PROJECT SPOTLIGHT

Freedman Award winner cornerstone of art district

The Crow Museum of Asian Art is the inaugural building of the Edith and Peter O'Donnell Jr. Athenaeum, a 12-acre arts and performance complex on the campus of the University of Texas at Dallas. The project is slated to include two museums and a performing arts center surrounding a public art plaza.

The $68,000 \, \mathrm{ft^2} \, (6300 \, \mathrm{m^2})$ structure, which is the Crow Museum's second location, was a design-assist project bringing together design architect Morphosis, based in Los Angeles, Calif.; general contractor The Beck Group, of Dallas, Tex.; and PCI producer member GATE Precast, based in Hillsboro, Tex.

Coordination among all parties was required early on to make sure connections were placed in the panels in a way that would interfere as little as possible with the work of other trades on the jobsite. Approximately half of the museum's 158 uniquely shaped panels are cantilevered off secondary steel; the rest are hung in the traditional bottom-bearing, top-connected orientation. The building's lobby and atrium feature sweeping expanses of curved, canted panels, each of which required its own engineering and analysis.

The panels measure roughly 10×30 ft $(3 \times 9 \text{ m})$ and are $6\frac{1}{2}$ in. (165 mm) thick, on average, with a rigid foil-faced insulation backing and a separate metal-stud furring wall inside the assembly. Some of the panels were shaped using intricate flat-panel formliners, while others—21 unique panels, both concave and convex—required custom computer-numerical-control foam shapes, which were designed with three-dimensional modeling software. GATE Precast proved to be the only company that could make the custom foam shapes quickly enough to meet the project schedule. Their carpenters constructed wood forms around the foam shapes before the liner patterns were applied to the foam.

The project team considered precast concrete to be a logical fit because of its flexibility and ability to accommodate adventurous new enclosure design possibilities. The museum's deceptively complex, undulating facade has a lively, creative energy remiscent of brushstrokes and paint spatters. This effect was the result of an iterative process through which they optimized the repetition and overlapping of just a handful of formliners to create maximal variation. The facade's shimmer, refined through several trials of concrete, aggregate, and finish combinations, was ultimately created by moderately sandblasting the bright white concrete to expose some of the white aggregate.

—Rory Cleveland

GATE Precast Co. of Hillsboro, Tex., won the 2024 Sidney Freedman Craftsmanship Award for the Crow Museum of Asian Art at the University of Texas at Dallas. Mauricio Rojas, Courtesy of UT Dallas.

