Pinnacle National Development Center represents a groundbreaking collaboration between a professional sports team, a national sports federation, and a first-class sports medicine provider. The new, 81,000 ft² training center for the professional soccer club Sporting Kansas City also provides a permanent facility for training U.S. Soccer coaches and referees, and is home to the Children’s Mercy Sports Medicine Center, which provides a full range of sports medicine services, resources, and programming for student athletes in all sports.

The project was intended to provide training for athletes from across the United States while conveying a distinctive sense of place that would invite each visitor to feel like a part of the local environment, says Dirk McClure, director of business development for Enterprise Precast Concrete. The sand-colored precast concrete façade with three-dimensional patterning helped to make that happen. “Through the use of modular, repetitive formliners, the custom design pattern makes a statement, and this one-of-a-kind design solely belongs to the new home of this team,” McClure says.

READY FOR THE NATIONAL STAGE

Precast concrete was not the initial choice for this project, McClure notes. When they designed the building, the architects wanted to use depth, color, and textural variation to express “the movement of the body and the ball,” he says. The design team explored multiple exterior-cladding options, such as fiber-reinforced concrete or fiber-cement panels. But after multiple design iterations and cost estimates for these options, team members determined that they needed another option to stay within budget. “Solid architectural precast concrete panels were the next logical step,” says McClure.

The primary design element is the pronounced diamond pattern cast into the precast concrete wall panels. The look was chosen after an extensive mock-up process, in which the precast concrete team filmed a panel for a full day to learn how sun and shadows affected the protrusions in the precast concrete panel design. “Everyone loved it,” McClure says.

An acid-etched finish was also used in the entryway of the building for a modern design sensibility, and a sandblasted finish at the field level integrates the design with the landscape. A rain-screen system featuring a wood veneer was added as further complement to the precast concrete panels.

Along with delivering the desired visual effect, the use of precast concrete helped the project stay on schedule and budget. As winter approached, “precast concrete contributed to a fast-track delivery method with quick erection times,” McClure explains. Also, precast concrete “offered a cost-effective exterior design solution,” he says.

The versatility of precast concrete helped to meet the client’s ultimate goal of creating a unique building whose design feels local to the area but can also stand out on the national stage. “With a client as passionate and involved as the design team was, this facility successfully came to life as a world-class training facility and exceeded all expectations,” McClure says.

“The diamond pattern in the façade ties in with Sporting Kansas City’s imagery and reinforces the team’s brand in a powerful, effective, and visually striking way.”
— Dirk McClure,
Enterprise Precast Concrete
OWNER:
Sporting Club, Kansas City, Kans.
(Tenants: Sporting Kansas City, U.S. Soccer, Children’s Mercy Sports Medicine Center)

PCI-CERTIFIED PRECAST CONCRETE PRODUCER AND PRECAST CONCRETE SPECIALTY ENGINEER:
Enterprise Precast Concrete, Omaha, Neb.
enterpriseprecast.com

ARCHITECT:
Populous, Kansas City, Mo.

ENGINEER OF RECORD:
Walter P Moore, Kansas City, Mo.

GENERAL CONTRACTOR:
Turner Construction, Kansas City, Mo.

PROJECT COST:
$75 million

PROJECT SIZE:
81,100 ft²

Photos: Jacia Phillips Photography and Enterprise Precast Concrete.