

HEATING, VENTILATING, AIR CONDITIONING (HVAC) SERVICE ENGINEER

Code No.: 4-14-141
COMPETITIVE

DISTINGUISHING FEATURES OF THE CLASS: This is a service position responsible for repairing, installing and servicing HVAC systems. (The employee may also operate HVAC systems in a building not requiring licensing as per City of Rochester requirements.) Employees are distinguished from Assistant Stationary Engineers by virtue of the expanded scope of work with emphasis on major repairs, installations and service versus the routine operations and minor repairs assigned to the Assistant Stationary Engineers. This position is distinguished from the Assistant HVAC Service Engineer by working independently and performing more complex work such as analyzing servicing needs and handling problems with installations. The employee reports directly to, and works under the general supervision of a Lead HVAC Service Engineer or other higher level staff member. Supervision is not a responsibility of this class. Does related work as required.

TYPICAL WORK ACTIVITIES: (All need not be performed in a given position. Other related activities may be performed although not listed.)

Installs and services boilers, air conditioning systems, air compressors, pneumatic systems, duct work and computer hardware for control systems, by measuring pipes, soldering or brazing metals, wiring control systems, etc.;

Installs, maintains and repairs heating, refrigeration, and ventilation equipment including cooling towers, blowers, chillers, motors, compressors, direct digital controls and pumps;

Properly handles refrigerant gases;

Analyzes energy usage, and recommends solutions to energy use problems;

Reads blueprints, schematics, manuals and work orders to gather information necessary to schedule and perform preventive maintenance requirements;

Repairs steam and hot water leaks, motors, pumps, steam traps, air handling units and all other HVAC equipment and components;

Performs preventive maintenance to HVAC equipment by changing oil, filters, belts, bearings, etc.;

Identifies and solves problems with electric controls, heating systems and refrigeration systems;

Responds to maintenance work requests and tenant complaints;

Tests and treats water used in air conditioning systems in order to prevent growth of fungi and bacteria;

Keeps operating logs for all HVAC equipment under employee's charge;

Trains Assistant HVAC Service Engineers and Assistant HVAC Service Engineer Trainees where applicable.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL

CHARACTERISTICS: Good knowledge of HVAC systems including electrical, refrigeration, boiler and heat pump; good knowledge of types of equipment and appropriate lubricants; good knowledge of preventive maintenance and servicing needs of systems; good knowledge of mechanical principles; good knowledge of possible dangers to health and safety relating to areas such as asbestos, insulation wastes, chemicals; good knowledge of existing HVAC equipment and how it works; good knowledge of systems and problems specific to various jurisdiction buildings; good knowledge of jurisdiction safety, regulations and devices; good knowledge of resources for safety information; ability to install boilers, ducts, air conditioning systems, wiring and piping; ability to analyze servicing needs and provide verbal and written descriptions of problems and observations; ability to read warranty specifications, blueprints, installation manuals, maintenance manuals, wiring and piping schematics, flyers and technical books; ability to apply appropriate information to present systems, problems in installation, future servicing, etc.; ability to add, subtract, multiply and divide as used in mathematical formulas; ability to relate mechanical principles to problems; ability to observe and analyze jobs; mechanical ability; good judgment; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Graduation from high school or possession of an equivalency diploma plus either:

- (A) Three (3) years paid full time or its part time equivalent experience in the installation, maintenance and repair of HVAC systems found in commercial or public buildings which must include at least one (1) year paid full-time or its part-time equivalent experience in heating, and in the installation, maintenance and repair of refrigeration equipment*; OR,
- (B) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree or Certificate in Heating, Ventilating and Air Conditioning plus one (1) year paid full-time or its part-time equivalent experience in the installation, maintenance and repair of HVAC systems found in commercial or public buildings which must include at least one (1) year paid full-time or its part-time equivalent experience in heating, and in the installation, maintenance and repair of refrigeration equipment*; OR,
- (C) An equivalent combination of education and experience defined by the limits of (A) and (B) above.

*Minor repair and preventive maintenance tasks such as changing filters and belts and lubrication of HVAC and refrigeration equipment will not be considered as qualifying experience.

SPECIAL REQUIREMENTS: Possession of a Universal Refrigerant Transition and Recovery Certificate issued by the United States Environmental Protection Agency (EPA) or EPA approved certifying organization**.

**submit copy of certificate with application.

Possession of a valid license to operate a vehicle in New York State or otherwise demonstrate your capacity to meet the transportation needs of the position.

ADOPTED: April 21, 1988
REVISED: August 4, 1988
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