

THE AC472 ACCREDITATION PROGRAM BUILDING OFFICIALS



What is AC472 Accreditation Program?

The AC472 Accreditation Program is the most comprehensive quality assurance accreditation program of its kind. A unique characteristic of the AC472 Accreditation Program is that it audits the integrity of design engineering and manufacturing processes. It focuses on several key areas:

- Audit of order documents providing the customer with clear information on what he/she has ordered.
- Audit of the design/detailing process to assure adherence to requested codes and to confirm that the project requirements are met in a rational engineering manner. This audit not only covers the building-code applications but also the proper use of design standards such as AISC, AISI, etc.
- Audit of raw material usages including proper ASTM standards, ordering practices, tracking of mill certifications, product traceability, etc.
- Audits assure comprehensive traceability of materials and workmanship.
- Audit of manufacturing practices including machinery calibrations, measuring tools, weld certifications, etc.
- Audits to ensure the metal building manufacturer has a well-managed quality assurance system and a qualified staff. This includes verification of licensed professional engineers who design and detail the metal building system, and certified weld inspectors.

This is all verified annually through two on-site inspections of the firm's design and manufacturing facilities and of representative projects to confirm that the appropriate standards are in place and being applied.

This assures building officials that the manufacturer has comprehensive quality assurance processes in place that provide high-quality, reliable buildings.

Why require an accredited manufacturer?

Requiring an AC472-accredited manufacturer provides an extra level of assurance that the building supplier's engineering/order/design/fabrication processes all conform to high-quality standards and are evaluated by a respected independent third party.

Other advantages, which expedite the building approval process, include: building officials can deem AC472-accredited manufacturers as

approved fabricators as defined in Chapter 17 of the International Building Code; elimination of additional inspections; cost savings to verify code compliance of metal building fabrication; and assurance the metal building manufacturer's staff has a well-qualified quality system in place.

Benefits to the Building Official

Benefits to the building official include:

- By requiring IAS AC472 accreditation, the building official can easily confirm the manufacturer is in compliance with the requirements in Chapter 17 of the International Building Code®.
- The building official can be assured that suppliers have passed the stringent audit requirements of the IAS AC472 Accreditation Program.
- Allowing only accredited suppliers helps protect the building official's goal of guaranteeing that a committed, audited supplier is on the project.
- Since the building supplier is doing the structural design, accreditation assures that the product is being designed by professional engineers who have demonstrated knowledge of building systems and applicable codes.
- Accreditation requires that the manufacturer only use raw materials meeting applicable ASTM specifications.
- Accreditation requires that all Letters of Certification, design calculations and drawings be clearly communicated and stamped by a fully qualified design professional.

How will you know if a building has been supplied from an AC472-accredited manufacturer?

Make sure the contractor tells you the brand of building he is supplying. Then check the complete list of accredited companies and facilities (http://www.iasonline.org/Metal_Building_Systems/MB.html). If the brand is not listed on that website, you should ask why the manufacturer has not been accredited.

And last!

Do not be confused by other certification programs such as ISO or the AISC Fabricators Program. These programs are valuable for some forms of construction, but only the IAS AC472 Accreditation Program addresses all aspects of a metal building system manufacturer's operation, including design engineering.





Q. What is the International Accreditation Service, Inc.?

A. The International Accreditation Service (IAS) is a wholly-owned subsidiary of the International Code Council, which evaluates and accredits building departments, special inspection agencies, testing and calibration laboratories, fabricator inspection programs, and oversees the AC472 Accreditation Program for Metal Building Systems Manufacturers.

Q. What do they do?

A. IAS measures a manufacturer's ability to conform to documents and standards referenced in building codes through onsite assessment and periodic monitoring by IAS-accredited third-party inspection agencies. It also scrutinizes a manufacturer's quality assurance program.

Q. Why was the AC472 Accreditation Program developed?

A. As industry products and design programs advanced, metal building systems became very successful in entering new markets involving larger buildings with high human occupancy. Thus, the members of the Metal Building Manufacturers Association (MBMA), who developed this expanding technology, felt a responsibility to work with IAS to develop an accreditation program to critically evaluate the sales, engineering and manufacturing functions in the metal building systems industry and to comply with the special inspection requirements in Chapter 17 of the International Building Code®.

Q. There are other accreditation and certification programs like ISO and the AISC heavy fabrication programs. Don't these accomplish the same things as AC472?

A. No. Those programs only address the manufacturing process--not the unique needs of building systems.

Q. Why are those needs unique?

A. Since the design, detailing and manufacturing is done by the same company, these processes are mutually dependent and need to be evaluated together.

Q. With conventional construction, I receive a set of design calculations and drawings stamped by a registered professional engineer. Why isn't that adequate for metal building systems?

A. When a conventional designer selects standard beam sizes off of AISC tables or out of SJI manuals, those sections are then manufactured by a fabricator. In the case of metal building systems, the design and fabricating processes are customized and require ongoing communications between the engineering

and fabricating teams. The only way to be assured that these functions are being properly integrated is to require that the supplier have AC472 accreditation.

Q. If I require that only AC472-accredited companies can bid projects in my jurisdiction, will I be restricting competition such that construction costs unfairly rise?

A. No. There are a significant number of companies with multiple accredited facilities throughout the U.S. who can provide you with competitive choices. A list of accredited firms, along with certificates, can be seen on http://www.iasonline.org/Metal_Building_Systems/MB.html.

Q. Are there areas in the country where building codes have adopted criteria requiring AC472 accreditation on building systems projects?

A. Yes. Most jurisdictions throughout the country have adopted the International Building Code® or an amended version of the code and enforce Chapter 17 special inspection requirements and rely on the AC472 Accreditation Program for Metal Building Systems Manufacturers to designate approved fabricators..

Q. Why is the AC472 Accreditation Program a principal focus of the MBMA?

A. The members of the MBMA sponsor and conduct much of the research targeted on improving building systems technology. Accreditation reinforces the technical efforts of the MBMA in the marketplace and the quality level in the industry.

Q. So if accreditation provides real value, and there are many companies who have subjected themselves to the standards of accreditation, why would anyone not demand an accredited building?

A. We don't know!