

# the eXchange

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## Craftsmen showcase extraordinary skills in the Baltimore region

From installing the extraordinary systems needed to operate a state-of-the-art hospital to giving new life to irreplaceable pieces of art and architecture to creating a modern garden in the sky, winners of the 2022 BC&E Craftsmanship Awards channeled their expertise, creativity and dedication to produce outstanding results.

When a renovation plan at the Baltimore Museum of Art necessitated the temporary removal of the Franzoni Arch, craftsmen at Hilgartner Natural Stone realized the operation would require a massive effort and a delicate touch. The last-known work by Italian sculptor Giuseppe Franzoni had been created in four sections, each weighing 1,600 to 2,000 pounds. No records existed of how it was installed in the early 1970s so crews began a slow, surgical demolition of the load-bearing wall around the artwork to determine how it was anchored.



Once the anchoring system was revealed, Hilgartner confronted the next challenge, namely how to remove the arch.

"We needed to lift those pieces up in order to pull them out,"

said Ian Davis, Project Manager. "But we only had 18 to 24 inches of clearance above the top of the arch to the bottom of the reinforced concrete joists in the ceiling above it. Also, there was so much temporary structural support built around that location plus scaffolding and rigging that we had to find a piece of equipment small enough to fit in a four-by-eight-foot space that could lift those stone pieces."

All of the crew's work, including the removal of the arch, also had to stay within strict limits for generating vibration in the museum (that could harm artworks in the galleries above) and avoid any damage to the room's original Beaver Dam marble floor. With museum officials observing, consulting on and occasionally

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*The Franzoni arch project in-progress at the Baltimore Museum of Art.*



recording their work, the crew deftly removed, stored and replaced the arch and met the very tight tolerance for the glass doors that would be installed beneath it.

At Kaiser Permanente's new, state-of-the-art, 220,000-square-foot center in Baltimore County, the crew from J.F. Fischer Inc. faced an entirely different challenge. The center was designed to support 24-hour urgent care, a surgical center, 12 procedure rooms, services by 30 medical

While prefabricated CUPs are becoming more common, installing this CUP involved an extra challenge — site restrictions.

"This project put a lot of hospital on a small piece of real estate," Fischer said.

Shoehorned in between Interstate 83 and railway tracks, the site left the J.F. Fischer crew operating within a 200-foot-wide strip as they prepared to install the CUP.

The required 550-ton crane "came in on about a dozen trucks and we needed a smaller crane to assemble it," he said. "Then we had multiple loads to pick. As I recall, the heaviest was 46,000 pounds and it had to go six stories up into the air and over the top of the building to be placed on the roof. That created a lot of stress, a lot of sleepless nights."

But ultimately, the installation went smoothly.



*(Top left) The reinstalled Franzoni arch at the entrance to the BMA Center for Matisse Studies. (Bottom left) One of the rooftop garden spaces at Avalon Bay Harbor East. (Right) The restored cupola of Hampton Mansion.*



specialties and, ultimately, sufficient facilities to serve 175,000 patients each year. The design would require J.F. Fischer to complete extensive mechanical and plumbing installations, including sinks and medical gas lines in treatment rooms, more than 80 restrooms and multiple air handlers, cooling towers and energy recovery units. It would also require the crew to install a prefabricated Central Utility Plant (CUP).

"The plant was assembled off site then split into four sections. In those sections were the pumps, chillers, boilers, electrical gear and pretty much everything needed to generate chilled air for cooling and hot water for heating," said Jason Fischer, Project Manager.

Several 2002 Craftsmanship Awards recognized excellence in working with some of Maryland's most significant historic buildings.

At Hampton Mansion, a National Historic Site and one of the country's finest existing examples of federalist architecture, the team from Worcester Eisenbrandt completed an immaculate restoration of the cupola. Craftsmen repaired, restored or fabricated replacement parts for the cupola's rusticated wood base and elements of its cornice, columns and entablature. They created custom shaper knives to recreate the profile of each historic element and meticulously matched the grain lines of each piece as it was put back into place. They removed, repaired and restored