

ELECTRICAL INSPECTOR

NATURE OF WORK

This is skilled inspection work in securing compliance with municipal ordinances and regulations governing the installation and operation of electrical systems and equipment..

Work involves responsibility for inspecting a variety of electrical installations as set forth in municipal and national electrical codes. Employee normally works with considerable independence on field inspections, making decisions requiring the use of technical judgement and discretion; however, consultation with supervisors is available on difficult or unusual cases or decisions. Work also involves the performance of inspection tasks in other construction fields as workloads in the department require. All work is subject to periodic checks and reports may be reviewed for completeness. All work is performed under the general supervision of the Building Inspection Program Coordinator.

EXAMPLES OF WORK

(Any one position in this class may not include all duties listed, nor do listed examples include all duties that may be found in positions of this class).

Makes inspection of new and existing wiring and electrical installations in residences, businesses, public and other buildings for conformance with safety standards, laws, and ordinances;

Insures that contractors are licensed and are employing journeymen in electrical work;

Checks plans and specifications for electrical projects to see that work complies with ordinances and regulations; and recommends methods for improvement;

Assists fire prevention and investigation authorities by investigating fire scenes for possible evidence of electrical origin;

Assists in making inspections of projects permitted under the Minnesota Mechanical Code.

Instructs contractors regarding the requirements of applicable codes;

Issues and records permits; prepares reports of inspections;

Performs related work as required.

MINIMUM REQUIREMENTS

High school diploma supplemented by coursework in electrical wiring and construction, AND five years experience working as an electrician.

ALSO: Possession of valid Minnesota driver's license; must provide own appropriate transportation; and possession of state electrician's license of at least the level of Class A Journeyman.

DESIRABLE EDUCATION AND EXPERIENCE

Considerable knowledge of the methods and practices involved in constructing, installing, maintaining, and operating a variety of electrical installations, equipment, and appliances;

Considerable knowledge of possible defects and faults in electrical wiring and

appliances and of stages in electrical construction where such faults and defects are most readily ascertained and remedied;

Considerable knowledge of the operating principles and adaptability of the standard electrical testing devices;

Considerable knowledge of the municipal ordinances relating to electrical appliances and installations;

Considerable knowledge of National Electrical Code standards;

Some knowledge of plumbing and heating construction practices;

Ability to detect and locate defective electrical wiring and construction, and to ascertain the state of construction or installation when defects are most easily found and remedied;

Ability to contact building owners, contractors, craftsmen, and others and to effect and maintain satisfactory working relationships in inspection and regulatory matters;

Ability to understand and work from construction and wiring plans, blueprints, drawings, and diagrams.

ESSENTIAL JOB FUNCTIONS

The work environment characteristics and physical demands described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Must have the ability to maintain balance and safely work at considerable heights such as ladders, roofs of houses, or office buildings;

Must have the ability to reason and react calmly; must have above average practical judgement in order to deal with unexpected, potentially dangerous situations in the course of duty; must be able to operate independently and be aware of surroundings at all times in order to recognize possible danger to self and others;

Must be able to read, write, and speak English sufficiently to perform all testing; to understand complex, technical information related to electrical inspections; to effectively communicate both orally and in writing; to read and comprehend instruments, dials, and other equipment; to recognize hazardous materials; to report occurrences; to follow written and oral instructions;

Must be able to work in areas with exposure to various environmental conditions such as dirt, dust, noise, disagreeable odors, humidity, and extreme temperatures;

Must demonstrate honesty and integrity in personal behavior and attitudes; must have the ability to establish and maintain effective working relationships with superiors, other employees and the general public; must be capable of controlling his/her own impulses or emotions to at least an average degree so as to ensure the safety of the public;

Must be free of conditions which would endanger self or others in the carrying out of duties; must be free of substance abuse (legal or illegal) in order to maintain effective job performance; must demonstrate a level of social maturity and self assurance sufficient to carry out tedious, unpleasant, or repetitious tasks;

Must have the ability to distinguish colors, particularly red, green, and yellow, in order to operate equipment that has alarms and signals and to identify labels of potentially hazardous materials;

Must have the ability to be mobile for long periods of time including but not

limited to: standing, walking, kneeling, crawling, crouching, bending, stretching, and working overhead;

Must have the ability to climb ladders;

Hearing requirements of this job include the ability to perceive detailed information through oral communication as well as to assist the public;

Must have the ability to enter and traverse areas of uneven or excavated ground such as a construction site, new building construction, or building remodeling site; must have the ability to enter various building construction environments and spaces to inspect and perform related job duties;

Must have the ability to effectively deal with individuals who are disturbed about decisions the inspector has made; must be able to communicate the intent and purpose of electrical code to individuals who have no knowledge of the code;

Must have the ability to recognize minimum standards of electrical code; must have the ability to recognize variances in normal construction practices and make decisions regarding alternative construction methods that do not effect the health and welfare of the public yet are still allowed by the code;

Must have the ability to learn a wide variety of electrical construction methods and associated codes; must be able to learn the operation of normal office equipment such as computers and printers, fax machines, calculators, telephone systems, and two way radio communications equipment.

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