

invelope in Action

Rehabilitating the way we build walls

Case Study: *Ohio Orthopaedics and Sports Medicine Findlay, Ohio*



Architect: Medical Design International (MDI)

General Contractor: Clouse Construction

Masonry: Goosche Putnam Masonry

Ohio Orthopaedics & Sports Medicine serves all of Northwest Ohio including Hancock, Putnam, Wood and Seneca counties. With an expert staff of physical therapists, physicians and supporting medical staff, Ohio Orthopaedics & Sports Medicine provides a full range of care in orthopaedics and sports medicine, including ancillary services of Open MRI.

The staff at the Ohio Orthopaedics & Sports Medicine facility strives to stay up-to-date with the latest techniques of orthopaedic and sports-related care. When planning for the new state-of-the-art facility, the staff and architects knew they needed to find the latest building technology to fit their modern needs. Not only were they seeking a sophisticated look, but they wanted a building that will last. That is where **invelope** comes into play: new technology plus a superior back-up wall system built to last. **invelope's** ability as a single-component, insulated metal composite back-up wall system offered a quick install to get the facility in the game fast.

The project

The Ohio Orthopaedics Sports & Medicine facility is a two-story brick veneer building utilizing three-inch thick invelope panels covering 11,000 square feet of wall surface. The **invelope** installation began in April 2009 and took approximately 14 working days for Clouse Construction (New Riegel, OH) to complete.

When the project was complete in the spring of 2009, **invelope** contributed to the sophisticated performance of the new building and was ready to fulfill its promise to be an advanced back-up wall system.

The invelope value

Think about it. When designing a building, wouldn't it be impressive to find a building envelope that eliminated a few of the traditional installation steps and reduced the number of penetrations to the steel framing, all while providing a high-performing back-up wall system? The **invelope** system does just that.

"It's hard to compare **invelope** to other barrier wall systems," says John Preece of MDI Atlanta. "With the high-performing components of the panel and the installation and labor savings, it seemed like an easy solution."

Preece, along with his associate, Richard Lowery, were searching for a product to solve problems caused by conventional wall backup systems. In order to design a new state-of-the-art facility, they needed to fix old problems like water infiltration, mold, mildew and Sick Building Syndrome. Plus, in a time where sustainable energy efficient building is mainstream, they needed to find a building envelope that reduced energy use.

While this seems like a large order to fill, Preece and Lowery found that **invelope** met their requirements.

"Old masonry veneer wall construction has proved to be a very poor back-up system trying to screen water from masonry," said Lowery. "From a building science standpoint, **invelope** is just an easier solution."

Preece noted that **invelope** panels are more appealing than conventional backup systems – **invelope** contributes to energy savings and a better performing product. "The energy savings produced by using **invelope** panels, in combination with the building's geothermal HVAC system will provide a more energy-efficient system," said Preece. With sustainability being a major goal of the project, the architects found the energy savings gained from **invelope** fit their needs.

A final deciding factor for MDI was the tested R-value insulation. The respective R-values of **invelope** panels are 14 and 21 (for two and three inch thickness panels). "**invelope** provides a true R-value, while other systems have had a decreased R-value over time," Preece said.

From an architect's point-of-view, **invelope** panels met requirements such as eliminating mold and mildew. Plus, the panels are easy to install and save money on labor. Based on these important factors, MDI felt it was time to put **invelope** in action.

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invelope's one step design was a plus for construction crews who raved about the lightweight nature of the panels and the ease of installation.

"The one-piece panel went up quickly for quick close-in," said Jerry Kirian, superintendent for Clouse Construction. "The product proved to be very beneficial because we were able to quickly handle and install it during an unpredictable weather season in Findlay."

Completing the installation, Goosche Putnam Masonry installed bricks over the **invelope** panels.

"On some other buildings, only insulation is attached to the studs, but **invelope** is a much better system," said Putnam Davis of Goosche Putnam Masonry. "From a mason's perspective, the brick ties stayed on module very well and we encountered no problems working with the system."

Build a better wall

The benefits of **invelope** are unmatched. Not only did the **invelope** system impress MDI, but the construction crew and masons appreciated the ease of installation and labor savings. Find out how you can build a better wall, call 1-866-279-3777 or visit www.buildbetterwalls.com.

About invelope

A product of CENTRIA, **invelope** provides a single-component, insulated, metal composite back-up wall system. With over 30 years of proven building envelope science, the **invelope** panel's one-step design helps contractors save time and money in the installation and labor process while delivering superior energy, insulating and environmental performance.

The **invelope** system combines a foam-filled super-insulating core with a durable metal rainscreen and integrated masonry anchors, eliminating the need for conventional batt or board insulation, exterior gypsum board, air and vapor barriers and building wraps. Also, it can be used on all building types, for commercial and institutional applications, and will perform successfully in all climates. It was developed with Advanced Thermal Moisture Protection (ATMP) technology, it is Cradle-to-Cradle Silver Certified^{CM}, and can help buildings earn LEED points.

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