

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

#### **Preface**

The 2023 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

No changes

Section 2 During the Audit

- 2.2 Revision
- 2.6 Revision

Section 3 Fabricators of Intermediate Bridges (IBR)

• 3.2 - Editorial

Section 4 Fabricators of Advanced Bridges (ABR)

• 4.2 - Editorial

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The table below lists the current certifications and endorsements, and those superseded:

Current Certification/Endorsement	Superseded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

## **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 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 Program 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 Program Requirements for Fracture Control Endorsement (FCE).
- 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 have work 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 also 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.

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

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.



- 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 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.
- 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 a bolting method demonstration at each Initial Certification (RFN), Full Certification Renewal (RF) audit, 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



## 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 4.1.

From Standard Chapter 4.1:

"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."
- BR3.2 Participants renewing their Intermediate Bridge Certification shall be required to perform a demonstration of capability (See *GR* 5.11) during each Renewal Certification (R1, R2 or RF) audit unless there is intermediate bridge work in the shop at the time of the audit or intermediate bridge work 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 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 groove weld SAW Welding Procedure Specification (WPS)
  - 2. Supporting Procedure Qualification Record (PQR)
  - Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness



## <u>Section 4 Fabricators of Advanced Bridges (ABR)</u>

BR4.1 Applicants applying for Advanced Bridge Certification shall have representative work (See *GR* Section 5.11) during each Initial Certification (RFN) 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 vears. 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"
- Participants renewing their Advanced Bridge Certification shall be required to have representative work (See *GR* 5.11) during each Renewal Certification (R1, R2 or RF) audit unless there is advanced bridge or intermediate bridge work in the shop at the time of the audit or advanced bridge work has been completed 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 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 groove weld SAW Welding Procedure Specification (WPS)
  - 2. Supporting Procedure Qualification Record (PQR)
  - 3. Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness