

STEAMFITTER

KIND OF WORK

Skilled, licensed, steamfitting work.

NATURE AND PURPOSE

Under general supervision, an employee in this class performs skilled high-pressure steam, water and air line installation, alteration, maintenance, and repair work according to specifications in the state high-pressure piping code. An employee in this class may train and direct the work of laborers, other maintenance employees, correctional facility inmates, and regional center residents. Performs related work as required.

This class differs from Steamfitter Supervisor because the Steamfitter Supervisor exercises full supervisory authority over subordinate licensed Steamfitters, laborers, and maintenance employees.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Monitors and reports on the work activities of lesser-skilled laborers, maintenance employees, correctional facility inmates, and regional center residents to ensure the timely completion of steamfitting projects by determining the most efficient work procedures and techniques; by instructing others on the appropriate use of equipment and steamfitting techniques; by inspecting the quality of work performed by others; and by recording hours worked and materials and equipment used.

Reviews plans, blueprints and specifications for steamfitting projects to understand the scope of the project and to recommend changes by reading the plans, blueprints and specifications and discussing them with the supervisor; by researching the plans and specifications of previously completed steamfitting projects; and by defining the detailed tasks of the project.

Completes cost estimates for time, labor and materials so that the supervisor can prioritize, budget and schedule steamfitting projects by determining the necessary supplies to complete the project; by selecting the best work procedures; by determining equipment and labor requirements; and by requisitioning necessary supplies and equipment.

Installs, repairs, maintains, and replaces piping for high and low-pressure steam mains, radiation, hot water systems, condensate lines, chilled water systems, gas, air and vacuum lines according to state high-pressure piping code to ensure safe and efficient steam, gas, air and water flow by requisitioning and selecting the necessary supplies and equipment for the steamfitting project; by identifying the most direct route to run the piping; by locating the area of broken pipe; by cutting threads and tightening pipe and fittings; by welding pipe hangers and supports to secure all piping and connections; by installing any valves as needed; by following standard practices and procedures of the steamfitting trade; and by complying with safety standards and procedures to prevent injuries.

Installs, repairs, maintains and replaces heating, ventilating, and air conditioning controls, meters, and valves by calibrating and adjusting environmental controls such as thermostats, humidistats, initiating devices, timers, pneumatic temperature and heat controllers, relay switches, dampers, motors; by servicing and repairing flow meters, condensate meters, pumps, reducing stations, thermal and pneumatic temperature valves; by inspecting equipment for worn parts, leaks, excess vibration and noise according to preventative maintenance schedules.

Maintains and cares for steamfitting supplies and equipment to ensure their safe and efficient use for current and future steamfitting projects by inspecting the physical condition of all pipe threading, bending and tightening tools; testing equipment (e.g., ultrasound and calibration); by repairing or replacing worn or broken parts on welding equipment; and by ensuring an adequate supply of steel and plastic piping for immediate repair projects.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Construction plans, blueprints and steamfitting specifications sufficient to interpret, modify and follow them to complete heating, ventilating and air conditioning projects.

State high-pressure piping code, standard steamfitting practices, techniques, materials and tools sufficient to requisition and select supplies and equipment and apply them to complete steamfitting projects.

Steamfitting tools and equipment, safety standards and procedures sufficient to prevent injuries.

Shop math sufficient to estimate labor and material costs for planned projects.

Skill in:

Using hand tools, such as pipe cutters, benders, threaders, wrenches, etc., and arc and acetylene welding equipment sufficient to install, maintain, repair and replace heating, ventilating and air conditioning systems in state buildings.

Ability to:

Maintain and repair hand tools and welding equipment sufficient to ensure their availability and safe operation for steamfitting projects.

Instruct and monitor the steamfitting work of lesser-skilled employees, inmates and residents sufficient to train and direct them during the length of the project.

Maintain steamfitting project records of time and materials sufficient to report daily, weekly, and monthly progress of the steamfitting project.

LEGAL AND LICENSURE REQUIREMENTS:

Registration with the Minnesota Department of Labor and Industry as either a Journey or Master Steamfitter.

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Ckd.: 07/67
Rev.: 03/74
05/78
09/91

T.C.:
Former Title(s):