

## HVAC TECHNICIAN

### **Job Summary:**

Under supervision, inspects, maintains, repairs, and installs air conditioning, heating, and ventilation equipment; and performs related work as required.

### **Essential Duties and Responsibilities:**

(These functions are representative and may not be present in all positions in the class. Management reserves the right to add, modify, change or rescind related duties and work assignments.)

1. Inspects, tests, repairs, maintains and services all types of refrigeration, hot water, forced air heating and ventilation equipment, electronic and electrical components, including chillers, centervacs, boilers, hermetic type refrigeration units, and pneumatic controls.
2. Installs, adjusts and replaces valves, fans, blowers, gaskets, filters, belts, switches, gauges, thermostats, tubing, and transformers.
3. Installs, replaces, adjusts and repairs pressure regulators, compressors, evaporators, condensers, motors, electrical water pumps and other parts as needed; pumps down unit.
4. Adjusts and balances air distribution systems.
5. Flushes boilers.
6. Uses various testing devices to locate defective parts.
7. Adds refrigerants and oil.
8. Descales tubing.
9. Cuts, threads, connects and repairs pipe.
10. Makes necessary electrical connections and repairs.
11. Checks and tests new equipment before installation.
12. Works independently and may train and supervise the work of assigned staff.
13. Writes reports and maintains records of assignments and work completed.
14. Drives City vehicle to different City facilities to perform work or conduct inspections.
15. May serve on maintenance response team in case of emergency or disaster.
16. Orders and picks up supplies and materials; checks supply catalogs for supplies.
17. Performs related duties as required.

### **Qualification Guidelines:**

A typical way to obtain the requisite qualifications to perform the duties of this class is as follows:

### **Education and/or Experience:**

Completion of high school or GED and four years of full-time journey level experience inspecting, testing, maintaining, repairing and installing air conditioning, heating and ventilation equipment and component parts; or three (3) years of full-time journey level experience plus completion of a State of California certified refrigeration/heating apprentice training program. Experience and/or education in a related field may be substituted on a year for year basis.

### **Knowledge of:**

- Air conditioning, heating, and ventilating equipment, component parts and materials, including but not limited to: heat exchangers, electronic controls, thermostats, switches, hermetic refrigeration units, pneumatic controls, centervacs.

- Standard methods, tools and equipment used to inspect, test, maintain, repair, and install air conditioning, heating and ventilating equipment and component parts.
- Material and installation requirements for heating, air conditioning and ventilation (HVAC) as published in the "Uniform Mechanical Code" by the International Conference of Building Officials.
- Safe work practices.
- Basic principles of supervision.
- Basic record keeping practices.

**Skill and Ability to:**

- Inspect, test, maintain, repair and install air conditioning, heating and ventilating equipment and component parts such as: chillers, centervacs, boilers, hermetic type refrigeration units.
- Work skillfully and safely with appropriate tools such as ohm meters, vacuum pumps, wet and dry bulb thermometers.
- Read and interpret blueprints and schematics.
- Understand and follow oral and written directions.
- Demonstrate physical endurance, agility and strength necessary to perform heavy manual labor.
- Observe safety practices and procedures.
- Maintain routine records and reports.
- Establish and maintain cooperative and effective working relationships with others.
- Work from heights.
- Learn basic high voltage electricity used in building maintenance work.

**License or Certificate:**

Possession of valid California Class C driver's license. Employees in this classification will be enrolled in the Department of Motor Vehicles (DMV) Government Employer Pull Notice Program which confirms possession of a valid driver's license and reflects driving record.

**Physical Requirements and Working Conditions:**

Employee accommodations for physical disabilities will be considered on a case-by-case basis. Positions in this class normally:

- Require mobility to stand, stoop, reach, twist and bend.
- Require mobility of arms to reach above shoulder level and dexterity of hands to grasp and manipulate small objects.
- Perform work which involves the frequent lifting, pushing and/or pulling of objects which may weigh approximate 50 pounds and occasionally up to 100 pounds.
- May be required to respond to emergency call back.
- May be required to work with harsh and toxic substances.
- May be required to wear a uniform, safety shoes, protective apparel including goggles, face protectors, aprons and oxygen breathing apparatus.
- May be required to work within confined/enclosed spaces or at heights above ground level.
- May be required to work around loud noise and foul odors.
- May be required to work overtime after regular work hours, including weekends.