

**COMPETENCY MODEL FOR
PIPEFITTER SUPERVISOR (2016)
CLASS CODE 3438**

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

- 1. Reading Comprehension
- 3. Judgment and Decision Making
- 8. Safety Focus
- 20. Job Knowledge
- 25. Space Visualization
- 28. Supervision
- 45. Oral Communication
- 49. Project Management

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.

- 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:

- Obtains the necessary amount of relevant information.
- 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

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.

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

1. Knowledge of correct installation and assembly, functions (e.g., steam, oil, gas, water), and operating principles (e.g., manual, pneumatic, automatic) of valves and fittings such as weld and steel fittings, screwed fittings, ball valves, and gate valves sufficient to supervise crewmembers and/or subordinates performing this work, plan and lay out piping systems according to industry standards such as the Uniform Mechanical Code, American Waterworks Association, and American Society of Mechanical Engineers Section, and make correct estimates on the time and materials needed to complete piping system jobs.
2. Knowledge of the tools (e.g., grinders), materials (e.g., pipes, fittings), and methods (e.g., socket welds, butt welds) used in electric and acetylene welding and cutting of ferrous and non-ferrous metals in high pressure, high temperature, and other piping systems such as process piping and fuel gas piping sufficient to use the proper tools to weld various types of metals into pipes.
3. Knowledge of the codes/rules contained in the American Society of Mechanical Engineers Section IX and power piping codes and regulations such as materials and weld processes sufficient to accurately determine if crewmembers and/or subordinates are building pipefitting assemblies according to applicable regulations and specifications.
4. Knowledge of rigging practices such as preparing slings and wire rope and using cranes and other hoisting devices such as chain falls sufficient to safely and efficiently lift and move piping, valves, fixtures, and equipment such as pumps, cooling towers, and air conditioning equipment to predesignated locations.
5. Knowledge of drafting tools such as t-square, 30/60 triangle, and drafting templates sufficient to create detailed sketches (i.e. isometric piping drawings) of work to be performed by crewmembers and/or subordinates.
6. Knowledge of blue prints and other drawings such as isometric drawings and piping and equipment schematics sufficient to interpret them and identify key details such as type and size of piping and valve location for the installation, replacement, maintenance, and repair of pipe systems.

25. SPACE VISUALIZATION – Pictures and manipulates objects “in the mind’s eye;” accurately perceives the location longer in sight.

Level of Competency Required by Job:

Level 1: Perceive presence of unseen stationary objects from objects in view. Mentally tracks location of moving objects even when they are out of sight.

Level 2: Visualize an object from various perspectives and/or the appearance of a rotated object from a single perspective.

Level 3: **Visualize a completed design, and the relationship of objects in it, before it has been constructed. Recognizes the changed relationship among objects when one or more of them is moved.**

Examples of Behavioral Indicators:

- Efficiently packs items into boxes.
- Accurately estimates the amount of storage space needed for a given amount of materials.
- Sketches a finished product before it is produced.
- Accurately estimates the type and quantity of materials needed to produce a given product.
- Understands complex systems that process liquids or gasses.

Performance Levels:

Satisfactory

Perceives the results of motion with sufficient accuracy to avoid accident or injury. Efficiently packs/ stores materials. Visualizes the finished product before work is initiated.

Superior

Develops a means of producing/ constructing a finished product or system in compliance with design specifications. Recognizes how changes in the construction process or materials will affect results.

28. SUPERVISION – Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/or ability in the areas of:

- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and teambuilding
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU's and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers' Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

- Level 1: Supervises small workgroup of employees performing the same or highly related work.
- Level 2:** **Supervises a larger workgroup of employees performing various types of work.**
- Level 3: Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.
- Displays knowledge of legal requirements including applicable Federal and State laws, Administrative Code provisions, Civil Service Commission Rules and Policies, and MOU provisions.

Performance Levels:

Satisfactory

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

Superior

Identifies opportunities to improve performance by changing the goal or personal behavior to reach the goal. Supports changes imposed by others.

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.

49. PROJECT MANAGEMENT – Anticipates and plans for all aspects of a multi-faceted, discrete endeavor to ensure resources are available and actions are taken at proper times for successful completion.

Level of Competency Required by Job:

Level 1: Plan, coordinate, and oversee accomplishment of multi-step projects involving other employees.

Level 2: Design, plan, coordinate, and manage large, multi-faceted projects involving employees from various segments of the organization representing different perspectives.

Level 3: **Design, plan, secure approval and resources, and manages largescale, complex projects involving many employees representing a large number of diverse segments of the organization and perspectives, which may at times be in conflict.**

Examples of Behavioral Indicators:

- Establishes project plans that gain management acceptance.
- Establishes realistic timeline and estimates of resources needed.
- Assembles appropriate team with complementary skills to efficiently execute all portions of a project.
- Secures necessary resources for successful project completion.
- Clearly designates roles/responsibilities/accountability.
- Addresses failure to perform or other problems in a timely and effective manner to minimize negative impact.

Performance Levels:

Satisfactory

Establishes acceptable project plan; assembles team with required skills; establishes personal responsibility/accountability. Ensures the necessary time and resources are available.

Superior

Designs efficient project plan to maximize benefits and minimize use of resources. Designates precise mix of people to best accomplish the project. Completes on time, with resources allocated.

