

# RIALTO UNIFIED SCHOOL DISTRICT CLASSIFIED

# HEATING, AIR CONDITIONING, VENTILATION & REFRIGERATION TECHNICIAN

#### **DEFINITION:**

Under the direction of an assigned Administrator or Supervisor, perform skilled work in installing, repairing, and maintaining heating, air conditioning, ventilation, refrigeration (HVAC & R) equipment and systems for designated buildings and facilities; may assist with semi-skilled and skilled duties in other maintenance trade areas; perform other job-related duties as assigned and/or as required.

#### **ESSENTIAL DUTIES:**

- Install, service, maintain, troubleshoot and repair heating, ventilation, air conditioning systems and equipment; diagnose malfunctions and determine repair needs; inspect systems and equipment to identify defective parts and ensure proper functioning.
- Install, replace and repair various HVAC & R parts such as valves, fans, motors, gaskets, filters, fans, semi compressors, belts, relays, fuses, controls, thermostats, switches, gauges, tubing, pumps, pipes, variable frequency drives (VFD) and variable refrigerant flow systems (VRF).
- Install, adjust, program, replace and repair Energy Management System (EMS) and Variable Volume & Temperature (VVT) systems.
- Inspect repair and maintain refrigeration systems including coolers, walk in freezers, ice machines, electric and gas commercial kitchen equipment, rack systems, boilers and steam equipment.
- Recover, recycle, reclaim refrigerant; weld and pull vacuum on refrigeration systems.
- Cut, bind and join to install and replace tubing and pipes.
- Test systems by utilizing pressure test, and balances air conditioning systems; correct air flow issues.
- Test joints and insulate pipes pertaining to refrigeration, heating, or air conditioning systems;
  inspect, maintain and operate thermostats and control systems.
- Fabricate, repair and install ductwork and covers.
- Connect motors to control panels and control panels to power sources.
- Adjust valves, thermostats, fans and controllers.
- Inspect ventilation, heating and air conditioning units; replace transformers, valves, pressure regulators, pumps and light pilots.
- Plan, organize and lay out assigned skilled tasks; interpret HVAC & R plans, diagrams, blueprints, sketches and specifications.
- Perform daily, weekly, quarterly, monthly and annual preventive maintenance on assigned HVAC & R systems and related equipment.
- Maintain a variety of preventive maintenance records.
- Estimate labor, material, parts and equipment needed for assigned HVAC & R projects; monitor inventory levels of parts, supplies and equipment; requisition, receive and store parts, supplies and equipment as directed.

- Operate and maintain specialized equipment including pumps, gauges, welding torches, meters and a variety of hand and power tools.
- Operate a computer and assigned software.
- Train, coordinate and provide work direction to assigned maintenance personnel.
- Communicate with personnel, vendors and various outside agencies to exchange information and resolve issues or concerns.
- Maintain shop and work areas in a safe, clean and orderly condition.
- Drive a service vehicle to various sites to conduct work.
- Perform other job-related duties as assigned and/or as required.

#### **KNOWLEDGE AND ABILITIES:**

### KNOWLEDGE OF:

- Methods, materials, tools, and equipment used in the maintenance and repair of heating, ventilation, air conditioning and refrigeration systems and equipment.
- Principles of thermodynamics and understanding of high-and low-pressure components.
- Building codes, policies, regulations, and guidelines pertaining to typical school district refrigeration, ventilation, heating and large air conditioning systems, E.M.S and V.V.T. systems;
- Safe working methods and procedures.
- OSHA and South Coast Air Quality regulations.
- Operation and maintenance of tools, equipment and machinery used in HVAC & R maintenance and repair.
- Operation of a computer and assigned software.
- Proper methods of storing equipment, materials and supplies.
- Training principles and techniques.
- Electrical control systems including energy management systems (EMS).
- Arithmetic computations.
- Oral and written communication skills.
- Recordkeeping techniques.

#### ABILITY TO:

- Perform skilled work in the inspection, servicing, overhauling, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration systems for designated buildings and facilities.
- Troubleshoot and diagnose HVAC & R device, system and equipment malfunctions.
- Install, adjust, program, replace and repair Energy Management Systems (EMS).
- Work from blueprints, shop drawing, sketches, manuals, and diagrams;
- Operate and maintain tools, equipment and machinery used in the HVAC & R trade.
- Estimate labor and material costs accurately.
- Train, coordinate, organize and direct the work of assigned maintenance employees.
- Maintain simple records and logs.
- Maintain and prepare complete and concise operational reports.
- Understand and carry out oral and written directions.
- Establish and maintain cooperative working relationships.
- Observe health and safety regulations and procedures.
- Make accurate arithmetic calculations.
- Communicate effectively, both orally and in writing.
- Work independently with little direction.

# **EDUCATION AND EXPERIENCE:**

#### **EDUCATION:**

Verification of a High School diploma, a GED certificate, or a higher degree

#### **EXPERIENCE:**

Four years of experience as a journey level air conditioning and heating maintenance technician in the commercial or industrial field. Recent job-related experience within the last five years is required.

# LICENSE, CERTIFICATIONS AND OTHER REQUIREMENTS:

- Verification of a valid California Motor Vehicle Operator's License
- Insurability by the District's liability insurance carrier is required.
- Possession of E.P.A. Universal Technician Certificate.

# PREFERRED QUALIFICATIONS:

Supplemental training or course work in the maintenance and repair of modern refrigeration, ventilation, heating, and commercial air conditioning equipment is desirable, but not required.

#### **WORKING CONDITIONS:**

# **ENVIRONMENT:**

Indoor and outdoor work environment. Driving a vehicle to conduct work.

#### PHYSICAL ELEMENTS:

The physical requirements indicated below are examples of the physical aspects that the position classification must perform in carrying out essential job functions:

- Persons performing service in this position classification will exert 75 to 100 pounds of force to lift, carry, push, pull, or otherwise move objects.
- This type of work may involve ascending and descending ladders, stairs, scaffolding, and ramps, and will involve walking or standing for extended periods.
- Perceiving the nature of sound, near and far vision, depth perception, providing oral information, the manual dexterity to operate equipment and use hand tools, and handle and work with various materials and objects are important aspects of this job.

Reasonable accommodation may be made to enable a person with a disability to perform the essential functions of the job.

#### POTENTIAL HAZARDS:

Working around and with machinery having moving parts. Exposure to hazardous chemicals. Regular exposure to fumes, dust, dirt, oil/grease. Working at heights. Electrical power supply and high voltage. Working in a cramped or restrictive work chamber. Exposure to hot, cold, wet, humid, or windy conditions caused by weather may occasionally be experienced.

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