Grade-A Glass

Florida Hurricane-Rated Project Passes Test for Daylighting, Impact Performance

Photo: Shawn Sandusky

The recently completed A.K. Suter school project in Pensacola, Fla., featured a variety of hurricane-rated glazing applications.

Photo: Eric Hanssen - Hanssen Glass

As far as glazing goes, the A.K. Suter Elementary School has a little bit of everything.

Designed by Caldwell Associates Architects, the new 120,000-square-foot building in Pensacola, Fla., replaced the original school that was built in the early 1900s. The project, executed by general contractor Morette Co., was completed in the summer of 2015.

The job included three 21-foot-high curtainwall elevations, 12 entrances and 85 various storefront openings. Pensacola-based Hanssen Glass installed approximately 1,500 square feet of Coral Architectural Products' hurricane impact-resistant curtainwall, as well as 5,000 square feet of storefront glazing.

Natural light was critical for the project, as both Caldwell and the school district desired a design that incorporated maximum daylighting, including in the fire stairwells.

"The daylighting is great for the students and also helps capture exterior views, allowing [them] the benefit of exterior orientation even when inside," says Caldwell architect David Thomas.

Above the Curve

The project features many arched tops, including a half circle at the main entrance. Eric Hanssen, vice president at Hanssen, says the peaks on top of the curtainwall also tested the installers, as did the artistic muntin design. "The entire building incorporates a unique look with its muntin patterns, which are almost like tree branches," he says.

Mike Rogers of Coral says other challenges that were overcome included the coordination of custom hardware for the entrances, as well as the ever-stringent compliance with Florida energy codes.

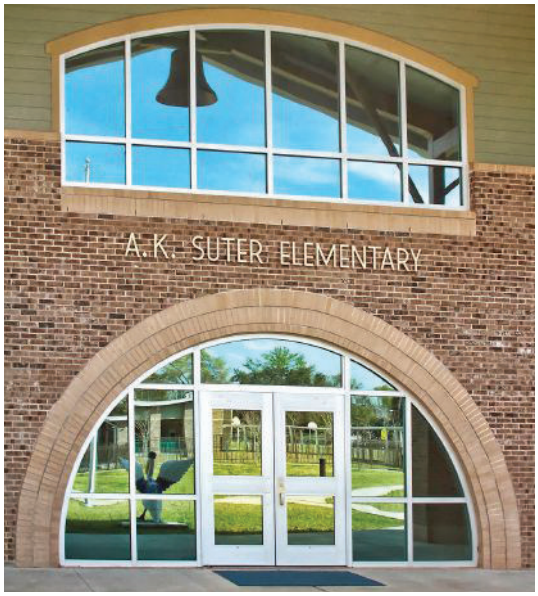
Energy efficiency was at the forefront of the glazing, as many of the openings incorporated sunshades, and Viracon supplied high-performance glass for the project.

Thomas says his firm used "a glass that was attractive, hurricane-resistant, [and also provided] energy performance." He says Caldwell, Morette, Hanssen and Coral "met and discussed requirements of the system prior to installation."

Team Work

According to Hanssen, his company worked with Caldwell throughout the design development, making decisions on window types and glass products. This is something, he says, that is always important.

An artistic muntin pattern in the curtainwall elevations was a unique glazing design element.



Arched tops are a prominent feature in the school's various entrances.

One of the biggest decisions made from a glazing standpoint involved the classroom windows.

The project called for at least one egress window per classroom. Originally the architect drew in sliding windows in the storefront framing for that purpose, but Hanssen advised them against that and instead recommended a casement outswing window.

"We went with a zero sightline outswing casement," he says. "There are casement vents in these windows, but you can't even tell they're there."

The glazing installation was done in three phases and took approximately five to six months with some gaps in between. All sizes for the square openings were guaranteed early in the process, which allowed Hanssen to build the frames and order the glass ahead of time.

Morette worked closely with the surrounding businesses and residents to coordinate construction activities in order to minimize disruptions to those areas. According to Morette, this was important due to a very constricted project site situated in a residential neighborhood. AGG