

RIVERSIDE UNIFIED SCHOOL DISTRICT

CLASS TITLE: HVAC&R and BUILDING AUTOMATION CONTROLS TECHNICIAN (Range 31)

BASIC FUNCTION:

Under the direction of an assigned supervisor, perform journeyman-level mechanical and electrical work in the inspection, service, installation, repair and alteration of heating, air-conditioning and refrigeration systems and related equipment.

DISTINGUISHING CHARACTERISTICS:

Incumbents perform journeyman-level mechanical and electrical work for the District in the installation, repair and service of heating, air conditioning, and refrigeration, Energy Management Systems (EMS), Direct Digital Control (DDC) and related systems.

REPRESENTATIVE DUTIES:

Install, service, maintain, troubleshoot and repair heating, air conditioning and refrigeration systems and equipment such as hydronic systems, cooling towers, package units and refrigeration equipment; perform maintenance on equipment as required. *E*

Diagnose malfunctions and determine repair needs; tests for defective parts. *E*

Install, serve, maintain and repair systems, including temperature controls, pressures, electrical circuit applications, sealed systems, EMS equipment/systems and others according to established principles of the HVAC&R and EMS controls industry. *E*

Inspect, repair, maintain, rebuild and replace reciprocating and centrifugal compressors; clean rodding; maintain and service cooling towers, closed loop water systems, water pumps and other related equipment. *E*

Repair, install and maintain pneumatic control systems, including air compressors, low and high voltage control systems and related sensory instrumentation and controls for appropriate air flow. *E*

Service, repair, maintain and replace air blowers, boilers, exhaust fans, ventilators, coolers, heat pumps, gas fired heating equipment. *E*

Estimate and prepare cost and materials estimates; submit to appropriate personnel for approval; sign on open purchase orders from local vendors according to established procedures. *E*

Test systems and joints; insulate pipes pertaining to heating or ventilation systems. *E*

Fabricate, repair, and install duct work and covers. *E*

Operate and maintain a variety of specialized hand and power tools and equipment; drive a District vehicle to conduct work. *E*

Assure work completed and in progress comply with applicable EPA laws, rules and regulations. *E*

Write simple and complex EMS program code. *E*

Compile, implement and assure correct operation of EMS programs. *E*

Diagnose EMS communication problems. *E*

Create, configure, and monitor EMS graphics. *E*

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Basic record-keeping techniques.

Energy Management Systems (EMS), Direct Digital Control (DDC) and related systems.

PC or laptop operation (Windows and DOS).

Methods, materials, tools, and equipment used in the maintenance and repair of ventilation and heating equipment.

Building codes, policies, regulations, and guidelines pertaining to typical school District ventilation and heating systems.

Safe working methods and procedures.

Proper use of refrigerant recovery equipment and safe disposal of refrigerant containers.

Technical aspects of field of specialty.

Health and safety regulations.

ABILITY TO:

Perform journeyman-level repair, maintenance, and installation of ventilation, heating and refrigeration equipment.

Skillfully use tools and equipment including desktop and laptop computers in performing HVAC&R installation, maintenance, and repair activities.

Work from blueprints, shop drawings, sketches, manuals, as-builts, specifications, and diagrams.

Plan, organize, and lay out HVAC&R work.

Accurately estimate labor and material.

Maintain records and prepare clear, complete and concise EMS records and reports.

Understand and follow oral and written directions.

Establish and maintain cooperative working relationships.

Maintain work pace appropriate to given work load.

Operate, adjust and service specialized equipment used in the basic trade.

Diagnose EMS communication problems.

Perform technical EMS tasks.

Read and write program code using District related EMS programming languages.

Perform complex and varied tasks.

Apply current industry standards.

HVAC&R Technician

E = Essential Duties

Revised and Approved by the Negotiation Team on 9/11/14

Effectively operate a computer/laptop and commonly used job related software programs.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: graduation from high school and two years of journeyman-level HVAC & Refrigerant experience.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

Valid Environmental Protection Agency (EPA) Refrigerant Recycling certification.

WORKING CONDITIONS:

ENVIRONMENT:

Indoor and outdoor environment.

Driving a vehicle to conduct work.

Subject to fumes and noise from air conditioning and refrigeration equipment.

Noise from equipment operation.

Exposure to adverse weather conditions.

PHYSICAL ABILITIES:

Seeing to diagnose problems.

Crawling, crouching, and kneeling to conduct work.

Lift, push, pull or carry heavy objects.

Climbing ladders and work from heights.

Dexterity of wrists, hands and fingers to operate hand tools and specialized equipment.

Reaching overhead, above the shoulders and horizontally.

Walking and standing for extended periods of time.

Bending at the waist.

Perform heavy manual labor.

Hearing and speaking to exchange information.

HAZARDS:

Working on ladders or scaffolding at heights.

Working in a cramped or restrictive work chamber.

Working around and with machinery having moving parts.

Electrical power supply and high voltage.

Exposure to vapors, gases and fumes.

High Pressure.