STOCKTON UNIFIED SCHOOL DISTRICT

HVAC & REFRIGERATION TECHNICIAN

DEFINITION

Receive general supervision from the Plumbing/HVAC/EMS Supervisor to perform journey-level HVAC work in the repair, alteration, construction, installation and maintenance of heating, ventilation and air conditioning systems, boilers, chillers, refrigeration/heating appliances; and perform related duties as assigned.

REPRESENTATIVE DUTIES: (Incumbents may perform any combination of the essential functions shown below (E). This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification but is intended to accurately reflect the principle job elements.)

Journeyperson level competency required to include but not limited to the installation, troubleshooting, testing and repair of all heating, ventilation, air conditioning equipment, refrigeration/heating appliances, forced air units, heat pumps and electrical cooling units, install ducts and units.

Disassemble, repair and maintain steam boilers, hot-water boilers and gas furnaces. (E)

Maintain and repair multi-zone and package units. (E)

Install, repair or replace compressors, charge units, motors, fans, valves, controls, temperature control devices, pumps, water pressure regulators, cooling towers and other parts and systems related to HVAC equipment and refrigeration/heating appliances. (E)

Inspect, clean and replace filters as necessary. (E)

Maintain and repair electric and pneumatic thermostats, hot and cold water pumps, gas valves, fans, and air compressors. (E)

Install new furnace systems, boilers, steam lines, and gas lines, involving cutting, brazing and welding. (E)

Test boiler water and recommend chemical additives. (E)

Lay out work and inspection of completed work. (E)

Assist in estimating necessary materials for work as assigned by their immediate supervisor. (E)

Maintain cost records of time and materials. (E)

Prepare reports. *E*)

Inspect, install and repair water coolers, ice cream cabinets, beverage coolers, reach-in refrigerators, walk-in boxes, freezer boxes and a variety of central and individual unit heating and air conditioning equipment. (E)

Minor overhauling of compressors. (E)

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Remove and install defective air conditioner components, including motors and fan bearing. (E)

Repair condensers and evaporators as required. (E)

Perform periodic maintenance inspection and repair. (E)

Operate a variety of equipment and machinery such as various meters and testing devices, pressure gauges, vacuum pumps and hand tools. (E)

Install, repair, service and maintain swimming pool heaters. Maintain inventory of stock if required. (E)

Use welders, vacuum pumps, gas service cylinders, air control measuring gauges, control calibrating equipment and refrigeration hand tools. (E)

Maintain regular and prompt attendance in the workplace. (E)

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

- <u>KNOWLEDGE OF:</u>Methods, materials, tools and equipment used in servicing heating, air conditioning, and refrigeration units.
- Mechanics of refrigerant flow control, electric controls, pneumatic controls, and electronic controls.
- Principles of defrosting, reverse cycle refrigeration, absorption refrigeration, centrifugal compressors, liquid chilling, and air movement; soldering, brazing, welding, indicating and recording instruments.
- Engineering and construction practice related to the HVAC field.
- Other construction and craft trade responsibilities and disciplines as they relate to the job functions of an HVAC Technician.
- Oral and written communication skills.

ABILITY TO:

- Use skillfully the tools and materials necessary in the repair and servicing of boilers, heating, refrigeration and air conditioning equipment.
- Competency in print reading.
- Follow oral and written instructions and work from plans and specifications.
- Maintain routine records.
- Work independently without close supervision.
- Maintain cooperative working relationships with others.
- Read and write at the level required for successful performance on the job.
- Physical capability sufficient to perform required job tasks.
- Develop and maintain cooperative working relationships with those contacted in the course of work.
- Carry out oral and written directions; write and speak at a level sufficient to fulfill the duties to be performed for the position described.
- Operate a computer and knowledge of basic operating programs.

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EDUCATION AND EXPERIENCE:

Any combination of education, training and/or experience equivalent to a high school graduation: plus completion of a minimum of four year of classroom and field work in a certified technical school or state indentured apprenticeship program totaling a minimum of six years of experience as a construction and/or maintenance HVAC Technician.

License or Certificate

Possession of a valid California driver's license is required.

WORKING CONDITIONS:

WORK ENVIRONMENT;

- Indoor and outdoor work environment
- Regular exposure to fumes, dust and odors
- As required must wear protective devices such as earplugs, dust mask, coveralls, gloves, safety boots and safety glasses.
- Enclosed work spaces

Physical Demands:

Employees in this position must have/be able to:

- Dexterity of hands and fingers to operate a variety of trade tools
- Walk and/or stand for extended periods of time;
- See with/without assistive devices sufficient to perform assigned duties
- Lift and/or carry up to 60 lbs at waist height for short distances
- Occasionally lift 50 lbs overhead for short distances.
- Push/pull up to 90 lbs up to 100 feet
- Bend at the waist, kneel, crawl, crouch and stoop; reach overhead, above and below the shoulders and horizontally
- Climb ladders and work from heights
- See, hear and speak with/without assistive devices sufficient to communicate effectively with others.

Hazards:

- Working on ladders; on roofs and energized circuitry.
- Natural gas
- Exposure to heat and cold from heating and cooling system.
- Welding flame