



# CERTIFICATION PROGRAMS

## Supplemental Requirements for Bridge Fabricators (SBR, IBR, ABR)

### Preface

The 2024 revision is not a complete revision of the *Supplemental Requirements for Bridge Fabricators (SBR, IBR, ABR)*. The following changes have been made in this revision:

#### Section 1 Before the Audit

- BR1.4 Editorial
- BR1.5 Editorial
- BR1.6 Editorial

#### Section 2 During the Audit

- BR2.2 Revision
- BR2.4 Editorial
- BR2.7 Revision

#### Section 3 Fabricators of Intermediate Bridges (IBR)

- BR3.2 Revision
- BR3.3 Revision
- BR3.4 Revision

#### Section 4 Fabricators of Advanced Bridges (ABR)

- BR4.1 Revision
- BR4.3 Revision
- BR4.4 Revision



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## Scope

This document (hereinafter referred to as the *Supplements*) provides the additional requirements for the Certification Program for Bridge Fabricators (SBR, IBR, ABR) (hereinafter referred to as the *Program*).

The table below lists the current certifications and endorsements, and those superseded:

Current Certification/Endorsement	Superseded
<i>Certified Bridge Fabricator - Simple (SBR)</i>	<i>Simple Bridge Certification</i>
<i>Certified Bridge Fabricator - Intermediate (IBR)</i>	<i>Major Bridge Certification</i>
<i>Certified Bridge Fabricator - Advanced (ABR)</i>	<i>Major Bridge Certification</i>

## **Section 1 Before the Audit**

- BR1.1 Participants and Applicants are required to have available and comply with these *Supplements* and the *Governing Requirements for Certification Programs* (hereinafter referred to as the *GRs*).
- BR1.2 The *Standard for Certification Programs* (hereinafter referred to as the *Standard*) is the primary normative document for all Certification Programs. Whenever there is a conflict between the *Supplements* and the *Standard*, the *Supplements* shall govern.
- BR1.3 *Standard* Chapter 1 (General Requirements) and Chapter 4 (Bridge Fabricator Requirements) apply to this *Program*.
- BR1.4 This *Program* will issue certifications as Bridge Fabricator. It includes three categories: Simple Bridge (SBR), Intermediate Bridge (IBR), and Advanced Bridge (ABR). Each facility of a Participant and Applicant can only apply for and be certified under one category. Refer to Chapter 4 of the *Standard* for descriptions of these categories.
- BR1.5 Participants and Applicants are eligible to apply for the Complex Coatings Endorsement (CCE 1, 2, or 3). For information and requirements concerning this endorsement, refer to GR Section 2, “Applying for Certification,” or Section 8, “Making Changes to the Certification Scope,” and the *Supplemental Requirements for Applicators of Complex Coatings Endorsement (CCE)*.
- BR1.6 Participants and Applicants are eligible to apply for the Fracture Control Endorsement (FCE). For information and requirements concerning this endorsement, refer to GR Section 2, “Applying for Certification,” or Section 8, “Making Changes to the Certification Scope,” and the *AISC Supplemental Requirements for Fracture Control Endorsement for Bridge Fabricators (FCEB)*.



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BR1.7 Applicants to this *Program* must submit an application, payment, and all documents required by the *Application Document Submittal for AISC Certification—Fabricators and Manufacturers*.

## Section 2 During the Audit (All Categories—SBR, IBR, ABR)

BR2.1 The Quality Management System (QMS) that this *Program* applies to will be audited. Sample jobs/contracts of steel bridge work meeting the scope of their certification(s) and endorsement(s) will be used to demonstrate capability to meet the *Program* regardless of whether the job/contract requires an AISC certified bridge fabricator.

BR2.2 Participants and Applicants are required to be actively fabricating in the shop at the time of the audit that can be used to demonstrate compliance with the provisions of the Program. This work must be structural steel as defined in Section 2.1 of the *Code of Standard Practice for Steel Buildings and Bridges* (AISC 303). This work must be steel bridge work meeting the applicable category. **If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

Solutions may include a demonstration of capability (See GR 5.11) that follows the quality management system. Participants unable to adhere to this requirement prior to the expiration of their certificate will be referred to the Certification Review Group (CRG), who will make a decision on whether or not the certificate renewal process will be terminated.

Intermediate bridge fabricators refer to Section 3 below for further details.

Advanced bridge fabricators refer to Section 4 below for further details.

**If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.**

BR2.3 Section 1.3 of the *Standard* is amended by the following:

- All references must be available in English.
- Availability of the current editions of the following additional references are required. (*Note:* Other editions may also be required by existing participant contracts.)
  - AASHTO/AWS D1.5M/D1.5 *Bridge Welding Code*
  - SSPC-PA 1, *Shop, Field, and Maintenance Coating of Metals*
  - SSPC-PA- 2, *Paint Application Standard No. 2*
  - AASHTO/NSBA, *G4.1 Steel Bridge Fabrication QC/QA Guidelines*
  - AWS D1.1/D1.1M, *Structural Welding Code—Steel*, is not required.

Provisions of *Standard* Element 1.3 not modified above remain in effect.

BR2.4 The AWS Certified Welding Inspector (CWI) may be an employee of the Participant or Applicant or contracted. In the case of the latter, contract status and qualifications of the CWI must be demonstrable. The CWI must be available during the audit.



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- BR2.5 Participants and Applicants will be audited and evaluated to ensure compliance with the current AASHTO/AWS D1.5M/D1.5 *Bridge Welding Code*, regardless of whether this is required by the sampled contracts and specifications.
- BR2.6 Participants and Applicants must perform bolting method demonstrations at each Initial Certification, and as indicated in the audit plan, first in-person audit when a Participant holds a Conditional Certification, scope change audits (as applicable) and as determined necessary by the CRG.

The demonstrations shall comply with the current RCSC *Specification for Structural Joints Using High-Strength Bolts* Section 7, “Pre-Installation Verification,” and with the Rotational Capacity Test for high-strength bolts in ASTM F3125 Annex A2.

- BR2.7 Participants and 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 audit.
1. One representative Welding Procedure Specification (WPS)
  2. Supporting Procedure Qualification Record (PQR), when required
  3. Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness

Observation of PQRs, WPSs, or WPQRs does not constitute approval by AISC, QMC, or the QMC auditor. The applicant or participant is responsible for preparing and maintaining documents conforming to the applicable welding code.- Reference AASHTO/AWS D1.5:2020 Clause 7, et al.

Observation of PQRs, WPSs, or WPQRs does not constitute approval by AISC, QMC, or the QMC auditor. The applicant or participant is responsible for preparing and maintaining documents conforming to the applicable welding code.- Reference AASHTO/AWS D1.5:2020 Clause 7, et al.

## **Section 3 Fabricators of Intermediate Bridges (IBR)**

- BR3.1 Participants and Applicants applying for Intermediate Bridge Certification shall be required to perform a demonstration of capability (See GR Section 5.11) during each Initial Certification (RFN) audit unless there is intermediate bridge work in the shop at the time of the audit. This is in addition to the eligibility requirements of the *Standard* Chapter 4.I.

*From Standard Chapter 4.I:*

*“The fabricator shall have either:*

- (a) Supplied plate girder spans with field splices for highway or railroad bridges within the last five years, or*
- (b) Established a documented training program for the purpose of communicating intermediate bridge work functions to the work forces, and demonstrated capability to fabricate intermediate bridges.”*



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BR3.2 Participants renewing their Intermediate Bridge Certification shall be required to perform a demonstration of capability (See *GR* 5.11) during each audit unless there is active intermediate bridge work in the shop at the time of the audit or intermediate bridge work (which includes representative that has been self-performed and or mock exercises) has been completed within the past two years. This is in addition to the eligibility requirements of the *Standard* Chapter 4.I. **If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

**If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.**

BR3.3 Participants and Applicants renewing or applying for Intermediate Bridge Certification shall demonstrate that training has been performed at least annually for the communication of the requirements for Intermediate bridge work unless intermediate bridge work has been fabricated (self-performed) within the past year. This training must be documented and available during the audit. This is in addition to the eligibility requirements of the *Standard* Chapter 4.I.

BR3.4 Participants and 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 audit.

1. One representative CJP groove weld Welding Procedure Specification (WPS) using the SAW process
2. The supporting Procedure Qualification Record (PQR) for the CJP groove weld WPS using the SAW process
3. One representative Welder Qualification Test Record (WQTR) for the CJP groove weld using the SAW process, maintained current and qualified with records of period of effectiveness

## Section 4 Fabricators of Advanced Bridges (ABR)

BR4.1 Applicants applying for Advanced Bridge Certification shall have representative work (See *GR* Section 5.11) during each Initial Certification audit unless there is advanced bridge work in the shop at the time of the audit. This is in addition to the eligibility requirements of the *Standard* Chapter 4.A.

*From Standard Chapter 4.A:*

*“The fabricator shall have either:*

*(a) Supplied advanced bridges for highway or railroad applications within the last five years, or*

*(b) Supplied intermediate bridges for highway or railroad use, established a documented training program for the purpose of communicating advanced bridge work functions to the work forces, and demonstrated capability to fabricate advanced bridges”*

If you have not fabricated intermediate or advanced bridges (as defined by the *Standard for Certification Programs* (AISC 207-23)) for highway or railroad use, you are not eligible to apply for ABR certification.



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BR4.2 Participants renewing their Advanced Bridge Certification shall be required to have representative work (See *GR 5.11*) during each Renewal Certification audit unless there is an active advanced bridge or intermediate bridge work in the shop at the time of the audit or advanced bridge work or intermediate bridge work has been fabricated (self-performed) within the past two years. This is in addition to the eligibility requirements of the *Standard* Chapter 4.A.

**If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

**If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.**

BR4.3 Participants and Applicants renewing or applying for Advanced Bridge Certification shall demonstrate that training has been performed at least annually for the communication of the requirements for advanced bridge work unless advanced bridge work has been fabricated (self-performed) within the past year. This training must be documented and available during the audit. This is in addition to the eligibility requirements of the *Standard* Chapter 4.A.

BR4.4 Participants and 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 audit.

1. One representative CJP groove weld Welding Procedure Specification (WPS) using the SAW process
2. The supporting Procedure Qualification Record (PQR) for the CJP groove weld WPS using the SAW process
3. One representative Welder Qualification Test Record (WQTR) for the CJP groove weld using the SAW process maintained current and qualified with records of period of effectiveness