



# Inside

A special section:

## Construction, design & engineering

### Steel buildings shed that 'tin-can' look

By Nancie Hudson

Newly erected steel frames that tower over construction sites have become routine sights for commuters. But why are so many new buildings being constructed with steel rather than wood frames? And why is the steel building — made with steel frames, steel walls and a steel roof — becoming more commonplace?

Many people choose steel because of its cost, according to Dave Trombley, marketing and administration manager for **Maverick Construction Inc.**

"Usually we can beat out a wood frame price with a steel building, so that's the key benefit," Trombley says from his Kalamazoo office. "That's why most of what we do is steel."

There are two different systems of metal building, Trombley says. Structural steel is the widely used system in which steel is fabricated locally and constructed on site according to an architect's plans and/or an engineer's designs. Pre-engineered steel is the newer system that uses steel fabricated by a national manufacturer, and the building is assembled according to kit-like instructions. The steel is the same, but the buildings are constructed differently.

A pre-engineered steel building in downtown Kalamazoo **Maverick Construction** built last year for **One Way Products** won recognition from **Metal Construction News**, a monthly trade publication based in Woodville, Ohio, for being one of the top five metal buildings in the nation for 2002, Trombley says. Built with a brick veneer facade and other features to make it resemble 1940s era structures, the building also won two awards last year from **ABC, Associated Builders and Contractors** in Grand Rapids, for excellence in construction.

"Steel was good for the **One Way Products** building because with steel, you can get good clear spans, heights and widths across the building



"Usually we can beat out a wood frame price with a steel building, so that's the key benefit," says **Maverick Construction Inc.'s Dave Trombley**, in front of a brick-facaded steel building **Maverick** built for **One Way Products** in Kalamazoo. "That's why most of what we do is steel."

Photo by Jennifer Giesey

and you can do it for a relatively cheap amount," Trombley says. "So for a good industrial building like that, steel was a perfect fit."

There are certain applications when steel is necessary in construction, notes **Doug Sparling**, vice president of the steel division at **Pioneer General Contractors Inc.**

"If you're going to get a span a little bit longer or if you're going to have a heavy roof load or floor load, or if you want overhead cranes in your buildings, generally steel gives you a longer span between bearing walls," he explains from his Grand Rapids office.

Huge sports arenas such as the new **Ford Field** built for the **Detroit Lions** in downtown Detroit are all steel framed and have spans up to 400 feet, Sparling says. High school gymnasiums built with steel have spans ranging from 110 feet to 150 feet. But in typical industrial buildings such as factories, spans average 30 or 40 feet.

Business owners who are planning to build new facilities should consider steel, but not only because of its lesser cost and larger span capabilities, Sparling adds. When buildings are constructed using steel frames rather than wood frames, the building is

more durable and more versatile. For example, a steel framed building could accommodate the addition of overhead crane rail systems at some future time, whereas a wood framed building would not.

Recent steel projects built by **Pioneer General Contractors** include the steel frames for **Spectrum Health's** heart center and **Saint Mary's Mercy Medical Center** cancer center, both currently under construction in downtown Grand Rapids.

Most of the buildings **Maverick Construction** builds with steel range in size from 10,000 to 50,000 to 120,000

square feet, but Trombley says "we're getting very competitive with smaller buildings of 5,000 or 6,000 feet, too."

Many people underestimate the versatility of pre-engineered steel buildings, Sparling notes.

"You could take a steel pre-engineered building and put a brick or a stucco veneer on it or some higher end wall panels," he explains. "They don't have to have that tin-can look. You can really dress them up to look like anything you want."

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