

COUNTY OF SOLANO
CLASS SPECIFICATION
BUILDING TRADES MECHANIC - (Senior)

CLASS SUMMARY:

Under direction, performs the most difficult and/or specialized technical assignments which require considerable knowledge of trade skills required for the maintenance and repair of buildings, equipment and related systems. Employees in this advanced journey level class performs and/or leads the work of others in construction, repair, and maintenance of County buildings and building support equipment. Assignments cover the full spectrum of the building trades (e.g., carpentry, plumbing, electrical, masonry, painting, and locksmithing) from rough to finish work. Provides technical expertise in support of building maintenance and repairs.

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from the:

- **Facilities Operations Manager** class which plans, organizes directs and oversees maintenance programs and operations for County facilities, including all building systems and components; custodial and landscape maintenance, construction and remodel projects, building security, energy management, cogeneration power distribution plant operations and maintenance.
- **Facilities Operations Supervisor** class which is a first line supervisory class responsible for the work unit engaged in the operations and maintenance of County owned buildings and support equipment, and which, depending on the unit supervised, may include heating, air conditioning, ventilating, refrigerating, electrical, plumbing, carpentry.
- **Building Trades Mechanic** class which under direction, performs a variety of building construction maintenance and repair tasks requiring journey level skill in the building trades. Employees in this class perform journey level work in the construction, repair and maintenance of County buildings and building support equipment. If required, provides technical expertise in support of building maintenance and repairs. Assignments cover the full spectrum of the building trades (e.g., carpentry, plumbing, electrical, masonry, painting, and locksmithing) from rough to finish work. If required, provides technical expertise in support of building maintenance and repairs.
- **Building Maintenance Assistant** class which under supervision, assists in performing routine maintenance and minor construction tasks on buildings and building support equipment. Employees in this class assist Building Trades Mechanics in construction, repair, and maintenance of County buildings and building support equipment and, assist Stationary Engineers with heating, cooling, ventilating and refrigeration systems, or may assist other related classes.

SUPERVISION RECEIVED AND EXERCISED:

- Supervision is provided by a Facilities Operations Manager and/or Facilities Operations Supervisor
- No supervision is exercised over others.

- Provides lead, technical expertise, consultation, and advice to Building Trades Mechanics and/or Building Maintenance Assistants.

ESSENTIAL DUTIES: This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.

Performs lead worker duties over Building Trades Mechanics and Building Maintenance Assistants such as:

- administers and provides on-the-job training;
- passing on instructions received from supervisor and initiating work;
- distributing work among staff;
- monitoring status of work being performed and keeping supervisor informed of work progress;
- reviewing work of assigned staff, informing supervisor of customer feedback, work quality, conduct problems, and providing input on performance to supervisor;
- interpret administrative directions and incorporate into policies and procedures
- ensuring work is performed safely and efficiently;
- assist with periodic inspections of County facilities to determine operating condition, safety, and deficiencies.

Performs the same duties as the work being led such as the following:

- building trades carpentry work: constructs, repairs, and/or installs rough and finish counters, cabinets, bookcases, shelving, desks, framing, stairs, concrete forms, fencing and related hardware;
- building trades masonry work: pours and finishes concrete including sidewalks and equipment pads; lays blocks and ceramic tiles;
- building trades painting work: prepares walls, ceilings, and floors to be finished including but not limited to patching, taping, sanding and texture; applies finished flooring such as Vinyl Composite Tile (VCT) and tile; applies wall, door, cabinet, and furniture finishes such as paints, staining, sealers, polyurethanes, and varnishes;
- building trades electrical work: Troubleshoots, repairs, and installs a variety of electrical systems and equipment; maintains and services electrical systems to include replacing switches, plugs and breakers, installing lighting, installing new circuits to include fasteners, boxes, conduit and associated hardware; inspects, repairs and installs a variety of lighting systems including incandescent, fluorescent, vapor, Light Emitting Diode (LED) and sodium lamps; installs and repairs photo cells, time clocks, automated clocks, relays, and electric locks, maintains and repairs decorative fountains; ensures that electrical systems and fixtures meet electrical code and safety requirements; uses Building Management Systems (BMS) as it pertains to automated lighting control systems excluding HVAC or Cogeneration Plant related systems;
- building trades plumbing work: Installs and repairs plumbing and fixtures related to water distribution and waste disposal systems; installs fixtures such as drinking fountains and toilets; maintains and services plumbing systems to include pipes, fittings, pumps, water heaters, showers, sinks, toilets and institutional plumbing fixtures; cuts, threads and fits plastic, metal, clay pipe, and repair electronic water maintenance systems;
- other building maintenance and servicing work: constructs, repairs and/or installs flooring and ceilings, glass and insulation; troubleshoots and maintains kitchen equipment to

include warming ovens, steam kettles, dish washers, grease traps, hoods/filter, and laundry equipment;

- conducts locksmithing activities including maintaining and repairing locking systems, keys, institutional locks, and locksets; maintains and services doors and door hardware to include closers, locks, and weather stripping;
- provides technical direction and training to Building Maintenance Assistants and Building Trades Mechanics;
- coordinates with and oversees the work of vendors and contractors;
- maintains documentation for compliance with CAL/OSHA standards; keeps records of disbursement inventories; and maintains adequate stock of supplies and equipment related to building maintenance;
- coordinates work efforts of inter-related building systems with colleagues.
- performs other duties as assigned.

REQUIRED EDUCATION AND EXPERIENCE:

- **Education:** High School Diploma, GED, or equivalent; **AND**
- **Experience:** Five (5) years of experience including three (3) years of apprenticeship training in a program or under a journey worker in electrical, plumbing, carpentry or closely related building trade AND two (2) years of full-time paid experience at the level of a journey worker in electrical, plumbing, carpentry or closely related building trade.

LICENSING, CERTIFICATION AND REGISTRATION REQUIREMENTS:

- Applicants are required to possess, or obtain prior to employment, a valid California Driver's License, Class C.

Note: *The driver's license must be kept current while employed in this class.*

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of:

- Methods, materials, machines, equipment and tools used in the building trades.
- Building safety and the building code (s).
- Safe shop practices.
- Standard and accepted principles of leadership, on-the-job training, and work review.
- Customer service techniques.
- English composition, spelling, grammar, vocabulary, and punctuation for both written and oral communications.
- Basic mathematics to determine amount of materials needed for a job, including but not limited to, square footage of areas to be worked on, etc.
- Modern office equipment to include: computers, smartphones and building related software applications.
- Construction safety protocols and regulations.

Skill and/or Ability to:

- Distribute work and provide work directions, review work performance and conduct of staff, and provide on-the-job training to staff led.

- Understand, interpret and explain regulations and policies governing assigned program operations.
- Identify and analyze problems and implement changes.
- Make decisions and independent judgments.
- Organize and prioritize work assignments.
- Collect and analyze data to identify needs and evaluate equipment effectiveness, draw logical conclusions and make appropriate recommendations and adjustments.
- Use a variety of hand, pneumatic, hydraulic power tools and related shop equipment need to support construction, repairs and maintenance activities.
- Operates saws, drill presses, grinders, hand and power tools, electric and pneumatic power tools, welders, air compressors, and other tools as needed to support construction, repair and maintenance activities.
- Read and interpret building plans, blueprints, and related schematics.
- Estimate materials required for a specific job.
- Perform a variety of building trades in a variety of settings.
- Operate and maintain a variety of tools and forklifts properly and safely.
- Follow verbal and written directions.
- Communicate effectively both verbally and in writing.
- Maintain accurate records and document actions taken.
- Establish and maintain cooperative working relationships.
- Demonstrate tact and diplomacy.
- Make routine arithmetical calculations and analysis.
- Follow and train safe working procedures.
- Determine the appropriate course of action in stressful and/or emergency situations.
- Use modern office equipment to include: computers, smartphones and building related software applications.

PHYSICAL REQUIREMENTS:

- **Mobility and Dexterity:** This class typically requires employees to perform the following: (1) balancing, stooping, kneeling, reaching, crawling, fingering, grasping, and repetitive motion; (2) climbing and working safely on ladders and step ladders with a total weight that does not exceed the weight capacity of the ladder or the highest rated capacity of the harnesses and lanyards used for fall protection; and (3) standing or walking during normal working hours on uneven surfaces.
- **Lifting, Carrying, Pushing and Pulling – Heavy work:** This class typically requires employees to perform the following: exerting up to 100 pounds of force occasionally with assistance, and/or up to 50 pounds of force frequently, and /or up to 20 pounds of force constantly to move objects.
- **Vision:** This class requires employees to have close visual acuity, with or without correction, to prepare and analyze data and figures, view a computer terminal, read, and to distinguish between normal and off shade colors and to read gauges and meters in dimly lighted areas etc. Employees are also required to have depth perception and good eye-to-hand coordination in order to operate a motor vehicle and to operate a variety of hand, power tools and equipment.

- **Hearing/Talking:** This class requires employees to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Employees in this class are also required to be able to communicate to express or exchange ideas. Detailed or important instructions must occasionally be conveyed to others accurately, loudly, and/or quickly.
- **Other:** This class typically requires employees to have sufficient sense of smell, and touch to observe equipment functions for normal and abnormal occurrences.

WORKING CONDITIONS:

- **Outdoor Work:** Employees in this class will often be working outdoors and thus may be subject to exposure to intense noises, fumes, odors, pollens, dust, inadequate lighting, and to unpleasant field conditions including rainy, windy, cold, or hot weather; may be exposed to insects, rodents, snakes, bees, wasps, spiders, ants, etc.
- **Work in various Industrial Area(s):** Employees in this class will often be working in an industrial area and thus will be subject to exposure to moving mechanical parts, electrical currents, toxic agents, fuel, oil, gases, smoke, fumes, odors, dust, and vibrations; employees may be subject to injuries when working with hand, power tools, and equipment.
- **Traffic Hazards:** Employees in this class may be required to operate a vehicle and thus may be subject to traffic hazards while driving.
- **Working at Heights:** Employees in this class may be required to work at heights 50-75 feet or more above the ground on equipment and structures.

OTHER REQUIREMENTS:

- **Background Checks, Reference Checks and Physicals:** The County will conduct a background check, a reference check and a physical on candidates prior to appointment to a position within this class.
- **Independent Travel:** Incumbents are required to travel independently, to perform work at other work sites, etc.
- **Hours of Work:** Incumbents may be required to work weekends, holidays, irregular hours, on-call, and after normal business hours.
- **Drug and Alcohol Testing:** Candidates applying for positions in this class are subject to, drug and alcohol testing as required under the Federal Omnibus Transportation Employee Testing Act of 1991. Testing of incumbents includes post-accident, as well as random and reasonable suspicion testing as required by law.

CLASS HISTORY AND CLASS INFORMATION:

- **Date Approved by the Civil Service Commission:** March, 1995
- **Date Adopted by the Board of Supervisors:** March, 1995
- **Date(s) Revised:** December, 2016
- **Date(s) Retitled and Previous Titles of the Class:** Building Trades Mechanic (Lead)
- **Class Code:** 874020