



Master Electrical Permit Program

PURPOSE:

The State of Oregon Chapter 479 “Electrical Safety Law” and Oregon Administrative Rules Chapter 918 requires permits for electrical installations. This requirement can be met by obtaining a permit for the installation or by obtaining and meeting the requirements of the Master Electrical Permit Program under ORS 479.560 (3).

This document describes how the Master Electrical Permit Program will be administered by City of Hillsboro, Oregon.

REQUIREMENTS:

Periodic or annual (Master Permit) inspections are required under Oregon Administrative Rules, Chapter 918, Master Permit Program 918-309-0100.

WORK COVERED:

The electrical work covered by the Master Electrical Permit Program encompasses all electrical installations, performed at the covered plant or site, not prohibited under the Master Program. Examples of work covered by the Master Electrical Permit Program are:

- Installation, extension, or relocation of branch circuits or outlets.
- Installation, extension, or relocation of feeders or panels.
- Replacement of electrical components that requires an increase in component size, voltage, and ampacity from the existing.
- Installation or relocation of lighting fixtures and switching controls.
- Connection of new or relocated process equipment that is hard wired.
- Installation, extension, or relocation of a signal circuit, limited energy circuit panel, multiple circuit terminal board or installation or extension of limited energy circuit. Public utility, telecommunications utility, or cable television utility are exempt.
- Maintenance and replacement of existing electric motors and equipment when work is performed by licensed employees of the facility or electrical contractor listed on the agreement.

WORK NOT COVERED:

The following do NOT constitute “repair, alteration or replacement of existing electrical products” and require a separate permit and inspection:

- Electrical installations in a new building shell or in structural alterations of load bearing elements of a building.
- Any electrical installation in connection with changing the type or use of occupancy.
- Any addition which increases the square footage of the building or structure.
- Remodeling of more than 25% of the contiguous area of any floor.
- Electrical installations that are a part of construction within a covered facility that also
- involve a plumbing, structural or mechanical permit.

PROGRAM REQUIREMENTS

WHO CAN USE A MASTER ELECTRICAL PERMIT:

- (a) A master permit shall only be provided to an electrical contractor, owner or operating manager responsible for all electrical installations in the whole covered facility;
- (b) An owner, electrical contractor or operating manager of a covered facility can obtain a Master Permit only if appropriately licensed electricians are to do the work.

SUPERVISION / PERSONNEL:

The Master Electrical Permit Program covers work done on participating sites by employees holding an appropriate license issued by the Oregon Building Codes Division. Work done by other electricians holding an appropriate license is also covered if they are included under the Master permit taken out by the owner or operating manager. Each plant or site will maintain a record of all licensed employees and contract electricians by name, license number and type of license. An updated roster shall be furnished to City of Hillsboro at each Master Permit Inspection. When an Electrical contractor ceases to serve the covered facility, notice of termination shall be filed with City of Hillsboro within ten (10) working days.

RECORD KEEPING:

City of Hillsboro will furnish a “Master Electrical Permit Work Log” (Exhibit A) for the purpose of recording all electrical installations performed. The permit holder is required to set up an inspection schedule with an interval of not greater than one year.

Electrical Plan Review

Under Oregon Administrative Rules 918-311-0010 and 918-311-0040, City of Hillsboro requires mandatory electrical plan review in connection with a permit for the construction, alteration or repair of electrical installations under certain conditions. Plan review fees will be charged at the current hourly rate.

STANDARDS FOR ELECTRICAL PLAN SUBMISSION:

Electrical Plan Review Limitations.

1) Plan Reviews shall be required if the “complex structure” means an electrical installation that involves one or more of the following:

a) Ampacity

A) A service or feeder beginning at 400 amps where the available fault current exceeds 10,000 amps at 150 volts or less to ground or exceeds 14,000 amps for all other installations.

B) 150 kva or more for transformers.

C) Addition of a 100 horsepower or more for motors.

D) Fire pump installations as defined in Article 695 of the NEC.

E) Emergency systems installations as defined in Article 700 of the NEC

F) A service or feeder rated at 600 amps or over

b) Voltage. More than 600 supply volts nominal.

c) Height. More than 3 stories.

d) Occupancy

A) Six or more residential units in one structure.

B) An “A” (Assembly) occupancy, “E” (Educational) occupancy, or “I-2 or I-3” (Intentional) occupancy as defined in the adopted Oregon Structural Specialty Code.

C) Any of the special occupancies as described in chapter 5 of the NEC adopted by the board as per 918-305-0100.

i) Hazardous (Classified) locations as defined in Articles 500 to 516

ii) Patient care areas of health care facilities as defined in Article 517

iii) Agricultural building used for commercial purposes

iv) Floating buildings as defined in Article 553

v) Marinas and boat yards as defined in Article 555

vi) Recreational Vehicle Park. A new recreational vehicle park or any addition or alteration to an existing park.

- 2) Standardized format for plan review. When electrical plan review is required, the electrical plan shall meet the following requirements:
 - A) Two legible sets of electrical plans are required.
 - B) The plans must be drawn to scale, contain definitions for legends used; be of sufficient clarity to indicate the location, nature and extent of the work proposed; and show in detail that it will conform to the applicable electrical code requirements, laws ordinances, rules and regulations.
 - C) The plans shall contain the following minimum requirements:
 - i) Feeder riser diagram.
 - ii) One line or panel layout.
 - iii) Available fault current on the line side of service disconnect.
 - iv) Provide complete load calculations or applicable load records for all new installations and for additions to existing installations.
 - v) Fixture schedule showing type, location, and layout of the fixtures.
 - vi) Address of the installation and name and address of owner.
 - vii) Identification of the employer; identification and signature of person who prepared the plan, and their license number if they are an electrical supervisor or their professional registration number if they are an architect or engineer.
 - viii) Location of emergency systems, identifying the power source and the system on the plan.
- 3) Lighting and energy budget calculations are required where applicable.

STANDARDS FOR ELECTRICAL REVIEW:

Plans will be reviewed to the following minimum.

- 1) Check load calculations for appropriateness, completeness, and accuracy.
- 2) Check equipment to determine if it is:
 - A) Suitable for the environment.
 - B) Properly sized and rated to meet the minimum code requirements.
- 3) Check service and feeder installations for code compliance related to:
 - A) Wiring method.
 - B) Conduit and box fill.

- C) Conductor size and ampacity.
- D) Clearances.
- E) Locations.
- F) Accessibility.
- F) Service grounding conductor size.

LISTED INDUSTRIAL ELECTRICAL EQUIPMENT:

During the course of permit inspections or Master Permit industrial inspections, unlisted or unlabeled equipment that has been installed may be observed. When the unlisted equipment is “industrial electrical equipment,” it shall not be required to be certified. However, it shall be inspected to determine whether it meets minimum safety installation standards.

INSPECTION PROCEDURE:

- Inspections can be called for at any time or frequency, but no less than once a calendar year.
- Where installed wiring is to be covered, the City of Hillsboro Electrical Division shall be notified, and the work **must not** be covered until inspected. To arrange for the required inspection(s) contact the Master Permit contact person. To schedule an inspection call (503) 681-6144
- A routine inspection, cover inspection or plan review can be scheduled by calling the Master Permit contact person at the City of Hillsboro at (503) 681-6144

FEES:

Costs will be billed monthly on an hourly basis \$80.00 per hour, plus 12% state surcharge, for the inspector’s time. This includes travel and report time, as well as the time for inspecting buildings or conducting plan reviews. This billing amount is established by City Resolution.

There is a one time set-up fee of \$100.00 to establish the program.

- It is important that your file contains the correct billing information, including a name and phone number of the person responsible for invoice payment.

Other codes or publications may impact your electrical inspections and the responsibility rests with the permit holder or Master Permit Program holder for complying with all applicable requirements.