

ELECTRICIAN, 3863  
SENIOR ELECTRICIAN, 3864  
ELECTRICIAN SUPERVISOR, 3865

Summary of Duties : Does skilled electrical work in the installation, maintenance, and repair of wiring and electric installations in public buildings, plants, and facilities and on adjacent grounds; or acts as a lead person to journey-level Electricians; or supervises such work; and does related work.

Distinguishing Features : An Electrician and a Senior Electrician are journey-level employees whose work is not limited to a particular branch of the electrical field. Their work may range from wiring low voltage systems to installing and maintaining plant or lighting and power electrical systems and switchboards, and electronic controls and surveillance systems. Assignments are in the form of written and verbal orders or plans and diagrams, and their work is always subject to inspections as well as supervisory checks. In addition, a Senior Electrician acts as a lead person to Electricians and their helpers.

An Electrician Supervisor's main responsibility is to plan and supervise work, although under special circumstances, an employee of this class may also do journey-level electrical work. An Electrician Supervisor inspects the work of journey-level employees for quality, quantity, and conformance to electrical codes. Assignments for new installations and alterations are usually in the form of plans or wiring diagrams, while instructions for other maintenance work are general in nature. Review of an Electrician Supervisor's work is typically through conferences with supervisors.

Employees in these classes do not work in electric stations or steam electric generating plants, and normally do not work with high voltage lines or equipment. However, all are exposed to hazards involved in working on energized lines and equipment and occasionally in working from scaffolding or aerial lifts.

Examples of Duties : Electrician: Installs conduit and pulls wire for lighting and power; installs, adjusts, trouble shoots, and maintains wiring, lighting fixtures and outlets, signal systems, public address and intercommunication systems, electric motors, heating and ventilating equipment, air conditioning, conventional or solid state control apparatus for electrical installations, and associated electrical equipment; test circuits for shorts, grounds, open conditions, and proper insulation; makes electrical tests using equipment such as meggers, voltmeters, ammeters, and ohmmeters; inspects, cleans, lubricates, and replaces bearings and brushes in motors and small generators; cleans and replaces control apparatus and associated equipment on all types of electrical devices, motors, controls, panels, and switchboards; repairs portable electric tools

and other small or portable electric equipment; reads and interprets wiring diagrams, plans, and sketches; keeps routine work records; may drive a truck between job locations; trouble shoots and maintains lighting, power, controls, instrumentation systems, and electronic supervisory systems; may make minor adjustments and repairs to electric elevators; and may shoot trouble on a medium-sized generating installation.

Senior Electrician : In addition to the above, acts as a lead-person to one or more crews of journey-level employees and helpers; and occasionally Elevator Mechanics; prepares wiring diagrams, list of materials, and cost estimates; keeps work records, prepares reports, and requisitions materials and tools; assures that proper safety precautions are taken by subordinates; may prepare required plans and secure electrical permits; may inspect electronic equipment.

Electrician Supervisor : Plans, lays out, assigns, coordinates and inspects the work of one or more crews of Senior Electricians, Electricians, and helpers; determines that conduits, wiring, switchboards, electrical installations, and associated electric equipment have been properly installed, repaired, or maintained; inspects electrical installations to determine maintenance requirements and procedures, and prepares maintenance schedules for journey-level employees; investigates trouble calls; makes sketches and layouts for electrical construction, alteration, replacement, or extension; recommends changes to improve existing facilities; prepares material lists and cost estimates;

Requisitions materials and supplies; may supervise Elevator Mechanics; may inspect the work of contractors engaged in repairing electric elevators; may inspect work in process or completed by contractors for conformance to plans and specifications; conducts training and safety meetings for subordinates; assures that adequate precautions are taken to protect electricians, other workers, and the public during electrical work; arranges to have electric circuits de-energized to allow work on electrical installations; makes recommendations concerning procedures and personnel matters pertaining to the work; and may occasionally do journey-level electrician work.

Employees in all three of these classes may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications :

<u>Knowledges :</u>	<u>Elec- trician</u>	<u>Senior Elec- trician</u>	<u>Elec- trician Super- visor</u>
Methods, materials, tools and equipment used in the installation, maintenance, testing, and repair of motors and small power generators, electric lighting and wiring installations, switchboards, signals systems, public address and intercommunication systems, and other electrical installations and equipment;	Good	Good	Good
Los Angeles City Electrical Codes;	Working	Good	Good
Hazards involved and applicable safety precautions in working on energized lines and equipment, and pertinent provisions of the Safety Orders of the California Division of Industrial Safety;	Good	Good	Good
Electrical plans and circuit diagrams as used in installation, and maintenance work;	Good	Good	Good
Fundamentals of electricity and electronics as related to the installation, maintenance, and repair of electrical installations equipment, and wiring including solid state circuitry;	Good	Good	Good
Supervisory principles and practices;		General	Working
Maintenance and repair requirements of passenger and freight elevators;		General	Working

<u>Knowledges (Cont) :</u>	<u>Elec- trician</u>	<u>Senior Elec- trician</u>	<u>Elec- trician Super- visor</u>
Laws and regulations re- lated to equal employ- ment opportunity and affirmative action;		Working	Working
City Personnel rules, policies, and procedures;		General	General
Memoranda of under- standing as they apply to subordinate personnel;		General	General
<u>Abilities :</u>			
Read and interpret electri- cal plans and diagrams;	X	X	X
Prepare plans and diagrams of electrical work;	X	X	X
Deal tactfully and effec- tively with other employees and the public;	X	X	X
Prepare time, work, and material reports;	X	X	X
Estimate time and material costs for electrical in- stallations;		X	X
Supervise and lay out the work of journey-level electricians and helpers.		X	X
Completion of a recognized four-year apprenticeship or attainment of journey-level rank as an electrician or six years of experience as an electrical helper is required for Electrician.			l s
Two years of experience as a journey-level electrician is required for Senior Electrician.			r
Four years of experience as a journey-level electrician is required for Electrician Supervisor.			n
<u>License</u> A valid California driver's license is required for all classes.			

Physical Requirements: Electrician and Senior Electrician: Strength to perform average lifting up to 35 pounds and occasionally over 70 pounds; body agility and

equilibrium involved in activities such as climbing and balancing under precarious conditions; arm, hand, and finger dexterity with both hands involved in such activities as reaching, handling, and feeling, and good hearing ability.

Electrician Supervisor: Strength to perform average lifting of 15 pounds and occasionally over 25 pounds; good speaking and hearing ability.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in these classes. Such determination must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory, and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.