



CERTIFICATION PROGRAMS

Supplemental Program Requirements for Structural Steel Erectors (CSE) Applicants ONLY

Scope

This document (hereinafter referred to as *Supplements*) provides the additional requirements for the AISC Certification Program for Structural Steel Erectors (CSE) (hereinafter referred to as the *Program*). This document applies to **applicants only**. Current participants in the *Program* should refer to *Supplemental Program Requirements for Structural Steel Erectors (CSE)*.

Section 1 Before the Site Audit

- SE1.1 All Applicants are required to have available and comply with these *Supplements* and the *Program Requirements for Fabricator, Erector and Manufacturer Certifications* (hereinafter referred to as *Requirements*).
- SE1.2 This Program uses the AISC *Certification Standard for Steel Fabrication and Erection, and Manufacturing of Metal Components - 2016* (hereinafter referred to as *Standard*) as the normative document. Whenever there is a conflict between the *Supplements* and the *Standard*, the *Supplements* govern.
- SE1.3 Along with full payment of fees, Applicants must submit a current Certificate of Liability Insurance naming the American Institute of Steel Construction, LLC and Quality Management Company, LLC as additional entities covered by the insurance, and they must submit a Reciprocal Indemnity Agreement. A sample Certificate of Liability Insurance form and the Reciprocal Indemnity Agreement can be found on either the “Applicants” web pages at www.aisc.org/certification - click “Erector QMS Certification” for the documents.
- SE1.4 *Standard* Section 5.3.1, 5.3.2 and 5.3.3 are not included in the Certified Steel Erector Program. These Sections apply to the specific endorsement (Refer to SE1.5).
- SE1.5 Applicants of this *program* are eligible to apply for the following endorsements:
- Seismic Erection Endorsement (See Section 3 below and *Standard* Section 5.3.1)
 - Metal Deck Installation Endorsement (See Section 4 below and *Standard* Section 5.3.2)
 - Bridge Erection (See Section 5 below and *Standard* Section 5.3.3)
- To include/add any or all of these endorsements refer to the *Requirements* Section 2 “Applying for certification” or Section 8 “Making changes to the Certification Scope”
- SE1.6 Applicants to this *Program* must submit an application, payment and all documents required by the *Application Document Submittal for AISC Certification - Erectors*.



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Section 2 During the Site Audit

- SE2.1 *Standard* Section 1.3 is clarified and modified by the following:
- All references must be in English
- SE2.2 Applicants will be audited and evaluated to ensure compliance with the current AWS D1.1/D1.1M *Structural Welding Code - Steel* regardless if this is required by the sampled contracts and specifications.
- SE2.3 Applicants must perform a bolting method demonstration at each site audit. The demonstration shall comply with the current RCSC *Specification for Structural Joints Using High Strength Bolts* Section 7 “Pre-Installation Verification”.
- SE2.4 Applicants must demonstrate that its Quality Control Inspector(s) (QCI) are qualified per current ANSI/AISC 360 *Specification for Structural Steel Buildings* Section N4. These qualifications must be stated by the Applicants in its quality management system including experience and training requirements.
- SE2.5 When required, Certified Welding Inspectors (CWI) may be an employee of the Applicants or contracted. In the case of the latter, contract status and qualifications of the CWI must be demonstrable
- SE2.6 Applicants are required to have an active job site in the United States of America and complying with US Dept of Labor Occupational Safety and Health Administration (OSHA) 1926 at the time of the site audit that can be used to demonstrate ability to meet these *requirements*. This includes work described in the AISC *Code of Standard Practice for Steel Buildings and Bridges* Clause 2.1 or work of equivalent complexity as determined by the auditor.

An active job site is where the minimum following activities are occurring during the site audit:

- Connecting of steel elements via welding and/or bolting
- QCI inspections occurring and documented
- Execution of site-specific quality and safety plan
- Material handling

Section 3 Seismic Erection Endorsement

- SE3.1 Applicants shall develop documented procedure(s) for the erection of seismic elements of the structural frame per *Standard* Section 1.12.
- SE3.2 Applicants shall have available the current edition, in English, and demonstrate their ability to work to, and meet the requirements of the following normative documents:
- ANSI/AISC 341 - *Seismic Provisions for Structural Steel Buildings*
 - ANSI/AISC 358 - *Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications*
 - AWS D1.8/D1.8M *Structural Welding Code - Seismic Supplement*



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- SE3.2 If an active job site with seismic connections is not available at the time of the site audit, mock exercises shall be used to demonstrate capabilities unless records are available for a seismic connection project completed within the past two years.
- SE3.4 Applicants shall maintain the following documents for Demand Critical welds in compliance with AWS D1.8/D1.8M *Structural Welding Code - Seismic Supplement* and have them available for review during each site audit.
1. One representative Welding Procedure Specification (WPS)
 2. Supporting Procedure Qualification Record (PQR)
 3. Welder Performance Qualification Record (WPQR) maintained current and qualified with records of period of effectiveness

Section 4 Metal Deck Installation Endorsement

- SE4.1 Applicants shall develop documented procedure(s) for metal deck installation per Standard Section 1.12.
- SE4.2 Applicants shall have available the current edition, in English, and demonstrate their ability to work to, and meet the requirements of the following normative documents:
- ANSI/SDI QA/QC *Standard for Quality Control and Quality Assurance for Installation of Steel Decking*
 - SDI COSP *Code of Standard Practice*
 - AWS D1.3/D1.3M *Structural Welding Code - Sheet Steel*
- SE4.3 Applicants shall maintain the following documents in compliance with AWS D1.3/D1.3M *Structural Welding Code - Sheet Steel*. and have them available for review during each site audit.
1. One representative Welding Procedure Specification (WPS)
 2. Supporting Procedure Qualification Record (PQR)
 3. Welder Performance Qualification Record (WPQR) maintained current and qualified with records of period of effectiveness
- SE4.4 If an active job site with metal decking installation activities is not available at the time of the site audit, mock exercises shall be used to demonstrate capabilities unless records are available for a metal decking installation project completed within the past two years.

Section 5 Bridge Erection Endorsement

- SE5.1 Applicants shall develop documented procedure(s) for the erection of steel bridges per *Standard* Section 1.12.



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- SE5.2 Applicants shall have available the current edition, in English, and demonstrate their ability to work to, and meet the requirements of the following normative documents:
- AASHTO/NSBA *S10.1 Steel Bridge Erection Guide Specifications*
 - AASHTO/AWS *D1.5M/D1.5 Bridge Welding Code*
- SE5.3 Applicants shall maintain the following documents in compliance with AASHTO/AWS *D1.5M/D1.5 Bridge Welding Code* and have them available for review during each site audit.
1. At least one Welding Procedure Specification (WPS)
 2. Supporting Procedure Qualification Record (PQR) , when required
 3. Welder Performance Qualification Record (WPQR) maintained current and qualified with records of period of effectiveness
- SE5.4 A bolt demonstration shall be required of Applicants at the initial (INIT) site audit that complies with Appendix D of the AASHTO/NSBA *S10.1 Steel Bridge Erection Guide Specification for Field Rotational Capacity Testing*.
- SE5.5 If an active job site with bridge erection activities is not available at the time of the site audit, mock exercises shall be used to demonstrate capabilities unless records are available for a bridge project completed within the past two years.

COMMENTARY - Provided for clarification of criteria in the *Standard* and includes reference to the appropriate section(s) of the *Standard*.

- C1 1.6 **Contract Review** This section requires a “documented procedure” for contract review. As a part of this review, there will be required sign-offs, checksheet completion, or other means of determining that the bid offered is meeting the contract and that any special considerations found in the contract documents have been considered and planned for. During the audit, the auditor will be looking for evidence in the form of records of the outcome of the contract review process.
- C2 1.10.3 **Receipt inspection** The term “receiving inspection” is not used in the *Standard*. It has been replaced by 1.10.3 where verification of purchased product, materials and services. This verification or inspection can be performed as part of the purchasing or inspection procedure depending on how the company is structured. Section 1.13.2 does mention that “materials shall be inspected before work begins” which is indicative of an inspection of materials but if it is done as part of the in-process inspection and a defect is found requiring replacement of the material then the delay could have a greater impact on the project then if the inspection is performed at or near receipt of material.
- C3 1.12 **Process Control** This section requires “documented procedure(s)” for those fabrication and erection processes that affect quality. A list of minimum required procedures is provided but what are the procedures which affect quality? The answer to this question is found in the Glossary of the *Standard* by referring to the definition of Fabrication and Erection.



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- C4 1.13 **Inspection Sampling** Section 1.13 requires “documented procedure” to ensure that the completed work meets contract documents.
- C5 1.10.2 **Subcontracted Fabrication/Erection** When a Certified company needs to subcontract fabrication/erection, the criteria of 1.10.2 requires subcontractors to be evaluated on their ability to meet requirements of approved construction documents. If the approved construction documents require Certified Fabricator/Erector than the subcontractor needs to meet the requirement. When an approved construction document is not met or needs changed/deviated, 1.8.2 for control of construction documents is followed for requesting changes and approval.
- C6 1.14 **Calibration or Adjustment History** These type of quality records provide evidence that the calibration was performed and traceable to a national or international standard, identification of the equipment that was calibrated, who performed the calibration, date of the calibration and date the calibration expires or next calibration is due. The calibration record would also provide evidence of any adjustments that were performed during the calibration process.
- C7 **Quality Control Records** this term is used throughout the *Standard* to identify this type of record. These records are controlled by referring to *Standard* Section 1.9.