COMPETENCY MODEL FOR COMMUNICATIONS ELECTRICIAN
CLASS CODE 3686

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of COMMUNICATIONS ELECTRICIAN (Numbers refers to the order of competencies in the Competency Bank.)

3. Judgment and Decision Making
8. Safety Focus
11. Initiative
12. Conscientiousness
20. Job Knowledge
34. Customer Service
35. Teamwork
45. Oral Communication

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (italicized, bolded, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.
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.
11. INITIATIVE – Generates activity that facilitates accomplishment of work.

Level of Competency Required by Job:

Level 1:  
*Offer to help co-workers and/or recognize things to do that facilitate work group accomplishment.*

Level 2:  
Identify new tasks/projects to be undertaken and assist others with accomplishment of their work.

Level 3:  
Determine additional work necessary to improve the function and productivity of the organization or its services to citizens or other customers.

Examples of Behavioral Indicators:

- Makes suggestions for improvement in work quality or quantity.
- Finds work to do when own work is slow rather than allow diminished personal productivity.
- Expands scope of work/responsibility in appropriate directions.
- Anticipates upcoming events in order to prepare for them.

Performance Levels:

**Satisfactory**
Generates goal directed activity rather than waiting to be told what to do. Anticipates what is likely to occur in order to be able to prepare; recognizes that preparation for (and clean-up after) a job is part of doing the job.

**Superior**
Actively pursues additional tasks/responsibilities that will facilitate effectiveness. Makes extensive preparations for upcoming events or expected changes.
12. CONSCIENTIOUSNESS – Dependable, reliable, diligent, and attends to all aspects of assignments (the “details”).

Level of Competency Required by Job:

Level 1: Remain on-task and make every reasonable effort to complete work in time allotted. Note discrepancies and takes action or informs appropriate person when “things don’t seem right” in information or data.

Level 2: **Note when own work logically relates to the work of others and coordinate with them and when additional tasks must be performed to complete an assignment and perform/assign them. Recognize when, despite best efforts, work will not be done and notifies supervision.**

Level 3: Attend to each area of responsibility, and if all are not being addressed, arrange for transfer or elimination of some of them. Ensure that all aspects of programs/projects are properly addressed to ensure success.

Examples of Behavioral Indicators:

- Seeks all necessary information to do the job well.
- Learns from experience so can recognize when things are not right.
- Maintains a high level of task-related behavior.
- Continues to work diligently in the absence of supervision.
- Fully attends to seemingly minor as well as major aspects of each work assignment.

Performance Levels:

**Satisfactory**

Fully attends to work at hand; notes details, errors, and discrepancies and follows-up as necessary. Reliably performs and completes work. Punctual; respectful of others’ time.

**Superior**

Notes relationship of own work to work of others to ensure all aspects are coordinated. Performs additional tasks and otherwise follows-up to ensure thoroughness.
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.
Job Knowledge Areas

GENERAL

1. *Knowledge of principles of electricity and electronic theory relating to various communications equipment systems. This may include base and mobile radio, security systems, microwave, avionics, voice and data network, and audio-visual systems.

2. *Knowledge of common sources of trouble in communications systems such as base and mobile radio, security systems, microwave radio, avionics, voice and data network, and audio-visual systems using the appropriate resources, tools, and equipment.

3. *Knowledge of methods of installing, servicing, rebuilding, and repairing communications systems such as base and mobile radio, security systems, microwave radio, avionics, voice and data network, and audio-visual systems using the appropriate resources, tools, and equipment.

4. *Knowledge of electronic test equipment, tools, and materials employed in the construction, servicing, installation, and repair of communications systems such as base and mobile radio, security systems, microwave radio, avionics, voice and data network, and audio-visual systems.

5. *Knowledge of safety precautions and hazards involved in working on or installing electronic and communications equipment.

6. Knowledge of rules and regulations such as Federal Communications Commission (FCC) and Departmental rules pertaining to the operation, documentation, and maintenance of public safety and industrial communications systems.

7. Ability to prepare work records and technical documentation such as log books in order to document work.

8. Ability to understand, prepare, and work from communications plans, schematics, diagrams, and other sketches, drawings, cable records, and oral and written instructions.

9. *Knowledge of proper safety use and care of hand and portable power tools.

10. *Deleted per SEAs on June 23, 2021

11. *Deleted per SEAs on June 23, 2021

12. *Deleted per SEAs on June 23, 2021
13. Ability to use ladders and catwalks in order to make repairs.
14. Skill in driving motor vehicles requiring a Class C license.
15. Ability to organize and stock materials, tools, and equipment.
16. Knowledge of various communication systems problems sufficient to be able to review, develop, and evaluate options and implement solutions.
17. Knowledge of basic computer programs such as MS Office Suite and cloud based programs.
18. Ability to use bucket trucks, forklifts, and/or scissor lifts in order to access equipment.

**RADIO COMMUNICATIONS**

19. Knowledge of radio communication systems in order to test, install, and repair.
20. Knowledge of basic electrical and electronic principles such as DC/AC theory.
21. Ability to inspect various equipment and/or facilities for radio frequency (RF) interference.
22. Ability to mount equipment on towers and vehicles.
23. Ability to test and adjust RF Microwave/base and mobile radio receivers and transmitters to system specifications and/or FCC rules and regulations.
24. Ability to align microwave antennas in order to receive the strongest signal.

**VOICE AND DATA NETWORK**

25. Ability to differentiate wire and cable colors in order to accomplish work.
26. *Deleted per SEAs on June 23, 2021
27. *Knowledge of voice network systems in order to troubleshoot, install, and/or repair.
28. *Ability to identify faults in data cabling in order to repair network infrastructure.
29. *Ability to use computers (including hardware and software) to configure or process information on data network equipment.
30. *Ability to monitor network reliability.
31. *Ability to use and interpret network testers, software and cloud based testers, protocol analyzers, in order to analyze networks.
32. Knowledge of applying quality of service and policy based routing in order to shape the flow of traffic.

33. Knowledge of subnet masks in order to determine IP addresses.

34. *Deleted per SEAs on June 23, 2021

* Reviewed and revised by Special Examining Assistants (SEAs) on June 23, 2021.
34. CUSTOMER SERVICE – Interacts with recipients of services (internal or external customers) in a way that provides accurate, timely, and effective information and service.

Level of Competency Required by Job:

Level 1: Interact with customers in person, over the telephone, or through e-mail (and/or other electronic media) in order to provide information or assistance. Listen to customer concerns; explain/reconcile information and provide alternatives if possible; facilitate resolution by making referral and/or following-up as necessary.

Level 2: *Promotes positive customer service. Serves as a model of providing exemplary customer service.*

Level 3: Develop customer-oriented procedures; identifies changes in procedures to enhance customer service and ensures they are implemented.

Examples of Behavioral Indicators:

- Carefully listens to (or reads) customer statement of the issue.
- Provides direct, informative, accurate responses to customer.
- Suggests options if available.
- Maintains a positive attitude in the face of customer complaint or frustration.
- Remains focused on the issue presented by the customer and directs the customer back to the issue if necessary.
- Asks the customer if their concerns have been fully addressed.
- Ensures organizational policies and practices are customer-focused.
- Ensures all employees recognize their responsibility for customer service and are properly trained for it.

Performance Levels:

**Satisfactory**
Displays knowledge as well as courtesy and patience when interacting with customers. Ensures customers’ issue is correctly identified and remains focused on it until it is resolved.

**Superior**
Seeks further information or advice to resolve difficult issues. Solicits feedback on the effectiveness of service. Makes suggestions for improving service and facilitates changes needed to implement.
35. TEAMWORK – Interacts effectively with others to achieve mutual objectives; readily offers assistance to others to facilitate their goal accomplishment.

Level of Competency Required by Job:

Level 1: Work effectively as a member of a work unit or project team. Readily offer assistance to others when they have too much work or have too little.

Level 2: **Work effectively as a team member in which different people have different roles/responsibilities and perspectives. Identify points for collaboration with co-workers; readily offer and request assistance.**

Level 3: Work effectively as a part of an interdependent team (your work gets done only if the work of the whole team is done; evaluation of team performance is more relevant than individual performance).

Examples of Behavioral Indicators:

- Discusses work-related matters with co-workers.
- Offers and requests assistance readily.
- Offers and is receptive to suggestions.
- Identifies problems with workflow that will prevent team from accomplishing its goals.
- Provides constructive criticism and feedback to team members to improve overall functioning of team.
- Assigns credit to team for accomplishments.

Performance Levels:

**Satisfactory**

Cooperates with co-workers and fulfills responsibilities as a member of a project team. Maintains a focus on common objectives and offers and requests assistance readily.

**Superior**

Sees the team as a whole; acknowledges that performance of the team is what in reality is evaluated by others. If anyone fails, everyone on the team fails.
45. Oral Communication – Communicates orally in a clear, concise, and effective manner.

Level of Competency Required by Job:

Level 1: *Exchange specific, job-related information orally with others in the immediate work environment or via telephone and/or radio.*

Level 2: Obtain/provide/present general and/or job-specific information orally to a variety of others in various situations.

Level 3: Obtain/provide/present a diverse array of information orally at varying levels of complexity to a wide range of others across many different situations and circumstances.

Examples of Behavioral Indicators:

- Audience clearly understands the intended message.
- Rarely must repeat information in response to questions.
- Refrains from use of unnecessary words, phrases, or jargon.
- Provides a level of detail appropriate to the situation (avoids too much or too little detail).
- Speaks at a level appropriate to the audience in terms of terminology, sentence structure, and simplicity/complexity of ideas expressed.
- Uses words with precision (vocabulary) to convey exact information.

Performance Levels:

**Satisfactory**

Speaks clearly and audibly, providing the appropriate information and level of detail. Typically conveys the message on the first attempt. Answers questions accurately and directly.

**Superior**

Speech is direct and to the point. Speaks convincingly and with authority when appropriate. Maintains sensitivity to the audience while providing thorough information with the appropriate level of detail through the use of precise language.