

New York State Department of Civil Service
Division of Classification & Compensation

Occ. Code 7120160

Trades Specialist (Plumber & Steamfitter), Grade 12

Brief Description of Class

Trades Specialists (Plumber & Steamfitter) perform journey-level plumbing and steamfitting work and may supervise others in the installation, alteration, and repair of pipes, fittings and fixtures of heating, ventilating, heating control, water, and drainage systems, according to specifications and plumbing codes.

Distinguishing Characteristics

Trades Specialist (Plumber & Steamfitter): non-competitive; responsible for all plumbing and steamfitting work, including the planning and laying out of work and determining the cause of trouble in plumbing and heating systems and equipment in an assigned area, on an assigned project, or for an entire facility.

A Trades Specialist (Plumber & Steamfitter) may supervise others in this work including semiskilled and relatively unskilled workers.

Related Classes

A Trades Supervisor (Plumber & Steamfitter) supervises, plans, and lays out the work for a large-scale plumbing and heating installation and repair operations involving journey-level plumbers and steamfitters, and semiskilled and unskilled positions in the plumber and steamfitter trades.

In many State facilities, Vocational Instructors specializing in plumbing and steamfitting formally instruct inmates in the theory and practice of this trade.

Maintenance Assistants (Plumber & Steamfitter) perform less difficult plumbing and steamfitting tasks involving either replacement and repair, or installation work with layouts provided by a journey-level Trades Specialist (Plumber & Steamfitter).

Facility Operations Assistants 1, assigned to a plumbing crew, assist plumbers and maintenance positions in plumbing and steamfitting work by performing manual tasks involving elementary skills as directed, while learning the practical techniques of the plumbing and steamfitting trade.

A Trades Generalist may also perform journey-level plumbing and steamfitting activities. However, such positions are classified only where incumbents perform skilled and semiskilled activities in a combination of trades.

Employees engaged in other building, mechanical and maintenance trades are classified under our commonly used titles descriptive of their work such as Trades Specialist (Carpenter) or Trades Specialist (Electrician).

Illustrative Tasks

Repairs, maintains, and installs plumbing fixtures and appliances such as sinks, shower baths, commodes, drinking fountains, dishwashers, valves including pneumatic controls, gas and water meters, gas hot water heaters, and other gas appliances, heating systems and controls, and various steam equipment used in laundries, kitchens and cafeterias, water pumps, irrigation, and hydrotherapy equipment.

- In cases of malfunction or breakdown, discusses problem with user, visually inspects the fixtures or equipment, and uses appropriate test equipment such as pressure and vacuum gauges to determine cause and location of trouble.
- Following technical manuals, codes, diagrams and previous experience, plans work procedures to make repairs and orders replacement parts indicating quality and type and any other materials required.
- Makes necessary repairs or adjustments or directs others in performing such activities.
- Installs or directs the installation of plumbing fixtures and appliances following diagrams, codes and previous experience.

Plans and lays out the installation, alteration, and repair of high- and low-pressure pipe systems that carry water, steam, air, or other liquids or gases.

- Plans new installations, alterations to existing installations, and major repairs consistent with specifications, plans and plumbing codes.
- Reviews building plans and working drawings to determine work aids required, and sequence of installation.
- Locates and marks position of pipes, pipe connections, and passage holes for pipes in walls and floors and cuts openings required to accommodate pipes and fittings.
- According to plan, measures, cuts, threads, and bends pipe to required angle.

- Assembles and installs a variety of metal and nonmetal pipe and pipe fittings.
- Joins piping by means of threaded, caulked, wiped, soldered, brazed, fused, or cemented joints.
- Tests pipe system for leaks by filling with liquid or air and reading pressure gauges.
- May weld holding fixtures to steel members.

May draw rough sketches or prepare plans to scale from oral or written instructions to accomplish the project.

From blueprints or specifications, may estimate labor, materials, tools and equipment necessary for the project.

Assembles materials, tools, and equipment required to complete the work according to plans.

May supervise and instruct others in performing plumbing and steamfitting work.

- Assigns work to plumbing crew.
- Gives verbal instructions and/or demonstrates proper plumbing techniques and the use of plumbing and steamfitting tools and equipment.
- Observes and inspects the work while in progress and when completed to ensure that the work is done properly.

Independence of Operation

Trade Specialists (Plumber & Steamfitter) are supervised by higher-level maintenance operation positions such as Trades Supervisor (Plumber & Steamfitter), Plant Utilities Engineer, or Maintenance Supervisor. Generally, work priorities are prescribed, material is furnished, the nature and extent of the work to be performed is given, and detailed plans, diagrams, and specifications are provided. In the absence of such direction, the Trades Specialist (Plumber & Steamfitter) sets priorities, requisitions materials, determines the work that has to be done, and lays out the work.

Although the work of a Trade Specialist's (Plumber & Steamfitter) is inspected periodically by a supervisor, incumbents are expected to work with considerable independence as is typical of a skilled tradesperson.

Communication

The nature of a Trade Specialist's (Plumber & Steamfitter) activity generally restricts relationships to employees working within the same organizational unit, including skilled tradespersons in other trades. On occasion, however, incumbents may be required to orally communicate with others in a State agency or facility to determine the nature of the problem related to the malfunction or breakdown of plumbing and/or heating equipment and the reasons why the work is being accomplished in the manner selected.

Trade Specialists (Plumber & Steamfitter) may supervise maintenance staff. Such relationships are characterized by frequent oral communications in assigning work and providing instructions. Written and oral communications with the general public are not typical of this class. The tasks of this class are predominantly thing-oriented and involvement with others is not a factor in determining its classification.

Supervision Exercised

A Trade Specialist (Plumber & Steamfitter) may supervise a subordinate maintenance staff and/or individuals for whom the State has custody or responsibility by making assignments, giving instructions and observing and inspecting work performed to ensure that instructions have been followed and that the quality of the work is satisfactory.

Minimum Qualifications

Trades Specialist (Plumber & Steamfitter)

Non-competitive: Four years of full-time experience in plumbing under a skilled tradesperson; which would provide training equivalent to that given in a training, apprenticeship, or equivalent program, OR an equivalent combination of experience and training gained by completion of technical courses in plumbing at a school, institute, or branch of the Armed Services; OR successful completion of the two-year Trades Specialist (Plumber & Steamfitter) traineeship or a two-year plumbing training, apprenticeship, or equivalent program* such as the New York State Civil Service Employees Association-Partnership Applied Skilled Trades Traineeship and Certificate Program.

* Successful completion of the traineeship and the training program includes a total of 288 hours of trade-specific classroom instruction, 45 hours of technical math course work, 45 hours of technical communications course work, and 15 hours of blueprint/schematic reading course work. Course work must be completed with an average of "C" or better. Additionally, successful completion of the traineeship also includes 4,000 hours of on-the-job training.

Trades Specialist (Plumber & Steamfitter) Trainee 1

Full-time permanent service in a position allocated at Grade 12 or below which is primarily engaged in the performance of unskilled and/or semiskilled labor and trades tasks; must be 18 years of age or older; possess a High School diploma or general equivalency diploma recognized by the New York State Education Department; and be proficient in English and math.

Trades Specialist (Plumber & Steamfitter) Trainee 2

Successful completion of a 52-week probationary period as a Trades Specialist (Plumber and Steamfitter) Trainee 1; OR completion of 45 hours of technical math coursework and 15 hours of blueprint reading/schematics coursework or passage of an equivalency exam or proof of successful completion of equivalent training, 144 hours of plumber and steamfitter trade-specific instruction, and 2,000 hours of on-the-job training. Trainees must maintain a "C" or better average in their coursework.

When required to operate motor vehicles, candidates must possess a valid New York State driver's license appropriate for the type of vehicle to be operated.

Note: Classification Standards illustrate the nature, extent and scope of duties and responsibilities of the classes they describe. Standards cannot and do not include all of the work that might be appropriately performed by a class. The minimum qualifications above are those which were required to appointment at the time the Classification Standard was written. Please contact the Division of Staffing Services for current information on minimum qualification requirements for appointment or examination.

5/2024