



Job Description

POSITION CODE: 608
Classified Group: CSEA
Salary Range: 34
Work Days: 261
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POSITION TITLE: Heating and Air Conditioning Technician I

DEFINITION: Under general supervision, performs skilled electrical and mechanical work in the installation, maintenance, and repair of heating, ventilating, refrigeration, and air conditioning equipment.

DIRECTLY RESPONSIBLE TO: Supervisor, Mechanical Maintenance

SUPERVISION OVER: N/A

DUTIES AND RESPONSIBILITIES: (Any one position may not include all duties listed; the listed examples do not include all duties and responsibilities which may be found in positions within this classification.)

1. Inspects, troubleshoots, cleans, and repairs low pressure boilers, gas, and electric heating systems including forced air, combination units, air handlers, heat pumps, heat strips, steam radiators, and others.
2. Disassembles and cleans controls, contacts, orifices, tubes, heating surfaces, filters, and component parts.
3. Performs soldering and brazing.
4. Maintains and repairs medium and low temperature refrigeration and air conditioning systems including window units, centrifugal and direct expansion chillers, and component parts such as cooling towers, water circulating components, evaporators, and condensers.
5. Installs and repairs condensate drain lines, hot water, gas, air, and refrigerant lines, valves, gas cocks, and other piping and valves.
6. Cleans and repairs heat exchangers and water storage tanks.
7. Calibrates, cleans, repairs, or replaces electrical, pneumatic, and low-voltage controls, thermostats, timers, safety controls and regulators
8. Maintains, troubleshoots, tests, and adjusts district Energy Management System (EMS) scheduling programs.
9. Overhauls, installs, and repairs pumps, motors, fans, compressors, valves, air handling and distribution equipment such as unit ventilators and other equipment.
10. Performs related electrical tasks such as replacing breakers, switches, magnetic starters, and transformers.
11. Services, cleans, and repairs wall and window type air conditioners.
12. Installs ducts and vents.
13. Repairs gas-fired kilns and water heaters and swimming pool heaters.
14. Performs chemical treatment of water.
15. Reads and interprets blueprints, diagrams, and schematics.
16. Fabricates parts.
17. Performs preventive maintenance on heating and cooling equipment.
18. Prepares rough sketches and diagrams, analyzes and recommends changes for operational efficiency.
19. Prepares reports on work completed.
20. Initiates, modifies, and closes work orders in automated system.
21. Ensures all work performed conforms to safety codes.
22. Cuts and threads pipe.
23. Installs and repairs walk-in freezers and warehouse coolers.
24. Performs related work as required.

QUALIFICATIONS:

Education and Experience:

Completion of apprenticeship program, college, or technical school with courses in electrical and mechanical technology, principles of heating and cooling systems; experience with a variety of commercial heating and cooling systems, hot water boilers, chillers, pumps, motors, and electrical, pneumatic, and electronic controls.

Licenses and Certificates:

- Valid California Class C driver's license issued by the California Department of Motor Vehicles within 30 days of hire or before driving any vehicle requiring this license

Knowledge, Skills, and Abilities:

- Knowledge of the standard practices, methods, materials, tools, equipment, hazards, and safety precautions used in the repair of boilers, heating, ventilating, refrigeration, and air conditioning systems
- Knowledge of principles and theory of heating and air conditioning systems and the fundamentals of electricity and pneumatics
- Knowledge of applicable plumbing, safety, and electrical codes
- Knowledge applicable building, safety, and electrical codes
- Knowledge of the properties and characteristics of natural gas
- Knowledge and skill in use of computers and assorted software programs
- Ability to install, maintain, and repair a variety of heating and air conditioning equipment including related plumbing and electrical components
- Ability to accurately interpret blueprints, schematics, diagrams, instructional manuals, and OSHA requirements
- Ability to calibrate controls based on relationship of water temperature, air pressure, and outside air
- Ability to apply basic math concepts to compute heating and cooling loads
- Ability to use and learn district Energy Management System (EMS)
- Ability to keep records and prepare reports
- Ability to establish and maintain effective relationships with those contacted in the course of work
- Ability to understand and follow verbal and written instructions
- Ability to communicate effectively both verbally and in writing with administrators, staff, students, and the community
- Ability to maintain consistent, punctual and regular attendance

WORKING CONDITIONS:

Work Environment:

- Indoor and outdoor work environment
- Seasonal hot/cold weather
- Loud noise from equipment
- Drive a vehicle to conduct work

Typical Physical Characteristics: (with or without the use of aids; consideration will be given to reasonable accommodation)

- Inspect documents and other written materials with fine print
- Distinguish color coded wiring
- Hear to detect air leaks and diagnose equipment malfunctions
- Operate tools and equipment requiring repetitive hand movement and fine coordination

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- Transport, move, and lift up objects weighing up to 75 pounds
- Move about schools and facilities to conduct work, including balancing, bending, stretching, stooping, kneeling, crouching, working in small and enclosed spaces, and remaining in a stationary position for long periods of time
- Ascend/descend ladders
- Communicate to exchange information in person, with small groups, and/or on the telephone

Hazards:

- Work near moving mechanical parts
- Work in high, precarious places
- Exposure to fumes, airborne particles, and toxic or caustic chemicals
- Risk of electric shock

Other Characteristics:

- Willingness to respond to emergency calls at night and/or on weekends

This job description is not a complete statement of essential functions and responsibilities. The district retains the discretion to add or change typical duties of a position at any time.

Board Approved: 8/9/2017
Adopted: 6/1/1972
Revised: 3/1/1977
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