

## HEATING AND AIR CONDITIONING FITTER

### DEFINITION

Inspects, installs, maintains, repairs, and replaces complete direct gas-fired, steam, hot-water, air conditioning, heating, and ventilating systems, including control instruments and equipment.

### TYPICAL DUTIES

Inspects, installs, maintains, repairs, and replaces hot-water, high- and low-pressure steam, and direct gas-fired heating systems; chilled-water and direct-expansion air conditioning systems, including condensers and cooling towers; variable refrigerant flow systems; and pressure cooking equipment.

Inspects, installs, maintains, repairs, and replaces pipes, traps, boilers, pumps, valves, coils, radiators, air and refrigeration compressors, space heaters, furnaces, vents, fans, blowers, safety controls, and related equipment.

Inspects, installs, maintains, tests, checks, adjusts, repairs, and replaces temperature and combustion controls, instruments and systems.

Determines the amount and type of material and makes simple sketches for the emergency repair of heating and air conditioning equipment.

Assists in determining repairs needed to prevent equipment deterioration.

Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Heating and Air Conditioning Fitter inspects, installs, replaces, and repairs and maintains steam, hot water, and gas-fired heating, chilled water and direct expansion cooling, and related air conditioning equipment and controls.

A Senior Heating and Air Conditioning Fitter investigates, plans, estimates, and/or assists an Area Heating and Air Conditioning Supervisor in scheduling, supervising, and inspecting heating and air conditioning installation and repair jobs in District facilities.

An Apprentice Heating and Air Conditioning Fitter performs duties gradually progressing from unskilled to skilled while learning the heating and air conditioning trade in a program of on-the-job training and formal instruction.

### SUPERVISION

General supervision is received from an Area Heating and Air Conditioning Supervisor. Work direction is received from a Senior Heating and Air Conditioning Fitter. Work direction may be exercised over lower-level personnel.

## CLASS QUALIFICATIONS

### Knowledge of:

Gas and oil fuels and combustion  
Pipe fittings, solder, flux, tools, and materials of the heating and air conditioning trade  
Construction, installation, operation, repair, and maintenance of all types of steam and hot-water heating and food processing fixtures and appliances  
Chilled-water, direct-expansion, and variable refrigerant flow systems as applied to air conditioning and heating systems  
Design, construction, and functions of mechanical, pneumatic, electrical and electronic control systems, including energy management systems  
Heating, ventilating, air conditioning, and air distribution systems and equipment  
State and local regulations relative to gas-fired equipment installations, and high-and low-pressure boilers and related heating and air conditioning systems  
Safety precautions required in the repair of heating, ventilating, and air conditioning systems and related equipment

### Ability to:

Interpret and work from blueprints, drawings, and sketches  
Follow written and oral instructions  
Work effectively with others  
Use and operate a computer, tablet, or other computing device  
Identify and troubleshoot malfunctions of heating, ventilation and air conditioning equipment  
Operate electronic testing equipment such as meters, electronic scales, and related heating, ventilation and air conditioning equipment

### Special Physical Requirements:

Manual dexterity and strength to use tools of the trade  
Visual acuity to read and calibrate instruments  
Ability to stand, walk, bend, crawl, climb, reach overhead, crouch, kneel, balance, push, pull and safely lift and carry items weighing up to 100 pounds  
Ability to work at heights including the use of ladders, scaffolds, and other related equipment  
Ability to work safely in confined spaces

## ENTRANCE QUALIFICATIONS

### Education:

Graduation from high school or evidence of equivalent educational proficiency.

### Experience:

Successful completion of a recognized heating and air conditioning or refrigeration apprenticeship program or six years of experience in the installation, maintenance, and repair of heating, ventilation, and air conditioning or refrigeration equipment, of which one year must have been at the journey-level.

Special:

Possession of a certificate of competence of chlorofluorocarbon License type Universal in accordance with EPA Rule 608, Clean Air Act.

A valid driver's license to legally operate a motor vehicle in the State of California and use of a motor vehicle.

SPECIAL NOTE:

Employment is subject to medical clearance.

Positions in this classification are subject to pertinent provisions of the General Industry Safety Orders of the California Code of Regulations regarding protective equipment when exposed to hazardous materials, including, but not limited to, asbestos and lead.

This class description is not a complete statement of essential functions, responsibilities or requirements. Entrance requirements are representative of the minimum level of knowledge, skill and/or abilities. To the extent permitted by law, management retains the discretion to add or to change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

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