

STEEL INSPECTOR

DEFINITION

Inspects structural and miscellaneous steel in fabricators' shops and at construction sites to assure that materials and workmanship conform to drawings, specifications, contracts, and applicable State and local regulations.

TYPICAL DUTIES

Inspects structural and miscellaneous steel to be used in new construction, modernization projects, and alterations of buildings for type of steel, size and shape of section, laboratory tests performed, material damage, and size and location of punched holes.

Inspects all completed welds and inspects all multi-pass welding during performance of each pass; inspects primer paint applied after welding and cleaning; and inspects all bolted and welded structures for type of bolt and weld indicated by the number of, or shape of, the head of the bolt and size of weld.

Observes use of torsion test equipment on bolts and torque tests anchors installed in concrete to determine tightness of structures after assembly.

Reviews shop drawings for conformance to design drawings and recommends approval of change orders on structural steel work.

Checks credentials of welders to confirm qualifications and verifies the use of appropriate welding rods required by the type of steel.

Determines when additional nondestructive types of welding tests, such as X-ray, gamma-ray, and ultrasonic, are necessary, and so notifies assigned testing laboratories.

Certifies conformance to drawings, specifications, contracts, and applicable State and local regulations by tagging and/or stamping the steel and by signing the quarterly compliance reports of the Division of the State Architect for each project using structural steel.

May perform quality assurance inspections for spray-applied fireproofing.

Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Steel Inspector performs specialized inspection of structural and miscellaneous steel to be used in school buildings at fabricators' shops and at job construction sites.

A Building/Construction Inspector represents the District at construction sites and performs continuous inspection of construction materials, methods, and work quality; and monitors construction work for compliance with plans, specifications, and regulations.

Other specialized inspectors represent the District in the inspection of materials and work quality provided by contractors relative to their designated areas of specialization.

SUPERVISION

General supervision is received from a Supervising Building/Construction Inspector. No supervision is exercised.

CLASS QUALIFICATIONS

Knowledge of:

State and local regulations pertaining to structural steel fabrication, welding, bolting, riveting, and erection
American Institute of Steel Construction (AISC) and American Iron and Steel Institute (AISI) standards
Types, sizes, shapes, quality, and condition of structural steel, welding rods, bolts, rivets, and reinforcing bars
Types of laboratory tests for structural steel and welds
Methods of construction for reinforced masonry and reinforced concrete buildings
Pertinent Safety Orders of the Division of Industrial Safety of the State of California
Computer applications including Microsoft Word, Microsoft Excel, and electronic mail programs.

Ability to:

Read, interpret, and coordinate construction drawings with shop drawings
Test the tightness of bolted and riveted connections
Detect deviations from drawings and specifications by inspection
Maintain effective contacts with steel fabricators
Evaluate soundness of completed welds and adequacy of primer coat of paint
Work independently

ENTRANCE QUALIFICATIONS

Education:

Graduation from high school or evidence of equivalent educational proficiency, preferably supplemented with courses in engineering and welding.

Experience:

Three years of experience as an inspector of construction involving structural metal or as a technician or supervisor in structural metals fabrication or as a supervisor in structural metals erection.

Special:

The following are requirements and must be kept valid during the term of employment:

A valid certification as a Certified Welding Inspector (CWI) with the American Welding Society (AWS).

A valid certification as a Structural Steel and Bolting Special Inspector (S1) with the International Code Council (ICC).

The Division of the State Architect's approval of qualifications as an inspector of structural steel/welding/high strength bolting as required by Title 24, California Code of Regulations (C.C.R.) and chapter 17A of the California Building Code (C.B.C.).

Certification as a ICC Spray-applied Fireproofing Inspector is preferred.

Certification as a DSA Project Inspector is preferred.

A valid California Driver License.

Use of an automobile.

The class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

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