




University System of Maryland Job Class Specification

TITLE: HVAC MECHANIC I
FLSA: NONEXEMPT
EEO6: H60
IPEDS-SOC: 49-9021

JOB CODE: N13HV1
JOB TYPE: SYSTEMWIDE
JOB FAMILY/SERIES: PHP MNT

APPROVED BY: Chancellor's Designee: 
09/01/07

EFFECTIVE DATE:

James Sansbury, Associate VC Financial Affairs/Human Resources

JOB SUMMARY

Under general supervision, installs, services and repairs a variety of residential and commercial heating, ventilation, air conditioning and refrigeration (HVAC) equipment. Mechanics at this level install and service residential and commercial heat pumps and industrial centralized air conditioning systems up to 100 tons. Systems may contain several zones.

PRIMARY DUTIES

1. Installs, operates, services, and repairs light commercial heat pump/air conditioning systems and other HVAC equipment such as refrigerators, fumehoods, window units, exhaust ventilators, coolers, deep freezers, and unit ventilators.
2. Operates, services, and repairs pneumatic, electric, or electronic control systems on HVAC systems up to 100,000 gross square feet (GSF).
3. Regulates and monitors air conditioning compressors, cooling tower fans and other related support equipment as prescribed by operating procedures.
4. Regulates and monitors all building air handling equipment for central and local stations.
5. Tests air and hydronic systems to isolate problems. Adjusts distribution valves and resets temperature and humidity controls for steam supplied and self contained generation systems.
6. Performs service tasks such as adding refrigerant, lubricating, adjusting and replacing compressors and expansion devices, repairing pumps, cleaning out cooling towers and repacking valve glands and pump seals.
7. Installs and reinstalls wiring and controls to connect components and controls to electrical power sources at low line voltage.

8. Diagnoses HVAC system problems utilizing computer applications. Reviews mechanical blueprints, schematics, specifications, and performance data to indentify and provide interpretations of system problems and performance.
9. Provides guidance and training in the HVAC trade to other maintenance personnel.
10. Services and repairs traps, flash tanks, piping, control valves, condensate pumps and meters on steam systems up to 30 pounds.
11. Performs mechanical joining of piping by using industry methods such as soldering, brazing, and gas welding. Insulates piping and mechanical equipment such as heat exchangers and associated subsystems. Performs insulation repairs to air duct systems.

Note: The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma or GED.

EXPERIENCE: Four years progressively responsible experience in the air conditioning/refrigeration trade.

OTHER:

REQUIRED KNOWLEDGE/SKILLS/ABILITIES

General knowledge of the principles of air conditioning and refrigeration; of the practices and techniques used in the installation, repair and maintenance of HVAC equipment and systems; of refrigerant types, enviromental impact, and gas reclamation procedures and equipment. Working knowledge of OSHA regulations related to the refrigeration trade; of National Electric Code; of basic mathematics including area, volume, and weights and the practical application of fractions, percentages, ratios, and proportions. Skill in the use and maintenance of the tools and equipment of the trade; in welding, brazing, soldering, and silfoss; skill in repairing and servicing HVAC equipment and systems. Ability to read and interpret blueprints, schematics, drawings, specifications, and construction documents; to read and understand manufacturer's recommendations regarding scheduled and preventive maintenance, servicing, and operation; to use computers and related software to diagnose HVAC system problems; to prepare reports; communicate effectively both orally and in writing; to work in, on, around, over and under fixed equipment and machinery; to work at heights up to 35 feet; to manipulate heavy equipment, tools and supplies and/or exert force up to 50 lbs.; to concurrently manipulate multiple controls on machinery or equipment; to work in hazardous or irritating environments, confined spaces, and adverse weather or temperature conditions; to wear and work in personal protective equipment.

OTHER: Except for qualifications established by law, additional

related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

CONDITIONS OF EMPLOYMENT

Candidates selected for employment may be subject to medical inquiries and/or medical examinations to determine ability to perform the job. Employees assigned to work with CFC refrigerants must maintain valid certification in accordance with federal law. Valid Maryland Non-commercial Class C or equivalent driver's license may be required.

Candidates selected for employment may be required to be trained to work with asbestos.