



## **Electrician 1**

**Category:** Classified  
**Pay Grade:** C20  
**Job Code:** 13720

*To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.*

### **JOB SUMMARY**

Performs journeyman level electrical work in the installation, alteration, maintenance, and repair of electrical systems, fixtures, and equipment; works in accordance with standard trade practices; carries out assignments made in the form of written and oral instructions that may be accompanied by sketches and blueprints and work that arises out of inspections and troubleshooting.

### **ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)**

- Installs, maintains, modifies, and repairs electrical fixtures and equipment including power appliances, machinery, overhead circuits, fiber optics, underground conduit, motors, relays, switches, and control boxes;
- Makes technical inspections of the installation of new electrical systems or modification of old electrical wiring systems, motors, equipment, and related electrical apparatus;
- Maintains lighting equipment in County offices and buildings and detects and corrects causes of electrical failures;
- Detects and corrects breakdowns in electrical equipment and performs field repairs and adjustments to electrical motors of up to 200 horsepower capacity, often in limited space and under adverse environmental conditions;
- Identifies areas for improvement and makes engineering and purchasing recommendations for implementation;
- Renovates or installs new service wiring for electronic communications and maintains inventory of critical parts and supplies;
- Operates special motorized equipment, installs lightning arrestor protection, installs wall outlets, and connects motors, appliances, heating and cooling equipment, and transformers;
- Interprets and ensures compliance with electrical codes and calculates line leads to determine wire and equipment size and capacity;
- Uses hand, bench, and small power tools during electrical repairs;
- Maintains inventory and purchases supplies;
- Performs data entry of violations and necessary corrections; and
- Performs other related job duties as assigned.

### **QUALIFICATIONS**

#### **Education and Experience:**

Three (3) years of electrical trades' experience that includes six (6) months as a team leader or supervisor; or an equivalent combination of education, training, and/or experience.

#### **Special Qualifications (May be required depending on area of assignment):**

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.

- Possession and maintenance of a valid Pinellas County electrician journeyman level Certificate of Competency.
- Career Ladder Advancement – After completion of required years of experience in this classification plus documented skill competency in designated trade(s), the department may consider an employee for non-competitive promotion.
- Other knowledge, skills, abilities, and credentials required for a specific position.

**Knowledge, Skills and Abilities:**

- Knowledge of standard practices, materials, tools, and equipment of the electrical trade and local and national electrical;
- Knowledge of occupational hazards and appropriate safety precautions, to include working with low and high voltage power systems;
- Knowledge of work hazards and safety associated with crafts, trades, and facilities work;
- Knowledge of tools, power tools, and materials used in skilled trade work;
- Knowledge of the methods, materials, tools, and practices for building, electrical, and mechanical work.
- Skill in the use and care of standard tools, equipment, and testing devices of the electrical trade.
- Ability to work from oral or written instructions, broken parts, or basic diagrams and sketches;
- Ability to troubleshoot defects in machinery and equipment operation, make proper repairs and adjustments, and complete assignments;
- Ability to lead helpers and others to complete assignments, keep basic records, and perform heavy manual work;
- Ability to read and interpret blueprints and schematics, equipment diagrams, draw sketches of proposed projects plan assignments, order materials, and understand and follow oral and written instructions;
- Ability to plan and execute facility maintenance or construction work plans;
- Ability to operate a personal computer and other automated systems to monitor work, enter, and retrieve information;
- Ability to interpret drawings and blueprints, prepare work specifications, and estimate material needs;
- Ability to install, alter, repair, and maintain a variety of electrical systems and equipment;
- Ability to endure long periods of standing, walking, or working in inclement weather and possession of sufficient physical strength and agility to lift and move heavy objects;
- Ability to detect problems and repair machinery and equipment;
- Ability to communicate orally and in written form to impart information, write reports, etc.;
- Ability and strength to climb ladders and perform heavy manual labor for extended periods.

**PHYSICAL/MENTAL DEMANDS**

The work is medium work which requires exerting up to 50 pounds of force occasionally, and/or up to 30 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects. Additionally, the following physical abilities are required:

- **Balancing:** Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- **Climbing:** Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
- **Crawling:** Moving about on hands and knees or hands and feet.
- **Crouching:** Bending the body downward and forward by bending leg and spine.
- **Feeling:** Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- **Fingering:** Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- **Grasping:** Applying pressure to an object with the fingers and palm.
- **Handling:** Picking, holding, or otherwise working, primarily with the whole hand.
- **Kneeling:** Bending legs at knee to come to a rest on knee or knees.

- Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- Pulling: Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- Pushing: Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
- Reaching: Extending hand(s) and arm(s) in any direction.
- Visual ability: sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- Hearing ability: sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- Speaking ability: sufficient to communicate effectively with other individuals in person and over a telephone.
- Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- Repetitive Motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
- Standing: Particularly for sustained periods of time.
- Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
- Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

### **WORKING CONDITIONS**

Work is performed in an environment where errors can lead to significant physical or mental consequences for self or others.