



AISC Audit Policies

Issue #13 3/21/06

AISCQC014

AISC Audit Program Policy approved by the AISC Certification Committee

NOTE: Audit policy numbers are not sequential—nonconsecutive numbers do not mean a policy is missing.

NOTE: Policies are in effect for all audits unless an effective date is noted.

Policy #	Certification Category					topic
	Building/element	Bridge	Erector	F C	S P E	
1	✓	3, 12, 12.1	✓	✓		Your WPSs are not approved by AISC. Requirements for WPS and welder qualifications per AWS D1.1/5.
1a	✓	3, 12, 12.1	✓	✓		D1.1 has required written procedures other than the WPS.
2	✓	3	✓	✓		Audits gather evidence to show your understanding code requirements
3	✓	policy				Audits focus on structural steel projects
4			✓	✓		WPS and welder duration requirements D1.5
5	✓	policy	✓	✓		Consultants involvement with AISC and for onsite audits. (see policy A)
6	✓	policy	✓	✓		Falsified records
7	✓	Scope				Audit focuses on "normal" fabrication
8	✓	11	✓	✓		Material identification
9						Policy number not used
10						Policy number not used
11					✓	Fracture control plan requirement
12			✓			Library requirement
13	✓	12.2, 14	✓	✓		Bolt Pre-installation verification demonstration requirement
14						Policy number not used. (Superseded by policy #24 in Audit Program Policy issue 7.)
15	✓	14	✓	✓		Gage calibration.
15a	✓	14				Gage Calibration frequency
16	✓	4.38, 13, 18	✓			Basis for qualification of Inspection personnel (also see policy 30)
17	✓	5.6.2.1				Material submission requirements for application/renewal
18	✓	3	✓	✓	✓	Documents required in English
19	✓	13.2.3, 13.2.4	✓			Documenting final inspection
20	✓	13.2.3, 13.2.4				How to assess subcontract detailers

AISC Audit Program Policy approved by the AISC Certification Committee

Policy #	Certification Category					topic
	Building/element	Bridge	Erector	F C	S P E	
21	✓	7.2.2.1, 5.4.1				Qualifications of the detailing manager
22	✓	15, 16				Nonconformances are for both product and the QMS
23	✓	15				Qualifications of personnel who disposition nonconforming product
24	✓	5.4.1				QA/QC does not need to be separate from production
25	✓	5.2, 5.4.1, (fn 2)				Executive management definition.
26	✓	4.12, 5.2				All elements need to be addressed
27			✓			CWI requirement defined.
28			✓			Fabrication equipment requirements.
29	✓	6				When does contract review begin
30	✓	4.38, 13.1, 13.2.3, 18				Assigning inspectors, documenting their training (also see policy 16)
31	✓	13				Establishing an Inspection Sampling Plan
32	✓	12	✓			Fabricators doing field work
33						Policy number not used
34					✓	Can't completely subcontract SPE capability
35						Policy number not used
36	✓	9, 11, 13.2.1	✓		✓	Certificate of Conformance (CofC) for Paint
37				✓		AISC Certified Erectors Subcontracting Erection Work
38						Policy number not used
39						Policy number not used
40	✓	12.1	✓	✓		Maintaining welder qualification
41				✓		FC
42			✓		✓	Documented Procedures
A	✓		✓	✓	✓	Observers for Onsite Audits

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #1—auditors' review of WPS (original fall 2001) (revision 10/25/02) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

Auditors performing onsite audits will sample WPS (welding procedure specifications), PQR (procedure qualification records), and welder performance records (WQTR, WPR, etc.) as objective evidence that the fabricator has the capability to interpret the requirements of D1.1 or D1.5. **If these documents or the execution of these documents do not comply with the code requirement(s), the auditee will be issued a corrective action.** This review by the onsite or documentation auditor in no way constitutes a judgment on the suitability of any WPS for production or the satisfaction of a contract requirement. The procedures cannot not be represented as "AISC approved". The responsibility remains with the auditee.

Additionally: The application/yearly renewal materials will include one sample WPS for each process used for fabrication of structural steel at that facility. The materials will also include one welder performance/qualification record corresponding to each WPS submitted. If required by contract or code, the corresponding qualifying PQR will also be submitted.

Reference element 3, 12, 12.1 Certification Standard for Steel Building Structures

AISC Audit program policy #1a—Procedures identified by AWS Codes (original 5/24/04)(effective 12/1/04)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

AWS D1.1 and D1.5 refer to required procedures or documented required procedures other than the WPS. If the auditee is performing an operation related to such a requirement, it will not need to be a documented procedure that includes the elements of ¶4.11 {Standard for Steel Building Structures.} The item can be a work instruction that is controlled by element 9 and 8, however it must be written. For Firms who hold the Simple or Major Bridge category only, the procedure must also be written.

Reference element 3, 12, 12.1 Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #2—audits in accordance with code (revision 3/28/02 Clarification, amplification)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

Objective evidence gathered in the course of the audit will demonstrate the auditee's ability to understand, interpret and comply with the requirements of industry codes and specifications, regardless of the auditee's specific contract requirements. Demonstration of compliance is required for ANSI/AWS D1.1-Structural Welding Code Steel (building fabrication only), AASHTO/AWS D1.5 Bridge Welding Code (bridge fabrication only), AISC Code of Standard Practice for Steel Buildings and Bridges and RCSC Specification for Structural Joints Using ASTM A325 or A490 Bolts.

Notes to the policy: A customer contract may not require compliance to one of the above standards and codes, but in the course of the documentation review and the onsite audit, compliance will be determined onsite. sample: weld quality in a building shop will be judged compliant when it complies with the acceptance criteria of D1.1, and may be used as objective evidence that an inspection procedure, or welding process procedure is existing, implemented and effective.

Any ultimate customer and specifier will be confident in choosing any AISC auditee knowing that they are compliant to these standards and codes.

Reference element 3 of the Certification Standard for Steel Building Structures

AISC Audit program policy #3—auditing structural steel (revision 3/28/02)(edited to clarity 1/05)

For information all programs

During the course of the onsite audit, auditors will gather objective evidence from the auditee's projects on structural steel items (as defined by COSP ¶2.1.) In the absence of sufficient structural steel projects in house, the auditor will obtain objective evidence related to other than structural steel, (such as the items listed in ¶2.2 in the COSP). The audit report will address this issue—however no public letter or certificate will indicate this observation unless released by the client.

AISC Audit Program Policy approved by the AISC Certification Committee

**AISC Audit program policy #4—D1.5 welding procedure/welder duration (original 3/28/02)
(revision 9/9/02) (revision 10/4/02)**

This policy is an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category for Bridge Projects—a CAR is mandatory.

Regardless of a contract requirement, the auditee's welding procedures will be up to date in accordance with the requirements of duration in D1.5—Bridge Welding Code, current revision.

Additionally, if there are no projects in-house at the time of the audit, the auditee must have at least one WPS (with supporting PQR) qualified and current, and at least one welder qualified in accordance with the requirements of D1.5 including duration requirements. Note: If the auditee uses the SMAW process exclusively for bridge projects, a prequalified WPS in accordance with the requirements of AWS D1.5 is acceptable. (revision 9/9/02)

Documentation audit requirement for simple bridge (initial, upgrade, full)—a SMAW (prequalified procedure) is acceptable if the auditee uses this process exclusively for bridge fabrication. If the auditee uses FCA, GMAW or SAW for bridge fabrication, they must supply a WPS for one process that is supported by a current PQR, i.e. conducted no later than 60 months prior to the documentation audit date, and no later than 36 months prior to the documentation audit date for fracture critical work.

Documentation audit requirement for major bridge (initial, upgrade, full)— The auditee must supply a WPS for one process (other than SMAW) that is supported by a current PQR, i.e. conducted no later than 60 months prior to the documentation audit date, and no later than 36 months prior to the documentation audit date for fracture critical work.

Onsite audit, simple and major bridge—all production for bridges requires compliance with D1.5. All production that is sampled during the onsite will be in accordance with a WPS appropriately qualified, e.g. WPSs utilizing FCAW or SAW will be qualified by a PQR that was conducted no later than 60 months prior to the start of project production, and no later than 36 months prior to the start of project production for fracture critical work. Additionally, SAW must be utilized for main member welding for initials on the mock girder demonstration.

Onsite audit, simple bridge—if the auditee has declared SMAW as the sole process used for bridge work, audit evidence will be sought that supports this declaration. The auditor randomly selects projects to determine if the evidence, (past shop drawings, shop travelers, inspection records, etc.) shows that SMAW is the sole process used for bridge work. If the projects selected by the auditor support the declaration (verbal only required), the auditee is not required to present any further documentation or statement.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #5—consultants to auditees (see also Policy A) (revision 3/28/02) (edited for clarity 1/05)

For information—all programs

In the course of the audit process—administrative review, documentation audit, onsite audit and final review—all correspondence, discussion and interviews will be conducted directly with the auditee. AISC (and the audit firm selected by AISC) is grateful to organizations and individuals who can assist auditees in learning how to establish quality systems, and improve their business by instituting quality system management procedures. Representatives of these auditees who have been retained by the auditee may be present during documentation audit discussions and onsite audit activities. However, they may not pose questions or answer questions on behalf of the auditee or coach the auditee during the auditing process. It is at the auditor's discretion to request removal of these representatives if appropriate. If any organization or individual that has been retained by the auditee falsely represents them as an employee, the auditee's certification may be jeopardized and the audit may be stopped.

AISC Audit program policy #6—falsification of records by auditees (revision 8/22/02) (edited for clarity 1/05)

This policy is a requirement for all categories of the AISC Certification Program—a CAR is mandatory and further Certification Committee action may be taken.

A falsified record clearly does not reflect a commitment to quality or to the AISC certification program on the part of the auditee. The auditor takes specific action when presented with records that are false. Every effort is made to gain information surrounding the record in question to support the observation. This may include continuing the audit to compare substantiating documented information. When clear audit evidence is obtained and verified as false beyond reasonable doubt, the audit is stopped. The auditor contacts the Chicago office for action.

Note: Although the specific record may not represent a direct and immediate threat to product soundness, it is the integrity of all audit evidence that now comes into question. If the record is discovered at a lower level, it must be taken to top management. In most cases the audit will be continued. The auditee and auditee management is given every opportunity to recognize and acknowledge the error. If acknowledgement is not given, certification will not be granted. The auditing committee may conduct a review of the situation and determine the path for reentry into the program.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #7—auditing projects beyond basic structural steel contract requirements

For information—Certification Standard for Steel Building Structures

During the onsite audit, auditors may randomly select a project during the auditing process where the requirements of a contract require more than the “normal” quality (as described by the Certification Standard for Steel Building Structures) during an audit.

Every effort is made by the auditor to select jobs that reflect “normal qualification” as defined by the Certification Standard for Steel Building Structures. Requirements (even if they are the owner’s requirements) beyond basic quality will not be cause for corrective action or jeopardize the auditee’s certification. Conversely, if the random job selected is below the requirements of the Certification Standard for Steel Building Structures, the auditee will still need to meet quality as described by the Certification Standard for Steel Building Structures. However, the specific product does not need to meet the quality standard.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #8—review of Material Test Reports (MTRs) (revision 8/22/02) (revision 3/7/03) (revision 4/1/03) (revision 5/24/04) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

The Auditee must have a written procedure for material identification for all structural material. The procedure must identify how structural material (per COSP ¶2.1 for the building category) is marked for shape and grade. The designation may be the actual values for shape, and grade or may be the auditee's unique mark that can be connected to shape and grade by procedure. If the auditee orders only one type of grade for each material shape (i.e. 572/992 G50 for wide flange, A500 for tube, etc.) marking by exception is permitted. This means that all items for that type of material must have the size identified, but no grade identification is required. If material is ever ordered that is different from the auditee's standard grade(s) must be completely identified with shape and grade.

When materials arrive at the facility, MTRs must be used to verify that the material is as ordered and identify it appropriately before the first fabrication process on that piece. Once the verification is made, it is not necessary that MTRs be kept on file, unless a contract requires it for that specific material. If a contract does not require that MTR's are retained, the auditee can determine if MTR's are retained and how they are filed. The auditee's written procedure details their practice.

If the auditee has material that cannot be "identified" and chooses to designate materials as uncontrolled (that is not used for structural projects), this marking or segregation method must be described in the written procedure.

Positions/individuals who have identified responsibility in the auditee's written procedure must be knowledgeable in the execution of their duties.

Note: audit policy #8 eliminates or replaces the requirements of checklist questions for the erector program.

E Reference: Erector Certification Program Guidelines, section 8.3.2 Advanced Certified Steel Erector – Audit Checklist, OP39 (Site 1) and OP37 (Site 2) and Certified Steel Erector – Audit Checklist, OP36 (Sites 1 & 2) In the event that applicant purchases weld wire, steel material, paint, etc., are the manufacturer's test reports of certificates of compliance on file at the location where the material is being utilized? **Manufacturers test reports are not required to be on file for steel material. Erectors must have a documented procedure for material ID.**

Note: Contract requirements for material ID that are more demanding than audit policy #8 will override the requirements of policy #8 for materials for that specific contract. Auditees must demonstrate how material is segregated for special treatment.

Reference element 9, 11 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #11—Fracture Control Plan (FCP) is required (revision 8/22/02)
(edited for clarity 1/05)

This policy is a requirement for the Fracture Critical Endorsement to the Major Bridge Program Category—a CAR is mandatory.

The auditee must develop, document and implement an effective Fracture Control Plan to qualify and maintain the Fracture Critical Endorsement. The plan or procedure must outline responsibilities and methods employed in the auditee's facility to meet requirements of both checklist questions and the requirements of D1.5, Article 12.

AISC Audit program policy #12—library requirements (revision 8/22/02)

For information—simple/major bridge program

The auditee must have the AREMA document in their library only if the auditee serves the railway industry. Familiarity with the requirements is assessed during the audit.

AISC Audit program policy #13—bolt pre-installation verification requirements (revision 8/22/02)
(notes edited for clarity 1/05)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

The auditee's capability to perform pre-installation verification of bolt assemblies must be verified during the onsite audit process. The auditee must demonstrate this capability for the initial audit and then again for each full audit.

Notes to policy:

- *Pre- installation verification of the assembly prior to installation cannot be satisfied by the bolt manufacturer or supplier. Rotational capacity tests and other verifications performed prior to installation do not satisfy the pre-installation requirement.*
- *The testing device (Skidmore) can be borrowed, rented or owned by the auditee.*
- *Even if the auditee states that the only bolt installation they do is snug tight, the preinstallation verification capability must be demonstrated per RCSC for a pretensioned joint.*

Reference element 12.2, 14 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #15—calibration of volt/amp meters and dry film thickness gages and tapes (revision 8/22/02) (revision 3/7/03) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

The required calibration of measurement devices is as follows:

Volt/amp meters must return for calibration every 12 months at a minimum or when the accuracy of the meter is in question. For the bridge categories, this is a requirement per question D.2.d (C). For the Building Structures category, this is a requirement only if the auditee uses volt/amp meters as the means to verify WPS compliance.

The use of shims which show a comparison to a standard that is traceable to a national standard is sufficient to calibrate DFT. For all painting applications—regardless of manufacturer’s recommendation for the meter itself (i.e. Elcometer®)—the auditor must determine the capability of the auditee to perform these calibrations.

Tapes must show a comparison to a standard that is traceable to a national standard.

Specifically for the Certification Standard for Steel Building Structures ...

The only gages that are required to be in the Auditee’s calibration system are those that are used to demonstrate the final conformance of product. Although the Auditee may choose to include them in the system, gauges that are used for in-process checks or for reference are not required to be part of the Auditee’s calibration system.

Reference element 14 of the Certification Standard for Steel Building Structures

AISC Audit program policy #15a—calibration frequency (original 5/24/04) (edited for clarity 1/05) (effective 7/1/04)

For information—Building Program Category

The Auditee may choose to document a calibration frequency different from the manufacturer’s recommendations if the gage is not used frequently. However, even if the gage is not used frequently, the requirements of specific codes must be followed. As an example, this includes the required yearly calibration of the tension calibrator per RCSC.

Reference element 14 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

**AISC Audit program policy #16—basis for qualification of inspectors (QC personnel)
(original 8/22/02) (revision 9/22/02) (edited for clarity 1/05)**

This policy is a requirement for the Building Program Category—a CAR is mandatory.

Basis of qualification for Inspectors: The auditee must describe and document the basis for qualification of inspectors who conduct final inspection of fabrication processes as described in element 13 of the Certification Standard for Steel Building Structures. for all fabrication processes. The basis for qualification will include either experience or training in metals fabrication, inspection and testing. If the competency of the inspector is verified during the onsite audit, the requirement will be considered satisfactory.

Reference element 4.38, 13, 18 of the Certification Standard for Steel Building Structures

This policy is a requirement for the Simple/Major Bridge Program Category—a CAR is mandatory.

Basis of qualification for Welding Inspectors: Using the direction from D1.1/5 as a guide, the auditee must describe and document the basis for qualification and must include experience and training. The auditee will be required to provide a statement of the extent of the Inspector's qualifications. If the competency of the inspector is verified during the onsite audit, the requirement will be considered satisfactory.

Basis of qualification for inspectors of other fabrication processes: E.1.a *Are there qualified shop inspectors?* No specific requirements or documentation regarding defining the basis can be required (although it is encouraged) as the requirement for documentation is not essential. However, the lack of satisfaction of this question *may be* additive as management question A.2.b, *Are personnel qualified for, and capable of, performance of their duties,* and this question will not be satisfied.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #17—submission requirements (original 9/9/02) (revision 10/4/02) (revision 10/25/02)

This policy is a requirement for the Building Program Category.

AISC will require submission (at the time of billing each year) of a quality manual that addresses all documentation required by the Certification Standard for Steel Building Structures. (reference element 5.6 Certification Standard for Steel Building Structures)

The submission must also include:

- o Referenced procedures if all required information is not included directly in the auditee's quality manual
- o One WPS/PQR/WQR for each welding process used
- o Job descriptions with the qualifications of the position and biographical information for the key functions of the company (will be evaluated during the onsite audit)
- o Cross reference matrix (a table that matches the elements of the Certification Standard for Steel Building Structures with the locations, procedures, paragraphs, work instructions or other quality management system documentation that addresses the requirements of the element)

Submission exceptions:

- o Do not submit detailing standards (will be evaluated during the onsite audit)
- o If there have been no changes to the quality manual, a submission for that year is not required. The previous year's submission will be used for the audit.

Reference element 5.6.2.1 of the Certification Standard for Steel Building Structures

AISC Audit program policy #18—U.S. code requirement and language requirement (original 9/9/02)

This policy is a requirement for the Building Program Category, the Simple/Major Bridge Program Category and the Erector Program Category—will be necessary to pass the documentation audit and mandatory CAR for the onsite audit (§2 below)

Additionally, AISC also requires the mandatory documents submitted during initial and renewal applications to be in English. Additionally, detailing standards must be available onsite in English. (note: this includes biographical information for the SPE endorsement)

Additionally, AISC requires auditees to demonstrate capability to work to all U.S. codes. Although the auditor may use the implementation of regional codes and requirements to demonstrate the functioning of some systems, demonstrated compliance and implementation of required U.S. codes cannot be substituted.

For the onsite audit, translators will be required to aid in assessing work instructions and the implementation of requirements. It is not necessary that the translators be independent—the translator may be from the auditee's organization.

Reference element 3 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #19— final inspection (original 9/9/02) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

Every final inspection that is conducted must be documented. What is final inspected (other than welds) is per the auditee's plan. The auditee must take care to consider other factors when establishing the inspection plan. Other requirements may be involved, which may be dictated by contract requirements.

Reference element 13.2.3, 13.2.4 of the Certification Standard for Steel Building Structures

This policy is an essential question for the Simple/Major Bridge Program Category—a CAR is mandatory.

Question E.2.d, Do all pieces receive a final inspection and is a record kept of this inspection?

This non-essential question is interpreted as an essential when the inspection is concerning welds and contract compliance to AWS D1.5 (linking to D.2.b.1 Is fabrication in accordance with contract documents and specification and are finished products shipped in accordance with approved detail drawings?).

This policy requires retrievable records that are retained for an appropriate period related to contract requirements and what is reasonable to protect the auditee's best interests.

The requirement will be considered non-essential question when it is not related to weld inspection or a contract requirement and will not cause initiation of a CAR unless there are a significant number of other issues that effect scoring. The onsite auditor will note it as a concern and bring it to the auditee's attention at the closing meeting.

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category—a CAR is mandatory.

Weld Inspection VI The AISC Certification Program requires 100% visual inspection of all welds (as required in D1.1/5), and a record to show final inspection of welds. The Program does not dictate that each specific visual inspection (each weld) be documented separately. As an example: an inspector's signature on a traveler indicating that all welds on that piece have been final inspected in accordance with AWS D1.1/5

Reference element 13.2.3, 13.2.4 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

**AISC Audit program policy #20— assessing subcontract detailers (original 9/9/02)
(revision 3/7/03) (edited for clarity 1/05)**

This policy is a requirement for the Building Program Category—a CAR is mandatory.

The Auditee must conduct a review of their subcontract detailing firm(s) which must include at minimum how the requirements are identified on prints for:

- Material requirements,
- coating requirements,
- contract and/or specification needs,
- special contract conditions,
- material special conditions,
- inspection requirements,
- conformance to the auditee’s detailing standard.
- Personnel qualification (résumé’s of checkers that will be working on the project)

The frequency (how often) and sample size (how much) will be defined and documented. The “defined and documented” can be in the auditee’s procedures or quality manual.

Clarification

The Building Program Category requires definition and documentation of the qualification and selection process for choosing subcontract detailing. There is also the requirement (in 10.2) that detailing (as a subcontractor) be periodically reviewed. Fabricators may choose one or more of the methods listed below or create their own appropriate and effective method for their business:

1. Satisfy that the detailer has performed the specific type of work for which the auditee is specifically contracting for via a check of drawings or third party review.
2. Review that the subcontractor’s management have created and implemented procedures to track RFIs.
3. Review references of where individuals (detailer and checkers) have worked.
4. Review samples of work (their drawings).
5. Have a procedure in place to check a chosen percentage of the drawings of the subcontractor for a specific period of time.
6. Records of fabrication subcontractor calls related to detailing errors (show review of patterns and trends).

Clarification—will likely be a concern if not satisfied

If the Auditee selects a subcontract detailer based on price and availability when the subcontract detailer may not yet meet the auditee’s requirements, the following is necessary.

1. The auditee must assess the “pre-knowledge” level of risk when choosing methods to assess the sub-contract detailer. That is—the Auditee is aware that if the project is complex, or has some very critical areas, that increased checks of the subcontractor’s work or other precaution will be necessary for this project.
2. The auditee’s post-assessment must be demonstrable and there must be evidence of a complete assessment of qualification of the sub-contract detailer. That is—the Auditee must set aside time after the project to perform its full subcontractor assessment if they will be adding this provider as a source in the future.

Reference element 7.2.3, 7.1.3, 10.2 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #21— evaluation of the qualifications of the detailing manager (original 9/9/02) (revision 3/7/03)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

The detailing manager shall demonstrate knowledge of the position (as described in ¶7.2.2.1) as well as knowledge of codes related to shop details.

Additionally the knowledge of approval and transmittal procedures related to customer approval and connection consultation subcontracting.

There must be an individual in the auditee's employ that satisfies one of these three criteria: (reference Certification Standard for Steel Building Structures 7.2.2.1)

- Experience in detailing and checking shop and erection drawings meeting the approval of designers for a variety of structures representative of projects the company provides. In lieu of this curricula, the auditee may describe and determine an appropriate way to demonstrate competence.
- Graduate engineer with experience related to structural steel fabrication.
- Licensed P. E. or S.E. with experience related to structural steel fabrication.

Note: the below bullets is a reduction of requirements from the original November 2002 publication of the Certification Standard for Steel Building Structures.

Reference element 7.2.2.1, 5.4.1 of the Certification Standard for Steel Building Structures

AISC Audit program policy #22— Interpretation of Nonconformance (original 3/7/03)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

The Auditee must identify nonconformances related to the performance of their quality management system. Nonconformances are not restricted to just nonconforming product.

These nonconformances must be identified by the Auditee's procedure or during the internal audit, which is then addressed by their corrective action procedure and then reviewed at their management review.

This procedure must also identify how the Fabricator identifies and resolves nonconformances related to the performance of their quality management system. These nonconformances must be identified within the Fabricator's processes and recorded during the internal audit, which is then addressed by their corrective action procedure and then reviewed at their management review. Regardless if the nonconformance of the quality management system is discovered during an internal audit or during the normal course of executing the system, the nonconformance must be recorded.

Reference element 15, 16 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #23— Authority for Disposition of nonconforming product (original 3/7/03) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

The auditee's procedure defines the personnel with responsibility for disposition of nonconforming product. The procedure must also identify qualifications required for individuals that have that responsibility. If the disposition is rework or repair, the result must include re-inspected per drawing, specification, project requirements and the auditee's sampling plan and inspection procedure.

Reference element 15 of the Certification Standard for Steel Building Structures

AISC Audit program policy #24— Separation of QA and QC Management from Production Management (original 3/7/03)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

As long as the individual is qualified, quality assurance and/or quality control management can report to (or be the same individual as) production management. However, this individual must also report directly to (or be) executive management.

Note: this policy supersedes a former policy number 14.

Reference element 5.4.1 of the Certification Standard for Steel Building Structures

AISC Audit program policy #25— Executive Management and the Executive Management Team (original 3/7/03)

For information—Building Structures Program

The members of the executive management team (as defined by ¶5.4.1 and footnote 2) must be aware of (have reviewed) the requirements for the management review detailed in ¶5.2 and the results of the review. They may or may not have been present or part of the review that generates the management review record required in ¶5.2.

The auditee may identify executive management as only the one top individual in the facility, or a team defined by the organizational chart.

Reference element 5.2, 5.4.1, (footnote 2) of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #26— All Elements of the Certification Standard for Steel Building Structures must be addressed (original 3/7/03) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

Regardless of the processes performed at the facility, the Auditee must document all procedures, methods and standards required by each element of the Certification Standard for Steel Building Structures. There must be knowledgeable personnel conversant with the criteria of the specific requirements of the Certification Standard for Steel Building Structures, related codes and specifications related to each element and their own procedure(s).

Note: Elements are *Management Responsibility, Contract and Project Specification Review and Communication, Detailing, Document and Data Control, Purchasing, Material Identification, Fabrication Process Control, Inspection and Testing, Calibration of Inspection, Measuring and Test Equipment, Control of Nonconformances, Corrective Action, Handling, Storing, and Delivery of Product and Materials, Control of Quality Records, Training and Internal Audit.*

See definition of "Element" ¶4.12 Certification Standard for Steel Building Structures.

Reference element 4.12, 5.2 of the Certification Standard for Steel Building Structures

AISC Audit program policy #27— CWI (original 3/7/03) (edited for clarity 1/05)

For information—Simple/Major Bridge program category

When a CWI is required by the AISC Certification Program for the bridge certification categories, a part time employee is acceptable.

If the fabricator does not have an employee, a contract CWI is allowed. The continuous employment or contract status of that individual CWI must be demonstrable.

Regardless of the status of the CWI, at least one CWI must be present for the audit.

AISC Audit program policy #28— Fabrication Process Equipment (original 3/7/03)

For information—Simple/Major Bridge Program Category

The Auditee does not need to have process equipment and inspection gages related to fabrication processes not performed at the facility. Checklist questions related to this equipment can be marked 'non applicable'.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #29— Contract and Project Specification Review (original 3/7/03) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

The Auditee's procedure must address the requirements of Element 6 the Certification Standard for Steel Building Structures. AISC realizes that the estimation or bid process does not always realize in a bid award. Thus, at a minimum, the Auditee must address Contract and Project Specification review criteria beginning when the Auditee accepts the responsibility for performing the work and proceeds.

Additionally, a project review must be completed for every structural steel project. The process has minimums as defined by the Certification Standard for Steel Building Structures Element 6. The Auditee determines within their procedure the level of detail for each review to meet contract requirements for the order.

Reference element 6 of the Certification Standard for Steel Building Structures

AISC Audit program policy #30— Assignment of Quality Control (QC) Inspectors and documented training of existing final inspection personnel (original 3/7/03) (edited for clarity 1/05)

This policy is a requirement for the Building Program Category—a CAR is mandatory.

Assignment of QC Inspectors

Assignment of QC inspectors, (Certification Standard for Steel Building Structures ¶13.1) allows production personnel to inspect their own work as an in-process inspection. However, that inspection cannot be accepted as the final inspection for product conformity. Production personnel can perform final inspection of the work of others, provided they are properly trained (and the training is documented per element 18), and their work is monitored by QC (another QC qualified inspector or QC management.)

For in process operations, The Certification Standard for Steel Building Structures requires that production personnel demonstrate their capability to inspect their own work. This can be demonstrated by their knowledge of the acceptance criteria for the part of the process for which they are responsible.

Documenting training

AISC recognizes that there are inspectors performing final inspection who may have received training many years prior to the requirement for documentation of training. To comply with the current requirement, the Auditee's management must conduct and document a review of each inspector's qualifications currently performing final inspection when the quality management system is implemented. Periodic training is required after this point. That training must be documented in accordance with ¶4.38 and ¶18. Note – Inspector qualification is not for welding only, the fabricator needs to address the qualifications of other final inspections as well – i.e. dimensional, bolt inspection, paint, etc.

Reference element 4.38, 13.1, 13.2.3, 18 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

**AISC Audit program policy #31— Establishing an Inspection Sampling Plan (original 3/7/03)
(edited for clarity 1/05)**

This policy is a requirement for the Building Program Category—a CAR is mandatory.

Although the sampling plan (as referenced in element 13) does not need to be 100% for characteristics other than welds, a sampling plan of zero does not meet the requirement of the Certification Standard for Steel Building Structures. The sampling plan that the Auditee chooses, will be evaluated during the audit process (internal and audits performed by AISC) for effectiveness in assuring the expected contract quality. Management then makes adjustments to the sampling plan if audit results or nonconformance results show it is necessary or prudent.

Reference element 13 of the Certification Standard for Steel Building Structures

AISC Audit program policy #32— Field Work by Fabricators (original 4/22/03)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category—a CAR is mandatory.

Fabrication of structural steel performed by an AISC certified steel fabricator is considered covered by the Fabricator's certification when the work is performed "in the field" with the following conditions:

- a. The work is limited to the repair of work that was fabricated in the facility or new work related to a change request that must be executed after delivery of a specific project. The field site is considered temporary in nature, to execute a limited scope, and the work provides the completion of the service of a specific contract that would have been performed in the Fabricator's facility.
- b. All procedures and requirements of the AISC Certification Program, personnel qualification and equipment must be controlled by the Fabricators audited quality system which include but are not limited to material identification/material control, inspection, control of nonconformance, bolting procedures, welding procedures.
- c. The Fabricator shall include a documented procedure in their quality management system that addresses any special conditions or requirements for executing the requirement of their quality management system under field conditions.
- d. The work may not include erection activities.
- e. The fieldwork cannot be subcontracted (to another AISC Certified Fabricator, AISC Certified Erector or non certified entity)

Reference element 12 of the Certification Standard for Steel Building Structures

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #34—Sophisticated Paint/Coating Endorsement— (original 12/3/03) (effective 7/1/04)

This policy is a requirement for the Sophisticated Painting Endorsement—a CAR is mandatory.

A fabricator must demonstrate the full capability♣♣ of the sophisticated paint endorsement program requirements.

The fabricator (the certified entity) must own or control painting and blasting equipment and have at their facility all equipment as outlined in the endorsement document (i.e. blast equipment, paint sprayers, inspection gages, etc.).

This does not preclude the endorsement holder from subcontracting sophisticated paintwork to a certified SPE or QP3 entity when capacity is not available.

♣♣Note: full capability is defined as all essential questions in the SPE checklist and the non-essential questions related to equipment and facility identified by this policy.

AISC Audit program policy #36—Certificates of Conformance (CofC) for Paint (effective 7/1/04)

This policy is a requirement for the Building Program Category, and is considered as an essential question for the Simple/Major Bridge Program Category and is a requirement for the Sophisticated Painting Endorsement—a CAR is mandatory

At a minimum, the Certificate of Conformance must contain the paint name and a written statement from the manufacturer that the tests performed meet or exceed the paint specification and any additional contract requirements

Reference element 9, 11, 13.2.1 of the Certification Standard for Steel Building Structures

AISC Audit policy #37 AISC Certified Erectors Subcontracting Erection Work (effective 12/17/03)

This policy is a requirement, and is considered as a critical question for the Erector Program Category—a CAR is mandatory.

When an AISC Certified Erector must subcontract erection and the requirement for AISC Certified Erector is included in contract documents, the subcontractor must also be an AISC Certified Erector. If the requirement is waived, it must be in writing by the owner.

AISC Audit Program Policy approved by the AISC Certification Committee

**AISC Audit program policy #40—maintaining welder qualification (original 5/1/05)
(effective 5/1/05)**

This policy is a requirement for the Building Program Category, the Simple/Major Bridge Program Category, and the Erector Program Category—a CAR is mandatory.

Qualification of welders for AISC certification (all programs) is the initial record of qualification and the continuing record of the welder's engagement in the process for which they are qualified. The Firm must maintain a record of a date(s) where the welder has used the process every six months, or once in the last 6 month period. This will provide evidence that the qualified welders have satisfied the six-month limitation on welder qualification required by AWS welding codes.

The Firm may choose any form of record (i.e. log, production records, time sheets etc.) to provide evidence of use of the process for each welder.

AISC Audit program policy #41—FC (original 5/1/05)

EFFECTIVE DATE 11/1/05

This policy is a requirement for the FC endorsement—a CAR is mandatory.

To qualify for the Fracture Critical Endorsement (FC), the auditee must demonstrate capability to produce work that meets the requirements of Section 12, AWS D1.5. If the auditee has not produced FC work, they can demonstrate capability by running a job or a portion of a job as if it met FC requirements. Simulated purchasing documents and drawings can demonstrate capability in preparing for FC work. The auditee must have at least one welding procedure (and PQR) and one welder qualified for FC work.

Additionally, the auditee must demonstrate that responsible personnel have received training in the requirements of their written procedure and the requirements of Section 12, AWS D1.5. This training must be documented. Responsible personnel include the functions with responsibility for detailing, purchasing, fabricating, controlling and inspecting fracture critical work.

If the firm has had no fracture critical work for three years, they must demonstrate ongoing capability by running a job or a portion of a job as if it met FC requirements.

AISC Audit Program Policy approved by the AISC Certification Committee

AISC Audit program policy #42—Documented Procedures (original 3/21/06)

EFFECTIVE DATE 7/1/06

This policy is a requirement for the Major Bridge Program and the Fracture Critical Endorsement Categories—failure to comply will result in an unsatisfactory rating for the Checklist question requiring the procedure.

Procedures required by the Certification Program shall be established, documented, implemented, and maintained. The documentation provides information about how to perform an activity or process consistently. Documentation can include written instructions, drawings, diagrams, charts, specifications, and references to or excerpts of appropriate standards and codes. Documentation shall contain:

- The Purpose of the procedure
- Process definition that includes steps required for completion
- Assignment of responsibility for completion
- Assignment of responsibility for review of the procedure
- Identification of records that are generated.

An effective Quality Management System depends on consistent process implementation and the ability to make process adjustments for the sake of improving quality. Documented procedures are critical in achieving these two objectives.

Policy #A

Observers for Onsite Audits

(original fall 2001)(revision 10/25/02) (revision 7/6/04)

This policy is a requirement for all programs.

Observers may be present during an onsite audit as guests of QMC, AISC or the Auditee.

Except for a statement of purpose during the Opening Meeting, the observer does not address the auditee during the onsite audit. If asked direct questions by the auditee, the response should be brief and redirected to the audit team lead.

When an observer is present during an onsite audit, the team lead may schedule brief opportunities for the observer to pose questions to the team during the audit process. These sessions are conducted without employees of the auditee present or in auditory proximity.

The observer must agree to protect the confidentiality of the audit and the auditee.

Note: A bold border line along the left margin marks changes from the previous revision.