

SAN CARLOS SCHOOL DISTRICT

MAINTENANCE MECHANIC

BASIC FUNCTION:

Under general supervision, performs variety of journey level skilled work in the maintenance, alteration and repair of mechanical, plumbing, or electrical systems, facilities and buildings. Independently performs journey level work in an advanced building trade requiring completion of a formal apprenticeship or certification, e.g., electrical, HVAC, plumbing, electronics. Duties are primarily performed at the "expert" level in area of specialization, but will also perform support duties in other trades as required. Requires strong communication skills to discuss complex technical information.

ESSENTIAL DUTIES:

- Inspects, repairs, fabricates, installs, services and maintains facilities and buildings of the District in a qualified special technical area.
- Contacts vendors and suppliers as appropriate to develop estimates and schedule deliveries in accordance with project timelines.
- Determines priorities for requisitioning materials and supplies. Keeps tools and equipment in good condition.
- Maintains required records and makes reports. Prepares reports on work completed and materials used.
- Performs one or more of the following in accordance with area of specialization:
- Performs a variety of electrical repair and maintenance duties. Installs, adjusts, repairs or replaces electric lights, motors, heaters, generators, transformers, switchboards and other electrical apparatus.
- Installs transmission lines for electrical equipment. Operates electrical equipment.
- Performs a variety of plumbing duties. Cuts and threads pipe. Inspects, maintains and repairs standard plumbing systems and equipment concerned with water, gas, oil, sewage, fire control, and refrigeration. Repairs pumps.
- Performs a variety of HVAC duties. Operates, maintains, inspects and repairs heating, air conditioning refrigeration, water treatment, cogeneration, heat reclamation, ventilation and air compressor equipment.
- Tests, adjusts and calibrates air conditioning machinery and mechanical, electrical, and pneumatic control instruments. Tests as required, condenser and cooling tower water and water from other systems.
- Maintains, inspects, diagnoses and makes emergency repairs to natural gas, water, refrigeration, air and oil distribution systems.
- Coordinate with other trades on complex projects requiring welding and/or machinery work. Determine appropriate methods for repair and retrofitting of existing structures.
- Inspects, disassembles, repairs, assembles, maintains, and installs air conditioning units, hot water heating units, electrical motors, blowers, and fans, circulating pumps, and heating convectors.
- Programs and maintains a computer-controlled energy management system using standardized program language to set appropriate timing and intensity levels for heat/air conditioning and lighting at District facilities.
- Checks HVAC and plumbing units for leaks, loose wires, broken belts, defective switches, thermostats, valves, tubes, motors, and other parts.
- Replaces belts, compressors, timers, shaft bearings, valves, gaskets, filters, and other equipment.
- Overhauls and repairs flush valves, faucets, and drinking fountains, resets toilets, cleans out waste and drain lines with augers and power snakes.
- Repairs and installs sinks and traps, installs water lines with a wide variety of materials.
- Is present on a daily basis to perform duties assigned.
- Performs other duties as assigned that support the overall objective of the position

OTHER DUTIES:

- Perform other duties as assigned.
- Inspects, tests, and repairs smoke and heat sensors, fire alarms, pull and panels to meet applicable standards.
- Conducts preventative maintenance on sprinkler flow switches to exercise controls, resets fire alarm panels, test alarms for proper operation and communications wiring for proper connections, and check remote reset capabilities.

KNOWLEDGE AND SKILLS:

- Requires in-depth working knowledge of the principles, practices, methods, techniques, materials, tools, equipment, layouts and set-ups used in at least one of the following areas: electrical, plumbing, plus basic-to-journey level skills in the other areas listed.
- Require knowledge of HVAC systems and electrical controls sufficient to perform maintenance and troubleshooting.
- Requires basic knowledge of the operating characteristics and maintenance procedures for fire prevention systems.
- Requires knowledge of applicable federal, State, County and local building, fire and safety codes.
- Requires sufficient computer skills to access and use common business applications, knows record-keeping techniques, and specialized energy management applications.
- Requires knowledge of the uses and purposes of hand and power tools and equipment used on construction and general maintenance and follows preventive maintenance methods.
- Must be thoroughly familiar with safe work practices related to area of specialty.
- Requires sufficient communications skills to convey information to co-workers and contractors.
- Requires sufficient math skills to make measurements and estimate costs.
- Requires the ability to perform basic to journeyman level electrical, plumbing work skillfully and in a timely manner.
- Requires the ability to promptly respond to urgent maintenance situations, including fire alarms and power outages.
- Requires the ability to operate trucks and maintenance equipment, including a full range of hand and power tools used to perform construction, carpentry, electrical and mechanical services.
- Requires the ability to maintain and repair fire prevention systems.
- Requires the ability to maintain records and activity logs.
- Requires the ability to estimate materials and labor for assignments.
- Requires the ability to work cooperatively and maintain harmonious relations with staff, contractors, and the public.
- Must understand and follow Cal OSHA and employer requirements for use of Personal Protective Equipment.
- Must understand and follow manufacturer recommendations for cleaning solvents, chemical solvents and other semi-hazardous materials.
- Requires the ability to observe safe work practices and handle hazardous materials according to accepted procedures.
- Requires the ability to travel to all District sites to complete projects and support special events.

EXPERIENCE AND OTHER REQUIREMENTS:

- Two years of increasingly responsible journey level experience in one of the building maintenance trades.
- Pre-employment physical
- Drug Test
- Valid Driver's License

WORKING CONDITIONS ENVIRONMENT:

- Indoor and outdoor work environment.
- Regular exposure to fumes, dust and odors.
- Seasonal heat and cold, humidity and rain or adverse weather conditions.
- Wear appropriate safety equipment such as gloves, masks, closed toe shoes, safety glasses and ear protection.

PHYSICAL DEMANDS:

- Must sustain normal physical effort for 8 hours.
- Bending at the waist, kneeling or crouching.
- Exhibit full range of motion for shoulder external rotation and internal rotation, shoulder abduction and adduction, elbow flexion and extension, shoulder extension and flexion, back lateral flexion, hip flexion and extension and knee flexion.
- Ability to work in a safe effective manner in the following: at various elevated heights on ladders, roofs, and in restricted spaces and demonstrate manual dexterity necessary to perform fine motor skills during maintenance procedures and operate both manual and power hand tools, operate a variety of powered equipment and tools.

- Climb slopes, stairs, steps and ladders.
- Hear normal range verbal conversation (approximately 60 decibels).
- Must be able to function effectively indoors and outdoors engaged in work of primarily an active nature.
- Requires the ability to stand for extended periods of time, walk up to 400 yards, and manipulate (lift, carry, move) light to heavy weights of up to 50 pounds on a regular basis.
- Requires the ability to push, pull, and guide materials over 50 pounds.
- Requires sufficient hand-eye coordination, hand and finger dexterity including ability to grasp and use tools, and visual acuity to operate specialized equipment and read technical (including blueprints) and safety information.
- Requires near and far visual acuity to read printed materials, moving objects, and observe work in-progress.
- Requires speaking ability to carry on ordinary conversations.
- Requires the ability to work in extreme temperature conditions.
- Under some circumstances, further testing may be required to determine if an applicant is able to perform the essential duties with or without reasonable accommodation.

HAZARDS:

- Exposure to dirt, grease, high voltage and chemical fumes.
- Working on ladders and scaffolding at heights.
- Working in a cramped or restrictive work chamber.
- Use of chemical solvents, cleaning solvents and other semi-hazardous materials.
- Working around and with machinery having moving parts.
- Exposure to flying debris or nails.