

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 California Driver License
Use of an automobile.

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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