

Class Concept

This is technical work in the analysis of the more complex construction, modification, or repair problems in building heating, ventilation, and air conditioning equipment or systems. Positions in this class independently troubleshoot heating, ventilation, or air conditioning problems, recommend parts needed and work procedures, and serve as working supervisors in the construction, modification, or repair. Positions review the heating or cooling requirements of existing buildings, compare these requirements to existing heating, ventilation, and air conditioning systems, and recommend modifications to achieve better system effectiveness and efficiency. Positions often serve as technical experts in one or more areas of the heating, ventilation, and air conditioning field such as absorption and centrifugal chillers or electrical, pneumatic, and electronic controls, through advising other mechanics on repair problems and providing training in their areas of expertise. Work is performed independently usually under the general supervision of an air conditioning supervisor and is reviewed through the proper operation of equipment and the effectiveness of repairs.

Recruitment Standards

Knowledge, Skills, and Abilities

- Working knowledge of operating (BAU) building automation systems.
- Working knowledge of troubleshooting (DDC) Direct Digital Controls.
- Considerable knowledge of the design and operation of centrifugal and reciprocal compressors.
- Considerable knowledge of the practices, methods, materials, and equipment used in the maintenance and repair of air conditioning and refrigeration equipment.
- Basic knowledge of electricity sufficient to troubleshoot and repair complex electrical control circuits.
- Working knowledge of refrigeration theory.
- Ability to diagnose equipment malfunctions and prescribe repair procedures.
- Ability to train other workers.
- Ability to analyze building heating and air conditioning equipment and recommend modifications to achieve better operation or energy savings.

Minimum Education and Experience

High school or General Educational Development (GED) diploma and four years of progressive experience in the installation, maintenance or repair of air conditioning chillers, air handling, chilled water distribution and control systems including one year at the journey level; or an equivalent combination of education and experience.

Necessary Special Qualifications

Requires current certification by the Environmental Protection Agency as a Type I, II, III or Universal technician as required by Title 40, Code of Federal Regulations part 82, subpart F.

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.