

Design Capabilities

Firm's Headquarters Incorporates Metal Panels for Aesthetic & Insulating Benefits

by Jonathan Bishop, associate account manager, Kingspan

River Crossing, the 89,000-square-foot corporate headquarters of M3 Engineering & Technology in Tucson, Ariz., is different by design. In an area of the country where stucco buildings are the norm, this two-story structure is clad in more than 30,000 square feet of metal panels from Kingspan Insulated Panels North America and Morin.

According to Dennis Mulligan, architect and executive vice president at M3 Engineering, the result is a building that reflects the unique capabilities of the full-service design firm. "Many of our clients come from the industrial and high-tech sector," he explained. "The use of metal components in the design of these facilities is common in our design vocabulary. We wanted to use metal in a way that projected what we do and would also be an example to our clients of what is possible within a familiar general framework."

Mulligan went on to say, "The variety of metal cladding and finishes available provided a wonderful palette of textures, finishes, and colors." M3 took full advantage of these options to design a building whose customized façade incorporates a variety of metal panels, including Kingspan Benchmark Designwall(TM) 2000 insulated metal panels and Morin Integrity Series, Concealed Fastener and perforated panel systems. Together, the panels offered the aesthetics the company sought as well as durability and insulating features so important in Tucson's hot desert climate.

Kingspan's Benchmark Designwall2000 architectural insulated metal panels accent the building vertically and horizontally, creating an attractive champagne bronze color envelope that includes a continuous, 2" polyisocyanurate core. The wall system's double-gasket shiplap joint

maximizes thermal efficiency and creates a double barrier against air and water penetration, while helping to ensure a stable interior environment. The durable panels also offer important sustainability benefits, contributing to reduced energy and maintenance costs throughout the life of the building.

Integrated with the Benchmark product, the ribbed X-12 panel from the Morin Integrity Series wraps the building horizontally and features a concealed clip and fastener design that supports the aesthetics of the Designwall panel. The X-12 panels utilized extruded aluminum vertical reveal trims, which have no exposed fasteners and crisp, sharp lines. According to Morin regional sales manager Tim Del Monte, "The clip system also allows for panels to expand and contract freely. This can be especially important in a climate like Tucson's, where temperature swings can be great."

The Morin Concealed Fastener MiterSeam Corner offers another advantage. "Like the panels, the corners are available in a variety of colors and paint systems and allow the panel profile to continue seamlessly around building corners, eliminating the need for trim at this location," Del Monte noted. "The M3 building demonstrates this design feature, combining mitered corners in a silversmith color to match the X-12 and Designwall panels."

Morin also provided a corrugated metal panel that introduces an interesting architectural feature to the building. The perforated C-29 panels run along the entrance to the structure and feature a painted two-coat Mica finish in a Copper Penny color that supports the company name and guides visitors to the front door. "We wanted to keep the palette of materials simple, so apart from the entrance, the exterior is primarily two types of metal siding that provide contrasting elements in-filled with glazed curtain and window walls," said Mulligan. "We utilized the panels on the interior of the building's public spaces as well. There is a seamless transition from the

exterior to the interior in the use of the metal panels. The only separation is the glazed curtain-wall system.”

Responsibility for the installation of the Kingspan and Morin panels rested with Mark Brownell, president of The J.R. Tuttle Co. in Tucson. According to Brownell, the installation went smoothly. “I like working with the insulated panels because it’s a complete product that combines a metal skin with an insulated core, eliminating the need for additional substrate. Once the metal studs were up, we were immediately able to fasten the panels right to the metal studs and complete the job in a fairly quick timeframe.

“I was also impressed with the sales support that Kingspan and Morin offered,” Brownell continued. “The M3 project was our first experience with the mitered seamless corners, but with Morin’s help, the process went smoothly, and we were able to eliminate bulky trim on the corners.”

When River Crossing opened, it brought together staff previously scattered in several leased office locations and provided them with a new, exciting and upbeat working environment. At the same time, the new building made a statement about the firm that designed, engineered, and constructed it. “River Crossing demonstrates our design abilities and has worked well as a positive recruitment tool as M3 continues to grow,” said Mulligan. “It has been acknowledged as a good, distinctive, and architecturally recognized building within the community. So I think it’s safe to say that with this structure, all our building goals have been achieved.”

The project was also acknowledged by the Metal Construction Association (MCA), as Morin was awarded with the 2010 President’s Award for Commercial/Industrial at their annual meeting on Jan. 23 – 25. This award gives special recognition to its member companies for outstanding metal construction projects. A jury comprised of the MCA Awards

Committee and members of the MCA Board of Directors select the award recipients.

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