

MORGAN STATE UNIVERSITY

JOB SPECIFICATON



PLUMBER SPECIALIST

Class Code: N1139

FLSA Code: N/E (Non-Exempt)

Pay Range: 14

JOB SUMMARY

Under general supervision, performs specialty and/or complex plumbing and pipe-fitting work at the journey level, includes inspections, maintenance, repair and some installation of underground piping systems, low and medium pressure steam lines and associated valve/control devices, laboratory/research equipment, sprinkler systems, hot water generators, pumps, water coolers and industrial equipment producing and/or using hot water (i.e. coils, converters, water jackets). Serves as a lead technician and trains less-skilled employees.

PRIMARY DUTIES

1. Reference to specific equipment and duties will vary from institution to institution.
2. Independently, installs, diagnosis problems, repairs and maintains pipes, fittings, and control devices of water, gas, sewer, and drainage systems according to blueprints, specifications, and plumbing codes.
3. Performs repairs and maintenance to all underground piping -- sewer, storm, water, hot and chilled water, steam lines and gas lines.
4. Performs repairs on high pressure water lines.
5. Repairs and maintains low and medium pressure steam lines, traps, heat exchangers, pressure reducing devices, control devices, and equipment. Descales clean steam generators.
6. Installs, inspects and tests back-flow preventers; ensures that there are no cross connections between water and sewer lines.

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7. Repairs, replaces, and tests fire hydrants.
8. Installs, repairs water coolers and drinking fountains, including refrigerant systems.
9. Repairs condensate returns systems.
10. Maintains and repairs instantaneous steam fired hot water generators.
11. Maintains and repairs building boilers.
12. Operates specialized video camera equipment to inspect sewer and storm lines.
13. Specifies, installs, tests, troubleshoots, maintains and repairs domestic and laboratory piping including glass, stainless steel, and sani-tech systems.
14. Specifies, installs, tests, troubleshoots, maintains and repairs specialized laboratory equipment, including distilled water equipment, autoclaves, sterilizers, cage/equipment, washers, dechlorinators, softeners, UV light systems, humidifiers/dehumidifier.
15. Performs maintenance on electrical/electronic gauges, controls, solenoids. Equipment can be gas, steam, or water fed.
16. Troubleshoots and maintains dental oral evacuation system/saliva holding tanks, associated biohazard-type equipment and domestic water filtration and backwash equipment.
17. Performs underground pipe repair work in ditches and manholes up to 20' deep, requiring trenching and shoring in accordance with
 1. OSHA/MOSH regulations.
18. Locates underground piping for contractors, diagnosis water flow problems, determines connection requirements, updates facility/infrastructure drawings.
19. Performs and records (using computer based systems) maintenance of emergency eyewash, fire pumps, shower, and sprinkler systems. Determines maintenance requirements, schedules.
20. Performs testing of fire suppression sprinkler systems.

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21. Overhauls pumps including circulators, sumps, boosters, air, vacuum, and gas. Troubleshoots and repairs pump controls and switches.
22. Lays out and assembles pipe systems and supports. Pipe systems to include sanitary, hot water, low and medium pressure steam, storm; hydraulic, pneumatic, gas and oil fired water boilers, heating and radiating, lubricating, and sprinkler systems.
23. Inspects work site to determine presence of obstruction. Plans installation and repairs to avoid obstructions. Cuts, bends, welds, solders, braises, grooves, and threads pipes.
24. Oversees and performs repair and replacement of toilets, sinks, drain lines, and faucets. Cleans obstruction from waste and sewage lines.
25. Prepares estimates of time, labor, and materials. Prepares reports reflecting daily operations and project status. Uses computer-based estimating, scheduling, and costing programs. Develops and uses automated equipment preventive maintenance programs.
26. Operates and maintains tools and equipment of the plumbing and steamfitting trades. Cleans work area upon completion of project.
27. Provides guidance and training in plumbing work to other maintenance personnel. Has lead responsibility on projects; may review work of lower level mechanics.
28. Maintains understanding of current trends, codes, safety, practices and technologies related to the trade and associated trades.
29. Reads, interprets and performs work from complex blueprints, drawings and specifications.

Note:

The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma/GED

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EXPERIENCE: Six years progressively responsible experience in the plumbing and pipe fitting trade, experience with maintenance of hot water systems/components.

OTHER: Maryland State certification as a licensed plumber required; Master plumbing license required.

REQUIRED KNOWLEDGE/SKILLS/ABILITIES:

Comprehensive knowledge of and skill in the theory, principles, methods and techniques used in the pipe fitting and plumbing trade, including water valves, sewer, storm drain systems, steam and hot and chilled water systems. Thorough knowledge of and skill in basic mathematics including area, volume, weights, and the practical application of fractions, percentages, ratios, and proportions; of OSHA regulations related to the plumbing trade; of plumbing codes, the requirements for domestic water and waste disposal systems. Skill in the use and maintenance of the tools and equipment of the pipe fitting and plumbing trade; in the installation and repair of sanitary plumbing and appliances; in welding, soldering, and threading pipe. Working knowledge of computer based maintenance/cost estimating programs. Knowledge of electronic and direct digital control devices in the operation of specialized laboratory equipment. Ability to provide leadership to lower level mechanics; ability to read, interpret, and work from complex blueprints, drawings, and specifications; to prepare summaries and reports; to communicate effectively and follow directions; to work in, on, around, over and under fixed equipment and machinery; to work at heights up to 20 feet; to manipulate heavy equipment, tools, and supplies and/or exert force up to 50 lbs. regularly and 75 lbs. occasionally; to work at depths of 20'; to shore and trench according to OSHA/MOSH regulations; to concurrently manipulate multiple controls on equipment and machinery; to work in hazardous or irritating environments, confined spaces, and adverse weather or temperature conditions; to wear and work in personal protective equipment. Working knowledge of electric motors, controls, pumps, and wiring.

OTHER:

Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

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CONDITIONS OF EMPLOYMENT

Candidates selected for employment may be subject to medical inquiries and/or medical examinations to determine ability to perform the job. Valid Maryland Non-commercial Class C or equivalent driver's license is required. Candidates selected for employment may be required to be trained to work with asbestos and must be available for emergencies on an as needed basis. Employees assigned to work with CFC refrigerants must maintain valid certification in accordance with federal law.