

ELECTRICIAN

DISTINGUISHING FEATURES OF THE CLASS: The incumbent in this position performs skilled work in applying the techniques of the electrical trade in the planning, installation, maintenance and repair of electrical wiring, electrical fixtures, apparatus and control equipment according to specifications and codes. General instructions are received from the Maintenance Supervisor permitting leeway for planning and carrying out the details of the work. The Supervisor reviews assignments by discussion or through personal inspection. Although supervision is not a function of this position, the incumbent may direct the work of a small number of workers who perform unskilled tasks such as holding wires and fixtures or carrying equipment. Does related work as required.

TYPICAL WORK ACTIVITIES:

Installs control and distribution apparatus such as switches, relays and circuit breakers, fuses and panel boards while fastening same into place with screws or bolts while using drills, chisels, hammers and wrenches;

Tests continuity of circuits to ensure electrical compatibility and safety of components using such instruments as ohmmeters, oscilloscopes, voltmeters, continuity testers and test lamps;

Observes the functioning of newly installed equipment and systems to detect hazards as well as the need for adjustment or replacement;

Observes the functioning of established equipment and systems to detect electrical malfunctions using test instruments such as ammeters, volt meters, ohmmeters, continuity testers and test lamps;

Repairs malfunctions by replacing burnt-out elements and fuses, bypassing or replacing defective wiring, locating suitable contact points and cleaning or rewiring electric motors;

Estimates both material and time needed to perform work;

Draws sketches that illustrate location and sequence of wiring and ancillary equipment or follows diagnosis on blueprints drawn by architects or contractors;

Measures, cuts, bends, threads, assembles and installs electrical conduit and tubing while using tools such as hand saws, pipe threaders and conduit benders;

Pulls wires through conduit;

Splices wires by stripping insulation from terminal leads with knives or pliers, twists or solders wires together, applies tape or terminal caps, and connects wiring to lighting fixtures using various hand tools;

May perform other building maintenance activities.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of methods, materials and equipment used in electrical work;

Thorough knowledge of occupational hazards and safety precautions of the electrical trade;
Thorough knowledge of local codes and regulations governing electrical installation;
Good knowledge of the principles and theories of electricity;
Skill in making electrical installations, repairs and adjustments;
Skill in the use of tools and materials used in the electrical trade such as tube benders, drills, electrical meters, pliers, receptacle testers and screwdrivers;
Ability to read and understand sketches, drawings and blueprints;
Ability to follow both oral and written instructions pertaining to electrical work;
Ability to estimate both materials needed and project duration;
Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

Graduation from high school or possession of an equivalency diploma and four years of experience under a master-level Electrician which provided training equivalent to that given in a journey-level program and one year of commercial or industrial electrical trade experience at the journey-level.

NOTE: Journey-level training in the electrical trade or training obtained by the completion of technical courses in the electrical trade at a school, institute or branch of the Armed Services may be substituted for the above experience on a year for year basis up to four years.

SPECIAL REQUIREMENTS DURING THE PROBATIONARY PERIOD:

- 1) Possession of the appropriate journey-level license(s) for municipalities within Broome County.
- 2) Possession of the appropriate level Motor Vehicle Operator's License.

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COMPETITIVE