

**COMPETENCY MODEL FOR
ELECTRICAL CRAFT HELPER
CLASS CODE 3799**

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **ELECTRICAL CRAFT HELPER**. (Numbers refer to the order of competencies in the Competency Bank.)

1. Reading Comprehension
2. Mathematics
3. Judgment and Decision Making
8. Safety Focus
10. Physical Capability
20. Job Knowledge
24. Mechanical Aptitude
33. Interpersonal Skills

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (bold, italicized, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

1. READING COMPREHENSION – Comprehends and correctly applies information presented in written form. Makes correct inferences; draws accurate conclusions.

Level of Competency Required by Job:

Level 1: Concrete, specific job-related information (work orders; instructions; material/equipment labels)

Level 2: General information related to field of work and assignments; (articles in trade publications; technical/instructional manuals; memos; letters; e-mails; reports)

Level 3: Abstract/complex information (highly technical articles/ reports in specialized area; legal or other regulatory material)

Examples of Behavioral Indicators:

- Follows written instructions correctly.
- Learns information presented in writing.
- Identifies relevant written information.
- Interprets written legal regulatory material accurately.

Performance Levels:

Satisfactory

Reads instructions correctly. Learns from manual and other printed material.

Superior

Learns from manual and may answer others' questions. Explains information presented in written form to others.

ELECTRICAL CRAFT HELPER (3799)
Reading Comprehension Areas

1. Knowledge of how to read and comprehend written instructions such as plates on transformers and cables, forms, safety precaution labels, in order to understand work related documents.
2. Knowledge of how to read and comprehend street maps sufficient to locate work routes or work sites and estimate time required for travel.

2. MATHEMATICS – Performs arithmetic or higher-level mathematical computations accurately.

Level of Competency Required by Job:

Level 1: Perform arithmetic computations (add, subtract, multiply, divide, ratios, percentages).

Level 2: Use algebra (substitute numbers for letters in a formula), geometry (angles, distances, area), and/or descriptive statistics (mean/median/mode, standard deviation, range).

Level 3: Apply and interpret calculus, inferential statistics (t-tests, correlations, ANOVA, multiple regression) or other very high level mathematics.

Examples of Behavioral Indicators:

- Quickly and accurately performs arithmetic computations.
- Appropriately selects and applies formulas for stated purpose.
- Correctly identifies an appropriate analysis for a specific purpose and selects the appropriate computer program for computation.
- Accurately interprets and presents results of mathematical/statistical computations.

Performance Levels:

Satisfactory

Knows mathematical requirements of the job and performs them correctly. Verifies work to ensure accuracy.

Superior

Identifies additional opportunities for the application of mathematics in work. Answers questions/trains others to assist them in their use of mathematics.

3. JUDGMENT AND DECISION MAKING – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1: Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).

Level 2: General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.

Level 3: Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

Satisfactory

Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

Superior

Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.

8. SAFETY FOCUS – Performs work in a way that minimizes risk of injury to self or others.

Level of Competency Required by Job:

Level 1: Maintain awareness of unsafe conditions and actions to avoid injury.

Level 2: Follow safety rules/procedures; avoid known hazards in the work environment.

Level 3: Carefully follow safety rules and procedures and consistently use all necessary safety equipment.

Examples of Behavioral Indicators:

- Wears seat belt.
- Ensures safe physical work environment by taking actions such as eliminating unstable stacks of materials, closing drawers so filing cabinets will not tip over, and keeping pathways clear of tripping hazards.
- Reviews safety procedures before beginning each job with known hazards.
- Follows safety procedures while performing work even when it takes more time.
- Uses safety equipment such as goggles, gloves, and earplugs as required or warranted.
- Frequently checks safety equipment for proper condition and operation.

Performance Levels:

Satisfactory

Maintains awareness of personal safety to avoid injury or property damage during all work activities.

Superior

“Safety first.” Places avoidance of injury or property damage above all other job requirements. Mentions the need to follow safe work practices to co-workers. Actively seeks ways to avoid injury.

ELECTIRCAL CRAFT HELPER (3799)
Safety Focus Areas

1. Knowledge of proper lifting techniques for lifting objects in order to assure personal safety.
2. Knowledge of safety rules/regulations in order to perform work under hazardous working conditions without causing self or others bodily or material damage.
3. Knowledge of work area traffic control requirements for safe work in surface streets, state highways and freeways (Work Area Traffic Control Handbook) in order to assure compliance.
4. Knowledge of procedures for contacting emergency medical personnel to remote work site areas without radio or cell phone contact (i.e. asking a nearby resident to call or permit phone use or leaving someone with the injured worker and walking or driving to the nearest phone) in order to obtain emergency assistance.
5. Knowledge of vehicle inspection for safety prior to taking vehicle out of the yard, by checking fuel level, brake operation, and lights sufficient to complete safety check form.
6. Knowledge of the State Motor Vehicle Code in regards to commercial vehicle operation in order to ensure safe operation of vehicles.
7. Knowledge of safety equipment, emergency equipment, and first aid supplies such as first aid kits to be carried on trucks going to fieldwork sites sufficient to address medical emergencies.
8. Knowledge of safety equipment to be used for various jobs such as appropriate personal protection equipment in order to maintain personal safety.
9. Knowledge of proper procedures for safe work in confined spaces, including: ventilation requirements, always having an observer above, always using safety harness, and always having an Air Line in order to maintain safe working conditions.
10. Knowledge of requirements for placing ladders in trenches including depth of trenches in order to maintain safe working conditions.

10. PHYSICAL CAPABILITY – Strength, endurance, flexibility, and/or coordination.

Level of Competency Required by Job:

Level 1: Sitting and/or standing for extended periods of time.

Level 2: Awkward body position and/or precise motions required; and/or repeated lifting, carrying, and/or manipulation of objects; and/or walking for extended periods of time.

Level 3: Continuous or extreme exertion of physical effort.

Examples of Behavioral Indicators:

- Sits and may occasionally stand or walk for entire workday (except breaks).
- Walks for the duration of the workday.
- Repetitive motion required to perform task.
- Repeatedly lifts and carries heavy objects.
- Exerts maximal effort for extended periods of time.

Performance Levels:

Satisfactory

Performs tasks requiring physical capability satisfactorily and without undue physical stress or harm.

Superior

Performs tasks requiring physical capability correctly with relative ease. May be asked to perform the most physically demanding tasks or be sought by co-workers for assistance.

20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge is concrete, factual, and/or procedural and may be defined by the organization. Situations in which it is applied are quite consistent.

Level 2: Knowledge is substantive and may be defined by an external trade, field, or profession. Situations in which it is applied vary and, as such, require breadth and depth of understanding.

Level 3: Knowledge is abstract, conceptual, and/or complex and may be supported by a well-defined academic discipline or authoritative sources (e.g., laws, ordinances, government guidelines/regulations/codes). Situations in which it is applied may vary greatly or be novel.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.
- Sought out as a source of information by others.

Performance Levels:

Satisfactory

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Superior

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/ programs and/or give internal and/or external presentations related to work.

ELECTRICAL CRAFT HELPER (3799)
Job Knowledge Areas

1. Knowledge of the use and care for hand and power tools such as hammers, screwdrivers, wrenches, pliers, saws, drills, ladders, ropes in order to keep these tools in good working condition for various jobs and journey level workers.
2. Knowledge of the types and uses of conducting and insulating materials such as metals and synthetic materials in order to work near energized conductors and equipment.
3. Knowledge of how to tie common types of knots such as the square knot, bowline, clove hitch, timber hitch in order to secure items to the hand line used in underground and overhead work.
4. Knowledge of how to read test equipment, such as ohmmeters, voltmeters, ammeters, meggers, electric gas indicator's in order to assist journey level worker in determining the causes of operating errors.
5. Knowledge of the tools and methods used to measure materials such as cables and wires in order to complete tasks.

24. MECHANICAL APTITUDE – Accurately predicts the impact of forces on objects and assesses the behavior of other physical phenomena (e.g., volume, weight, velocity). Readily learns work involving the application of mechanical principles.

Level of Competency Required by Job:

Level 1: Maintain a safe work environment by ensuring objects in it are stable, tools and equipment are properly used.

Level 2: Know the physical properties of objects in the work environment and correctly anticipate the action of forces upon them; performs work accordingly (correctly and safely).

Level 3: In-depth understanding of mechanical and physical phenomena sufficient to design and/or oversee the construction of systems.

Examples of Behavioral Indicators:

- Recognizes the impact of an earthquake on objects in the work environment and re-arranges them as possible to avoid possible damage or destruction and potential to cause injury.
- Uses tools properly to accomplish work correctly and safely.
- Recognizes the effects of various actions on objects and performs only those actions that will accomplish intended result and will not cause property damage or injury.
- Systems designed and/or for which construction is overseen operate as intended upon completion.

Performance Levels:

Satisfactory

Recognizes the operation of mechanical/physical phenomena sufficient to readily learn and perform work of a mechanical nature.

Superior

Displays exceptional insight into the operation of mechanical phenomena, and makes correct inferences regarding it. Promptly and accurately troubleshoots problems.

33. INTERPERSONAL SKILLS – Interacts effectively and courteously with others.

Level of Competency Required by Job:

Level 1: Interact with members of the workgroup, supervision, and/or the public in a cordial, service-oriented manner.

Level 2: Interact across department lines and with appointed City officials, and/or members of the public, at times under adversarial circumstances, in a cordial, respectful manner.

Level 3: Interact with appointed and elected City officials, department heads, representatives of external organizations, and/or the media in a cordial, effective manner.

Examples of Behavioral Indicators:

- Works well with others toward mutual objectives.
- Does not arouse hostility in others.
- “Disagrees without being disagreeable.”
- Elicits acceptance/cooperation from others.
- Affords all individuals respect, regardless of their role or status.
- Effectively addresses concerns of politicians or others who may have their “own agenda.”

Performance Levels:

Satisfactory

Behaves in a courteous, respectful, cooperative manner toward co-workers, other City employees, and members of the public.

Superior

Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.