

# Clearly Certification

BY BRIAN RAFF

## AISC Certification tackles a tough subject—what happens in a fabrication shop audit—with an innovative new brochure.

**THEY SAY A PICTURE IS WORTH A THOUSAND WORDS.** But by my calculations, it's actually worth at least 8,844 of them—the number of words that make up the AISC Certification Standard for Steel Building Structures. If you're reading this article, you are most likely an engineer—or at least a proponent of the steel construction industry—which means you are probably a visual learner like me. As a visual learner, pictures have always been more effective to me in explaining concepts and processes. And perhaps your learning and early career experiences have been similar to mine.

As a structural designer just out of school, I found myself checking shop drawings, preparing plans, details, and mounds of computer and hand calculations. However, *context* was not part of my early career. I knew what a W24x55 should look like, as I had seen pictures in textbooks. But W24x55s, like all other shapes, were just lines on a piece of paper or on a computer screen. It wasn't until I visited a steel mill and a structural steel fabrication shop that I truly understood what a wide-flange section was and how it was cut, drilled, burned, spliced, etc.

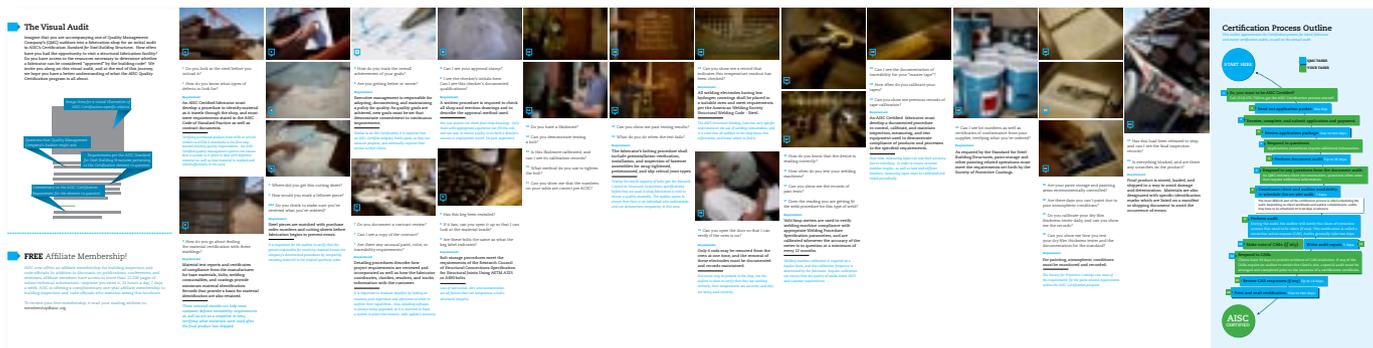
Similarly, I could not conceive what went on "behind the scenes" at a fab shop, and I had many questions. What types of errors affected steel fabrication, and how were they handled? What were

shops doing to minimize these errors, and how were fabricators going to make my plans and details come to life in the field?

By tagging along on an AISC Certification audit years later, I gained some perspective on how fabricators approached quality, and as a result, many of the above questions were answered. Naturally, I thought it would be a great idea to create a tool that would speak directly to those who still have not found their own answers to questions like the ones above—a tool that caters to us visual learners.

And we've done just that. AISC Certification has developed a new brochure intended to take you along, albeit virtually, on a Certification audit. As you experience this visual journey, imagine that you are accompanying one of Quality Management Company's (QMC) auditors into a fabrication shop for an initial audit to AISC Certification's *Standard for Steel Building Structures*. See what the auditors see, listen to some typical questions that they ask, and find out what they are really looking for and why. By the end, we hope you will have a better understanding of what the AISC Quality Certification program is all about.

Looking through the brochure, you will notice some images indicating the importance of documentation and records—the basis of a company's quality management system. The AISC Certifica-



The new Certification brochure explains the auditing process clearly in words and pictures.

**Quality Corner** is a monthly feature that covers topics ranging from how to specify a certified company to how long it takes to become a certified company. If you are interested in browsing our electronic archive, please visit [www.aisc.org/QualityCorner](http://www.aisc.org/QualityCorner).

tion program requires that its participants write a quality manual, and AISC holds a fabricator or erector accountable for everything written. The only way to ensure that a company is meeting quality Certification requirements is to conduct an onsite audit to verify that a quality management system has been implemented effectively. One of QMC's auditors works their way through the shop and talks to everyone from the president to the employees on the shop floor, asking questions and checking records to ensure that all requirements set forth in the *Standard* are met, and that there are no interruptions in the flow of information.

In order to get a better understanding of this auditing process, we have visually stratified the brochure/audit into four separate layers:

**Vision.** See what the auditor sees and get an idea of what QMC's auditors are looking for.

**Assessment.** As the auditors go through the *Standard for Steel Building Structures*, there are many elements that require documented procedures as well as records, process knowledge, etc. The auditor asks leading questions, waiting for answers that verify the employee's knowledge of his or her roles and responsibilities.

**Requirements.** Requirements listed in the brochure are referenced directly from the *Standard* and are intended to give you a sense of what auditors are looking for when asking questions.

**Commentary.** This final layer is meant to place the technical content on the back burner and provide a conversational explanation of why the auditor is asking the question as it relates to the overall quality of the fabrication shop.

This virtual journey covers the entire spectrum of steel fabrication from receipt of materials from the mill or service center, to final product shipment to the job site. It provides a quick, effective way to educate members of your project team about the depth and breadth of the AISC Certification program without having to read through the technical Certification documentation. In addition to the visual representation of the audit, a timeline is provided to give you and your potential owner and contractor a better understanding of how long the Certification process can take. If you have ever specified the use of an AISC Certified fabricator or erector in the past, then you may have experienced a low bidder purporting to be in the pro-

cess of getting their AISC Certification. It is important to keep in mind that the certification process is a rigorous one taking many companies a significant amount of time to navigate—and some are never able to get the proper quality management system in place to become AISC Certified.

### Sticking to Code

While it's extremely important for owners to understand the value that a Certified company can add to a project, it is also important that building code officials recognize the essentials of the program. Code officials and building inspectors also tend to fall into the category of visual learners, as this concept encompasses most of what they do. Because many local jurisdictions don't have the time or resources to fully research the details of the AISC Certification program, this brochure can be an extremely effective vehicle to pique interest and convey important aspects of the program. If a code official can identify with how an AISC Certified fabricator meets the requirements of an "approved fabricator" set forth in Chapter 17 of the *International Building Code*, time and money can be saved by avoiding code-required special shop inspections.

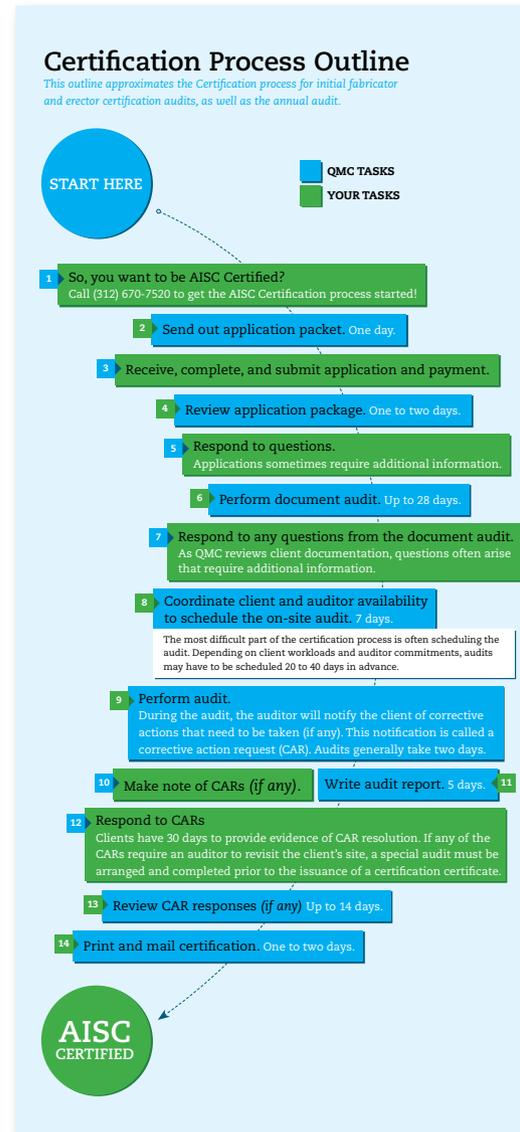
### More than Words

As the number of AISC Certified fabricators increases to more than 700, the Certification program continues to gain recognition for setting the standard in quality steel fabrication. This recognition can be attributed in part to our Certified fabricators who stand up for what they believe in and act as advocates of the program in their communities. Specifiers play an equally important role contributing to the overall quality of the steel construction industry by requiring the use of AISC Certified companies on each and every project. As designers, you now have an even more effective tool to communicate the importance of quality Certified structural steel fabrication. This visual journey is more than just words; it's a realistic depiction of a comprehensive Certification audit. It provides a picture of what AISC quality Certification really represents. Experiencing this journey can help members of your project team not only understand, but also truly *see* why this program is so important.

For a hard copy of the brochure, call 312.670.7520 or e-mail [certinfo@aisc.org](mailto:certinfo@aisc.org). Or, you can download a PDF version at [www.aisc.org/certbrochure](http://www.aisc.org/certbrochure). **MSC**

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*Cives Steel Company—Midwest Division ([www.cives.com](http://www.cives.com)) graciously allowed us to photograph their fabrication shop. Photos were taken by Jessica Sladek ([www.jessicasladek.com](http://www.jessicasladek.com)).*



The brochure's easy-to-read timeline outlines the process of an initial certification audit.

In order to increase awareness of the Certification program, AISC is offering a complimentary one-year affiliate membership for building inspectors and code officials that mention this brochure. Visit [www.aisc.org](http://www.aisc.org) for the benefits of AISC membership. Contact [membership@aisc.org](mailto:membership@aisc.org) for more details.