



University of Michigan Hospital:

Complete Shower & Tile Solutions for 12-Story Healthcare Facility



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University of Michigan Health

Ann Arbor, MI

Building Owners: University of Michigan Health, Michigan Medicine – Michigan

General Contractor: Barton Malow

Installer: Artisan Tile Inc., Brighton, MI

Lead Architect: HOK

Associate Architect: IDS

Construction Start: April 2021 | **Construction End:** Fall 2025

The Situation – D. Dan and Betty Kahn Health Care Pavilion

Hospitals are among the most demanding commercial construction projects, requiring exceptional durability and meticulous planning. These facilities must withstand constant foot traffic, heavy rolling equipment, and specialized machinery that often comes with strict installation guidelines. Materials must be able to withstand constant cleaning and disinfecting. And it all needs to be designed, built, and commissioned within a specific timeframe, because any delays to opening could have a tangible impact on the community that the facility is intended to serve.

Planners and designers undoubtedly faced such challenges with the construction of the D. Dan and Betty Kahn Health Care Pavilion. The new 12-story, 264-bed hospital falls under the umbrella of Michigan Medicine, the academic medical center of the University of Michigan Health, and will serve the Ann Arbor, MI, community when completed. The 690,000-square-foot (64,103 m²) facility is expected to cost \$920 million to build, offering specialty care services as well as 20 operating rooms built with the latest technology.

The hospital will be the crown jewel of Michigan Medicine. As such, stakeholders sought the very best building materials manufacturers for the project, those willing to be consistently involved throughout construction.



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— Jennifer Panning, President, Artisan Tile in Brighton, MI



The Challenges

Like many others, the construction industry faces ongoing labor shortages. Now more than ever, it is critical for projects to take advantage of innovative system solutions that can make installations easier and more reliable. And for hospital projects, speed and durability are absolute necessities.

Leveling & Flatness: Traditional methods to meet the floor level and flatness requirements of this healthcare project would be logistically challenging. Plus, such an approach would require materials to be transported up from ground level, mixed, and then installed on each of the 12 stories.

Technical Installation Methods: The traditional method of using a “mud bed” to create a sloped shower floor often needs specialized, experienced labor and is time consuming. Crews must apply layers in a specific manner, each with their own specified curing time, which can dramatically impact the construction timeline and delay the overall project. A mud-bed method might take days before mortar and tile can be applied, and even then, can have issues with pitch. This posed a formidable challenge for this project, which specified 240 shower installations in five custom sizes.

Precision & Jobsite Logistics: Not only would precise measurements be critical to the project as a whole, but it would also be vital that several specific installations conform with the Americans with Disabilities Act guidelines. Though shower openings would be similar in size, not all are identical. On-site material storage is also severely limited, making product supply coordination an essential need. Management of materials would be essential to maintain a steady supply without overwhelming the limited storage space.

Sourcing Complexity: Project managers would need to coordinate and streamline the substrate preparation, shower installation, waterproofing, and tiling, work that could affect or delay the critical path. The potential benefits to streamline this project were obvious: use of a single source for products that were designed to be installed together as a system and that offer a convenient and consistent installation process. In addition, the project could receive protection via an extended system warranty.

“When we first presented the whole system to U of M, they could see the value in using complete systems,” said Jennifer Panning, president at Artisan Tile in Brighton, MI. “It would come together and minimize quality issues. It would all help our schedule.”





A LATICRETE Solution

For this Michigan Medicine project, LATICRETE entered the picture early as the optimal single-source supplier to help expedite the installation of complete bath and shower systems throughout the hospital. The brand's reputation for reliable technical service and prowess as an industry leader of all things tile was advantageous for the project, as it could help maintain forward momentum even when labor was in short supply.

Both the installer and the university itself acknowledged the value proposition of streamlined system solutions even in the project's earliest stages, especially as the local tile installer, Artisan Tile, was not immune to labor shortages.



“By using our pre-formed shower pans, it allowed [the installer] Artisan Tile to speed up their process, which made things easier on such a sizable project.”

— David Rogers, Technical Sales Rep, LATICRETE

“All the trades have labor challenges, so projects are extending out,” added Panning. “We came to [the University] and said ‘Look, we have labor concerns like everyone else. [These systems from LATICRETE] are a way to help us minimize the impact.’”

As the choice for tile, shower, and grout installations, LATICRETE would help the hospital ensure that a high-quality finish and longevity would go hand in hand—vital for a facility that is poised to serve thousands over its lifetime. Both Artisan Tile and LATICRETE professionals collaborated to make sure the right needs were met, starting with the preparation.

Substrate preparation for this project involved a self-leveling underlayment that would set the foundation for a speedy and flawless shower installation—240 in total in five custom sizes. The self-leveling substrate preparation and custom shower solutions from LATICRETE were both critical to meeting the demands of the project with unmatched precision.

The LATICRETE system offered a streamlined, labor-saving alternative to traditional methods.

The LATICRETE® SUPERCAP® SC-500 solution was critical to supporting the project's timeline. High-performing, premixed self-leveling underlayment could be pumped from the ground level throughout the 12-story structure. Specialized trucks that pump as high as 20 stories in a fraction of the time of traditional placement methods proved to be vital. The choice ensured a faster and easier installation and avoided the challenges and hazards of mixing material on each floor. The move also alleviated waste and logistical issues associated with hauling and staging thousands of small bags manually, including the potential injury risks to workers.





A LATICRETE® shower system would enable installers to utilize a pre-formed, pre-waterproofed option for shower pans, even in custom sizes. This would reduce shower installation and waterproofing time, eliminate costly delays, keep worksites tidy, and allow tile to be installed immediately.

“They needed something that they could get done quickly,” said David Rogers, technical sales representative at LATICRETE. “By using our pre-formed shower pans, it allowed [the installer] Artisan Tile to speed up their process, which made things easier on such a sizable project.”

“To get mortar materials and stuff like that up and mixed mud is challenging,” added Panning. “In those circumstances, with the preformed pans, they’re already out in place. We don’t have to mix the sand and cement. We don’t have to let it cure. We can install them the same day.”

Logistics and on-site storage were sizable considerations, particularly with so many bathroom elements being needed. LATICRETE representatives stepped in, leading an effort to strike a balance that ensured a steady supply of shower pans and drains without congesting the busy jobsite.

“[The build site] couldn’t take [the shower pans] all in one shot,” said Mark Besescheck, senior technical service representative for LATICRETE. “We sent the pans in sequence to make sure that, as they’re moving forward, they had enough material to keep the project going. It’s quite intensive when we start working with large-scale projects. A lot of coordination goes into that.”



At the same time, precise measurements were critical in ensuring efficiency and a lasting installation. Variations in shower opening sizes mandated that each custom pan fit as closely as possible to avoid delays or modifications. LATICRETE easily overcame that hurdle without major pain points, including on several installations that needed to be ADA compliant.

“Once they got through 15 or 20 of these bathrooms, everything was spot on. No issues whatsoever,” added Besescheck. “That kept things moving between manufacturing and the build site. In this case, it was also a quick ship to Michigan.”

Patients, visitors, and employees will find LATICRETE product solutions like HYDRO BAN® Shower Pans and Drains, PERMACOLOR® Grout, and Glass Tile Adhesive Lite used in the restrooms and showers. They will also find 4-XLT Adhesive Mortar, LATASIL™ Silicone Sealant, and SPECTRALOCK® 2000 IG Industrial-Grade Grout in kitchens and other areas that demand high chemical resistance.

Outcome

The D. Dan and Betty Kahn Health Care Pavilion stands as a testament to the power of planning, innovative products and installation solutions, and seamless collaboration. Thanks to the significant technical and logistical support—and suite of LATICRETE offerings—the project has already received significant praise.

“We knew the significance and the importance of the project and have devoted a lot of resources to it and our team out there,” said Panning. “We’ve gotten a lot of positive feedback on it.”

As the project nears completion in the fall of 2025, the pavilion will provide a durable and reliable foundation for a space designed to support patients and healthcare providers for years to come.



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