

Accreditation of Fabricators: The Bridge between Quality Assurance and Quality Control



by Sandi McCracken, Accreditation Officer, Fabricator Inspection Programs, International Accreditation Service

In most manufacturing industries, everyone understands what “quality” means. However, there is a common misconception regarding the difference between “quality control” and “quality assurance.” This lack of understanding can cause delays and budget overruns, which inevitably translate into increased costs for consumers. More importantly, it often results in inferior quality: a critical safety issue when it comes to building products.

The International Accreditation Service, Inc. (IAS) is dedicated to ensuring that structures are safe and up to code. One way it accomplishes this is through its Fabricator Inspection Accreditation Program. Under this program, personnel assigned to activities that may affect the quality of products fabricated in IAS-accredited facilities are required to be formally trained and qualified in the principles of quality control and quality assurance. In addition, the facility’s management must be fully cognizant of quality assurance requirements, for which they are held accountable.

Quality Assurance

IAS defines quality assurance as “measurable systematic actions to provide confidence that the implementation of planned activities result in meeting objectives, goals and project specifications.” Under the IAS Fabricator Inspection Program, certain quality objectives and goals must be set by facility management. In actual practice on the shop floor, the responsibility for implementing these objectives and goals is usually delegated to a quality manager. The quality manager is expected to develop a quality plan—defined by IAS as “a written document prepared by the designated accreditation representative that describes the procedures and policies implemented to assure product quality meets specific contract documents”—and to see that the plan is implemented and meet project requirements.

Usually, the quality plan is a comprehensive document that covers all phases of fabrication and is called a “quality

manual.” Not only is a quality manual an indispensable tool, it is required by the *International Building Code* (IBC) for structural steel fabrication shops.

Quality Control

Quality control is defined by IAS as “the act of examination, testing or measurement that verifies processes, services or that documents conform to specified criteria.” While certain quality control activities, such as inspection, can be effective in “building-in” the quality of a fabricated member or component, they constitute only one aspect of quality assurance for a complete structure. A comprehensive quality assurance program must integrate all of the activities of the fabrication process, from design and contract review to final assembly.

An uncoordinated approach that only incorporates a few quality control checks often leads to missed opportunities for total quality management of the entire process. In contrast, experienced fabricators who implement well-defined quality assurance plans can expect to greatly reduce or eliminate cost overruns and enjoy repeat business from their best customers.

IAS Accredited Inspection Programs

IAS has developed several sets of accreditation criteria (AC) for fabricator inspection programs that facilitate the implementation of an effective quality management system. Each IAS AC addresses the following issues.

- Do quality plans and procedures exist to ensure that fabricated members or components will meet fabricator specifications?
- Does the fabricator review work instructions and technical data to identify characteristics critical to product acceptability?
- Are there written inspection and test procedures?
- Are the materials and supplies needed to support

production activities monitored for quality?

- Does the fabricator conduct and document audits of products and processes for conformance to specifications?
- Is there a means for verifying that product quality meets fabricator specifications, and can reports verifying compliance be produced on demand?
- Does the fabricator investigate complaints or deficiency reports and follow up with appropriate corrective action?
- Are assembly drawings and technical data controlled at every phase of the fabrication process?

Prior to inspection program accreditation, a fabrication facility is required to undergo on-site joint assessment by experienced IAS fabrication and quality specialists and an IAS-accredited third-party inspection agency. The purpose of the on-site joint assessment is to determine whether the fabricator's quality management system complies with the applicable acceptance criteria and to review the inspection agency's procedures. Additionally, IAS accreditation requires quarterly unannounced inspections by the inspection agency.

An on-site joint review is conducted after the first year of accreditation, and such reviews are repeated every two years thereafter for as long as the accreditation is maintained. The joint reviews includes a full evaluation of the fabricator's quality management system to identify strengths and weaknesses. In the event the fabricator is found not to be in compliance with IAS requirements, quality plans for project specifications or the fabricator's own quality management system, a Corrective Action Request is generated. Noncompliance must be resolved within a specified time frame which varies depending upon the seriousness of the issue. Failure to adequately resolve serious compliance issues can lead to suspension of accreditation.

Conclusion

The transparency of IAS accreditation provides building regulators, owners and specifiers a high level of confidence that a fabricator consistently demonstrates dedication to quality and code compliance. For more information about IAS fabricator inspection and inspection agency accreditation programs, go to www.iasonline.org or phone 1-866-427-4422. ♦

Looking for Robust, Customizable Community Development Software that Won't Break the Bank?

Take a Look at
BluePrince™

Quality, cost, and support are the main reasons why customers switch to BluePrince.

Aren't you ready for a better way of doing business?



- Powerful Permitting and Inspection Tools
- Online Contractor Permits, Inspections, and Payments
- Wireless Inspector Interface
- Flexible Zoning Solutions
- Code Enforcement
- Multiple Department Approvals
- Dynamic Reporting Capabilities
- Disaster Recovery Tools
- Comprehensive Training
- Custom Installation, Configuration, and Support

Call Toll-Free: 1-888-592-5336
Email: info@BuildingDepartment.com

www.BuildingDepartment.com