

## SENIOR MAINTENANCE MECHANIC I (BUILDING ENVIRONMENT)

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision an incumbent performs a wide variety of journeyman level maintenance and repair on heating/ventilating and air-conditioning systems. The position includes the lay out of jobs sufficiently complex to require advance planning and the maintenance of necessary supplies and records. Work is performed with considerable independence, and may be initiated by oral or written instructions and in accordance with a preventive maintenance schedule. Incumbent may work alone, as part of a crew or function as lead worker on specific projects and may supervise a number of lower level maintenance and labor employees. The journeyman is fully proficient in the skills and practices of the trade, with full knowledge of the principles, tools and techniques. The journeyman has responsibility for determining methods, techniques, materials, and/or devices best suited to complete projects. Work at this grade is completed with little or no check during progress or on completion; however supervisors periodically check overall work to see that it meets trade standards. Does related work as required.

### EXAMPLES OF WORK: (Illustrative Only)

Overhauls, repairs and installs heating and cooling units and their auxiliary equipment including fans, converters, motors, water and oil pumps, air compressors, pressure reducing valves, feed water regulators, controls, cooling towers, instruments, etc.;

Inspects, maintains and repairs various piping systems carrying high and low pressure steam, domestic hot and chilled water and other related piping;

Repairs and adjusts absorption and Freon refrigeration units involving work on pumps, tanks, circulating pumps, compressors, condensers, evaporators, expansion valves, etc.;

Sample, test and treat water for HVAC system;

Fabricates various specialized equipment from rough sketches and diagrams;

Lays out jobs making rough plans and sketches when needed and interprets job orders, diagrams, specifications, etc.;

Fabricates machine parts if required;

Calibrates and adjusts HVAC controls and instruments;

Solders, welds, and brazes in the performance of much of the work given above;

Diagnose, repair, maintain and monitor systems controls such as thermostats, regulators, electrical controls, and computers;

Maintains records of work done, supplies used and supplies needed, requisitions supplies;

Assists in securing information for budget formulation;

Monitor, record and adjust building conditions using the Direct Digital Controls (DDC) building environment software;

EXAMPLES OF WORK: (Illustrative Only) (Cont'd.)

Takes readings on operating equipment and controls;

Maintains work area in a clean, orderly and safe condition;

Performs routine and emergency repairs and maintenance, both scheduled and in response to emergency situations, as needed;

Assists in the operation and maintenance of HVAC generating and distribution systems, as needed;

Depending on work location, may operate equipment and devices, participate in snow removal, etc., as assigned;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, email and database software in performing work assignments;

May perform other incidental tasks, as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES:

Thorough knowledge of the tools, techniques, and terminology used in the mechanical trades related to the repair, adjustment and inspection of a variety of stationary machinery and equipment; thorough knowledge of heating, ventilation and air conditioning systems; good knowledge of standard machine shop practice; good knowledge of the accident and safety precautions of the trade; ability to operate to close tolerances standard machine shop equipment such as lathes, drill presses, milling machines, shapers and various cutting tools; ability to do gas and electric welding, soldering and/or brazing with a high degree of skill; ability to perform work with rough sketches, diagrams or blueprints; ability to coordinate work with the work of other trades; ability to learn and use building environmental software systems and direct digital controls; ability to follow oral and written instructions; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; resourcefulness in fabricating parts from existing materials and with available machinery; industriousness; physical strength; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either: (a) high school or equivalency diploma and four years of experience where the primary function of the position was mechanical repair, maintenance and installation, two years of which must have been in a wide variety of HVAC equipment including pumps, motors, chillers, fans, etc.; or (b) graduation from a high school level vocational course and three years experience in the trade; or (c) completion of a two year post high school or trade school course\* and two years experience as stated in (a); or (d) seven years work experience, five of which must have been as stated in (a); or (e) a satisfactory equivalent combination of training and experience as defined by the limits of (a), (b), (c) and (d).

SPECIAL REQUIREMENT: Depending on work assignment, must meet standards of OSHA regulation 1910.134 Respiratory Protection, and will be required to meet Federal, State and local standards with respect to health and safety.

NOTE: Must possess licensure appropriate to vehicle(s) being operated.

\*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Education Department as a post-secondary, degree-granting institution.