

## **Plumbing Inspector**

### **SUMMARY**

To protect the community and property from hazard, injury, and destruction by ensuring that work on water and waste systems performed by all plumbers and homeowners throughout the City of Duluth meets the standards required in the Minnesota Building Code, including the plumbing code, and other regulations, under the authority of the Minnesota State Building Code and the Building Official.

### **SUPERVISION RECEIVED**

For both one-of-a-kind and repetitive tasks, the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions. Incumbents work as instructed and consult with the supervisor.

### **SUPERVISION GIVEN**

Does not supervise.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

1. Oversee the work of Master and Journeyperson Plumbers, Licensed Pipelayers, Licensed Backflow Prevention Testers and Rebuilders, and homeowners in the City of Duluth through inspection of all plumbing system installations.
2. Verify contractors are licensed in accordance with Minnesota licensing regulations.
3. Review permit applications and plans for compliance with MN Plumbing Code.
4. Inspect plumbing and fuel gas piping installations, materials, venting, fixtures, plumbing appliances, and apparatus inside or running to building or structures for compliance with codes and ordinances governing plumbing and fuel gas piping work.
5. Communicate effectively with the public, coworkers, and contractors to provide exceptional service and promote public safety.
6. Review plans, specifications, and other construction documents prepared by architects, mechanical engineers, and others to ensure that they meet established codes, regulations, and safety standards.
7. Determine conformance problems, issue notices regarding correction of defective work, provide advice on code compliant installations, and perform re-inspection.
8. Issue stop work orders when needed and conduct other enforcement action for code violations.
9. Ensure that all work is performed in a safe manner using approved methods.
10. Approve final inspection when work is complete and complies with applicable codes.
11. Consult with Department of Labor and Industry and municipal Building Official as needed.
12. Operate City vehicle to, from, and around inspection sites.
13. Maintain computerized and written records of inspections made and actions taken, and produce written forms and reports as required.
14. Review permit applications and stated valuations for accurate permit fee determinations.
15. Attend training sessions, some involving overnight travel, and review technical and professional literature to upgrade knowledge necessary for effective job performance and to keep abreast of developing technology, methods, and code requirements.
16. Serve as a technical expert, conduct presentations, and provide information to other City divisions, contractors, engineers, architects and the public regarding codes, ordinances, and proper methods governing plumbing work.
17. Attend and participate in division meetings, and serve as a member of the Construction Services team.
18. Provide plumbing-code-related technical expertise to the Construction Services & Inspections team, plumbers, and others.
19. Perform inspections, review permits, and provide technical assistance in other construction areas as needed.
20. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute

to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.

21. Other duties may be assigned.

### JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
  - A. A minimum of five (5) years of experience as a licensed journeyperson plumber or master plumber, including residential and commercial plumbing, or equivalent training and experience.
2. License Requirements
  - A. Licensure by the state of Minnesota as a Master Plumber by the date of appointment and thereafter.
  - B. Possess and maintain a valid Minnesota Class D driver's license or privilege.
3. Knowledge Requirements
  - A. Expert knowledge of the terms, principles, practices, methods, techniques, tools, materials, and equipment used in plumbing work.
  - B. Expert knowledge of the Minnesota Plumbing Code.
  - C. Thorough knowledge of all applicable laws, rules, and standards regulating plumbing construction and installation practices.
  - D. Knowledge of Minnesota building codes and including the applicable provisions of Minnesota energy codes.
  - E. Knowledge of state licensing requirements for plumbing contractors, workers, and homeowners.
  - F. Knowledge of multiple communication methods, such as mobile devices, email, and preparation of official correspondence in letter form.
  - G. Knowledge of communication methods effective at building and maintaining strong relationships with the community, contractors, and coworkers.
  - H. Knowledge of possible defects in plumbing system installations and system designs.
  - I. Knowledge of proper inspection methods and procedures.
  - J. Knowledge of legal procedures involved in the enforcement of plumbing codes and ordinances.
  - K. Knowledge of math for the purpose of measuring, reviewing estimated valuations and plumbing installation requirements.
  - L. Knowledge of traffic rules and regulations.
  - M. Knowledge of problem-solving and conflict-resolution techniques.
  - N. Knowledge of applicable safety requirements.
  - O. Knowledge of, or the ability to learn, City policies and procedures.
4. Skill Requirements
  - A. Skill in inspecting plumbing work for adherence to regulations, requirements, ordinances, and procedures.
  - B. Skill in reading and interpreting plumbing plans, specifications, blueprints, diagrams, and technical codes and ordinances.
  - C. Skill in understanding the operation and maintenance and repair requirements of plumbing systems in order to apply code requirements.
  - D. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
  - E. Skill in reading and interpreting construction documents and technical codes and ordinances.

- F. Skill in reviewing plans and communicating deficiencies in mechanical system design and installation.
  - G. Skill in assisting the architects and mechanical engineers in understanding required design and installation requirements.
  - H. Skill in coordinating with other inspection and construction disciplines and trades.
  - I. Skill in reviewing construction costs, including materials and labor.
  - J. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, mobile devices, and modern office equipment.
  - K. Skill in managing one's own time and coordinating schedules with contractors and homeowners.
  - L. Skill in completing assignments accurately and with attention to detail.
  - M. Skill in safe work practices and procedures.
5. Ability Requirements
- A. Ability to apply advanced understanding of terms, principles, regulations, policies, and procedures to plumbing inspections and assistance to contractors, homeowners, and coworkers.
  - B. Ability to initiate and follow through on enforcement actions related to plumbing code compliance.
  - C. Ability to read and understand construction plans and other documents.
  - D. Ability to read and write reports regarding plumbing systems, codes, inspections, and permits.
  - E. Ability to maintain accurate and complete records.
  - F. Ability to work in all types of environmental conditions.
  - G. Ability to manage multiple projects of varying complexities and coordinate and collaborate with coworkers.
  - H. Ability to effectively listen, speak, write, and interact in a tactful and persuasive manner in one-on-one or group situations.
  - I. Ability to remain calm and professional in adversarial situations.
  - J. Ability to effectively explain codes, laws, and enforcement policies and produce written and visual materials that are easily understood by the intended audience.
  - K. Ability to transport oneself to, from, and around various worksites.
  - L. Ability to participate in training to update plumbing code knowledge and expertise.
  - M. Ability to recognize safety hazards, interpret safety rules and apply them to hazardous situations.
  - N. Ability to use a computer to maintain inspection records and write reports.
  - O. Ability to provide exceptional customer service.
  - P. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
  - Q. Ability to communicate and interact effectively with members of the public.
  - R. Ability to communicate effectively both orally and in writing.
  - S. Ability to understand and follow instructions.
  - T. Ability to problem-solve a variety of situations.
  - U. Ability to set priorities and complete assignments on time.
  - V. Ability to attend work as scheduled and/or required.

#### Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

#### Work Environment

The work environment involves everyday risks or discomforts requiring normal safety precautions typical of places such as construction sites, offices, meeting and training rooms, libraries, residences, commercial buildings, or commercial vehicles (e.g., use of safe work practices with office equipment, avoidance of trips and falls, observance of fire regulations and traffic signals, etc.). The work area is adequately lighted, heated, and ventilated.

HR: LD	Union: Basic	EEOC: Skilled Craft Workers	CSB:	Class No: 5101
WC: 9410	Pay:	EEOF: Housing	CC:	Resolution:

## Plumbing Inspector

**PURPOSE:** ~~Conduct inspections, review permits, and provide technical assistance for commercial, industrial, and residential construction and building projects.~~

### FUNCTIONAL AREAS:

- ~~1. Inspect plumbing construction, installation, alteration, and repair in residential, commercial, and industrial buildings and facilities for compliance with building codes and ordinances governing plumbing work.~~

#### \* ~~A.~~ SUMMARY

To protect the community and property from hazard, injury, and destruction by ensuring that work on water and waste systems performed by all plumbers and homeowners throughout the City of Duluth meets the standards required in the Minnesota Building Code, including the plumbing code, and other regulations, under the authority of the Minnesota State Building Code and the Building Official.

#### SUPERVISION RECEIVED

For both one-of-a-kind and repetitive tasks, the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions. Incumbents work as instructed and consult with the supervisor.

#### SUPERVISION GIVEN

Does not supervise.

### ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Oversee the work of Master and Journey person Plumbers, Licensed Pipelayers, Licensed Backflow Prevention Testers and Rebuilders, and homeowners in the City of Duluth through inspection of all plumbing system installations.
2. Verify contractors are licensed in accordance with Minnesota licensing regulations.
3. Review permit applications and plans for compliance with MN Plumbing Code.
4. Inspect plumbing and fuel gas piping installations, materials, venting, fixtures, plumbing appliances, and apparatus inside or running to building or structures for compliance with codes and ordinances governing plumbing and fuel gas piping work.
- ~~\* B. Inspect the quality of materials for approved plumbing installation.~~
5. \* C. Communicate effectively with the public, coworkers, and contractors to provide exceptional service and promote public safety.
6. Review diagrams, prepared plans, and specifications, and other construction documents prepared by architects, mechanical engineers, and others to ensure that they meet established codes and regulations, and safety standards.
- ~~\* D. Conduct maintenance inspections of existing industrial, commercial, and residential establishments or structures.~~
7. \* E. Determine conformance problems, issue notices regarding correction of defective work, provide advice on code compliant installations, and perform re-inspection.
8. \* F. Issue citations or orders to stop work that is in violation of the proper codes orders when needed and conduct other enforcement action for code violations.
9. \* G. Ensure that all work is performed in a safe manner using approved methods.
10. \* H. Approve certification of final inspection when required work is complete and complies with applicable codes.
11. \* I. Consult with Department of Labor and Industry and municipal Building Official and State Department of Public Health Plumbing Unit when necessary as needed.
12. \* J. Operate City vehicle to, from, and around inspection sites.

2. ~~Do related work as required.~~

\* ~~A. Maintain computerized and written records of inspectors inspections made and actions taken.~~

13. \* ~~B. Write, and prepare produce written forms and reports as required.~~

14. \* ~~C. Review permit applications and estimate building costs stated valuations for accurate permit fee estimates determinations.~~

15. \* ~~D. Attend training sessions, some involving overnight travel, and review technical and professional literature to upgrade knowledge necessary for effective job performance and to keep abreast of new developments and developing technology, methods, and code requirements.~~

16. \* ~~E. Serve as a technical expert, conduct presentations, and provide information to other City divisions, contractors, engineers, architects and the public regarding codes, ordinances, and proper methods governing plumbing work.~~

17. \* ~~F. Attend and participate in division meetings, and serve as a member of the Building Inspection Construction Services team on.~~

18. ~~Provide plumbing-code-related projects technical expertise to the Construction Services & Inspections team, plumbers, and others.~~

19. \* ~~G. Perform inspections, review permits, and provide technical assistance in other construction areas as needed.~~

\* ~~H. Perform other related duties as assigned.~~

20. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.

21. Other duties may be assigned.

### JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

#### 1. Education and Experience: Requirements

+ ~~A. Successful completion of a certified plumbing apprentice program plus three (3) minimum of five (5) years of experience as a licensed journeyperson plumber or master plumber. This experience must include three (3) years in, including residential plumbing and three (3) years in commercial plumbing; or equivalent training and experience.~~

#### 2. License Requirement: Requirements

+ ~~A. Possession Licensure by the state of a valid Minnesota driver's license or privilege by the date of appointment and thereafter.~~

+ ~~A. B. Possession of a valid Minnesota as a Master Plumber license from the State Board of Health by the date of appointment and thereafter.~~

B. 3. Possess and maintain a valid Minnesota Class D driver's license or privilege.

#### 3. Knowledge: Requirements

~~A. A. Extensive Expert knowledge of the terms, principles, practices, methods, techniques, tools, materials, and equipment used in plumbing work.~~

~~B. Expert knowledge of the Minnesota Plumbing Code.~~

+ ~~Thorough knowledge of Minnesota Building Code and other related codes, ordinances, all applicable laws, regulations rules, and manuals governing plumbing work.~~

+ ~~C. B. Extensive knowledge of safe and proper methods of standards regulating plumbing construction, and installation, and repair practices.~~

- D. ~~C.~~ Knowledge of Minnesota building codes and including the applicable provisions of Minnesota energy codes.
- E. Knowledge of state licensing requirements for plumbing contractors, workers, and homeowners.
- F. Knowledge of multiple communication methods, such as mobile devices, email, and preparation of official correspondence in letter form.
- G. Knowledge of communication methods effective at building and maintaining strong relationships with the community, contractors, and coworkers.
- H. Knowledge of possible defects in plumbing system installations and system designs.
- +I. Knowledge of proper inspection methods and procedures.
- +J. ~~D.~~ Knowledge of legal procedures involved in the enforcement of plumbing codes and ordinances.
- +K. ~~E.~~ Knowledge of math for the purpose of measuring and computing construction costs, reviewing estimated valuations and plumbing installation requirements.
- +L. ~~F.~~ Knowledge of traffic rules and regulations.
- +M. ~~G.~~ Knowledge of precautionary, safety, problem-solving and prevention methods involved in plumbing work conflict-resolution techniques.
- N. ~~H.~~ Knowledge of code applicable safety requirements.
- +O. Knowledge of, or the ability to learn, City policies and inspection methods in other trade areas procedures.

4. ~~4.~~ Skill: Requirements

- +A. ~~A.~~ Skill in inspecting plumbing work for adherence to regulations, requirements, ordinances, and procedures.
- +B. ~~B.~~ Skill in reading and interpreting plumbing plans, specifications, blueprints, diagrams, and technical codes and ordinances.
- C. ~~C.~~ Skill in ~~estimating~~ understanding the operation and maintenance and repair requirements of plumbing systems in order to apply code requirements.
- D. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- E. Skill in reading and interpreting construction documents and technical codes and ordinances.
- F. Skill in reviewing plans and communicating deficiencies in mechanical system design and installation.
- G. Skill in assisting the architects and mechanical engineers in understanding required design and installation requirements.
- H. Skill in coordinating with other inspection and construction disciplines and trades.
- I. Skill in reviewing construction costs, including materials and labor, and completion.
- J. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, mobile devices, and modern office equipment.
- +K. Skill in managing one's own time and coordinating schedules with contractors and homeowners.
- L. ~~5.~~ Skill in completing assignments accurately and with attention to detail.
- M. Skill in safe work practices and procedures.

5. Ability: Requirements

- + ~~A.~~ Ability to establish apply advanced understanding of terms, principles, regulations, policies, and maintain effective working relationships with procedures to plumbing inspections and assistance to contractors, workers, supervisors, peers, and the general public.

- A. ~~B.~~ homeowners, and coworkers.
- B. Ability to initiate and follow through on enforcement actions related to plumbing code compliance.
- C. Ability to read and understand construction plans and other documents.
- +D. Ability to read and write ~~report~~reports regarding plumbing systems, codes, inspections, and permits.
- +E. ~~C.~~ Ability to maintain accurate and complete records.
- F. ~~D.~~ Ability to work in all types of environmental conditions.
- G. Ability to manage multiple projects of varying complexities and coordinate and collaborate with coworkers.
- +H. Ability to effectively ~~communicate with individuals and groups, both verbally and in writing~~listen, speak, write, and interact in a tactful and persuasive manner in one-on-one or group situations.
- I. ~~E.~~ Ability to remain calm and professional in adversarial situations.
- J. Ability to effectively explain codes, laws, and enforcement policies and produce written and visual materials that are easily understood by the intended audience.
- +K. Ability to transport oneself to, from, and around various ~~work sites~~worksites.
- +L. ~~F.~~ Ability to participate in training to update plumbing code knowledge and expertise.
- +M. ~~G.~~ Ability to recognize safety hazards, interpret safety rules and apply them to ~~various~~ hazardous situations.
- +N. ~~H.~~ Ability to use a computer to maintain inspection records and write reports.
- O. ~~I.~~ Ability to ~~frequently walk~~provide exceptional customer service.
- +P. Ability to create and ~~elim~~maintain a positive working environment that welcomes diversity, ensures cooperation, and ~~occasionally stoop, kneel, crouch, crawl~~promotes respect by sharing expertise with team members, fostering safe work practices, and ~~reach overhead in order to conduct inspections inside and outside of buildings~~developing trusting work relationships.
- Q. ~~J.~~ Ability to ~~occasionally lift~~communicate and interact effectively with members of the public.
- +R. Ability to communicate effectively both orally and ~~carry up to 40 pounds such as ladder for conducting overhead inspections~~in writing.
- +S. ~~K.~~ Ability to ~~work outside in inclement weather~~understand and follow instructions.
- T. ~~L.~~ Ability to problem-solve a variety of situations.
- U. Ability to set priorities and complete assignments on time.
- +V. Ability to attend work ~~on a regular basis~~as scheduled and/or required.

\* ~~Essential job functions.~~

+ ~~Job requirements necessary on the first day of employment~~

### Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

### Work Environment

The work environment involves everyday risks or discomforts requiring normal safety precautions typical of places such as construction sites, offices, meeting and training rooms, libraries, residences, commercial buildings, or commercial vehicles (e.g., use of safe work practices with office equipment, avoidance of trips and falls, observance of fire regulations and traffic signals, etc.). The work area is adequately lighted, heated, and ventilated.



HR: <u>LD</u>	Union: Basic	EEOC: Skilled Craft Workers	CSB: <del>02/03/1998</del>	Class No: 5101
WC: 9410	Pay: <del>34</del>	EEOF: Housing	CC: <del>02/23/1998</del>	Resolution: <del>98-0138R</del>