

MADISON COUNTY SCHOOLS
Job Description

CLASS TITLE: CERTIFIED HVAC TECHNICIAN

REPORTS TO: Director of Districtwide Services

EXEMPT STATUS: Exempt

APPROVED: January 14, 2016- Order #2016-1720

BASIC FUNCTION:

Perform skilled mechanical maintenance duties in the inspection, repair, installation and alteration of District heating, ventilation, air conditioning and refrigeration systems and related equipment and facilities; perform preventive maintenance and routine servicing of equipment.

REPRESENTATIVE DUTIES:

- Inspect, repair, modify and install HVAC equipment including refrigeration and air conditioning compressors, receivers, condensers, chillers, water cooling towers, forced air converter units, pumps, automatic and hand valves, expansion valves and capillary tubes.
- Conduct regular preventive maintenance inspections of refrigeration units, isolated heating and ventilating units, including boilers, gas and electrically operated air-conditioning equipment, and make necessary adjustments or repairs; service and repair evaporative coolers.
- Repair or replace defective parts in units and equipment and their controls, including thermostats, automatic switches, fan controls, log switches, damper motors, louvers, relays, filters, controls, belts, compressors, heat exchangers, high limit controls, pressure controls, safety valves, and automatic gas valves.
- Operate a variety of hand and power tools, welder torch, vacuum pump, test equipment utilized in the trade and a motor vehicle; maintain equipment in effective and safe working condition; maintain parts and tool inventory.
- Repair and rebuild semi-hermetic reciprocating compressors and compressors for centrifugal refrigeration machines.
- Perform skilled electrical maintenance work in the repair, installation and alteration of HVAC equipment, components, timers, motors and wiring systems as needed; connect motors to control panels.
- Test and examine boiler operations, observing meter and pressure gauges; conduct boiler water quality test and treatment; adjust boiler burner combustion.
- Lubricate and pack heating, ventilation, refrigeration, and air-conditioning motors, pumps, fans, and other equipment.
- Install and calibrate systems; install copper tubing and repair pipes and tubing as necessary; test joints and insulate pipes of refrigeration and air conditioning systems; flush boilers, descale tubing; rebuild pressure and temperature safety valves and water pumps.
- Install, rebuild, replace or repair fans, motors, thermostats, fuses, filters, bearings, valves, controls, gaskets and other equipment as necessary.

- Maintain related records concerning time, labor and materials; maintain log of tasks performed and write reports as required.
- Maintain regular attendance.
- Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- Standard practices of the HVAC and refrigeration trade.
- Theory of HVAC and refrigeration systems.
- Materials, methods and tools used in the operation and repair of HVAC and refrigeration systems.
- Applicable building codes, ordinances and regulations of State and local authorities pertaining to HVAC, refrigeration and boilers.
- Air compressors and pneumatic controls.
- Cooling tower and boiler water treatment.
- Manual and electrical tools and equipment applicable to the HVAC and refrigeration trade.
- Welding and soldering techniques.
- Health and safety regulations.
- Basic record-keeping techniques.
- Proper methods of storing equipment, materials and supplies.

ABILITY TO:

- Perform skilled mechanical maintenance duties in the inspection, repair, installation and alteration of District heating, ventilation, air conditioning and refrigeration systems and related equipment and facilities.
- Calibrate systems; Perform preventive maintenance and routine servicing of equipment.
- Diagnose defects, and install, repair and maintain heating, ventilating, refrigeration, and air-conditioning units.
- Follow oral and written instructions.
- Operate specialized machinery, equipment and tools utilized in the repair, installation and maintenance of heating, ventilation, air conditioning and refrigeration systems.
- Communicate effectively both orally and in writing.
- Understand and follow oral and written directions.
- Work cooperatively with others and work independently with little direction.
- Meet schedules and time lines.
- Maintain routine records and prepare reports.

PHYSICAL DEMANDS

- The physical requirements indicated below are examples of the physical aspects that this 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 frequently to lift, carry, push, pull, or otherwise move objects.
- Must have an adequate range of motion in the upper extremities.
- 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.
- Exposure to hot, cold, wet, humid, or windy conditions caused by weather may occasionally be experienced.

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

EDUCATION AND EXPERIENCE:

Any combination equivalent to: high school diploma, G.E.D. Certificate as required by Kentucky law and four years increasingly responsible certified experience in the HVAC and refrigeration trade.

LICENSES AND OTHER REQUIREMENTS:

Valid Kentucky driver's license.