



CERTIFICATION PROGRAMS

Supplemental Requirements for Fracture Critical Endorsement (FC)

Preface

The 2019 revision is not a complete revision of the *Supplemental Requirements for Fracture Critical Endorsement (FC)*. The following changes have been made in this revision:

Preface - New Section Added

Section 1 Before the Site Audit

- FC1.1 - Editorial

Scope

This document (hereinafter referred to as *Supplements*) provides the additional requirements for the AISC Certification Program Fracture Critical Endorsement (FC) (hereinafter referred to as the *Program*).

Section 1 Before the Site Audit

- FC1.1 All Participants/Applicants are required to have available and comply with these *Supplements* and the *Governing Requirements for Certification Programs* (hereinafter referred to as *Requirements*).
- FC1.2 This *program* is an endorsement and requires concurrent certification(s) to:
- Certified Fabricator of Steel Bridges (all categories), OR
 - Certified Manufacturer of Highway and Bridge Components
- FC1.3 This *Program* uses Chapter 4.F of 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.
- FC1.4 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 Site Audit

- FC2.1 The current edition of AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*, is required. (*Note: Other editions may also be required by existing participant contracts.*)



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- FC2.2 Participants/Applicants will be audited and evaluated to ensure compliance with the current AWS D1.5M/D1.5, *Structural Welding Code - Steel*, regardless of whether this is required by the sampled contracts and specifications.
- FC2.3 Participants/Applicants renewing or applying for the Fracture Critical Endorsement shall maintain the following documents in compliance with Clause 12, AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*, for Fracture Critical work 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
- FC2.4 Participants/Applicants renewing or applying for this *Program* shall demonstrate capability to produce bridge or bridge and highway component work that meets the requirements of Clause 12, AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*. This may be achieved by providing quality records of work in progress at the time of the site audit or completed within the past two years. If the participant has not produced this type of work within the past two years, then its capability shall be demonstrated by running a job or a portion of a job as if it met FC requirements in accordance with the Fracture Critical Mock Exercises. This is in addition to the eligibility requirements of the *Standard* Chapter 4.F.

From the Standard Chapter 4.F:

"The fabricator shall have either:

- (a) Supplied fracture-critical members in accordance with AWS D1.5 within the last five years, or*
- (b) Established a documented training program for the purpose of communicating fracture-critical work functions to the work forces, and demonstrated capability to fabricate fracture-critical members."*

- FC2.5 Participants/Applicants renewing or applying for the Fracture Critical Endorsement shall demonstrate that training has been performed at least annually for the requirements of their Fracture Control Plan and the requirements of Clause 12, AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*. This training must be documented and available during the site audit. This is in addition to the eligibility requirements of the *Standard* Chapter 4.F.