



## HVAC TECHNICIAN

### **DEFINITION**

Under general supervision, performs skilled to semi-skilled duties in heating, ventilation and air conditioning (HVAC) refrigeration work, including installing, modifying, maintaining, repairing and overhauling District heating, refrigerated equipment, environmental, air conditioning, and all auxiliary systems at District facilities; and performs related duties as assigned.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from assigned supervisory and management personnel. Exercises no direct supervision over staff.

### **CLASS CHARACTERISTICS**

This classification performs the full range of journey level duties in support of the District's HVAC systems, skilled heating, air conditioning, ventilation, controls, water treatment, and auxiliary equipment services, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This classification is distinguished from the Senior HVAC Technician in that the latter classification performs the most complex work assigned to the series, including, but not limited to, providing lead direction and training to lower-level staff.

### **EXAMPLES OF TYPICAL JOB FUNCTIONS**

Management reserves the right to make reasonable accommodations so that qualified employees with verified medical conditions can perform the essential functions of the job.

- Installs, maintains and repairs heating and air conditioning equipment (HVAC).
- Inspect and examine heating/refrigeration and air-conditioning, chillers, boilers, air compressors, heat exchangers, and all auxiliary equipment to locate defects in operations.
- Disassembles units and restore to operating condition.
- Repair or replace condensers, compressors, pumps, valves, motors, bearings, belts and other parts.
- Recycle and charge refrigerants as required.
- Perform preventive maintenance on cooling towers and evaporative condensers.
- Inspect and test refrigeration systems, safety devices, and controls for efficiency of operation and compliance with safety practices, laws and regulations.
- Troubleshoot and take necessary corrective action for major malfunctions and breakdowns of heating/refrigeration and air-conditioning systems, pumps, air handlers, chillers, fans, ducts, dampers and grills.
- Install, repair and maintain major heating/refrigeration and air conditioning units, coils, fans, subsystems and components parts.
- Perform preventative maintenance and documentation on motors, HVAC equipment, air handlers, cooling towers, pumps, and any related equipment.
- Perform welding and soldering as needed.
- Read and interpret blueprints, shop drawings and technical manuals.
- Prepares and maintains work orders and records related to work performed; assists in the research of supplies and vendors and the ordering of supplies and materials.

- Works productively and cooperatively with others by demonstrating respect, patience, and equitable treatment of all internal and external customers.
- Observes and complies with District and mandated safety rules, regulations, and protocols.
- Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Energy management systems and the related control, design, installation and maintenance of such systems and components.
- EPA regulations related to the use of refrigeration and ozone depleting substances.
- Standard tools, equipment, materials, methods and techniques used in the maintenance and installation of HVAC equipment.
- Operation and proper maintenance of tools, equipment and machinery used in the maintenance of HVAC equipment.
- Requirements of maintaining HVAC Systems in good repair.
- Applicable building codes, ordinances, fire regulations and safety precautions.
- Proper methods of storing equipment, materials and supplies.
- District and mandated safety rules, regulations, and protocols.
- Basic mathematics.
- Principles and practices of record keeping.
- Techniques of providing a high level of customer service by effectively interacting with students, staff, faculty, representatives of outside organizations, and members of the public, including individuals of diverse academic, socio-economic, ethnic, religious, and cultural backgrounds, physical ability, and sexual orientation.
- The structure and content of the English language to effectively perform the work.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

### **Ability to:**

- Maintain and control the District's energy management system.
- Perform a variety of journey level HVAC maintenance and repair of District equipment.
- Install all aspects of HVAC equipment and systems.
- Operate a variety of hand and power tools and stationary mechanical equipment, HVAC specialty tools and a variety of hand and power tools in a safe and effective manner.
- Read and apply information in schematics, blueprints, and drawings.
- Identify building maintenance needs and take corrective actions.
- Maintain tools and equipment in a clean working condition.
- Maintain accurate logs and records of work performed.
- Perform heavy physical labor.
- Understand and follow oral and written directions.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Demonstrate sensitivity to, and understanding of, the diverse academic, socio-economic, ethnic, religious, and cultural backgrounds of community college students.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Education:

- Equivalent to completion of the twelfth (12th) grade, supplemented by specialized coursework and training in HVAC.

Experience:

- Two (2) years of increasingly responsible experience in HVAC servicing, preferably at a higher educational institution or a large business with a multi-building campus.

**Licenses and Certifications:**

- Possession of a valid California Driver's License to be maintained throughout employment.

**PHYSICAL DEMANDS**

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp, and make repetitive hand movement in the performance of daily duties; to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various District sites; and vision to read printed materials and computer screens, and to inspect and operate equipment. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to operate and repair tools and equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight of 50 pounds or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

**ENVIRONMENTAL CONDITIONS**

Employees work in the field and are exposed to moving mechanical parts, high voltage, loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, Freon, gas from heaters and boilers, carbon monoxide, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust, and air contaminants. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.