

Electrician I

Knowledge, Skill, Ability, and Personal Characteristic Statements

Rating Results

1.	Knowledge of the principles and methods (e.g., sequences of installations, coordination with other trades, conduit bending, wire pulling, rating of equipment) used in the installation, maintenance, and repair of electrical systems and components (e.g., wiring, switches, lighting, transformers, high voltage, switchboards, motor control centers) to accomplish work assignments.
2.	Knowledge of materials, tools, and equipment (e.g., cable reels, conduit benders, stripping tools, voltage or current meters, wire or cable cutters) used in the installation, maintenance, and repair of electrical systems and components (e.g., wiring, switches, lighting, transformers, high voltage, switchboard, motor control centers) to accomplish work assignments.
3.	Knowledge of the rules and regulations (e.g., National Electric Code, NFPA (70E), Electrical Safety Orders of the Division of Industrial Safety, California Code of Regulations) to safely complete work assignments and provide direction/information.
4.	Knowledge of Personal Protective Equipment (PPE) to safely complete work assignments and provide direction/information.
5.	Knowledge of electrical code books and manuals (e.g., National Electric Code (NEC), local jurisdictions) for the installation, maintenance, alteration and repair of electrical systems and components.
6.	Knowledge of organizational policies and procedures to maintain safety and security of facilities/departments, staff, property, etc.
7.	Ability to install electrical systems and components (e.g., wiring, switches, lighting, transformers, switchboards, motor control centers) to accomplish work assignments.
8.	Knowledge of the principles and operations of electrical equipment (e.g., wiring, switches, lighting, transformers, switchboards, motor control centers) for the installation, maintenance, alteration and repair of electrical systems and components.

8.	Ability to repair electrical systems and components (e.g., wiring, switches, lighting, transformers, high voltage, switchboards, motor control centers) to accomplish work assignments.
9.	Ability to troubleshoot electrical systems and components to ensure the safe and proper operation and adherence to electrical and building codes.
10.	Ability to care for hand and power tools and other equipment to ensure safe operation for the electrician and proper operations.
11.	Ability to use hand and power tools to ensure safe operation for the electrician and proper operation of the tools during the performance of daily assignments.
12.	Knowledge of computer applications (e.g., Microsoft Office, Microsoft Project, Microsoft Outlook) to assist in the completion of various work assignments.
13.	Ability to operate office equipment (e.g., computers, faxes, copiers) to complete various work tasks, including sending emails, maintaining records, etc.
14.	Ability to obtain certification for powered industrial vehicles (e.g., forklifts, handlifts, articulating boom lifts) for duties and functions.
15.	Ability to maintain a driver's license to travel for job duties and functions.
16.	Ability to use ladders used in the installation, maintenance, alteration and repair of electrical systems.
17.	Knowledge of contracts (e.g., maintenance, installation, construction) and service agreements of electrical systems and components to ensure effective and safe operation.
18.	Ability to practice personal safety and vigilance in the identification of safety or security hazards to actively support a safe and hazard free working environment.
19.	Ability to appropriately respond to emergency situations to ensure prompt and appropriate care is administered and safety is maintained.
20.	Ability to use proper body mechanics while lifting to avoid injuries and comply with safe handling procedures used in the installation, maintenance, alteration and repair of electrical systems and components.
21.	Ability to perform physical activities that require considerable use of limbs and body parts, such as climbing, crawling, lifting, balancing, walking, stooping, and handling of materials.

22.	Ability to perform a variety of physical activities (e.g., pushing, pulling, bending, squatting, grabbing, carrying, walking, standing) used in the installation, maintenance, alteration and repair of electrical systems and components.
23.	Ability to grasp, manipulate, or assemble objects used in the installation, maintenance, alteration and repair of electrical systems and components.
24.	Ability to lift and carry up to 50 lbs. used in the installation, maintenance, alteration and repair of electrical systems and components.
25.	Ability to listen and be aware of work environment activity to support a safe and hazard free working environment.
26.	Ability to stand and perform work duties for an extended period of time used in the installation, maintenance, alteration and repair of electrical systems and components.
27.	Ability to do strenuous manual labor in either indoor or outdoor areas to complete job tasks.
28.	Ability to work in various temperatures (e.g., warm, hot, cold, freezing) to complete job tasks.
29.	Ability to work in an environment that includes dust and other debris used in the installation, maintenance, alteration and repair of electrical systems and components.
30.	Ability to work in confined spaces for an extended period of time to complete job tasks.
31.	Ability to pass an annual physical examination to maintain proper physical health, fitness for duty, and compliance with Division of Occupational Health and Safety (CalOSHA) requirements.
32.	Knowledge of basic mathematical operations and calculations (e.g., addition, subtraction, multiplication, division, percentages, order of operations) to calculate labor, materials, and/or cost estimates for projects and work orders, etc.
33.	Ability to perform basic mathematical computations (e.g., addition, subtraction, multiplication, division, ratios, percentages) to calculate labor, materials, and/or cost estimates for projects, work orders and additions, etc.

34.	Ability to determine the accuracy of various mathematical calculations (e.g., addition, subtraction, multiplication, division, ratios, percentages) to verify labor, materials, and/or cost estimates for projects, work orders and additions, etc.
35.	Knowledge of algebraic formulas to perform electrical calculations (e.g., derating factors, load calculations).
36.	Ability to apply algebraic formulas to perform electrical calculations (e.g., derating factors, load calculations).
37.	Ability to interpret and work from rough sketches, plans (blue prints), drawings, and specifications to obtain/provide information for electrical work.
38.	Ability to prepare and develop rough sketches, plans (blue prints), drawings, and specifications to obtain/provide information for electrical work.
39.	Ability to maintain records and reports (e.g., timesheets, daily work orders, time reports) to provide information and documentation and to comply with departmental policies.
40.	Ability to read and comprehend written materials (e.g. references, summaries, memos, letters) to apply information and determine appropriate courses of action.
41.	Ability to handwrite legibly so that another person can read and understand such documentation, such as logs and notes.
42.	Knowledge of common forms and documents (e.g., preventative maintenance forms, work order forms, work permits, hot work permits, confined work permits) used in the installation, maintenance, alteration and repair of electrical systems and components.
43.	Ability to provide written information to supervisors and co-workers to keep open lines of communication.
44.	Ability to use proper grammar, punctuation, and spelling in the preparation of written records, emails, and/or other documents to ensure information is clearly presented and understood by others.
45.	Ability to orally communicate with individuals or groups (e.g., supervisors, coworkers, subordinates, the public, vendors) to provide accurate information, instruction, direction, and maintain effective working relationships.

46.	Ability to provide clear and accurate verbal instructions and directions to individuals with various levels of technical expertise.
47.	Ability to operate communications equipment (e.g., two-way radios, mobile cell phones) to communicate with management, departmental contacts, and others.
48.	Ability to establish and maintain effective working relationships with others (e.g., employees, vendors, the public) to create productive working environments.
49.	Ability to follow instructions to ensure adequate comprehension and follow through.
50.	Ability to deal with irate or agitated individuals with diplomacy and tact to prevent further escalation of problems and/or concerns.
51.	Ability to listen to others to facilitate an open exchange of ideas and provide for effective communication.
52.	Ability to communicate with diplomacy and tact, especially concerning difficult and sensitive issues when dealing with the needs, problems and/or concerns of others.
53.	Ability to conduct work in a professional and ethical manner consistent with departmental rules and accepted industry standards.
54.	Ability to maintain personal hygiene in compliance with professional and departmental standards.
55.	Ability to work independently on projects or assignments without close supervision or detailed instructions to maximize workplace productivity.
56.	Ability to maintain confidentiality to ensure compliance with applicable laws related to information security.
57.	Ability to identify information, materials, and resources needed to complete a project or assignment.
58.	Ability to prioritize assignments and projects to ensure completion within established timeframes and by expected deadlines.
59.	Ability to be objective and flexible in adapting to changes in priorities, work assignments, and other interactions that may impact pre-established courses of action for completing projects and assignments.

60.	Ability to complete tasks in a timely, detailed, and orderly manner.
61.	Ability to identify and anticipate problems and act proactively.
62.	Ability to analyze and evaluate situations accurately and thoroughly to determine and implement effective, appropriate courses of action.
63.	Ability to use logic and reasoning to identify the strengths and weaknesses of alternative approaches or solutions to allow for effective resolutions.
64.	Ability to arrange items or actions into logical orders or patterns according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
65.	Ability to complete circuit extraction and half-splitting to isolate issues down to individual components for repair.
66.	Ability to plan, lay out, and coordinate electrical work with departmental trades people, and other facility/department program staff, contractors and vendors to provide direction, information, and ensure accuracy and compliance of electrical assignments.
67.	Willingness to work in a fast paced environment.
68.	Willingness to do strenuous manual labor in either indoor or outdoor areas for the installation, maintenance, alteration and repair of electrical systems and components.
69.	Willingness to work in extreme temperatures (e.g., warm, cold, freezing) for the installation, maintenance, alteration and repair of electrical systems and components.
70.	Willingness to work in stressful situations.
71.	Willingness to maintain a professional appearance.
72.	Willingness to work at various locations (e.g., remote, facility, department) for the installation, maintenance, alteration and repair of electrical systems and components.
73.	Willingness to work extended hours and/or varying shifts as requested in order to maintain adequate coverage during hours of operation.

74.	Willingness to work overtime to complete work assignments and ensure area coverage.
75.	Willingness to work in confined spaces for the installation, maintenance and repair of electrical systems and components.
76.	Willingness to work in hazardous conditions (e.g., dust, chemicals, electricity) for the installation, maintenance, alteration and repair of electrical systems and components.