

BASIC FUNCTION:

Under the direction of the Director- Maintenance, Operations and Transportation, perform a variety of journey-level activities in heating, ventilation and air conditioning (HVAC), and electrical work and/or plumbing; provide guidance and training to maintenance personnel as assigned. May be assigned journey-level tasks in other trades including: carpentry, construction, locksmithing, and painting.

DISTINGUISHING CHARACTERISTICS:

The Lead Maintenance Worker classification is the advanced-level position in the series. Incumbents work independently and perform skilled journey-level duties in HVAC and electrical work and/or plumbing as well as provide guidance, and training to maintenance personnel. Incumbents may be assigned journey level work in other trades including: carpentry, construction, locksmithing, and painting.

The Maintenance Worker classification is the entry-level classification in the series. Incumbents work under the supervision of the Director of Maintenance, Operations, and Transportation and perform routine work in the maintenance, construction and repair of buildings, utilities and equipment.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Perform periodic inspection surveys to check for needed alterations, replacements or repairs; initiate work orders as appropriate; prepare project specifications.

Maintain service records and make recommendations for replacements.

Organize and lay out maintenance, repair, installation and construction tasks; interpret plans, diagrams, blue prints, sketches and specifications; estimate time, material and equipment requirements for assigned projects.

Prepare and maintain various records and reports related to projects, equipment, inspections, maintenance and assigned activities.

Respond to and resolve work orders and emergency needs.

Provide guidance, and training to maintenance workers as assigned.

Perform regular safety checks of facilities to assure compliance with established laws, codes and regulations; identify and resolve safety hazards.

Communicate with personnel and various outside agencies to exchange information, coordinate activities and resolve issues or concerns.

Maintain various records related to safety, expenses, work orders, project status and assigned activities.



Perform preventive maintenance on equipment and utilities including replacing and servicing parts and components.

Operate and maintain a variety of hand and power tools and equipment such as drills, saws, presses, grinders and others.

Operate a trencher, bobcat and other equipment as assigned.

HVAC ESSENTIAL DUTIES:

Perform a variety of journey-level activities in the installation, maintenance, and operation of cooling, heating, and refrigeration equipment.

Monitor operation of equipment, including regular checks on temperature, flow of chilled and condenser water, oil pressure and level, time clock, indicator lights, system leaks, water treatment system, accessory valves and pumps, water tower components, blowers, filters and other related components

Maintain schedule of periodic lubrication; clean filters, change belts and make minor adjustments.

Maintain operation and performance records of heating and cooling equipment; arrange for servicing as needed.

Diagnose faulty electrical systems in air conditioning, heating and refrigeration equipment.

Perform repairs to motors, relays, switches, starters, wiring and controls; test and repair refrigerant and condensation systems; charge systems with refrigerant gas.

Inspect, service, repair and maintain various types of gas heaters and boilers by cleaning orifices or by repairing or replacing controls or other parts.

Braze or solder tubing and lines.

Replace compressors, condensers, valves and coils.

ELECTRICAL AND /OR PLUMBING ESSENTIAL DUTIES

Incumbents are required to have journey level skills in the following essential duties of either electrical or plumbing work.

ELECTRICAL:

Perform troubleshooting and repair to electrical fixtures, equipment, systems and other installations; replace light fixtures, ballasts, switches, fuses, plugs, cabling and other electrical accessories; trace out wiring, perform diagnostic tests on system components and replace defective wires and parts.

Oversee, install, test, maintain, repair and replace a variety of complex electrical equipment and controls such as transformers, electrical equipment and controls, conduit and duct systems, and various types of electrical lighting and power equipment.

Train and familiarize district custodians in the proper selections and ordering of various types and uses of light bulbs.



Analyze electrical problems, isolate troubles and formulate remedies for defective components of the digital lighting controls hardware and software.

Oversee the proper operation, testing and repair of the electrical systems for gymnasium bleachers and basketball backboards.

Troubleshoot a 12,000 volt high voltage system; test and replace high voltage fuses.

Perform locating activities of underground electrical cable, telecommunication cables, conduits, water lines and gas lines.

PLUMBING:

Perform a variety of journey-level plumbing duties in the maintenance and repair of faucets, drinking fountains, toilets, urinals, sinks, pipes, valves, pumps and other fittings and fixtures; inspect and repair leaks, obstructions and general system failures.

Install, repair and maintain a wide variety of plumbing fixtures and equipment such as valves and other control devices, sprinkler systems, dishwashers, kitchen ranges, ovens, various pumps, space heaters, hot water heaters, hot water heating systems, boilers, faucets and other plumbing fixtures.

Caulk and pack joints; clear stoppages and repair breaks or leaks in water hydrants, service pipes and fire sprinkler systems.

Perform skilled welding work such as acetylene welding, acetylene oxygen brazing, silver brazing and soft soldering.

Build and maintain drains, sanitary sewers, storm drains, catch basins and other lines; clear stoppages as needed.

Repair and maintain gas lines and mains.

Repair and test backflow devices; make emergency repairs on mains and laterals.

OTHER DUTIES:

Perform journey-level locksmith work in the installation, maintenance, repair and alteration of locks on doors and cabinets; maintain organizational master key systems as required; re-key plugs and locks as needed.

Repair or fabricate articles and structures of wood or related materials such as doors, partitions, counters and furniture; repair and replace hardware; repair floors, walls, ceilings, roofs and windows; repair and install locks and security devices; repair wall board, stucco and sheetrock as needed.

Prepare surfaces for painting; apply paint or other protective or decorative material on a variety of surfaces; paint over graffiti as needed; operate a brush, roller or spray gun to apply a variety of surface coverings to various surfaces; clean brushes, tools and other equipment.



Assemble, move and arrange various furniture and equipment as directed; load and unload equipment and supplies.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Occupational hazards and safety precautions appropriate to the trade. Oral and written communication skills. Record-keeping and report preparation techniques. Proper methods of storing equipment, materials and supplies. Requirements of maintaining facilities, utilities and equipment in good repair. Operation of a wide variety of hand and power tools and equipment. Shop math applicable to the trades. Applicable building codes, ordinances, fire regulations and safety precautions. Technical aspects appropriate to the trades. Preventive maintenance principles and practices. Health and safety regulations and procedures. Record-keeping techniques. Proper lifting techniques.

HVAC

Functions and operations of heating, cooling and refrigeration equipment.

Materials, tools and methods used in the maintenance of heating, cooling and refrigeration equipment and knowledge of new and changing refrigerants.

Electrical and air conditioning systems, circuitry, terms and materials.

Federal and State regulations related to refrigerants.

Programming of Direct Digital Control (D.D.C.) and other control software.

ELECTRICAL

Methods, materials, tools and equipment used in electrical installation and repair work. Electrical terms and materials and the circuits used in buildings, single and polyphase motors, kitchen and refrigeration equipment and portable hand tools.

National Electric Code and Electrical Safety orders of the Division of Industrial Safety.

PLUMBING

Use of plumbing and welding materials, tools and methods, gas heaters, boilers, pumps and appliances.

State and local laws, codes and ordinances relative to plumbing installation.

ABILITY TO:

Perform a variety of journey-level activities in HVAC, and electrical work and/or plumbing. Perform a variety of journey-level tasks in the maintenance and repair of facilities, utilities and equipment including carpentry, locksmithing, and painting.

Operate a wide variety of hand and power tools and equipment related to the building trades.



Operate a vehicle safely.

Receive, prioritize and respond to work orders in a timely and efficient manner.

Inspect, diagnose, maintain, repair or replace a variety of parts and equipment.

Work from sketches, diagrams, blueprints, plans and specifications.

Work independently with little direction.

Estimate material and supply needs.

Observe health and safety regulations.

Maintain records related to assigned work.

Interpret, apply and explain applicable building codes, ordinances, fire regulations and safety precautions.

Understand and follow written and oral instructions.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others. Perform heavy physical labor.

ELECTRICAL

Read and interpret circuit diagrams, plans and specifications relating to electrical work. Use tools, materials and equipment involved in electrical work skillfully and safely.

PLUMBING

Use tools, materials and equipment involved in plumbing work skillfully and safely. Perform skilled plumbing installations, repairs and maintenance work in school facilities. Perform skilled welding work.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: graduation from high school supplemented by specialized training in HVAC and electrical and/or plumbing

Three years journey-level experience in HVAC and electrical and/or plumbing, including the responsibility to lead the work of others.

LICENSES AND OTHER REQUIREMENTS:

Valid California Class C driver's license. Type 1 and Type 2 EPA Technician Certification. Valid General Journeyman Electrician License as required by the State of California Division of Apprenticeship Standards preferred.

WORKING CONDITIONS:

ENVIRONMENT: Indoor and outdoor work environment. Regular exposure to fumes, dust, dirt, oil/grease. Seasonal heat and cold or adverse weather conditions.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a variety of tools and equipment. Hearing and speaking to exchange information.



Seeing to perform maintenance duties.

Lifting, carrying, pushing or pulling heavy objects as assigned by the position. Reaching overhead, above the shoulders and horizontally. Bending at the waist, stooping, kneeling or crouching. Climbing ladders and working from heights. Standing for extended periods of time. Heavy physical labor.

HAZARDS:

Working around and with machinery having moving parts.Working at heights.Power saws and flying debris or nails.Exposure to fumes from paints and solvents.Exposure to chemicals.Working around 12,000 volts high voltage and electrical power supply.