

## **HVAC MECHANIC**

### **DEFINITION**

Under general supervision, performs journey-level skilled work in the installation, maintenance, and repair of heating, ventilation and air conditioning (HVAC) systems and fixtures.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Assistant Director, Facilities Planning & Management and technical and functional supervision from the Lead HVAC Mechanic.

### **CLASS CHARACTERISTICS**

This is a journey-level HVAC Mechanic position responsible for performing installation and repairs on HVAC systems at the District to ensure that all are maintained in a safe and effective working condition and provide the highest level of safety for District and public use. This class is distinguished from the Lead HVAC Mechanic classification in that the Lead is responsible for technical and functional supervision of assigned HVAC staff and is capable of performing the most complex duties assigned to the function.

### **EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)**

1. Performs skilled HVAC work, including the installation and repair of general HVAC systems and equipment; inspects and performs tests on systems and equipment to identify defective parts and ensures proper functioning.
2. Inspects, disassembles, repairs, maintains, and services various types of refrigeration and air conditioning equipment and systems, including valves, fans, compressors, motors, gaskets, filters, fuses, tubing, controls, and thermostats; performs similar work on hot water and forced air systems.
3. Works from diagrams, blueprints, layouts, work orders, verbal instructions, or other specifications to install and test HVAC systems or equipment.
4. Operates and maintains specialized equipment, including pumps, gauges, meters, and a variety of hand and power tools.
5. Inspects facilities and buildings for damage and maintenance needs; recommends repairs as necessary.
6. Ensures the proper care and maintenance of tools and equipment.
7. Estimates labor, materials, and equipment needed for assigned projects; monitors inventory levels of materials and equipment; orders, receives, and maintains inventory of materials and equipment as needed.
8. Records and maintains work and material records.
9. Provides recommendations regarding needed parts.
10. Observes safe work methods and makes appropriate use of related safety equipment as required.

11. Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
12. Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the HVAC department.
13. Assists other District employees with various projects including carpentry, and plumbing, as well as, other maintenance areas by performing skilled, semi-skilled, and unskilled duties.
14. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
15. Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Principles, practices, methods, equipment, materials, and tools used in maintenance and repair of District HVAC systems and fixtures, including applicable HVAC codes
2. Safe application, operation, and maintenance of tools and equipment used in the HVAC trade.
3. Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
4. Occupational hazards and safety equipment and practices related to the work.
5. Standard office practices and procedures, including the use of standard office equipment, basic record-keeping, and arithmetic.
6. Safe work practices, including safe driving rules and practices.
7. English usage, spelling, vocabulary, grammar, and punctuation.
8. Techniques for providing a high level of customer service by effectively dealing with the public, vendors, students, and District staff, including individuals of various ages, disabilities, socio-economic and ethnic groups.

### **Skills & Abilities to:**

1. Perform a variety of complex technical tasks in the installation, repair, and maintenance of District HVAC fixtures and systems.
2. Skillfully and safely operate a variety of equipment such as boom truck or boom lift, scissors lift aerial lift, fork lift and power and hand tools used in the HVAC field.
3. Troubleshoot HVAC problems.
4. Determine materials, costs, and supplies required for HVAC repairs and maintenance projects; recommend purchases.
5. Interpret, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations.
6. Understand and follow written and verbal directions, instructions, and safety rules and procedures.
7. Maintain accurate logs, records, and basic written reports of work performed.
8. Operate modern office equipment, including computer equipment and software programs.

9. Read and interpret construction drawings, specifications, plans, manuals, diagrams, blue prints, and technical regulations.
10. Make accurate arithmetic calculations.
11. Operate a truck, and observe legal and defensive driving practices.
12. Organize own work, set priorities, and meet critical time deadlines.
13. Use English effectively to communicate in person, over the telephone, and in writing.
14. Understand scope of authority in making independent decisions.
15. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
16. 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:*

Equivalent to the completion of the twelfth (12<sup>th</sup>) grade and three (3) years of experience in journeyman level HVAC maintenance and repair work.

**Licenses and Certifications:**

1. Possession of and ability to maintain a valid California Driver's License.
2. Possession of an Environmental Protection Agency (EPA) Universal Refrigerant Certification #608.
3. A certification as a qualified journey-level HVAC mechanic from an approved institution is desirable.

**PHYSICAL DEMANDS**

Must possess mobility to work in and around District buildings and facilities, to operate a motor vehicle and drive on surface streets; strength, stamina, and mobility to perform light to medium physical work, to work in confined spaces and around machines, to climb and descend ladders, and to operate varied hand and power tools and equipment; vision to read printed materials and a computer screen and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in and around buildings and facilities and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous

physical substances and fumes. Employees may interact with staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.