area showing qualifications and training regarding a product area. It determines the scope of restricted energy electrical activity authorized under a restricted energy electrical license.

(17) "Industrial Electronic Equipment" means a device, appliance, motor, or machine regulated, operated, or controlled through fiber optics or by a combination of electron tubes, capacitors, resistors, impedance transformer, and relays; the control circuit, and/or the power circuits having electrons flowing through a vacuum, metallic vapor, gas tubes, or transistors as used in an industrial plant.

(18) "Industrial Plant", for purposes of licensing and electrical master permit inspection program, means an establishment engaged in industrial production, or service, or a school, hospital, sewer plant, water plant, commercial office building, building occupied by the state or a local government entity, or an institution. For purposes of the elevator program, "industrial plant" does not include a school, hospital, commercial office building, building occupied by the state or a local government entity, or an institution where the elevators are accessible to and used by persons other than the employees of that building.

(19) "Installation" includes external and field wiring, service contracts or warranties by the seller or manufacturer concerning the longevity of the equipment or parts after the original installation. It does not include "start-up" activities where new equipment is placed in service, and that type of work related to delivering and setting in place a piece of machinery.

(20) "Inverter", as it relates to renewable electrical energy generation equipment, is a product, equipment or system that converts direct current into alternating current.

(21) "Jurisdictional Inspector" is a state or municipal inspector having inspection responsibility within their jurisdiction over electrical products or their installation, or both.

(22) "Labeled" means a label, symbol or other identifying mark of a Nationally Recognized Testing Laboratory (NRTL), field evaluation firm or the division that is attached to an electrical product indicating the product is manufactured according to approved standards and tested or evaluated for specific end uses or both.

(23) "Lighting Fixture" is a complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamp to the power supply.

(24) "Limited Energy System" means those systems that include Class 1, Class 2 or Class 3 systems as defined by Section 725.2 of NFPA 70 (National Electrical Code) and audio systems, communication systems and power-limited fire alarm systems, covered in the Oregon Electrical Specialty Code.

(25) "Listed Product" means a product was examined and accepted by a Nationally Recognized Testing Laboratory (NRTL) to meet a particular product standard and]is maintained on a list of the listing laboratory.

(26) "Maintain" means to preserve electrical equipment in a good sound condition.

(27) "Maintenance" Compare with repair, replacement, and maintain for definition.

(28) "Minimum Electrical Installation Safety Code" means the adopted Oregon Electrical Specialty Code.

(29) "Nationally Recognized Testing Laboratory (NRTL)" means a laboratory recognized by the Federal Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.7.

(30) "NEMA" means the National Electrical Manufacturers Association.

(31) "Off grid system" is a stand-alone system, connected to a structure, whose electrical systems are not connected to a utility-supplied electrical production and distribution network.

(32) "On grid system" is an electrical power system connected to a structure whose electrical systems are also connected to a utility-supplied electrical production and distribution network.

(33) "Plug-in Replacement" is a part, component or assembly designed to be inserted directly into a mating receptacle or socket such as printed circuit boards, control relays, control harnesses or other equipment connected by a cord or cable and plug assembly. A plug-in replacement does not have any field wiring that is connected to the plug-in part or assembly.

(34) "Power Circuitry" means that portion of the system, other than control, that provides electrical power to utilization equipment.

(35) "Registered Professional Electrical Engineer" is an individual licensed by the State of Oregon Board of Engineering Examiners as a professional electrical engineer under OAR chapter 820, division 10.

(36) "Renewable Electrical Energy System" as it relates to electrical energy generation, is the total components and subsystems that, in combination, convert wind energy, solar energy, micro-hydroelectricity, photovoltaic energy or fuel cell energy into electrical energy suitable for connection to a utilization load.

(37) "Repair" means to restore worn or damaged parts to a good, sound condition by means other than replacement.

(38) "Replacement" means substitution of complete units of damaged or worn equipment with similar new or used equipment of a size and rating that does not exceed the design capacity of the existing product.

(39) "Signing Supervising Electrician" or "Signing Supervisor" is a licensed supervising electrician who has been authorized by the electrical contractor to sign permits.

(40) "Similar Equipment," as applied to the limited maintenance specialty contractor license established by ORS 479.630(12), means components of light fixtures other than ballasts.

(41) "Special Deputy" means a person certified by the board or Chief Electrical Inspector to perform special deputy inspections allowed under ORS 479.760.

(42) "Stand-alone system" is a renewable electrical energy system that supplies power independently of an electrical production and distribution network.

(43) "Up to the load side of the inverter", as it relates to electrical energy generation equipment, is the renewable electrical energy system equipment up to the alternating current connection terminals of the inverter.

[Publications: Publications referenced are available from the agency.]

Division 261
ELECTRICAL EXEMPTIONS

918-261-0015
Board Exemption from Engineering Requirements for Design of Fire Protection Systems

(1) As used in this rule:

(a) “Fire protection system” has the meaning given that term in OAR 918-305-0110.

(b) “Customer” means a person who purchases the design and the service of having the electrical portion of a fire protection system installed.

(2) A general supervising electrician, general journeyman electrician, or class “A” limited energy technician licensee who is employed by a licensed electrical contractor and acting both within the scope of the licensee’s license and as a signing supervisor:

(a) May design, plan, and lay out the electrical portion of a fire protection system for the licensed electrical contractor’s customers and for an electrical contractor who purchases the design and the parts or equipment for the electrical portion of a fire protection system and installs all or part of the system.

(b) Is not subject to any requirements for an additional license, permit, certificate, or registration when designing, planning, or laying out the electrical portions of a fire protection system as authorized by this rule.

(3) The electrical design documents for a fire protection system that are prepared by a general supervising electrician, general journeyman electrician, or class “A” limited energy technician licensee under subsection (2) of this rule are exempt from ORS 671.025 and do not require the stamp of an Oregon registered architect or professional engineer.

(4) For the purposes of ORS 479.860(2), and the exemption created in subsection (2) of this rule, the electrical portion of any fire protection system is considered a noncomplex electrical installation.

918-261-0025
Board Exemption for Limited Energy Underground Signaling Circuits

(1) A license and permit is not required to install limited energy underground signaling circuits or loops defined in this rule. Unlicensed individuals are allowed to install underground signaling circuits or loops, and cover these circuits or loops without a permit or inspection.

(2) For purposes of this rule “underground signaling circuits or loops” means Class 2 circuits defined in Article 725 of the Electrical Specialty Code intended for use as traffic signal devices, gate controllers, weigh stations, counters or other similar devices.

(3) A license and permit is required to splice, connect, or extend the signaling circuits, loops, or loop conductor, or to connect to any of the following:

(a) Controller;

(b) Control devices;

(c) Underground wiring; or

(d) Conduit outside the roadway surface.

918-261-0039
Board Exemption for Products Located on the Load Side of a Listed Class 2 Transformer

(1) An exemption from product certification is granted under ORS 479.540 for installation of Class 2 products, other than wiring, located on the load side of a listed Class 2 transformer. The exemption applies only to products that are not:

(a) In a damp or wet location;

(b) Located in a plenum, duct or other air-handling space;

(c) Located in any area from chapter 5 of the adopted Oregon Electrical Specialty Code; or

(d) Part of a protective signaling system.

(2) An exemption from permitting is created for installation of Class 2 wiring located on the load side of a listed garage door controller. The exemption applies only to one- and two-family dwellings when the wiring is not part of the original wiring of the dwelling.

918-271-0000
Role of an Electrical Inspector

An electrical inspector shall inspect electrical installations and provide public information on the meaning or application of an electrical code provision, but shall not lay out work or act as a consultant for electrical contractors, property owners or users.

918-271-0010
Calls for Inspection

(1) All persons who take out an electrical permit, homeowners as well as electrical contractors, shall request an inspection within three working days of:

(a) The completion of any electrical installation intended to be covered or concealed or that is intended to be placed into service before the final electrical inspection; and

(b) The completion of all electrical installations for the job site covered by a particular permit.

(2) Transactions under a master inspection permit are covered by separate requirements.

918-271-0020
Requests for Inspection and Notice of Results

(1) Except as provided in section (2) of this rule, an inspecting jurisdiction, shall inspect within 48 hours of a written request for inspection unless the time for inspection is extended to a set date by mutual agreement. The 48 hours excludes Saturdays, Sundays and holidays.

(2) The inspecting jurisdiction shall inspect an installation at a remote location within a reasonable time of the request.

(a) For the purpose of this section a "remote location" is:

(A) An inspection location that is more than 60 miles one way using the most direct route, measured from the closest of the inspector's station, inspection office or the inspecting jurisdiction's primary offices; or

(B) An inspection location that requires more than one hour of normal driving, one way, using the most direct route from the closest point mentioned in paragraph (A) of this subsection.

(b) For the purposes of this section "within a reasonable time" means a response time that takes into account the time, distance and number of inspection requests, but shall not exceed seven consecutive calendar days including the date the request was received unless the time for inspection is extended to a set date by mutual agreement. If the seventh calendar day falls on a weekend or holiday this is extended to include the next business day.

(3) Reasonable procedures designed to provide actual notice of inspection results shall be used by all inspecting jurisdictions to notify the person requesting inspections, of the results of electrical inspection. "Reasonable procedures designed to provide actual notice" shall include posting at the job site and:

(a) Nothing more, when the installation is by an owner;

(b) Nothing more, when the installation is approved;

(c) Notification of any deficiencies on a specific permit by:

(A) FAX transmittal to the electrical contractor;

(B) Personal delivery to the electrical contractor or signing supervisor;

(C) Mailing, including electronic mailing; or

(D) Telephone followed by written notification.

(d) By written confirmation of inspection approval if a permit holder requests confirmation.

(4) If the inspection mentioned in sections (1) and (2) of this rule involved a cover inspection, the work cannot be covered unless:

(a) Inspection clearance is given; or

(b) The request for inspection is in writing communicated to the inspecting jurisdiction, with notice that a cover inspection is involved, no extensions are agreed to, and the maximum time for making the required inspection under sections (1) and (2) of this rule are exceeded. For the purposes of this subsection:

(A) Written request includes a letter, telegram or FAX transmittal; and

(B) The burden of proof is on the person requesting the electrical inspection to prove that a written request was communicated.

918-271-0030
Correction of Defects

(1) Defects in electrical installations noted by the electrical inspector shall be corrected and an inspection request made within 20 calendar days of the date of actual notice of deficiency. For the purpose of this

rule, actual notice is given when the inspecting jurisdiction does everything required in OAR 918-271-0020.

(2) If corrections cannot reasonably be made within the specified time in section (1) of this rule, or an interpretation or written appeal has been requested, the permit holder shall contact the inspecting jurisdiction and request an extension of time to a specified date or until deficiency is resolved.

(3) Requests for inspection and requests for extension may be communicated in any way. However, if challenged, the burden of proof is on the requester to document the request was in fact communicated. Responses may also be communicated in any way, but if challenged, the burden of proof is on the inspecting jurisdiction.

Division 282
ELECTRICAL AND ELEVATOR LICENSING

918-282-0000
Electrical Contractors in General

(1) An electrical contractor license is a specialized license allowing a company to engage in the business of making electrical installations. This license is in addition to the licensing and bonding required by the Construction Contractors Board.

(2)(a) Generally, the contractor is required to have a full-time general supervising electrician to supervise the electrical work and sign permits; and

(b) Generally, the electrical installations are required to be made by individuals holding an appropriate electrical license.

(3) Exceptions to Sections (1) and (2). Certain statutory exemptions are in ORS 479.540. Different electrical contractor categories and requirements are in ORS 479.630 and this division of rules.

918-282-0010
Electrical Contractor License

An electrical contractor:

(1) Shall continuously employ at least one full-time general supervising electrician except as otherwise exempted;

(2) Is not authorized to make, direct, supervise or control the making of an electrical installation, unless properly licensed; and

(3) Shall display its electrical license at each of the contractor’s places of business. If the contractor has multiple places of business, a facsimile of the license may be posted. The object of this requirement is to display the scope of electrical authority held by the contractor.

918-282-0015
Electrical Contractor's Responsibilities

Electrical contractors engaged in the business of making electrical installations that require a signing supervising electrician shall assure that all electrical work is made by, or under the direct supervision or

control of, a continuously employed full-time signing supervising electrician acting within the scope of their license.

(1) Signing supervising electricians shall perform supervisory duties for only one contractor for which they are registered. Registered signing supervising electricians shall provide direct supervision or control through one of the following:

(a) Be on the job site;

(b) Have on the job site a continuously employed full-time supervising electrician; or

(c) Be available in person, or have a supervising electrician available to meet with the jurisdictional inspector at the job site within two business days following the request.

(2) Electrical contractors who have more than one designated continuously employed full-time signing supervising electrician shall assign only one signing supervising electrician responsibility for the work being performed under each valid permit.

(3) When an electrical contractor has only one designated signing supervising electrician, the electrical contractor may not use a different signing supervising electrician until the designated signing supervising electrician has discontinued the signing supervising electrician responsibilities and written notice has been provided to the division. The electrical contractor shall not continue electrical work until another signing supervising electrician is employed and written notification is provided to the division.

(4) Electrical contractors shall notify the division in writing who their signing supervising electrician(s) is. Notification shall be provided within five days of entering into or termination of that relationship.

(5) Worker leasing companies, as defined in ORS 656.850, shall notify the division within five business days of any contractual relationship or change in a contractual relationship with an electrical contractor. Notification shall include the name of the electrical contractor and a list of employed licensed electricians, including signing supervising electricians, leased to the electrical contractor. Electrical contractors and signing supervising electricians who utilize worker leasing companies are responsible for assuring compliance with the provisions of ORS Chapter 479 and the rules adopted thereunder.

918-282-0030
Limited Energy Contractor License

A limited energy contractor:

(1) Continuously employs at least one full-time Class "A" limited energy technician, Class "B" limited energy technician or general journeyman to act as a signing supervising electrician to obtain and sign permits;

(2) Is limited to electrical work on limited energy systems and the scope of work authorized under the employed signing supervisor’s license; and

(3) Is authorized to make, direct, supervise or control the making of an electrical installation, only if properly licensed.

918-282-0040
Limited Maintenance Specialty Contractor-HVAC/R License

(1) A limited maintenance specialty contractor-HVAC/R (Heating, Ventilating, Air-conditioning and Refrigeration):

(a) May maintain, service, repair or replace commercial and industrial electrical products that use fuel or other forms of energy to produce heat, power, refrigeration or air conditioning;

(b) May maintain, service, repair or replace the equipment on the load side of the disconnect switch located at or on the electrical product; and

(c) Shall only make electrical modifications or install electrical products where the modification, the size or the type of the product installed is approved by the manufacturer for the equipment involved; and

(d) Shall install, maintain or repair 100 volt-ampere or less thermostat or associated control wiring beyond the electrical product in other than a one- or two-family dwelling only when the contractor employs one or more of the following to perform the work:

(A) General journeyman electrician;

(B) General supervising electrician;

(C) Class "A" limited energy technician; or

(D) Class "B" limited energy technician.

(2) License and Equivalent Requirements. This contractor:

(a) Shall provide proof of at least two years (4,000 hours) experience in installation, including set-up and testing, plus approved specialized training from a manufacturer, distributor, school, or apprenticeship program, or lawful on-the-job training in one or more of the following activities: Electrical repair, service, maintenance, installation or replacement of existing, built-in or permanently connected commercial or industrial heating, ventilation, air conditioning, dehumidifying, filtering or refrigeration equipment;

(b) Shall agree to create an electrical training record within 60 days of hiring for each employee who will do the electrical work and:

(A) Maintain the record for as long as the employee remains with the contractor;

(B) Represent that only employees with electrical training will be used for electrical transactions under this license;

(C) Agree that the training records will be provided or made available to the division upon request; and

(D) Submit a list of all trained persons employed, or to be employed, to do electrical work authorized by this rule at time of the application and renewal. The list shall include all Class "B" limited energy technicians employed by the contractor and be updated within 30 days of changes.

(3) Employment of 100 volt-ampere journeymen or technicians. A limited maintenance specialty contractor-HVAC/R may employ, or be a:

(a) Class "A" limited energy technician; or

(b) Class "B" limited energy technician allowing 100 volt-ampere or under thermostat, or associated control wiring involving any type of equipment on which the limited maintenance specialty contractor-HVAC/R is authorized to work.

918-282-0060
Restricted Energy Contractor License

(1) A restricted energy contractor is limited to HVAC activities only, unless the board approves additional indorsements, at which time the contractor shall file separate proof of qualification.

(2) Applicants for this license shall:

(a) Designate the applicable indorsement sought;

(b) Attach a copy of the identification card to be used for the licensing period; and

(c) Provide a list of employees covered by the license and proof of experience:

(A) For the contractor, if the contractor is an individual; a partner if the contractor is a partnership; or a designated person employed by the corporation who actively supervises the restricted energy electrical activities in the case of a corporate contractor;

(B) That the qualifying person has on-the-job training, training from a manufacturer, distributor or school, or completed an apprenticeship program under the relevant Electrical Specialty Code or One and Two Family Dwelling Specialty Code; and

(C) That the person had at least two years of experience in the trade.

(3) In addition to the statutory requirements for identity of the contractor, the contractor shall issue an identification card to employees covered by the license upon employment, and annually thereafter showing:

(a) Name of employee;

(b) Date of issue;

(c) Contractor’s name and the Construction Contractors Board identification number; and

(d) The expiration date coinciding with the contractor’s license expiration.

(4) When the contractor’s experience is based on a corporate supervisor or partner and that person leaves the entity, the contractor shall immediately amend the license and qualify another person or surrender the license for cancellation.

(5) The contractor shall maintain a current list of employees with the division.

918-282-0100
Electrical Licensing in General

(1) An electrical license is issued to an individual and allows the holder to make certain regulated electrical installations. Individual electrical licensing laws are in ORS 479.630. The following rules

implement the individual electrical licensing laws. Application and examination requirements as well as continuing education and renewal requirements are located in OAR division 30.

(2) When the rules refer to a "valid" electrical license, this means a license issued by the Electrical and Elevator Board that has not expired, or been suspended or canceled.

918-282-0110
General Licensing Exemptions

In addition to the exceptions provided in ORS 479.540, electrical licenses are not required to:

(1) Replace light bulbs, fluorescent tubes or approved fuses, or to connect approved portable electrical equipment to permanently installed and properly wired receptacles;

(2) Do experimental electrical work or testing of electrical products in electrical shops, educational institutions, industrial plants or recognized testing laboratories;

(3) Operate, maintain, repair and replace broadcast equipment of commercial radio and television stations; or

(4) Install limited energy systems not exceeding 100 voltampere ("VA") in Class 2 and 3 systems limited to:

(a) Single station smoke or ionization detectors installed in buildings three stories or less in height;

(b) Closed circuit television systems installed in buildings three stories or less in height;

(c) Master Antenna Television ("MATV") systems installed in buildings three stories or less in height; or

(d) Intercom and audio systems installed in one- and two-family dwellings.

918-282-0120
Licensing Requirements for Electrical Work

(1) No person or entity shall allow any individual to perform electrical work for which the individual is not properly registered or licensed.

(2) Owners, managers or agents of facilities having electrical employees shall report in writing to the division and the authority having jurisdiction, the names and license numbers of limited supervising manufacturing plant or limited maintenance electricians employed.

918-282-0170
General Journeyman License

(1) A general journeyman:

(a) Is authorized to make any electrical installation; and

(b) Shall work under the supervision, direction and control of a general supervising electrician unless doing the type of work that may be supervised, directed or controlled by a person holding a specific limited supervising electrician license, or the type of work requiring no supervision.

(2) A general journeyman working in a manufacturing or industrial plant without a supervising electrician or engineer is limited to maintenance work.

(3) License and Equivalent Requirements.

(a) Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

(A) Stock room and material handling, 100 hours:

(i) Shop;

(ii) Service.

(B) Residential Wiring, 1,000 hours:

(i) Service and panel;

(ii) Conduit, flex, romex boxes, electric heating systems;

(iii) Wire pulling and taps;

(iv) Wiring devices and fixtures;

(v) Remodel and finish work.

(C) Commercial Installations, 1,000 hours:

(i) Services, switchboards and panels;

(ii) Conduit, flex, metal moldings, floor duct and boxes;

(iii) Wire pulling and taps;

(iv) Wire devices;

(v) Lighting fixtures — high voltages, explosion proof, perimeter lighting.

(D) Industrial Installations, 1,000 hours:

(i) Services, switchboards and panels;

(ii) Conduit, tray and boxes;

(iii) Wire pulling and taps;

(iv) Motor and equipment installations;

(v) Lighting fixtures — High voltage, explosion proof, security lighting.

(E) Intercommunication, Signal and Control Systems, 500 hours;

(F) Underground Construction, 100 hours:

(i) Tunnel rack work;

(ii) Ditch digging and material handling;

(iii) Conduit preparation.

(G) Trouble Shooting and Maintenance, 250 hours;

(H) Finishing and Fixture Hanging, 50 hours;

(I) Total Minimum Subject Hours, 4,000.

(b) Total Hours Required. Total electrical work experience shall be at least 8,000 hours. No more than 300 percent credit shall be allowed for subjects (A) through (H) for any one subject;

(c) Related Training Classes. Applicants shall submit transcripts with passing grades of "C" or better in graded classes and a "pass" in non-graded classes in the following related electrical training classes:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to National Electrical Code;

(F) Electrical fundamentals and basic theory, including AC and DC;

(G) Electrical measuring devices;

(H) Wiring methods;

(I) Low voltage and limited energy circuits;

(J) Residential, industrial and commercial calculations;

(K) Motors, generators and transformers;

(L) Practical circuit sketching;

(M) Lighting circuits;

(N) Fundamentals of electronics;

(O) High voltage distribution and equipment.

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918-282-0205
Limited Renewable Energy Technician

(1) In addition to the requirements of ORS 479.630(16), a limited renewable energy technician shall be employed by a limited renewable energy contractor or electrical contractor.

(2) Persons seeking to be licensed under this rule shall provide proof of completion of a board-approved apprenticeship program that includes:

(a) A minimum of 4,000 hours of on-the-job training in the following work areas:

(A) 1,500 hours total with a minimum of 1,000 hours in photovoltaics and a minimum of 500 hours in other renewable electrical energy system installations, including, but not limited to:

(i) Wire pulling and splices;

(ii) Conduit, flex, tray and duct;

(iii) Control panels and controls;

(iv) Wiring devices; and

(v) Removal and finish work of renewable electrical energy systems including wind, solar, micro-hydroelectricity, photovoltaic, fuel cells and engine generators for off-grid systems;

(B) 1,500 hours minimum in balance of system including, but not limited to, installation, removal and finish of inverters, batteries, regulation, metering, conditioning equipment and systems; and

(C) 1,000 hours in other related on-the-job training including, but not limited to:

(i) National Electrical Code requirements for design of system;

(ii) Troubleshooting;

(iii) Maintenance; and

(iv) Plan/blueprint reading; and

(b) A minimum of 288 hours of classroom or related training covering:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to the National Electrical Code;

(F) Electrical fundamentals and basic theory, including alternating and direct current;

(G) Electrical measuring devices;

(H) Wiring methods;

(I) Related electrical statutes and rules;

(J) Fundamentals of electronics;

(K) Renewable electrical energy systems including, but not limited to, systems and devices as set forth in ORS 479.630(16)(b)(A);

(L) Class 2 and 3 circuits; and

(M) Basic mechanics — applied physics and theory.

918-282-0270
Apprentices

(1) An apprentice:

(a) Shall meet the following minimum requirements:

(A) General journeyman, Class A limited energy technician and Class B limited energy technician:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED, or international equivalency; and

(iii) Have one-year high school algebra, integrated math 2 or its equivalent, with a grade of "C" or better, or equivalent community college mathematics placement test results.

(B) Limited journeyman manufacturing plant, limited maintenance, limited journeyman sign, limited journeyman stage and limited renewable energy technician:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED or international equivalency; and

(iii) Have one-year high school mathematics with a passing grade, or equivalent community college mathematics placement test results;

(C) Limited residential:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED, or international equivalency; and

(iii) Have one-year high school algebra, integrated math 2 or its equivalent, with a grade of "C" or better, or one-year high school math and completion of an algebra course as part of an approved apprenticeship program, with a grade of "C" or better, or equivalent community college mathematics placement test results.

(b) Shall be licensed;

(c) May assist an appropriately licensed electrician on the same job site and the same shift in performing electrical work authorized in the trade, or branch of the trade, in which the licensee is registered; and

(d) Shall not perform electrical work under a person holding a letter of authority card issued to State of Oregon employees.

(2) Apprentice licenses issued under sections (3)(a), (4), or (5) of this rule are issued and renewed by the Oregon Bureau of Labor and Industries according to standards established in this rule and the guidelines established by the Bureau of Labor and Industries and the Building Codes Division.

(3) Electrical apprentice licenses:

(a) Shall be issued to individuals registered in formal electrical apprenticeship programs recognized by the board and the Oregon Bureau of Labor and Industries under ORS Chapter 660; and

(b) May be issued to trainees enrolled in individually approved, employer-sponsored training programs leading to the limited journeyman license in OAR 918-282-0190. Individuals enrolled in these programs may be issued an electrical apprentice license only if the employer's program is approved by the board.

(4) Reciprocal electrical apprentice licenses shall be issued to individuals currently registered in an approved apprenticeship program outside Oregon in a state that is party to the state apprenticeship reciprocal agreement.

(5) Notwithstanding subsection (1)(c) of this rule, a final period apprentice licensed under sections (3)(a) or (4) of this rule that meets the requirements of this section and the Bureau of Labor and Industries may be issued an indirect supervision electrical apprentice license, allowing the apprentice to work under indirect supervision at the discretion of the responsible supervisor. A license under this section may be issued to:

(a) A final period apprentice in an 8,000 hour apprenticeship program with at least 6,500 hours of on-the-job training, allowing the apprentice to work under indirect supervision on projects not exceeding eight hours duration and limited to 300 volts phase to phase or phase to ground; or

(b) A final period apprentice in a 6,000 hour apprenticeship program with at least 5,000 hours of on-the-job training, allowing the apprentice to work under indirect supervision on projects not exceeding eight hours duration that are otherwise within the scope of the apprentice’s license.

918-282-0345
Class "A" Limited Energy Technician License

Scope of work. A Class "A" limited energy technician:

(1) Is allowed to install, alter and repair all limited energy systems; and

(2) Shall also be licensed as an electrical contractor or shall work for a licensed electrical contractor, limited energy electrical contractor, or for one employer in an industrial plant.

918-282-0355
Licensing Requirements for Class "A" Limited Energy Technician

(1) License and Equivalent Requirements. Applicant shall have a minimum of 6,000 hours of lawfully obtained experience. Experience must be verified as established in OAR division 30. This experience shall be obtained as follows

(a) By successful completion of a board-approved Class "A" limited energy apprenticeship program; or

(b) Through limited energy electrical experience equivalent to a Class "A" board-approved limited energy apprenticeship program.

(2) Persons utilizing lawful experience may meet equivalent experience requirements by providing verification as required by OAR 918-030-0030 through 918-030-0050.

(3) Applicants for approval under equivalent requirements must show proof of the following work categories and minimum hours of on the job training or experience:

(a) Stock room and materials, 150 hours:

(A) Shop;

(B) Service;

(b) Limited energy wiring, 2,400 hours:

(A) Installation;

(B) Wire pulling;

(C) Splices;

(D) Conduit;

(E) Flex;

(F) Tray and duct;

(G) Control panels and controls;

(H) Wiring devices;

(I) Removal and finish work;

(c) Trouble shooting and maintenance, 375 hours;

(d) Outdoor installation, overhead and underground, 75 hours; and

(e) Trade-specific installations, 3,000 hours of which at least 750 hours must be from paragraph (A) below:

(A) Protective signaling, including but not limited to;

(i) Fire alarm;

(ii) Nurse call;

(iii) Security;

(B) Medical;

(C) Data and telecommunications;

(D) CCTV, paging and sound;

(E) Instrumentation and HVAC;

(4) Total Hours Required. Total electrical work experience shall be at least 6,000 hours. No more than 300 percent credit shall be allowed in work categories (a) through (d) in Section (3) of this rule.

(5) Related Training Classes. Additionally, applicants shall have a minimum of 432 hours of related classroom training as outlined in the following:

(a) Electrical mathematics;

(b) Safety and accident prevention;

(c) Care and use of hand and power tools;

(d) Blueprint reading and electrical symbols;

(e) Introduction to the National Electrical Code;

(f) Electrical fundamentals and basic theory, including AC and DC;

(g) Electrical measuring devices;

(h) Wiring methods;

(i) Related electrical statutes and rules;

(j) Fundamentals of electronics;

(k) Transformers;

918-282-0360
Class "B" Limited Energy Technician

Scope of work:

(1) A Class "B" limited energy technician is allowed to perform limited energy electrical activity that does not include protective signaling as defined in ORS 479.905.

(2) A Class "B" limited energy technician shall also be licensed as an electrical contractor, work for a licensed electrical contractor, or for one employer in an industrial plant. The scope of limited energy

electrical work cannot exceed either that which the signing supervisor is authorized to perform, or that work which the individual is licensed to perform.

918-282-0365
Licensing Requirements for Class "B" Limited Energy Technician

(1) License and Equivalent Requirements. Applicant shall have a minimum of 4,000 hours of lawfully obtained experience. Experience must be verified as established in OAR division 30. This experience shall be obtained as follows:

(a) As an apprentice in a board-approved limited energy electrical activity apprenticeship program; or

(b) Through limited energy activity equivalent to an apprenticeship program, and the completion of a board-approved 32 hour training program.

(2) Persons utilizing lawful experience may meet equivalent experience requirements by providing verification as required by OAR 918-030-0030 through 918-030-0050.

(3) Applicants for approval under equivalent requirements must show proof of the following work categories and minimum hours of on the job training or experience:

(a) Stock room and materials, including shop and service: 100 hours;

(b) Limited energy installations, including cables and supports, wire pulling and splices, conduit, flex, tray and duct, control panels and controls, wiring devices, removal and finish work: 1,650 hours;

(c) Trouble shooting and maintenance: 250 hours; and

(d) Occupation specific applications including 2,000 hours in any of the following:

(A) Communications systems, including data telecommunications, intercom, paging;

(B) Specialized control systems, including HVAC, medical, boiler, clock, instrumentation, or other limited energy systems; and

(C) Limited energy electrical activity defined in ORS 479.905(4).

(4) Total Hours Required. Total electrical work experience shall be at least 4,000 hours. No more than 300 percent credit shall be allowed in work categories (a) through (d) in Section (3) of this rule.

(5) Applicants shall also have a minimum of 288 hours of class or related training covering:

(a) Electrical mathematics;

(b) Safety and accident prevention;

(c) Care and use of hand and power tools;

(d) Blueprint reading and electrical symbols;

(e) Introduction to the National Electrical Code;

(f) Electrical fundamentals and basic theory, including alternating and direct current;

(g) Electrical measuring devices;

(h) Wiring methods;

(i) Related electrical statutes and rules;

(j) Fundamentals of electronics;

(k) Transformers;

(l) Lighting circuits; and

(m) Basic mechanics — Applied physics and theory.

Division 305
ELECTRICAL CODES AND STANDARDS

918-305-0000
Existing Electrical Installations

Wiring installation in existing buildings in the State of Oregon that complied with the minimum electrical safety code standards, National Electrical Code or Oregon Electrical Specialty Code in effect at the time of installation shall not be considered in violation of the current minimum Electrical Specialty Code standards, unless the use or occupancy of the building is changed requiring different methods, alterations, or additions.

918-305-0005
Interpretations

All electrical interpretations dated prior to October 1, 2017, issued by the Building Codes Division are withdrawn.

918-305-0010
Scope of the Electrical Specialty Code

The Electrical Specialty Code applies to all nonexempt electrical installations except as covered by the electrical provisions of the Oregon Residential Specialty Code and is inspected by an Electrical Specialty Code inspector.

918-305-0020
Governing Codes

The applicable Electrical Specialty Code for electrical installations and alterations is:

(1) The Electrical Specialty Code provisions in effect at the earlier of a request for plan review or application for a permit; or

(2) At the option of the applicant, the current Electrical Specialty Code.

918-305-0030
Other Codes or Publications that Impact Electrical Installations

Other codes and publications that impact electrical installations include, but are not limited to those listed below:

(1) Chapter 9 of the **Oregon Structural Specialty Code** relating to fire protection systems and Chapter 3 of the **Oregon Residential Specialty Code** relating to smoke alarm installations.

(2) ORS 455.420 requiring individual electric meters for dwelling units.

(3) The **Oregon Energy Efficiency Specialty Code**, and chapter 11 of the **Oregon Residential Specialty Code** which address the energy efficiency issues of motors, electric lighting and other electric equipment; and

(4) Chapter 16 and 17 of the **Oregon Structural Specialty Code** which addresses the seismic requirements of nonstructural components and special inspection requirements.

(5) Publications and requirements of the serving utility.

(6) Public Law 101-336, the Americans with Disabilities Act, Part III; Department of Justice Regulations of Friday, July 26, 1991; 28 CFR Part 36, as amended, including the 2010 ADA Standards for Accessible Design and Public Law 100-430, the Fair Housing Act and the regulations adopted thereunder.

(7) Chapter 11 of the **Oregon Structural Specialty Code** which relates to the Americans with Disabilities Act for mounting height requirements for electrical and communication receptacles located in affected buildings and structures.

(8) The interconnection of all net-metering facilities and solar photovoltaic systems operated as interconnected power production sources shall comply with the **Oregon Electrical Specialty Code**. In addition, the interconnection of all net-metering facilities utilizing solid-state inverters shall comply with OAR 860-039 Net Metering.

(9) **Oregon Manufactured Dwelling Installation Specialty Code**. The electrical installations shall be in accordance with the requirements of the **Oregon Electrical Specialty Code**.

(10) The electrical portions of the installation or product standards identified in OAR 918-306-0005. These standards are informational only and are to be used to clarify code intent. They may be used as installation guides when not specifically referenced or covered in the **Oregon Electrical Specialty Code**. Examples include, but are not limited to, the electrical sections of NFPA 20, NFPA 54, NFPA 99, NFPA 101, NFPA 110, NFPA 780 and NFPA 820.

(11) Electrical installation requirements for electric vehicle ready parking facilities specified in OAR 918-020-0380.

918-305-0100
Adoption of Oregon Electrical Specialty Code

(1) The **Oregon Electrical Specialty Code** is adopted pursuant to OAR chapter 918, Division 8.

(2) Effective October 1, 2017, the **2017 Oregon Electrical Specialty Code** consists of the following:

(a) 2017 Edition of the NFPA 70, National Electrical Code (NEC), and as further amended by the division in OAR 918-305-0105 Table 1-E;

(b) 2017 Edition of the IEEE C2-2017, National Electrical Safety Code (NESC); and

(c) The electrical provisions of the **Oregon Elevator Specialty Code** adopted in OAR 918-400-0455.

(3) In the event of a conflict between the NEC and NESC requirements, the NEC requirement, as amended in subsection (2) of this rule, applies.

(4) As used in this rule:

(a) “ANSI” is the American National Standards Institute;

(b) “ASME” is the American Society of Mechanical Engineers;

(c) “IEEE” is the Institute of Electrical and Electronics Engineers; and

(d) “NFPA” is the National Fire Protection Association.

918-305-0105
Amendments to the Oregon Electrical Specialty Code

(1) The Oregon Electrical Specialty Code is amended pursuant to OAR chapter 918, division 8. Amendments adopted during the code-cycle for inclusion into the Oregon Electrical Specialty Code are placed in this rule, showing the section reference and a descriptive caption. Amendments to the Oregon Electrical Specialty Code are printed in their entirety in Table 1-E.

(2) Effective October 1, 2020, the Oregon Electrical Specialty Code Section 250.53(A)(2) is amended to not require a supplemental electrode in certain temporary electrical service installations.

(3) Effective October 1, 2020, the Oregon Electrical Specialty Code Section 517.13(A) is amended for allowance of additional wiring methods in certain type B occupancies.

(4) Effective October 1, 2020, the Oregon Electrical Specialty Code Section 700.3(F) is amended for allowance of building owner discretion in the requirement of temporary power sources for alternate source of power maintenance or repair.

918-305-0430
Requests for Inspection and Notice of Results

(1) All persons who take out an electrical permit shall request an inspection within 24 hours of:

(a) The completion of any electrical installation intended to be covered or concealed or that is intended to be placed into service before the final electrical inspection; and

(b) The completion of all electrical installations for the job site covered by a particular permit.

(2) Except as provided in Section (3) of this rule, an inspecting jurisdiction, shall inspect within 48 hours of a written request for inspection unless the time for inspection is extended to a set date by mutual agreement. The 48 hours excludes Saturdays, Sundays and holidays.

(3) The inspecting jurisdiction shall inspect an installation at a remote location within a reasonable time of the request.

(a) For the purpose of this section, a “remote location” is:

(A) An inspection location that is more than 60 miles one way using the most direct route, measured from the closest of the inspector’s station, inspection office or the inspecting jurisdiction’s primary offices; or

(B) An inspection location that requires more than one hour of normal driving, one way, using the most direct route from the closest point mentioned in paragraph (A) of this subsection.

(b) For the purposes of this section, “within a reasonable time” means a response time that takes into account the time, distance and number of inspection requests, but shall not exceed seven consecutive calendar days including the date the request was received, unless the time for inspection is extended to a set date by mutual agreement. If the seventh calendar day falls on a weekend or holiday, this is extended to include the next business day.

(4) Reasonable procedures designed to provide actual notice of inspection results shall be used by all inspecting jurisdictions to notify the person requesting inspections, of the results of electrical inspection. “Reasonable procedures designed to provide actual notice” shall include posting at the job site and:

(a) Nothing more, when the installation is by an owner;

(b) Nothing more, when the installation is approved;

(c) Notification of any deficiencies on a specific permit by:

(A) FAX transmittal to the electrical contractor;

(B) Personal delivery to the electrical contractor or signing supervisor;

(C) Mailing; or

(D) Telephone followed by written notification.

(d) By written confirmation of inspection approval if a permit holder requests confirmation.

(5) If the inspection mentioned in Sections (1) and (2) of this rule involves a cover inspection, the work cannot be covered unless:

(a) Inspection clearance is given; or

(b) The request for inspection is in writing communicated to the inspecting jurisdiction, with notice that a cover inspection is involved, no extensions are agreed to and the maximum time for making the required inspection under Sections (1) and (2) of this rule are exceeded. For the purposes of this subsection:

(A) Written request includes a letter, telegram or FAX transmittal; and

(B) The burden of proof is on the person requesting the electrical inspection to prove that a written request was communicated.

918-305-0440
Correction of Defects

(1) Defects in electrical installations noted by the electrical inspector shall be corrected and an inspection request made within 20 calendar days of the date of actual notice of deficiency. For the purpose of this rule, actual notice is given when the inspecting jurisdiction does everything required in OAR 918-271-0020.

(2) If corrections cannot reasonably be made within the specified time in section (1) of this rule, or an interpretation or written appeal has been requested, the permit holder shall contact the inspecting jurisdiction and request an extension of time to a specified date or until deficiency is resolved.

(3) Requests for inspection and requests for extension may be communicated in any way. However, if challenged, the burden of proof is on the requester to document the request was in fact communicated. Responses may also be communicated in any way, but if challenged, the burden of proof is on the inspecting jurisdiction.

918-305-0450
Electrical Products

(1) The service equipment of a system substation powered by AC shall be certified by an electrical testing laboratory or field evaluation firm approved by the State of Oregon.

(2) The DC transformation, rectification and distribution equipment within a system substation, including the traction power transformer, shall meet ANSI standards where applicable. Compliance shall be demonstrated by the operating entity by:

(a) Furnishing the required ANSI test reports upon request;

(b) Demonstrating the equipment is certified by an electrical testing agency approved by this state; or

(c) Having the equipment otherwise approved by the division as meeting applicable standards. Where there are no applicable ANSI standards for such electrical products, an exception may be granted by the division. All DC distribution equipment outside a substation is exempt from product certification.

(3) All electrical products and components installed for signaling systems are exempt from electrical product certification, the Electrical Specialty Code and the National Electrical Code. The main power supplies shall be certified by an electrical testing agency approved by this state as meeting applicable ANSI standards or otherwise be approved by the division. Where there are no applicable ANSI standards for such electrical products, an exception may be granted by the division.

(4) All electrical products installed for communications systems or components to such systems are exempt from regulation under this rule, the Electrical Specialty Code and the National Electrical Code. The main power supply shall be certified by an electrical testing agency approved by this state, or otherwise be approved by the division as meeting applicable ANSI standards. Where there are no applicable ANSI standards for such electrical products, an exception may be granted by the division.

918-305-0460
Grounding

(1) System substations shall be installed with a grounding grid to limit touch and step potentials to safe levels as recommended by IEEE 80, “Guide for Safety in Substation Grounding.” AC and low-voltage equipment shall be bonded or grounded to this grid, except as otherwise provided for the utility neutral or

ground. Calculations and ground resistance test reports for every substation shall be furnished to the division prior to final inspection and maintained by the operating entity.

(2) The service neutral conductor is not required to be bonded to the substation grounding grid, provided that:

(a) A warning sign is posted on the service equipment to provide notice of potential hazards to technical persons who may have access to the service equipment. The notice shall clearly indicate that the neutral is isolated and not grounded;

(b) An isolation barrier is installed over the neutral termination within the service equipment; and

(c) The ground grid is installed in a manner that will demonstrate a ground resistance of 5 ohms or less when tested in accordance with IEEE 81, “Guide for Testing Grounding Systems.”

(3) Free-standing signal system cabinets, bungalows or buildings shall be separately grounded by means of a driven ground electrode or electrodes to obtain ground resistance of 25 ohms or less when tested in accordance with IEEE 81.

(4) 60 Hz, 120-volt AC systems for accessory power or lighting located within station platforms or substations shall meet the requirements of the Electrical Specialty Code.

(5) All service equipment receiving service voltage from the utility shall be posted with warning signs to provide notice of potential hazards to technical persons who may have access to the panel. The notice shall clearly indicate that the neutral is isolated and not grounded.

(6) All fencing located within 10 feet of a metallic railway substation, building, ground grid, bungalow or other structure shall be constructed of nonmetallic material.

918-305-0470
Appeals

(1) Appeals of decisions recommended by a deputy inspector in relation to the application of the Oregon Electrical Specialty Code shall be to the chief electrical inspector in accordance with OAR 918, division 251, provided that no notice needs to be given to any local jurisdiction.

(2) The chief electrical inspector’s determination may be appealed to the director who may consult with the Electrical and Elevator Board or other consultants on any technical issues deemed necessary by the director.

Division 309
ELECTRICAL PERMITS AND FEES

918-309-0000
Electrical Permits

(1) Except as provided by OAR 918, division 282, dealing with restricted energy transactions, limited maintenance specialty contractor-HVAC/R, and registered telecommunications service provider, the signature of a signing supervising electrician or limited supervising electrician must be required on each permit to aid inspections by the division and indicate responsibility under ORS 479.710. Any person providing false or incorrect information or false or an incorrect signature to obtain a permit may be subject to compliance action by the board.

(2) The following may purchase electrical permits:

(a) Electrical contractors; and

(b) Registered telecommunications service providers (TSP) as defined in ORS 759.005, including competitive carriers, competitive local exchange carriers (CLEC) and telecommunications utilities. These telecommunications service providers are listed as such by the Public Utilities Commission (PUC).

(3) A permit is required prior to start of electrical work. See OAR 918-309-0080 for temporary permit criteria. Expansion of work under a permit may be added to an existing permit prior to final inspection.

(4) A permit must be posted in a conspicuous place near the main electrical panel location. If there is no main panel installed, the permit must be posted in a conspicuous place on the job site.

(5) An electrical permit, other than a restricted energy electrical permit as provided in OAR 918-309-0400, issued to one person or firm is not transferable and may not permit any other person or firm to perform any electrical work thereunder.

(6) Any permittee holding an unexpired permit may apply for an extension of the time within which work may be completed.

(7) Permits issued by an inspection jurisdiction under the provisions of the Oregon Electrical Specialty Code and these rules expire and become null and void if the work authorized by the permit is:

(a) Not started within 180 days from the date of permit issuance; or

(b) Suspended or abandoned for a period of 180 days after the work is started.

(8) Corrections to electrical installations must be completed regardless of 180-day suspension or abandonment of work. All corrections to electrical installations must be completed within 20 calendar days of notice of deficiency. See OAR 918-271-0030 for requirements.

(9) In addition to other signing supervising electricians, the following are authorized to sign permits:

(a) A person whose qualifications are relied upon for licensing under OAR 918-282-0140 is a “supervisor” under ORS 479.560 and can sign for electrical permits or labels for work under a limited maintenance specialty contractor-HVAC/R license;

(b) A Class “A” or Class “B” limited energy technician can sign permits or labels for 100 volt-ampere or less electrical installations performed by those licensees;

(c) A “supervisor” as used in ORS 479.630 who can sign restricted energy permits includes:

(A) A Class “A” or “B” limited energy technician when the electrical installation is within the scope of the person’s license;

(B) Persons whose qualifications are relied upon for the issuance of a restricted energy electrical contractor license under OAR 918-282-0060; and

(C) Any other electrical licensee authorized to sign a permit provided the work is within the scope of the person’s license.

(10) No electrical permit is required:

(a) To replace light bulbs, fluorescent tubes, or approved fuses, or to connect approved portable electrical equipment to permanently installed and properly wired receptacles;

(b) For experimental electrical work or testing of electrical products in testing laboratories of electric shops, educational institutions, industrial plants, or recognized testing laboratories;

(c) For those minor electrical installations for which the board has authorized an installation label;

(d) To install components exempted by OAR 918, division 261;

(e) To replace an existing garbage disposal, dish washer, electric water heater or similar appliance of 30 amps or less, single phase; or

(f) To install cord and plug connected Class 2 irrigation control systems.

(11) Unless noted otherwise in these rules, a permittee is entitled to two inspections for each electrical installation or portion thereof for which a permit fee is assessed. The total number of inspections under a permit are aggregated and used to inspect any of the installations under the permit. A permittee is considered to have received an inspection only when the permittee has requested and received an inspection from the municipality. Inspections are counted based on a single visit, in person or through an approved electronic inspection method, to a job site. See examples in Table 2-E.

918-309-0010
Electrical Permit Form and Format

The division has adopted a:

(1) Standardized statewide electrical permit application format; and

(2) Uniform statewide method for calculating permit fees:

(a) Fees can only be charged for the categories and under the procedures and requirements established in OAR 918, division 309.

(b) The fees set out in OAR 918-309-0070 are for state permits. Local jurisdictions may set different fees as authorized by ORS 479.845.

(c) The fees established for the various categories adopted in this rule shall be inserted in the permit application form for local jurisdictions.

(d) The surcharge required by ORS 455.210 and 455.220 shall be added to the fees established.

918-309-0020
State Electrical Permit Fees

The Building Codes Division electrical fees and method of computation of electrical permit fees are established in OAR 918-309-0030 to 918-309-0070.

918-309-0030
Permits for Residential Wiring

(1) The permittee is entitled to four inspections for a one-family dwelling, and eight inspections for a two-family dwelling. Fees are based on square footage for each one- or two-family dwelling (including attached garage) for residential wiring as follows:

(a) Wiring of not more than 1,000 square feet, $106;

(b) Each additional 500 square feet or portion thereof, $19.

(2) Permit fee for Manufactured Home or Modular Dwelling including service or feeder to unit served, $63.

(3) Permit fee for Limited Energy:

(a) One and Two Family Residential, $25. This permit fee covers all limited energy type systems installed in the building when installed at the same time by the permittee. A permit holder working under a residential wiring permit calculated under section (1) of this rule is not required to obtain a limited energy permit to install wiring for doorbells, garage door openers and heating and air conditioning systems.

(b) Multi-family residential, $45. This permit fee covers all limited energy systems installed in the building, except protective signaling as defined in ORS 479.905(5). The fee is assessed once per floor, regardless of the number of dwelling units on each floor. The permittee is entitled to two inspections per floor.

(c) Multi-family residential protective signaling, $63. This permit fee includes all protective signaling systems installed in the building as defined in ORS 479.905(5). The fee is assessed once per floor, regardless of the number of dwelling units on each floor. The permittee is entitled to two inspections per floor. See example in Table 3-E.

(4) Items Covered in this Section:

(a) When computing the area, include the square footage of attached garages;

(b) The residential fee covers services, feeders and all branch circuits on and inside each dwelling unit and includes garages that are attached to the dwelling unit, including the limited energy systems for the doorbell, garage door opener, and the heating and air conditioning control wiring in one and two family dwellings only;

(c) New Construction. Use this fee in connection with new construction;

(d) Remodels, Additions, Alterations or Repairs. Compute the fee under this section using the square footage of the area remodeled or added, then compute the fee under OAR 918-309-0060 “branch circuits.” Use the lower fee;

(e) Reconnection only. See OAR 918-309-0040(9).

(5) Application of Fees:

(a) One- or Two-Family Dwellings. To calculate the fee for a one or two-family dwelling, obtain the square footage of each unit. Include the garage if it is attached to any unit. There is an exception in subsection (c)(A) of this section if a detached garage or accessory building is built at the same time as the dwelling unit. Compute the fee using the procedure shown for each dwelling unit. Record the number of units under “Items” in the permit and multiply this with the fee shown;

(b) Multi-family Building. In the case of a multi-family building containing three or more apartments, determine the square footage of the largest apartment in the building and compute the fee. For each additional apartment in the building, a fee of one-half of the first unit fee must be used. The house panel fee for general service equipment such as apartment unit lights, washer-dryer, outdoor lighting and the like is calculated using OAR 918-309-0060(1) services and feeders, and OAR 918-309-0060(2)(b) dealing with branch circuits. The permittee is entitled to four inspections per floor;

(c) Detached Garages. Detached garages and accessory buildings are not considered part of the residential unit. The permit fee is based on the method of supplying power to the unit:

(A) Exception — Simultaneous Construction with Single Branch Circuit. If the structure receives power through a branch circuit from the house panel with a single branch circuit, include the square footage of the garage with the living unit, provided the garage is built at the same time as the dwelling unit. If separate construction is involved, use the fee for branch circuits under OAR 918-309-0060;

(B) Sub-Panel. If the detached structure has a sub-panel powered from the house service, the fee is computed using the “feeder” section, OAR 918-309-0040 and branch circuits, OAR 918-309-0060(1);

(C) If the detached structure is built first, the fee is based on service, feeder and branch circuits;

(D) Separate Service. If the structure has a separate service, the fee is based upon service, feeder and branch circuits.

(d) Reconnect Only. See OAR 918-309-0040(9);

(e) House Moves. In most instances, the fee will only involve a service reconnect:

(A) If changes to the service are made, a new service charge is made under OAR 918-309-0040;

(B) For each new, extension or alteration of branch circuits, use OAR 918-309-0060;

(C) If the building was moved in sections and there is no upgrading of the service, use the fees in this section using square footage.

(f) Manufactured Dwellings and Modular Homes. Manufactured dwellings and modular homes usually require a service and a feeder from the service to the home. In mobile home parks, usually only the feeder is necessary because the service already exists. Where there is a detached garage or accessory building, refer to subsection (5)(c) of this rule dealing with detached structures.

918-309-0070
Miscellaneous

Special fees are established for the following items in lieu of fees set under OAR 918-309-0060.

(1) Permit for each domestic water or sewage pump, irrigation pump or circle and its associated controls, excluding service fee, $63;

(a) Single Circuit. If a well pump or sewage pump and its associated controls are serviced from the house main service, and the pump is installed and ready for inspection, no additional fee is charged. If the pump is installed by another contractor or later, an additional pump fee and a new permit is necessary under this part;

(b) Feeder. If the well has a subpanel, there is a fee for the feeder from the main service to the subpanel and a fee for branch circuits. If the pump is installed later, or by another contractor, a new permit and pump fee is required;

(c) Separate Service. If the well has separate service the fee is based on the service (amps) and the number of branch circuits. If the pump is installed later, or by a different contractor, a new permit and pump fee is required.

(2) Permit for the installation of each electrical sign or outline lighting system supplied by a single branch circuit, $63.

(3) Each limited energy circuit panel, one or more air-conditioning or heater thermostats installed at a job site, multiple circuit terminal board or installation or extension of limited energy circuits, $63.

(4) The permit fees in this rule, except as noted in subsection (11), are for up to two inspections and are charged in addition to other fees for electrical service.

(5) Note the exception under OAR 918-309-0030(3)(a)(A) dealing with residential limited energy.

(6) Installation of signal circuits in buildings over three floors. Each floor in excess of three is considered a separate panel for the purpose of calculating fees.

(7) Fees for inspections in excess of those allowed under OAR 918-309-0030 through 918-309-0060, $55.

(8) Fees for other inspections not covered by this rule. All inspections not provided in this rule must be charged at $86 per hour including travel and office time with a minimum charge of one hour.

(9) Fees for Bulk Labels:

(a) Bulk labels sold only to electrical contractors, $25 per label;

(b) Contractors working under a bulk label system are billed for any difference in the cost of the bulk label and the cost of the permit fees required in this rule.

(10) The fee for swimming pools is permitted as provided in OAR 918-309-0040 and 918-309-0060. The inspection of the grounding of the pool is included in the permit for the pool and counted as one of the number of allowed inspections under the permit.

(11) Permit fees for renewable electrical energy systems. For renewable electrical energy permit applications, see OAR 918-309-0410. For repairs and maintenance of renewable electrical energy systems, see OAR 918-309-0220(5).

(a) (A) 5 KVA or less: $79;

(B) 5.01 KVA to 15 KVA: $94;

(C) 15.01 KVA to 25 KVA: $156.

(b) For wind generation systems in excess of 25KVA:

(A) 25.01 KVA to 50 KVA: $204;

(B) 50.10 KVA to 100 KVA: $469;

(C) For wind generation systems that exceed 100 KVA the permit fee is calculated in accordance with OAR 918-309-0040.

(c) For solar generation systems in excess of 25KVA:

(A) Each additional KVA over 25 will be charged an additional $6.25 per KVA.

(B) The permit charge will not increase beyond the calculation for 100 KVA.

(d) Permits issued under this sub-section include three inspections. Additional inspections will be billed at an hourly rate.

(12) Work Commencing before permit issuance. Any person who commences electrical work on a building or structure before obtaining the necessary permits will be subject to an investigative fee. The amount of the investigative fee is the average or actual additional cost of ensuring that a building or structure is in conformance with the Oregon Electrical Specialty Code and is in addition to the required permit fees.

918-309-0075
Provision of Services

(1) For any project requiring plan review, once the initial permit and plan review fees have been paid, a building official, inspector, or plans examiner may not stop work on-site or otherwise delay or refuse to provide inspection services in order to compel payment of outstanding fees.

(2) Stop-work orders may only be issued for permitted projects for violations of the minimum safety standards.

(3) Any violation of these rules is a failure to administer a building inspection program for the purposes of ORS Chapters 455 and 479, and may result in sanctions including but not limited to civil penalties and actions on certifications and other division approvals.

Statutory/Other Authority: ORS 455.055
Statutes/Other Implemented: ORS 455.055
History:
BCD 4-2016, f. & cert. ef. 4-1-16

918-309-0080
Temporary Electrical Permit Rule

(1) Authority and Scope of Rule. This rule:

(a) Is required by ORS 479.550;

(b) Applies to the Building Codes Division and all municipalities that enforce the electrical laws;

(c) Can only be used by a licensed electrical contractor.

(2) Definitions. For the purposes of this rule only, the following definitions are adopted:

(a) “Emergency Electrical Work” is an acute, unplanned and immediate need for electrical repair or replacement involving an existing electrical installation or product or both;

(b) “Licensed Electrical Contractor” or “Contractor” means any type of electrical contractor licensed by the Building Codes Division;

(c) “Jurisdiction” means the Building Codes Division, a municipality enforcing the electrical laws or municipality issuing electrical permits having authority over the electrical work;

(d) “Unanticipated Electrical Work” is electrical work, including a new installation, requested by a customer where the timing of a request for commencement of work does not reasonably allow the contractor time to obtain an electrical permit before starting the work:

(A) This includes, but is not limited to, additional work assigned at the work site as well as preassigned work when the customer requests service at an unplanned date or time;

(B) This does not include electrical work where a permit already exists covering all or part of the work.

(3) Temporary Permit. A jurisdiction shall recognize the existence of a temporary electrical permit when the contractor encounters “emergency electrical work” or “unanticipated electrical work,” complies with section (4) of this rule and does electrical work.

(4) Temporary Permit Procedures. The contractor must comply with subsection (a) of this section and with one of the requirements of subsections (b) to (d) of this section:

(a) Prior to commencing work, the contractor shall fill out a standard form electrical permit application for any jurisdiction, identify the proper jurisdiction, identify the contractor, and provide the electrical contractor and Construction Contractors Board identifications:

(A) The standard permit application form covering electrical installations can be used in any transaction, except the fees shall be that of the jurisdiction where the work is done;

(B) A restricted energy electrical application can only be used if the work is strictly covered by that permit;

(C) The temporary permit must be signed by the journeyman or technician that does the work or by a supervising electrician;

(D) A copy must be posted at the job site marked “temporary permit,” showing the starting work date and the ending date of the temporary permit. The ending date shall not be more than seven days from the starting date.

(b) FAX a copy to the jurisdiction and mail the original with proper payment to the jurisdiction all within five days of the start of the work;

(c) If the jurisdiction does not have a FAX machine, telephone the jurisdiction informing it of the time, place and type of work that was started within 24 hours of the opening for business by the jurisdiction, and mail a copy of the completed application and payment within seven days of the start of the work; or

(d) If the jurisdiction has a recording device, call in the time, place and type of work within 12 hours of the start of work and complete the electrical permit application and payment within seven days of the start of the work.

(5) If bulk label or minor label procedures are appropriate for the electrical installation and are allowed by the jurisdiction, those procedures may be followed in lieu of the requirements of this rule.

(6) An inspection shall be requested at any time following the temporary permit procedures. A jurisdiction may, but is not required to, require permit fees before providing an inspection.

(7) Burden of Proof and Assumed Risks. The contractor who uses this rule has:

(a) The burden of proving that an “emergency” or “unanticipated electrical work” existed which justified using this rule; and

(b) Assumes all risks that are inherent with starting electrical installations before review and approval by the jurisdiction.

(8) In addition to civil penalties that may be assessed for violation of this rule, the use of this rule may be suspended, restricted or denied to a contractor who violates this rule more than once.

918-309-0210
Use of Minor Labels

(1) The use of a minor label is an alternative option which allows a person to use a minor label instead of a permit. No new permit requirements are created.

(2) A minor label may be used for an installation that is exempt from permitting, but otherwise eligible for a minor label, including when the installation involves one or more components of an appliance exempted from permitting under OAR 918-261-0020.

918-309-0220
Scope of Electrical Work Allowed with Minor Label

(1) Minor labels may only be used in accordance with the minor label programs allowed by OAR 918-100-0000 through 918-100-0060.

(2) Electrical minor label use is regulated by license type. An electrical license that includes the scope of work listed in this rule may also use a minor label for that scope of work. This rule does not allow any person to make an installation or perform any work that is not authorized by the scope of the person’s license.

(3) A minor label may be used for new construction only for the following:

(a) As allowed by section (6)(a) of this rule; and

(b) As allowed by section (6)(b) of this rule.

(4) A minor label may not be used for:

(a) An underground electrical installation;

(b) An electrical installation that requires a cover inspection;

(c) An installation where plan review is required; or

(d) Any electrical installation that is located in an area classified as hazardous, as described in Article 500, or is subject to the requirements of Article 680 (Swimming Pools, Fountains, or Similar Installations) of the **Oregon Electrical Specialty Code**, as adopted in OAR 918-305-0100.

(5) A limited maintenance specialty contractor or a limited maintenance specialty contractor-HVAC/R may use a minor label for the following:

(a) Where the installation does not exceed 150 volts to ground, single-phase, for repair or replacement of:

(A) A furnace, oil or gas, not to exceed 20 amps;

(B) A fan not to exceed 20 amps;

(C) A dishwasher or garbage disposal, not to exceed 20 amps;

(D) A water heater, which involves an electrical circuit, not to exceed 30 amps; or

(E) An electrical furnace, air conditioning unit, or refrigeration unit.

(b) Applications up to 300 volts to ground for the replacement or retrofit of ballasts or other components in up to 10 light fixtures under one minor label. (For more than 10 light fixtures, inspections shall be performed as a branch circuit permit or hourly rate as authorized under OAR 918-309-0070(8)).

(6) A restricted energy contractor, limited energy contractor, registered telecommunications service provider, or an electrical contractor using an appropriately licensed person for applications not exceeding 100 volt-amperes, in Class 2 or 3 installations, may use a minor label for the following:

(a) Installation, repair, and replacement in new or existing construction of one- and two-family dwellings, of HVAC, telephone, garage door, vacuum systems, door bells, burglar, fire alarm and security systems, and audio/stereo systems; or

(b) Alteration, repair, and replacement of up to 50 devices in existing construction, or a new installation of up to 10 devices in new or existing construction, for the following installations provided the system does not penetrate any fire-rated assembly, as defined in the currently adopted **Oregon Structural Specialty Code** as adopted in OAR 918-460-0010:

(A) Thermostats;

(B) Data communication devices;

(C) Intercom, music, and paging devices;

(D) Door or gate control, monitor, or access devices;

(E) Cable television and closed circuit television devices;

(F) Burglar, security, and fire alarm devices, including "Power Limited Fire Alarm Circuits" as defined in Article 760 of the **Oregon Electrical Specialty Code**, as adopted in OAR 918-305-0100; and

(G) Notwithstanding the device allowances of Section (6)(b) of this rule, central vacuum cleaner control devices, one minor label per system.

(7) A properly licensed electrical contractor with a properly licensed signing supervising electrician may use a minor label for the following single-phase or three-phase electrical installations:

(a) Installation or extension of not more than three new electrical circuits limited to 60 amps and not more than 150 volts to ground;

(b) Installation or extension of not more than one new electrical circuit limited to 30 amps and not more than 300 volts to ground;

(c) Repair, replacement, or installation of components within existing electrical equipment or services, not to exceed 200 amps and 150 volts to ground, provided a reconnect is not required by the serving utility. For reconnects, see OAR 918-309-0040(9) for services. The complete replacement of a service is not allowed with a minor label;

(d) Replacement of multiple switches, circuit breakers, receptacles, light fixtures and light fixture components, and smoke detectors;

(e) In dwelling units, replacement of multiple 15 and 20 amp, 125-volt, GFCI or AFCI circuit breakers and receptacles;

(f) Installation of a grounding electrode when a metal water service is replaced with a non-metallic pipe; or

(g) Installation of a fan connected to existing duct work, without an additional mechanical permit when:

(A) The fan is replacing an existing fan;

(B) The replacement fan is 200 cfm or less;

(C) The person performing the replacement connects the new fan to the existing duct work; and

(D) No changes are made to the existing duct system.

(8) A limited renewable energy contractor or an electrical contractor using a licensed journeyman electrician or limited renewable energy technician may use a minor label for repair and maintenance of renewable electrical energy systems as set forth in ORS 479.630(16)(a).

(9) A limited pump installation specialty contractor may use a minor label for repair, replacement, and maintenance of installed pump or irrigation systems of the same horsepower and voltage, as set forth in ORS 479.630(13).

918-309-0260
Misuse of Minor Installation Labels

Violations of the minor label rules are subject to civil penalties or license revocations or both.

918-309-0310
Local Jurisdiction Enforcement of Bulk Labels

Each seller shall enforce the requirements of OAR 918, division 309.

918-309-0400
Restricted Energy Electrical Bulk Labels

(1) A separate Restricted Energy Electrical Permit Application Form and Restricted Energy Electrical Installer Log are created and adopted.

(2) The Restricted Energy Electrical Permit can be taken out by a general or subcontractor, limited energy installer or property owner for the fee set by the board in OAR 918-309-0030 for limited energy transactions provided the requirements of this rule are met. The person applying for the permit must:

(a) Assume responsibility to call for an inspection when the permits are signed by appropriate persons, installations are completed and after all corrections are made and comply with the requirements of the restricted energy electrical laws and the restricted energy electrical rules;

(b) Be responsible for all corrections required by the inspector under the permit, regardless of who performs the work;

(c) Call for a final inspection when corrections are made and the work is completed.

(3) Options. The person obtaining the permit may:

(a) Limit the permit to only the work of the permittee; or

(b) Include any and all limited energy installations including those done by separate installers, but the installations must be ready for inspection at the first inspection call. When this is done, the permit must be completed and separately signed by the person, also identifying the business responsible for each type of limited energy electrical installation.

(4) The restricted energy activities to be covered by the permit must be declared at the time of the purchase of the permit:

(a) It is not necessary to identify the contractor at the time of permit issuance;

(b) New permits must be purchased for all other restricted energy installations;

(c) If a contractor is changed, the contractor who completed the work must be identified.

(5) Regardless of what was initially intended the permit only covers those installations that are in place at the time of the first call for limited energy electrical inspection. A separate permit must be purchased for all other limited energy installations whether the installations become ready for inspection at a later date or are done at a later date.

(6) This rule does not apply to an industrial plant when ORS 479.560 is applicable.

(7) The Restricted Energy Electrical Installer Log must be posted at the job site for signing by appropriate persons installing the separate electrical systems as shown on the form. A municipality may require more than one log to be completed and left at the job site if it chooses to.