THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

CLASS SPECIFICATION

3/7/86

AIR CONDITIONING MECHANIC, 3774

<u>Summary of Duties:</u> Installs, modifies, maintains, and repairs air-conditioning, refrigeration, heating, and ventilating equipment, and related facilities; or supervises a crew engaged in such activities and prepares cost estimates for new installations; and does related work.

<u>Distinguishing Features:</u> An Air Conditioning Mechanic specializes in the maintenance and repair of refrigeration and air-conditioning facilities. An employee of this class spends most of the time working at the journey level, and supervisory responsibility is normally limited to the supervision of one helper. An employee of this class receives assignments in the form of blueprints, diagrams, working drawings, and sketches amplified by oral or written instructions.

Example of Duties:

- Installs, operates, maintains, and repairs refrigeration, water cooling, ventilating, and airconditioning equipment, such as freezers, cold storage lockers and related facilities;
- Overhauls, modifies, and replaces parts and units such as compressors, expansion devices, evaporators, and piping;
- Repairs leaks in, and installs, repairs, or replaces fixtures and parts in water cooling systems;
- Checks and follows up water test analysis in boiler water and condensing water systems;
- Inspects refrigeration and air-conditioning equipment for proper operation;
- Checks and logs operating conditions of all equipment;
- Diagnoses failures and analyzes, by observation and the use of test equipment, irregularities and defects in such equipment:
- Adjusts temperature regulating valves and thermostatic control equipment;
- Tests compressor pressures, relief and safety valves, defrosters, bellows, and regulatory valves;
- Tests for leaks, determines level of refrigerant, and replenishes it as required;
- Makes cost estimates:
- Prepares requisitions for materials, supplies, tools, and replacement parts;
- Maintains records of equipment serviced and repaired;
- Prepares reports on work performed and materials used;
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications

Knowledge of:

A Working Knowledge of:

- Types and uses of refrigerating, air-conditioning and related machinery and equipment of various sizes and capacities, and the installation, operation, maintenance, and repair of such equipment;
- Controls and control systems of air-conditioning and refrigeration systems;
- Safety principles and practices related to air-conditioning, refrigeration, heating and ventilation equipment;
- Principles of water treatment;
- Freezing points and other physical properties of liquids and gases used in refrigeration and air-conditioning equipment;
- Soldering, welding, and brazing;

A general Knowledge of:

- Operation and maintenance of low pressure steam heating boilers;
- Laws and regulations related to equal employment opportunity and affirmative action;

Ability to:

- Use the tools necessary to do air-conditioning work, air balancing and environmental control work:
- Read blueprints and wiring diagrams of mechanical, electrical, and electronic mechanisms pertaining to refrigeration, air conditioning, and related equipment;
- Install, align, and adjust refrigeration and air conditioning machinery and control devices, including low voltage control wiring, and to cut, fit, and install piping and tubing used in such equipment;
- Diagnose electrical and mechanical failures and defects in refrigeration and cooling equipment and determine corrective measures;
- Test such equipment for proper operation and to regulate thermostatic control equipment and other control apparatus to maintain desired temperatures;
- Prepare cost estimates for new or modified air-conditioning installations;
- Supervise a group of subordinate mechanics;
- Prepare and maintain service and repair records;
- Prepare reports on work performed and materials used;
- Communicate effectively with superiors, subordinates, and others;

<u>Requirements:</u> Completion of a recognized apprenticeship or attainment of a journey level rank as an air-conditioning mechanic or refrigeration fitter; <u>OR</u>

Three years of full time paid experience as a Building Operating Engineer, Electrical Repairer or Sheet Metal Worker with the City of Los Angeles performing maintenance and repair of air-conditioning equipment; **OR**

Six years of full time paid experience, as an air conditioning mechanic helper is required for Air

Conditioning Mechanic.

Completion of 12 semester units in Air Conditioning Technology, Refrigeration and Air Conditioning Mechanics, or Air Conditioning and Refrigeration from a recognized college or trade school may be substituted for each year of helper experience lacking up to a maximum of two years.

<u>License:</u> A valid California driver's license is required.

<u>Physical Requirements:</u> Strength to perform lifting up to 70 pounds and occasionally over 70 pounds; body agility and equilibrium involved in activities such as climbing and balancing under precarious conditions; good speaking and hearing ability; and good eyesight.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonably accommodate the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities, and required qualifications of any position shall be.