

# Are you good enough to get better?

## AISC Certification for Building Fabricators—One size fits all!

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**T**oday nearly 20% of AISC Certified companies have 25 or fewer employees with more than 100 companies having less than 20 total employees. Their reasons for participating in the program range from, “So I can bid on jobs that require it” to “All my competitors are Certified” to our favorite “I knew we were a good company, but I wanted a tool to help me find the holes in my system.”

Most small fabricators that choose not to be certified cite reasons such as: “It’s just not for us. The program criteria favor the big boys.” “Most of our customers don’t care about the stuff you audit to. Or at least they don’t appreciate it.” “It’s not like I’m putting a rocket into space.” Or the most popular reason: “As a small fabricator we simply don’t have the time or money it will take us to become certified.”

Becoming an AISC Certified company does take time and money. The real questions are how much and is it worth it? Or are the naysayers right? One particular fabricator claims it will cost him over \$50,000 to become AISC Certified under the *Certification Standard for Steel Building Structures (Building Standard)*. Because the annual certification fees average only \$5,000, his factor of 10 was shocking.

To protect the names of the innocent let’s call this fabricator Chris and his company Zeus Iron Works. Zeus Iron employs between 20–25 people with approximately 15 working in the shop. Chris runs a clean, organized shop; is highly-regarded by his clients; and enjoys a stable business comprised of many repeat customers. Chris firmly believes that his company can benefit from AISC Certification, but he just doesn’t have the resources available. Let’s look at some of Chris’s concerns that make up his \$50,000 price tag:

### “I don’t have a CWI on staff.”

This is a common misconception. The *Building Standard* does not require that you have a CWI in your employ. However, the personnel who perform final visual inspection of welds must be qualified to execute this task. Quality Management Company’s

(QMC) on site auditor will explore your inspector’s competence with an eye towards understanding and applying weld acceptance criteria, properly using weld gages; and properly executing welding procedure specifications (WPSs).

### “Roy is my welding inspector. How can I prove that he is qualified and equivalent to a CWI?”

Resumes, work histories and training records can show experience, education, or training in both fabrication and inspection methods. Acceptable training providers may be any of the following:

- a nationally recognized provider
- a qualified person or school in your local area
- an experienced person in your employ.

### “I can’t afford to implement a system to trace the chemical and mechanical properties for every piece of steel we order.”

You don’t have to! There are no requirements for material traceability for the building fabricator program. The traceability you describe is common in bridge industry provisions and can affect AISC Certified major bridge fabricators, but it is seldom required for building fabricators with the exception of high-seismic regions. There are some simple requirements for building structures:

- You do need to create a simple written procedure that shows how your staff identifies (marks) structural material (AISC *Code of Standard Practice*, Section 2.1) for shape and grade. At some point before the first fabrication operation, someone needs to take a look at the MTR (mill test report) for the material to see that it complies, but you don’t need to keep it.
- Be sure to carefully read your project notes and specifications. Your clients may request something more stringent.

### “I would need to hire a full time employee to write the mountains of documentation required.”

There are only two points you need to remember: don’t write what you don’t do and keep it simple! We’ve seen first-rate quality manuals comprised of less than 40 pages. Alternately we’ve had companies submit 300 page manuals (lovingly referred to as the “door stop”) and receive over 20 corrective actions on their audit. Small fabricators

are at an advantage here—your procedures don’t have to be as elaborate. The advantage for bigger companies is that they have more procedures already documented simply as a means of doing business. Documentation shouldn’t be viewed as a burden. Instead look at it as a management tool.

### “So how long will it take to get my system ready to be certified?”

It depends! If you have well-defined procedures in place (and all of your people are aware of and trained to those procedures) that address each element in the *Building Standard*, the primary challenge will be to accurately document what you already do. Many of your procedures may in fact already be documented. During this process, some fabricators discover that their system may not be as fully implemented as they had thought. Subsequently, the process can take longer. The best advice we can offer is start early and call QMC if you have questions or simply want to verify that you’re on the right path.

### “What we do is so straightforward we don’t write it down. For instance we’ve got two fitters that are both trained to do final inspection. We visually inspect 100% of all pieces. The fitter doing the particular inspection checks the piece and initials the traveler indicating the piece is ready to be loaded onto the truck. It’s that simple.”

Chris didn’t realize that those statements were the makings of a procedure according to the *Building Standard*. A procedure must be comprised of a purpose, responsibility, procedure (What are the steps involved? And what is the frequency?), records generated, and revision history. So if we look at Chris’s final inspection procedure with that in mind we have the following:

- **purpose:** final inspection
- **responsibility:** the shop fitters
- **procedure:** We visually inspect 100% of all pieces. The fitter doing the particular inspection, checks the piece and initials the traveler indicating the piece is ready to be loaded onto the truck
- **generated records:** the traveler
- **revision history:** original issue

As a procedure this would need some more meat. For instance an auditor may ask, “Do the

fitters check their own work?" But Chris has a solid start. Just remember, say what you do and keep it simple! Also keep in mind the first year is the hardest. Your manual is a living document, but the changes will be minor compared to the effort required to assemble it for the first time. Take advantage of the free resources at [www.QMOnline.com](http://www.QMOnline.com) for a jump-start on your documentation. And if you are considering hiring a consultant to help with your documentation, please read the March 2005 *Quality Corner* before doing so.

### **"I can't afford to add staff!"**

A good quality management system should integrate into all of your processes without hiring someone new. Perhaps you can get training for one or two of your key personnel. Many responsibilities can be combined. In those small shops the drafting manager often acts as the purchasing agent—the advanced Bill of Materials feeds directly from one to the other in most shops. The management representative can be anyone you choose. You want to keep fabrication processes separate from quality control if possible, but shop workers can inspect the work of others as long as they have the proper, documented training to do so. For example, if you only have two welders, Welder A can inspect the work of Welder B if he knows what he is to look for.

### **"Who can conduct the internal audit?"**

You may select anyone to perform a part of or the entire internal audit. They must not audit their own responsibilities. However, one individual can, if absolutely necessary, audit their own responsibilities—the Management Representative. If you wish you can also subcontract your internal audit out to a consulting service that specializes in these types of audits. Just ensure that all elements of the *Building Standard* are addressed, and that the person performing the internal audits is qualified to do so.

So what's the bottom line? It's hard to say what it will cost a small firm, but it's clear that \$50,000 is many times the real cost. And yes, there are a lot of good companies out there that are not AISC Certified. AISC Certification alone doesn't make you a good company—but it does make your company better. Take the words of Jim Pancero, a nationally recognized business-to-business sales man-

## **The Intangible Benefits of AISC Certification**

Companies that overcome the obstacles to becoming AISC Certified reap the benefits immediately. They uncover inefficiencies in their company that were likely costing them time and money. They get an objective means for telling their customers, "We're a good company." They find they are better prepared to take on jobs they otherwise might have passed on. And they have a valuable marketing tool. The improvements to your business processes should outweigh the cost of your time and the fees.

### **If you're going to make a mistake, why not learn something from it?**

When Chris was asked what Zeus Iron Works does about non-conformances he replied, "We fix them." This is a missed opportunity for improvement, because he doesn't know the bang for his buck. An effective non-conformance plan can save you money in the long run and every dollar saved goes right to the profits. What can you do? Again keep it simple. Start with a log that includes the date, type of non-conformance, and how long it takes to fix. Then you can do some enlightening math. You can easily identify trends in people, processes or time of day. Remember back in the '80s when they said never buy a car made on Monday mornings or Friday afternoons? Lots of non-conformances can be attributed to process inefficiencies. Larger companies can hide the costs of non-conformances. Not a small shop—these can put you out of business. The audit process can uncover common causes of variation. And in most manufacturing processes, including steel fabrication, the majority of defects or non-conformances arise from a limited number of causes.

Small businesses can't afford mistakes. They can't recover from errors, bad products, or contract omissions as easily as larger ones. Big fabricators can bury these costs or at least spread them out. If you make a mistake and have to redo it or worse yet have to fix it in the field it will be expensive, and those are only the costs you can measure. What will this do for your relationship with your customer? A quality management system may be your best competitive weapon in tough times or in competition with larger companies.

### **Business is changing. What are you doing to stay competitive?**

As an AISC Certified company you are making a statement to your customers that quality is important to you. It may not be fair, but people often assume that large companies are more capable. Big companies tend to work on projects with greater visibility. Their name is out there. Smaller fabricators don't get as many opportunities for free press. Having a third party independently audit your firm is a great way to indicate that you are as competent as a big shop. It will level the playing field. And what better marketing tool than to have your name on the AISC web site. Each month hundreds of visitors rely on "find a certified company" on the AISC web site ([www.aisc.org](http://www.aisc.org)).

Remember the days when deals were done with a handshake and your business relationships were everything. Let's face it—business is changing. The days of people staying with the same company for the length of their career are fading. Companies are being bought, sold, acquired, liquidated, consolidated, changing ownership, changing products—this doesn't just happen to public companies it is happening in the steel fabrication industry as well. Many of you have said, "That will never happen to me." But how can you be sure? And when a company closes some of the characters go down the street and start fabricating steel out of a garage and a new low-cost competitor is born to muck up the bid list. So how can you prove that you are better than your competition? ★

agement trainer, and ask yourself, "Am I good enough to get better?"

If you have another perspective that you would like to share please contact me or send a letter to the editor. If you would like to talk about how AISC Certification can benefit your company or how some of these ideas can efficiently be applied to suit your business, please call me at 312.670.5436 or send me an e-

mail, [marstellar@aisc.org](mailto:marstellar@aisc.org). I look forward to hearing from you. ★

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