

**COMPETENCY MODEL FOR  
MATERIALS TESTING TECHNICIAN  
CLASS CODE 7968**

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

1. Reading Comprehension
2. Mathematics
4. Analytical Ability
8. Safety Focus
35. Teamwork
40. Credibility
45. Oral Communication
47. Written 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.

**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.

**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.

**4. ANALYTICAL ABILITY .** Identifies, obtains, and evaluates relevant information to establish relationships or patterns, cite causes, and reach logical conclusions.

Level of Competency Required by Job:

**Level 1: Recognize similarities/differences in current situation to those previously encountered and is guided accordingly. Apply existing policies correctly. Ask pertinent questions or otherwise seek additional information to formulate appropriate response.**

Level 2: Consider multiple, varied factors when evaluating a situation or issue. Seek additional information to provide further insight. Reach conclusions that logically follow from the information obtained.

Level 3: Consider a multitude of diverse factors, their interrelationships, the perspectives of others, alternative courses of action and their likely ramifications when evaluating information to reach a conclusion.

Examples of Behavioral Indicators:

- Obtains the necessary amount of relevant information.
- Recognizes the impact of each type of information on conclusions.
- Evaluates the quality/source of information when considering it.
- States the shortcomings of the information and, therefore, the analysis.

Performance Levels:

Satisfactory

Recognizes available relevant information, seeks additional information to consider, and reaches a conclusion. Provides sound, convincing justification for conclusions, citing relevant data and facts.

Superior

Uses a great deal of existing and obtained information and data to develop and evaluate alternatives and arrive at a final conclusion. Provides compelling arguments in support of conclusions

**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.

**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.

**40. CREDIBILITY** . Is truthful and sincere; objectively and clearly provides all pertinent information rather than being vague, omitting negative information or only stating what listeners want to hear. +

Level of Competency Required by Job:

Level 1: Freely and openly share accurate job-related information with coworkers.

**Level 2: Provide complete, accurate information to other City employees and members of the public.**

Level 3: Represent department to the Mayor's Office, City Council, City Commissions, and/or department heads, and/or to external organizations, professional associations, and/or the media.

Examples of Behavioral Indicators:

- Admits mistakes.
- Information provided is consistent (not contradictory or stating different things to different people).
- Answers questions directly and thoroughly.
- Shares credit for achievements.
- Acts in the best interest of the organization, not self interest.

Performance Levels:

Satisfactory

Tells the complete story from the onset. Is forthcoming with full information when questioned. Statements are consistent. Readily admits mistakes and gives credit to others.

Superior

Information provided is complete and accurate, and includes any negative information or information contrary to self interest. Does not attempt to be vague or put a spin on negative information to make it appear more positive.

**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.



**47. WRITTEN COMMUNICATION .** Communicates effectively in writing.

Level of Competency Required by Job:

Level 1: Write notes/e-mails. Completes forms with some open-ended responses (sentences).

**Level 2: Write letters, articles/reports, and/or detailed descriptions of activities/occurrences.**

Level 3: Write lengthy reports, instruction manuals, in-depth analyses/reviews of complex issues and/or articles for publication. Reviews the written work of others.

Examples of Behavioral Indicators:

- Writing includes the necessary information to convey the intended message.
- Sufficiently few errors in spelling, punctuation, grammar to not interfere with the intended message or distract the reader.
- Little editing or re-writing needed to produce a final product.
- Composes materials efficiently.
- Information is presented in a well organized manner.
- Tone and degree of formality are appropriate to the purpose and audience.

Performance Levels:

Satisfactory

Writes material that clearly communicates the necessary information; needs little editing.

Superior

Precisely uses words and organizes information in a way that enhances presentation of the message. Virtually no editing needed.