COMPETENCY MODEL FOR
PLUMBER
CLASS CODE 3443

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **PLUMBER.**

1. Reading Comprehension
2. Mathematics
3. Judgment and Decision Making
8. Safety Focus
20. Job Knowledge
33. Interpersonal Skills
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 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

Superior

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

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

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

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

<u>Job Knowledge Areas</u>

1. *Knowledge of the function and use of hand tools, power tools, equipment and machines most commonly used in the plumbing trade.
2. *Knowledge of the proper methods and techniques of installing different types of pipe and fittings (e.g. copper, cast iron, galvanized, plastic).
3. *Knowledge of the different types of pipe and fittings and what plumbing systems they may be appropriately used on.
4. *Basic knowledge of various plumbing systems to be able to diagnose the cause and correction of problems.
5. *Knowledge of the City Plumbing Code as it relates to the installation, repair and maintenance of water, sewer, air, natural gas, gasoline, steam, oil dispensing and other plumbing systems.
6. *Knowledge of basic plumbing terminology sufficient to conduct work tasks.
7. *Knowledge of how to read and interpret gauges, recorders, and other plumbing test equipment inclusive of how to read and interpret symbols, terminology, and dimensions on blue prints and drawings.
8. Knowledge of the various types and uses of backflow prevention devises and why one would be used in preference to another.
9. Knowledge of preventative maintenance techniques of various pipe systems, valves and fittings per Department training requirements.
10. Basic knowledge of approved practices and procedures for safe working practices, safety precautions relevant to the plumbing trade, inclusive of Cal/OSHA safety requirements per Department bi-monthly training program.

*Needed at job entry

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	Superior
Behaves in a courteous, respectful, cooperative manner toward co-workers, other City employees, and members of the public.	Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.

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.