**Mechanical Tech 1**

**Summary**

Must be competent in the areas of In Building requirements and one of the following:  Prefab, Generator or AC’s.  Responsibilities may include hanging air conditioners, waveguides, fire suppression systems, and/or generators.  May also be responsible for installing cable trays, grounding (wiring), generator exhaust systems, louvers, dampers, vent fans, ice shields, block out plates and polyphasers.  Performs duties under limited supervision. Exercise’s initiative and judgment to complete and apply technical guidance given in work assignments.

**Description**

* + Reads and interprets Bill of Materials and prints to obtain the correct parts for each building.
  + Measures and cuts cable trays with portable band saw according to prints.
  + Measures and cuts all threads with a chop saw according to prints.
  + Cad welds ground wire to ground bar.
  + Prepares cover plates and waveguides for installation.
  + Prepares vent fans and poly phasers for installation.
  + Interprets prints to determine appropriate location for halo grounding, cable tray, ground bars, etc.
  + Installs halo ground (wire around top of ceiling).
  + Uses crimpers and c-taps to connect wire.
  + Installs cover plates, waveguides and ground bars according to print.
  + Drills holes in ceiling and installs mounting hardware for cable tray. Installs cable tray.
  + Uses crimpers to install lugs to ground wires and connect ground wires to ground bar.
  + Installs vent fans, poly phasers and ac grills.
  + Aligns wave guides over designated areas of wall.  Anchors to wall.  Caulks around wave guide to seal.
  + Reads blueprints to determine placement of cable trays.
  + Drills holes in walls and installs mounting hardware for cable trays.  Hang cable trays on ceilings.
  + Reads blueprints to determine appropriate grounding (wiring).  Attaches fasteners along top of wall just below ceiling.
  + Connects wiring vertical along top of wall with fasteners.  Attaches a second wire that runs horizontal and crimps wires together.
  + Interprets prints and Bill of Materials to determine size and type of generator required.
  + Threads and cuts pipe with a pipe threading machine to correct measurements.
  + Installs generator pan and anchors to floor.
  + Operates a forklift to set generator in building and anchor to floor.
  + Installs exhaust thimble (ladder, drill hole, caulk around it), exhaust piping and fuel lines.
  + Installs fire suppression systems.
  + Operates forklift to place generator inside building.  Pushes or pulls generator into place.
  + Installs fire suppression systems including cylinders.  Installs piping up the wall and overhead.
  + Interprets prints and Bill of Materials to determine size and type of AC’s required.
  + Removes packing material from AC and prepares for installation.
  + Operates a forklift to pick up AC. Aligns AC to holes on building and secures with anchors.
  + Caulks AC and AC sleeves.
  + Installs flashing as required.
  + Installs mounting hardware on walls for air conditioners.
  + Operates a forklift to pick up air conditioners.  Aligns in the building for installation.
  + Drills holes in the wall with a hammer drill and inserts mounting hardware.  Tightens fasteners with a ratchet.
  + Aligns and installs louvers and dampers on walls of building.

**Requirements**

* Required to wear personal protective equipment, such a protective eyewear and steel-toed boots.
* Exposed to seasonal temperatures throughout year.
* Able to operate miscellaneous hand and power tools such as electric drill, portable band saw, chop saw, caulk gun, hammer drill, wrench, wire crimpers, wire strippers, hydraulic crimpers, pipe threaders.  Also, able to operate a forklift.
* Required to work for long periods of time in a standing position while installing hardware, doors, canopies, etc.
* Must be able to ascend, descend and work from a ladder when mounting overhead waveguides, canopies, halo-grounding, etc.
* Employee is required to stoop or crouch occasionally to install equipment close to the ground.
* Required to work on knees at floor level when grounding conduit connections.   Must be able to complete overhead work when installing, cable trays, fire suppression systems, grounding, etc.
* Job requires bending forward to climb ladders and picking up parts in boxes.  Employee is required to raise or lower objects such as block out covers and polyphasers, weighing up to 50 pounds occasionally.
* Must be able to exert force up to 150 pounds often when pushing or pulling tool cart.
* Job requires lifting 25 pounds frequently when lifting cable trays, ladders, etc.
* May be required to lift up to 150 pounds occasionally with the assistance of another employee.
* Employee must regularly pick up objects with fingers such as door hardware, nuts, bolts, screws, washers, and lugs.
* Job requires clarity of vision, with or without corrective lenses.
* Job requires working in a dusty environment.
* Exposed to such hazardous conditions as extreme noise levels and electrical, automatic and/or moving equipment.