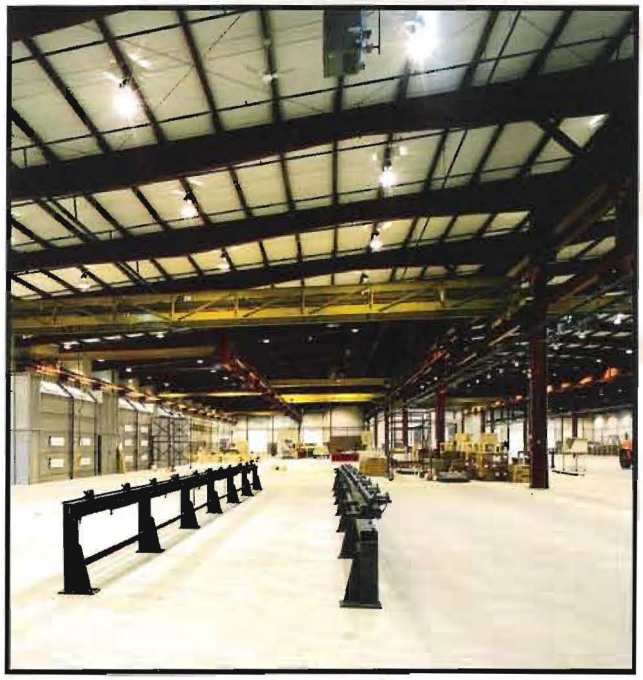
Solutions
Industrial Buildings

Metal Building Manufacturers Association

Applications

- Light Manufacturing Facilities
- Heavy Crane Structures
- Fabrication Plants
- Electronics Facilities
- Automated Storage Sites
- Lumber/Paper Mills
- Recycling Centers



Meet Key Requirements

Today's industrial operations require state-of-the-art facilities and equipment to satisfy stringent customer demands. Yet no matter what the application, a metal building system can meet the building owner's needs — both today and tomorrow.

Metal building systems employ modern technology that produces advanced designs and offers building owners the many outstanding benefits of systems construction. These include cost efficiencies and predictability, speedy construction times, design flexibility, energy efficiency and attractive aesthetics.

Design, fabrication and construction times are reduced when a metal building system is specified. If the structure must be enlarged in the future, the

building systems approach permits easy — and rapid — expansion. In many cases, this can be achieved simply by removing one or more walls, erecting new framework, and adding matching wall and roof covers. Plus, the original wall panels can often be reused. This flexibility reduces the time and inconvenience typically required to expand or add to existing traditional construction. It also reduces the costs of an expansion project.

Custom Engineering

Each metal building system is individually engineered and designed to meet the building owner's specific space and end use requirements. Wide, clear span structures are easily obtainable, generating uninterrupted space and the high eave heights necessary for plants and warehouses with large equipment and machinery.

Metal buildings also minimize the use of columns . . . while still meeting the needs for rack storage, conveyor belts, crane systems, mezzanines for office areas or additional storage. And when large expanses are needed, long-bay systems can be designed with columns spaced far apart.

The interior space in a metal building system can be finished or unfinished, depending on how the facility will be used. The building can also be designed with column-free interiors. Or the columns can be located in walls separating areas, rooms or offices. In any case, building owners gain maximum usable space and operating efficiency.

The Process

A metal building system consists of a series of fully integrated, computer-designed, factory-fabricated structural, roof and exterior wall systems, ceiling systems, fascia and soffit systems, window and interior wall systems, doors and frames, insulation and various trim systems.

The buildings are custom-designed to fit individual needs and delivered to the jobsite ready for immediate erection by a builder/contractor. This method assures single-source responsibility and prompt product delivery.

The Computer and Design

With a metal building system, the design professional can concentrate on improving both the facility's form and its function. The integration of computers in the design process has also spawned an exciting new world of design possibilities . . . one where architects are limited only by their imagination and creativity.

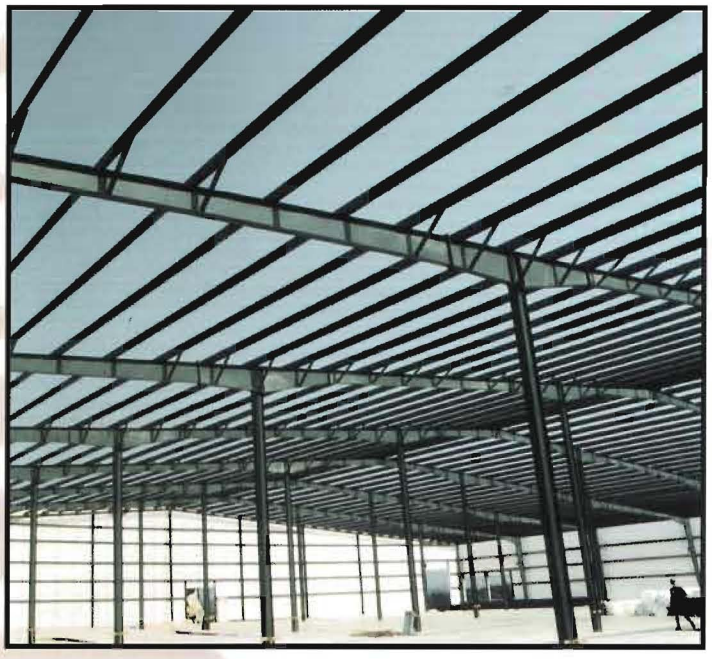
The computer enhances the design process by enabling metal building systems to be produced in a multitude of shapes, sizes and forms — from basic to advanced. In many cases, their outward appearance is indistinguishable from other types of buildings.

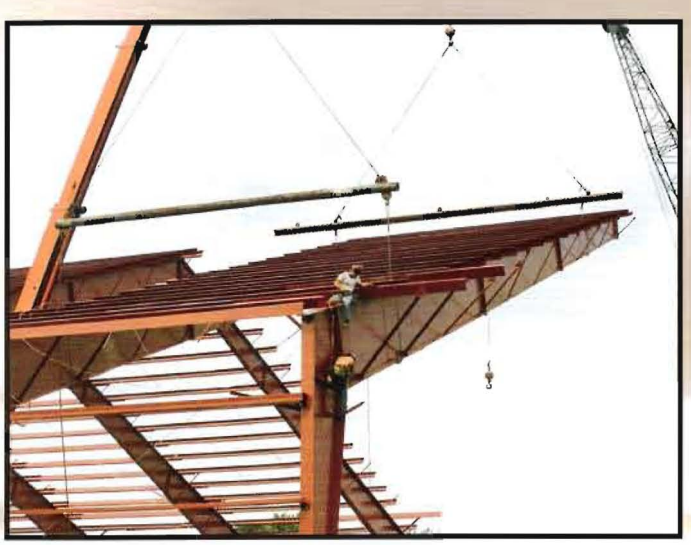
Moreover, a structural design can be rendered in a matter of hours rather than weeks, as is often the case with conventional buildings.

Additional Benefits

Another key benefit of the systems approach to construction is the reduced construction time needed to erect a metal building. As a rule, a metal building system can be completed in about two-thirds the construction time of a conventional building. Major cost savings and faster and firmer construction timetables are the result.

Saving energy is especially critical in the design and construction of today's industrial buildings, which typically have high demand levels





for lighting, heating and cooling. Metal building systems accommodate high thermal efficiency requirements and are designed to meet the most stringent energy codes, as well as those for wind, snow and seismic conditions.

Exterior Material Choices

Wall panels designed with attractive profiles, curves, textures and colors provide a modern look to metal building system exteriors. These panels also create a smooth visual transition between office areas and manufacturing or warehouse areas in an industrial facility.

Metal building systems are designed to incorporate non-load-bearing wall systems. This permits the structure to be integrated with exterior cladding materials that provide a pleasing exterior compatible with the surrounding environment. The choice of materials includes precast concrete, brick, stone, wood and glass.

Standing Seam Roof

One of the most important advances in roofing is the development of the standing seam metal roof. Utilizing formed, interlocking seams, this system can literally cover an entire building with minimal penetration by structural fasteners.

The standing seam metal roof used on metal building systems can be designed with a low slope or it can be highly visible with a steep slope — adding distinctive aesthetic appeal to the building. It can also be used for mansards, fasciae and similar applications.

The standing seam roof's light weight and durability also make it an excellent retrofit option. In retrofit projects, the standing seam metal roof can be installed over conventional built-up roofs with minimal disturbance to the existing structure, permitting work inside to continue uninterrupted.

Continuing Popularity

Metal building systems continue to evolve as the dominant method of low rise, non-residential construction. From small, simple utilitarian structures to large, complex industrial facilities, metal building systems usage continues to grow.

Whatever a building owner requires in a structure, a metal building system can provide the answer . . . quickly, economically and attractively.

Certification Program

Metal building systems manufacturers displaying the AISC Category MB logo are now covered by a comprehensive Quality Certification program developed by the prestigious American Institute of Steel Construction (AISC).

These are just some of the benefits that owners, architects, specifiers and building code officials achieve through this extensive program:

- Certified manufacturers have undergone rigorous third-party examination of their professional engineering and manufacturing policies, procedures and practices.
- Quality assurance standards and controls have been found to meet the requirements established in the certification program.
- Annual on-site audits ensure continued compliance with the program requirements.
- Certified manufacturers have proved under the program that they can meet the public safety requirements imposed by the applicable building codes because their basic design and quality assurance procedures and practices used to produce metal building systems meet the needs of predictable structural integrity and quality.

This program also enables local, national and international code groups to utilize an already established and nationally recognized certification agency to verify compliance with their standards.

The AISC Category MB logo verifies that the metal building systems manufacturer has met rigorous quality certification standards.

CERTIFIED
AMERICAN INSTITUTE OF STEEL CONSTRUCTION INC.
QUALITY
FOUNDED 1921
CATEGORY MB

MBMA
METAL BUILDING MANUFACTURERS ASSOCIATION

Metal Building Manufacturers Association
1300 Sumner Avenue
Cleveland, OH 44115-2851
Phone (216) 241-7333
FAX (216) 241-0105
Internet Address: http://www.taol.com/mbma
E-Mail Address: mbma@taol.com

MB-2295 15M

Printed in U.S.A. 1/96