



# COUNTY OF HIDALGO

## Department of Human Resources

Job Title: **ELECTRICIAN III**  
Grade: 12

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*The County of Hidalgo Department of Human Resources reserves the right to select candidates considered to be the most highly qualified based on education and experience. The hiring department will interview and select the candidates provided by the Department of Human Resources.*

### **GENERAL DESCRIPTION**

Performs advanced and highly complex senior level electrical repair and maintenance of electrical equipment and circuits. Work involves diagnosing installing, replacing, and maintaining electrical systems, apparatus, components of machinery, and equipment. May train others. Works under minimum supervision with considerable latitude for the use of initiative and independent judgment.

### **EXAMPLES OF WORK PERFORMED**

Installs and repairs electrical systems, apparatus, and electrical components of machinery and equipment

Inspects, tests, troubleshoots and diagnoses electrical equipment, lighting, and power circuits

Isolates defects in wiring, circuit breakers, fuses, switches, sockets, and other elements and replaces faulty circuit breakers, fuses, switches, sockets, and other elements of electrical systems

Mounts motors, transformers, and lighting fixtures into position and completes circuits according to diagram specifications

Repairs magnetic starters and remote start-stop stations; operates and maintains high- and low-voltage switches; and installs rigid, thin wall, and flexible conduit

Wires circuits and cleans and tightens low voltage switch gears

Plans the layout of electrical wiring to ensure compliance with specifications and electrical codes

Interprets blueprints sketches and schematic drawing of electrical circuits

Identifies all electrical terms and symbols

Calculates electrical loads, wire sizes, and lengths, conduit size, circuit breaker and power panel requirements necessary to upgrade electrical systems to meet electrical load and local/state code requirements in both newer/older buildings and equipment systems

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Assists in the maintenance and renovation of electrical service

May train others

Performs related work as assigned

### **EDUCATION AND EXPERIENCE**

Associate's degree from an accredited college or university or special training in an electrical trade

Six (6) years of experience in the operation, maintenance, and repair of electrical equipment required

Experience in major industrial/commercial experience in manufacturing environment or preventative maintenance/repairs in a building facilities environment

Two (2) years of related experience may be substituted for one (1) year of education

### **CERTIFICATES, LICENSES AND REGISTRATION**

Valid Journeyman's Electricians License and maintain such licensing requirements throughout employment

May require appropriate hours of on-the-job training and pass an examination issued by the Department of Licensing and Regulation

Must have a current valid Texas motor vehicle operator's license

Must be able to be insured by the County's insurance carrier

### **KNOWLEDGE, SKILLS AND ABILITIES**

Knowledge of general principles, theory of electricity, and safety regulations required

Skill in the use of tools

Ability to make maintenance or electrical repairs, to diagnose malfunctioning units, maintains records, communicate effectively, and train others

Decides on equipment and supplies needed

Makes corrections on blueprints and schematics to accommodate for job location

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to stand. The employee is occasionally required to walk; sit; use hands to find, handle, or feel objects, tools or controls; reach with hands and arms; climb or balance; stoop and kneel.

The employee must occasionally lift and/or move over twenty-five (25) pounds. Specific vision abilities required by this job include close vision, depth perception, and the ability to adjust focus.

## **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounter while performing the essential functions of this job.

The noise level in the work environment is usually moderate.

## **SAFETY REQUIREMENTS**

Maintain physical conditions appropriate to the performance of assigned duties and responsibilities which may include the following:

- sitting for extended periods of time
- standing for extended periods of time
- operating assigned equipment

Maintain mental capacity which permits:

- making sound decisions and using good judgment
- demonstrating intellectual capabilities

Effectively handle a work environment and conditions which involve:

- working closely with others
- working in a multi-task environment

Maintain effective audio-visual discrimination and perception needed for:

- making observations
- reading and writing
- operating assigned equipment
- communication with others
- required to follow the County of Hidalgo Accident Prevention Plan and department's safety regulations