Supplemental Requirements for Structural Steel Erectors (CSE)

Preface

The 2020 revision is not a complete revision of the Supplemental Requirements for Structural Steel Erectors (CSE). The following changes have been made in this revision:

Section 1 Before the Site Audit
- SE1.1 - Editorial
- SE1.10 - Revised

Section 2 During the Site Audit
- SE2.5 - Revised
- SE2.6 - Revised

Section 3 Seismic Erection Endorsement
- No Changes

Section 4 Metal Deck Installation Endorsement
- No Changes

Section 5 Bridge Erection Endorsement
- SE5.5 - Revised

Scope

This document (hereinafter referred to as the Supplements) provides the additional requirements for the AISC Certification Program for Structural Steel Erectors (CSE) (hereinafter referred to as the Program).

Section 1 Before the Site Audit

SE1.1 All Participants/Applicants are required to have available and comply with these Supplements and the Governing Requirements for Certification Programs (hereinafter referred to as the 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 the Standard) as the normative document. Whenever there is a conflict between the Supplements and the Standard, the Supplements shall govern.

SE1.3 Along with full payment of fees, Participants must annually 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 every three years. A sample Certificate of Liability Insurance form and the Reciprocal Indemnity Agreement can be found on the

SE1.4 Standard Sections 5.3.1, 5.3.2 and 5.3.3 are not included in the Certified Steel Erector Program. These Sections/Elements apply to the specific endorsements.

SE1.5 Participants/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 As used in these Requirements and in the Standard, the words **shall**, **must** or **will** denote a mandatory requirement. The words **should**, **could** or **might** denote a guideline or recommendation. The words **can** or **may** denote an opportunity to make a choice.

SE1.7 Standard Section 10.4: Customer supplied materials need to only be verified against the receiving documents. Verification to contract documents is the customer’s responsibility.

SE1.8 Standard Section 20.1.3: The safety plan shall include a list of all hazardous materials brought to the site by the erector with an applicable Safety Data Sheet (SDS). The safety plan shall also include where all site hazardous material SDSs can be reviewed.

SE1.9 Standard Section 20.1.3: The project safety plan may be combined with the erection plan regardless of the format used for the erection plan.

SE1.10 Participants/Applicants are required to have an active jobsite as required by SE2.5.

**Section 2 During the Site Audit**

SE2.1 Participants/Applicants will be audited and evaluated to ensure compliance with the current AWS D1.1/D1.1M, *Structural Welding Code—Steel*, regardless of whether this is required by the sampled contracts and specifications.

SE2.2 Participants/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.”

SE2.3 Participants/Applicants must demonstrate that their Quality Control Inspector(s) (QCI) is/are qualified per the current ANSI/AISC 360, *Specification for Structural Steel Buildings* Section N4. These qualifications must be stated by the Participant in their quality management system, including experience and training requirements.
**Section 2 Section 2E Seismic Erection Endorsement**

**SE2.4** When required, the Certified Welding Inspector (CWI) may be an employee of the Participant/Applicant or contracted. In the case of the latter, contract status and qualifications of the CWI must be demonstrable.

**SE2.5** Participants/Applicants are required to have an active job site in the United States and must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). At the time of the site audit, such compliance can be used to demonstrate the 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

**SE2.6** If a jobsite is not available for the scheduled audit date, the office portion of the audit will still be conducted on the first day of the audit date. The jobsite portion of the audit will then be rescheduled for a later date, but must occur 45 days prior to the expiration of the certificate (See Requirement 4.3.1).

**SE2.7** Participants who do not have an active job site are required to have one within 60 days from the date of the expiration of their certificate or their certification will be withdrawn from the program. Your certificate will be suspended during this time and the proceeding certification review period and will not be extended nor will your certification month.

**SE2.8** Erector participants may NOT reschedule if a jobsite is not available for the scheduled audit date, nor can participants reschedule to have both the office AND jobsite portions occur at the same time when a jobsite is not available on the scheduled audit date. SE2.8 supersedes Bulletin 2019-06.

**Section 3 Seismic Erection Endorsement**

**SE3.1** Participants/Applicants shall develop documented procedure(s) for the erection of seismic elements of the structural frame per Standard Section 12.

**SE3.2** Participants/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

**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 Participants/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 Participants/Applicants shall develop documented procedure(s) for metal deck installation per *Standard* Section 12.

SE4.2 Participants/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 Deck*
- SDI COSP, *Code of Standard Practice*
- AWS D1.3/D1.3M, *Structural Welding Code—Sheet Steel*

SE4.3 Participants/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), when required
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 Participants/Applicants shall develop documented procedure(s) for the erection of steel bridges per *Standard* Section 12.

SE5.2 Participants/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*
- ASTM F3125/F3125M Annex A2

SE5.3 Participants/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 Participants/Applicants at every initial (RFN) and full (RF) site audit in accordance with ASTM F3125/F3125M Annex A2.

SE5.5 An active job site with bridge erection activities is required for the site audit, or if bridge erection has been completed within the past two years then the review of the records for the bridge project will be performed in lieu of the active site.

COMMENTARY Provided for clarification of criteria in the Standard and includes references 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” is used. 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 than if the inspection is performed at or near receipt of material.

C3 1.12 **Process Control** This section requires “documented procedures” for those fabrication and erection processes that affect quality, and a list of minimum required procedures is provided. To develop documented procedures for other processes that affect quality, refer to the definitions of Fabrication and Erection in the glossary of the Standard.

C4 1.13 **Inspection Sampling** Section 1.13 requires a “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 require subcontractors to be evaluated on their ability to meet the requirements of approved construction documents. If the approved construction documents require a Certified Fabricator/Erector, then the subcontractor needs to meet the requirement. When an approved construction document is not met or needs to be changed/deviated from, 1.8.2 for control of construction documents is followed for requesting changes and approval.

C6 1.14 **Calibration or Adjustment History** These types of quality records provide evidence that the calibration was performed and traceable to a national or international standard, to identification of the equipment that was calibrated, to who performed the calibration, to the date of the calibration, and the date the calibration expires or the next calibration is due. The calibration record would also provide evidence of any adjustments that were performed during the calibration process.
Quality Records This term is used throughout the Standard to identify this type of record. Refer to the glossary of the Standard for the definition of a quality record. Maintenance/Control of these records is described in Standard Section 1.9.