### JOURNEYMAN WIREMAN ELECTRICIAN

### 1. Installation of Fixture Boxes

The electrician installs fixture boxes which can vary in size and weight. Sometimes the boxes may weigh as little as 8 ounces and at time, they may weigh from 10-50 pounds. The installation of the fixture boxes can be awkward, and it may involve standing on a step ladder while working at 12 ft. heights. This would be with the arms overhead, or it may involve kneeling or crouching on the floor to work on wall plugs located at 12 inches off the floor.

This task involves reaching, stooping, handling, and fingering. Occasionally, it involves lifting and carrying boxes of fixtures weighing as much as 50 pounds for distances between 10 and 100 feet.

# 2. Drilling Studs

The electrician drills studs through the wall with a one inch auger. The sequence of drilling varies according to the product line used. The electrician will crouch or stoop when drilling these studs located 18 inches from the floor, and will stand on a step ladder with the arms overhead when drilling at heights of 12 ft. and under.

This tasks involves reaching, stooping, handling, fingering, twisting, and turning.

## 3. Pulling Wires

This requires the electrician, in conjunction with a co-worker (one to feed wire and one to pull) to pull wire to the appropriate fixtures, outlets, or plug receptacles. Pulling the wire may involve, voice communication by way of two way radio, standing on a step ladder while working at 12 foot heights with the arms extended overhead, or it may involve kneeling or crouching on the floor to work at the 12 inch above the floor level.

This task involves pulling, handling, fingering, some twisting, and turning. Occasionally, it may involve lifting and carrying boxes of wire. Each box contains wire weighing anywhere from 5-50 pounds. The size of the wire used and the number of boxes needed, varies from job to job. If the weight of the boxes of wire exceeds 50 pounds, a co-worker would be available to assist the electrician with the lifting and carrying activities.

## 4. Terminating Wire

The electrician takes a small knife in hand and cuts off a piece of the thin outer insulation. He then pushes back the paper fillers and strips the wires. After stripping the wires, he places a scotch lock or wire connector on the end of the individual stripped wire.

This task involves fingering and handling.

## 5. Installation of Devices

The electrician installs switches, plugs or light fixtures either 12 inches from the floor, 40 inches off the floor or at ceiling height dependent upon the type of device installed.

This task involves reaching, stooping or crouching, bending, turning, fingering and handling.

#### 6. Installation of Conduit

The electrician first picks up a bundle of conduit weighing anywhere from 35-70 pounds and carries it to the job site. The distance carried varies from job site to job site. The electrician may be required to carry these bundles up and down stairs or on uneven surfaces. Installation of the conduit requires the electrician to climb a ladder, use the conduit benders, and to work as a team of two on large conduit which requires visual and two-way auditory communication.

This task involves pulling, handling, fingering, some twisting, turning and standing on a step ladder while working with the arms extended overhead. The electrician may spend time installing conduit underground in ditches ranging from 12 inches to five feet in depth. This task would require the electrician to bend, stoop, and crouch along with the above mentioned physical activities.

#### 7. Installation of Panels

The electrician installs switch gear, transformers and panels weighing anywhere from 25 pounds to 5,000 pounds. Mechanical assistance such as forklifts, cranes, and levers are available for those objects that weigh between 90 and 5,000 lbs.

The work for an electrician involves primarily commercial job sites. The physical activities are varied, depending on the actual job site and the demand for that particular job. Not all job sites are the same. These functions are usual and customary - however, various tasks are dependent upon the particular job. Therefore jobs that vary from usual and customary will be evaluated on a case by case basis. THE ABOVE DESCRIPTION IS A GENERAL ONE AND MAY VARY FROM CATEGORY TO CATEGORY.

# **Summary of Physical Demands:**

boxes of fixtures weighing up to 50 pounds, boxes of wire weighing Lifting:

from 5 to 50 pounds, switch gear, transformers and panels weighing

from 25 to 5,000 pounds.

boxes of fixtures weighing up to 50 pounds, boxes of wire weighing Carrying:

from 5 to 50 pounds, switch gear, transformers and panels weighing

from 25 to 5,000 pounds.

Reaching: overhead or while standing on a ladder to install fixture boxes, pull

wire, drill studs, or install conduit.

Stooping or to install fixture boxes, drill studs, or pull wire 18 inches or less off the

Bending: floor.

Handling & using a small knife to cut off thin insulation, pushing back paper fillers, Fingering:

stripping wires, connecting wires, installing switches, plugs or light

fixtures.

Twisting & on a step ladder with arms overhead or crouching when drilling.

Turning: pulling wire, installing switches, plugs or light fixtures.

Visual & Two-way communication between partners installing conduit, pulling

Auditory wire between offices, floors and remote building areas.