City of Mesa - Citywide

FACILITIES EQUIPMENT TECHNICIAN I

JOB DESCRIPTION

Classification Responsibilities: A Facilities Equipment Technician I primarily performs skilled work in one or more mechanical equipment trade areas such as: heating, ventilation, air conditioning/refrigeration (HVAC/R); electrical; plumbing; evaporative coolers; and other mechanical equipment in City buildings. Employees perform a wide variety of skilled tasks in installing, maintaining, and repairing HVAC/R; plumbing; mechanical equipment; and electrical systems, equipment, and fixtures. Work assignments are varied, and may be received verbally or in writing. When required, the employee exercises lead supervision over semiskilled and unskilled workers. This class performs other related duties as required.

Distinguishing Features: Employees in this class primarily perform mechanical equipment trades work and are licensed as and/or function as specialists (example: electricians, plumbers, etc.) in their respective mechanical trade. A high degree of competence in one or more of these mechanical equipment trades is required with at least three years of commercial journey-level experience in the trade related to the area of assignment. An employee in this class may be assigned to the Facilities Maintenance Department; Mesa Arts Center; or Parks, Recreation and Community Facilities Department (example: Hohokam Stadium, Fitch Park Training Facility, etc.). Employees in this class may progress by noncompetitive promotion to a Facilities Equipment Technician II upon meeting the specific criteria-based promotion requirements of performance and certification. Duties are performed according to general or specific instructions, and work may be inspected by a supervisor or foreman while in progress or upon completion. Responsibilities require the exercise of initiative and independent judgment in troubleshooting malfunctions and determining the proper method of repair. A Facilities Equipment Technician I is subject to stand-by duty and 24-hour call-out. Employees are required to use appropriate safety equipment and procedures in performing assignments. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City’s shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, and experience equivalent to successful completion of a trades apprenticeship program or equivalent. Considerable (3 - 5 years) commercial journey-level experience in one or more mechanical equipment trades with at least three years in the trade related to the area of assignment (example: HVAC/R, electrical, plumbing, etc.).

Special Requirements. Must possess a valid Arizona Driver's License by hire or promotion date. Must possess an Environmental Protection Agency (EPA) refrigeration certification card (by assignment). Due to the required access to all City buildings for this position, an individual receiving a conditional offer of employment from the City of Mesa must pass a background investigation through the City of Mesa Police Department, the Arizona Department of Public Safety, and Federal Bureau of Investigation prior to commencing employment with the City of Mesa to allow full, unescorted access to Police facilities (Facilities Maintenance by assignment).
Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures (by assignment).

Preferred/Desirable Qualifications. Good (1 - 3 years) experience in a related trade and knowledge of computers and Energy Management Systems are highly desirable. Training and experience in low temperature refrigeration (by assignment).

ESSENTIAL FUNCTIONS

Communication: Communicates with other City employees, vendors, management, and contractors in order to determine nature of problem and best method of repair. Records inspections and all service performed on a daily log.

Manual/Physical: Installs, maintains, and repairs all mechanical equipment (example: chillers, air handlers, pumps, evaporative coolers and cooling towers, lavatory equipment and fixtures, drinking fountains, and ice machines). Maintains electrical equipment up to and including 480 volt 3-phase. Maintains kitchen equipment such as refrigerators, ovens, steamer, coffee urns, meat slicer, mixers, and dishwashers. Maintains pools, fountains, pumps, etc. Troubleshoots small and heavy-duty electrical equipment. Replaces light bulbs, fluorescent lights, ballasts, receptacles, switches, circuit breakers, and fuses. Maintains proper levels of water, oil, and refrigerants in the system as specified by operating and maintenance guides. Inspects equipment, and corrects leaks and faulty functioning on components such as: thermostats, generators, fans, valves, recorders, bearings, solenoids, etc. Lubricates various parts of machinery and equipment as required. Performs preventive maintenance on, and repairs equipment and component parts. Resets thermostats and zone controls. Tests water to determine chemical concentrations and prevent scale and corrosion buildup. Repairs and services plumbing fixtures such as those used in lavatories (commodes and sinks), and other related items such as: hot water heaters, natural gas heaters and boilers, drinking fountains valves, piping, drains, and sewers. Operates a forklift, pickup truck, and bucket truck requiring a standard Arizona Driver's License to move equipment, pick up parts, and work on a marquee. Meets scheduling and attendance requirements.

Mental: Prioritizes own work such as scheduling needed maintenance. Coordinates work activities such as setting up crews and determining area availability. Understands blueprints, schematic drawings, and layouts to troubleshoot building problems. Estimates labor and material costs from work orders involving major downtime of equipment.

Electrical Assignment

Manual/Physical: Inspects objects and data to determine compliance with operating or safety standards. Distinguishes colors to work with color-coded electrical wires. Sets up and reads test equipment such as voltmeters, ammeters, and infrared heat detectors. Measures distances using a tape measure and calibrated instruments. Operates a motor vehicle such as bucket trucks, trenchers, and service vans requiring a standard Arizona Driver's License. Sets up and operates power-driven machinery such as generators, conduit benders, rotary hammers, pipe benders, wire pullers, saws, etc. Turns and pulls wire. Installs receptacles. Installs conduit in overhead spaces. Inserts circuit breakers and sets adjustable limits on equipment. Installs, replaces, or adjusts filters, light bulbs, etc. Works in
small cramped areas, at heights greater than 10 feet, and in close proximity to high voltages. Climbs ladders or steps to reach objects. Walks over rough, uneven, or rocky surfaces. Moves debris, dirt, or other material. Moves objects weighing up to 50 pounds in order to perform work. Sets up or removes barricades and traffic cones when laying wire near traffic. Installs temporary power poles and light standards. Uses common hand tools such as a hammer and screwdriver. Enters data into a personal computer. Cleans equipment using cleaning fluids and agents. Works with chemicals and paints using specialized and non-specialized protective equipment. Works in all weather conditions. Meets scheduling and attendance requirements.

**HVAC/R Assignment**

**Manual/Physical:** Repairs and performs preventive maintenance on heating and air conditioning equipment and component parts. Checks and cleans the City's hot water boilers for heating, gas furnaces, and electrical heating systems. Uses a welder and/or pipe bender. Uses common hand tools such as: hammers, screwdrivers, saws, pipe wrenches, and pipe cutters. Operates up to a half-ton truck requiring a standard Arizona Driver's License to drive to various job sites with appropriate tools, materials, and equipment in order to complete work assignments. Turns on gas, ignites pilots, and checks electric duct heating devices and calibration controls. Repairs, cleans, and treats water fountains, ice machines, evaporative coolers, and cooling towers. Tests water to determine chemical concentrations and prevent scale and corrosion buildup. Places equipment in operation, checking various gauges and instruments. Maintains proper levels of water, oil, and refrigerants in the system as specified by operation and maintenance guides. Inspects equipment, and corrects leaks and faulty functioning on such components as thermostats, generators, fan valves, recorders, bearings, and solenoids, etc. Lubricates various parts of machinery and equipment. Works in small cramped areas and at heights greater than 10 feet. Detects natural gas leaks. Meets scheduling and attendance requirements.

**HVAC/R, Electrical, Plumbing Assignment**

**Communication:** Communicates with City employees, vendors, or others to explain the operation of facilities equipment and controls. Determines the nature of the problem, orders parts, takes corrective action and follows-up on repairs. Produces written documents such as work orders or requests to maintain records of work activities, requisition materials, and coordinate activities with other departments and City personnel.

**Mental:** Comprehends and makes inferences from written material in order to troubleshoot, repair, and install equipment and systems. Reviews instruction sheets and specifications in order to make recommendations regarding replacement of units or systems and make changes to control methods. Conforms to EPA safety standards when dealing with refrigerants, oils, and other chemicals. Maintains preventive maintenance records and tracking of parts and equipment.

**Plumbing Assignment**

**Manual/Physical:** Repairs and services plumbing fixtures (example: commodes, sinks, and swimming pool dressing facilities) and other related items such as hot water heaters, natural gas heaters, boilers, drinking fountains, valve piping, drains, and sewers. Services and repairs evaporative coolers, air...
compressors, and pneumatic tube systems. Operates up to a half-ton truck requiring a standard Arizona Driver's License to drive to various job sites with appropriate tools, materials, and equipment in order to complete work assignments. Uses a welder, pipe threader, pipe bender, and metal bender to fabricate parts for repair. Uses common hand tools such as hammers, screwdrivers, saws, pipe wrenches, and pipe cutters. Inspects meters, gauges, etc., to determine compliance with operating or safety standards. Distinguishes colors to locate and repair color-coded pipe. Measures distances using a tape measure to fit pipe properly and install fixtures. Works with cleaning fluids using specialized protective equipment. Installs, replaces, or adjusts filters to provide an adequate flow to plumbing systems. Performs physical inventories. Moves dirt from one place to another using a shovel or other tool in locating plumbing problems. Moves water heaters and drinking fountains weighing up to 50 pounds for distances of 20 feet or less. Works in small cramped areas and at heights greater than 10 feet. Detects natural gas leaks. Meets scheduling and attendance requirements.

**Knowledge/Skill/Abilities:**

**Knowledge of:**

the methods, practices, tools, and materials used in electrical, plumbing, HVAC/R, evaporative coolers, maintenance work and energy management systems;

occupational hazards and necessary safety precautions applicable to work around high voltages, adverse climatic conditions, high pressure, and refrigerant systems, etc.;

welding/brazing techniques, as necessary;

provisions of the national and local construction codes as applied to installation, maintenance and repair work; and

safe work practices and hazards specific to the trades.

**Skill in:**

the use and care of tools and equipment necessary to perform various mechanical repair tasks; and reading and interpreting building schematics and blueprints.

**Ability to:**

handle all physical requirements of the class;

work with, and occasionally supervise other workers effectively; and

use arc and acetylene welding equipment, as needed.

**HVAC/R, Electrical, Plumbing Assignment**

**Ability to:**

retrieve, analyze, and enter data into a personal computer;

record inspections and all services performed on a daily log;

estimate labor and material costs from drawings and plans;

review and prioritize work requests to minimize time and materials used;

perform preventive maintenance inspections and repairs;
monitor contractors on engineering construction projects, report deficiencies; perform needed emergency repairs on HVAC/R, electrical and plumbing systems; prepare hazardous waste materials for disposal/pick up; and perform other work related to Facilities Maintenance functions.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included do not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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