Iowa Department of Administrative Services – Human Resources Enterprise

Job Classification Description

HVAC Coordinator

Definition

Plans/coordinates the maintenance, repair, installation, inspection, and operation of heating, air conditioning, ventilation, and refrigeration systems and leads two or more employees, volunteers, inmates, residents, or soldiers in the installation, alteration, maintenance, and repair of plumbing and related systems; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Assists supervisor by performing such duties as instructing employees, answering questions, distributing and balancing the workload, and checking work; may make suggestions on selection, promotions, and reassignments.

Coordinates/schedules repairs to minimize downtime and user inconvenience; users, or priority of building need; performs routine system/unit inspections and documents deficiencies for maintenance/repair requirements; prepares boilers/regulated water heaters for inspection by State Boiler Inspector and assists with inspections; submits purchase orders for repair parts, follows up on parts status, and receives parts for installation.

Monitors the performance of the BAS communication system and overrides operational values when necessary; performs these functions so as to maintain efficient systems operations; documents changes in BAS systems and electronic components and communicates with engineer, and recommends when an outside vendor must be called in for repairs or maintenance needs; acts as point of contact for vendor and remains on site while vendor is performing work; follows purchasing and authorization procedures when calling in outside repair services.

Assists engineer in the design/development of HVAC systems as part of building remodeling, new construction, or system upgrade projects; estimates/specifies material and equipment requirements for projects, prepare duct work design, determine installation plan, compiles and submits purchase requests; when assigned to reviews plans, blueprints, specifications, and conducts on-site visits.

Estimates and orders material for engineer projects; coordinates job site task assignment between soldiers and civilians trades employees, so work is performed in logical construction sequence and priority; works closely with engineers on special projects performing such tasks as: inspect/verify that projects are built to specifications, coordinate/provide support or input to contractors working on projects, and make recommendations to management on pending projects; ensures completed work is properly documented for historical purposes.

Responsible for Occupational Safety and Health rules/requirements, safety/compliance procedures common to the trade; insures maintenance/repair data or documentation reports are submitted to supervisor in a timely manner and maintained for historical purposes according to established preventative maintenance procedures.
Directs/performs highly skilled mechanical, electrical, plumbing, pneumatic, and electronic work that complies with manufacturer’s specifications, accepted trade standards and regulatory codes related to equipment/systems including (central gas forced air furnaces, packaged terminal units, heat pumps, radiant heat, hydronic heat, low pressure steam boiler systems, regulated inspectable water heaters, central air conditioning systems, packaged terminal units, chillers, window AC units, walk-in refrigeration units, walk-in freezers, appliance refrigeration units, commercial ice-makers and ducted distribution systems).

Oversees/performs diagnostic procedures and repair of electronic components, computers, and digital data controls related to the operation of HVAC systems to ensure proper operating parameters including Micronet, Powerlogic, Toshiba, Tosvert 130 and Altivar 56 and systems components (e.g., direct digital controls for variable air volume terminal boxes, pressure transducers, digital controllers, digital wall sensors, proportional integral controls, microprocessors, reversible and proportional electric actuators, variable speed drives, dampers, valves, and program switches).

Explains/operates systems software to control variable air volume, diagnostic reporting, flow sensor, verification, temperature sensor verification, negative air flow detection, proper communication in Building Automation System (BAS) and various operating values.

**Competencies Required**

Knowledge:

- **Mechanical** – Machines and tools, including their designs, uses, repair, and maintenance.
- **Customer Service** – Principles and processes for providing customer services, including customer needs assessment, meeting quality standards for services, and evaluating customer satisfaction.
- **Building and Construction** – Materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
- **Design** – Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- **English Language** – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- **Computers and Electronics** – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

Abilities:

- **Problem Sensitivity** – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- **Finger Dexterity** – Make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
- **Near Vision** – See details at close range (within a few feet of the observer).
- **Visualization** – Imagine how something will look after it is moved around or when its parts are moved or rearranged.
- **Manual Dexterity** – Quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
- **Extent Flexibility** – Bend, stretch, twist, or reach with your body, arms, and/or legs.
• Arm-Hand Steadiness – Keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.

• Static Strength – Exert maximum muscle force to lift, push, pull, or carry objects.

• Multilimb Coordination – Coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.

• Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.

• Inductive Reasoning – Combine pieces of information to form general rules or conclusions.

• Information Ordering – Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).

Skills:

• Equipment Maintenance – Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

• Installation – Installing equipment, machines, wiring, or programs to meet specifications.

• Quality Control Analysis – Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

• Troubleshooting – Determining causes of operating errors and deciding what to do about it.

• Operation Monitoring – Watching gauges, dials, or other indicators to make sure a machine is working properly.

• Repairing – Repairing machines or systems using the needed tools.

• Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

• Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

• Operation and Control – Controlling operations of equipment or systems.

• Monitoring – Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Minimum Qualification Requirements

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

1) Graduation from an accredited college or technical/trade school with an associate’s degree in building automation systems or logic control systems, and experience equal to five years of full-time work in the installation, maintenance, repair, and operation of heating, ventilation, air conditioning, boilers, refrigeration, and ancillary equipment related to HVAC.
2) All of the following (a and b):
   a. Five years of full-time work experience in the installation, maintenance, repair, and operation of heating, ventilation, air conditioning, boilers, refrigeration, and ancillary equipment related to HVAC, including two years of full-time experience in programming building automation systems; and
   b. A total of two years of education and/or full-time experience, where one year of post-high-school education in HVAC equals one year of full-time experience.

Notes

Within a period of time after hire, as determined by the appointing authority, employees in this class may be required to obtain one or more of the following certificates, licenses, or endorsements:

- A driver’s license
- A Commercial Driver’s License (CDL)
- A license to perform electrical work in accordance with Iowa Code Chapter 103 from the State of Iowa Electrical Examining Board

Effective date: 12/19 SA