Jersey Shore redevelopment project uses composite precast concrete cladding

A new five-star multifamily development in Long Branch, N.J., has two eight-story luxury glass towers containing 47 condominiums on 1.7 acres (6900 m²) of oceanfront property. The development features three-sided panoramic views: gardens, penthouses, rooftop terraces and glass-enclosed, climate-controlled loggias. It also features the latest in energy efficiency and safety.

The developer (FEM South Beach Urban Renewal), the architect of record (Shore Point Architecture), and the construction manager (Cornerstone Construction Services) all agreed that they wanted precast concrete panels for the towers. Together, they selected SlenderWall precast concrete building panels, manufactured by Smith-Midland Corp. of Midland, Va. They opted for SlenderWall for a number of reasons, including its visually appealing features (cleaning white, acid-etched panels), its light weight (which makes installation faster, safer, and easier), its strength (to stand up to strong East Coast winds and storms), its durability in the ocean air, and its energy efficiency (to meet the state's new energy and thermal code requirements).

SlenderWall, an Easy-Set Worldwide-licensed product, is a composite cladding system that is 66% lighter than traditional 6 in. (150 mm) thick precast concrete. The light weight is achieved by integrating a galvanized interior steel stud frame with a 2 in. (50 mm) thick precast concrete panel. Each panel has its stud cavity filled with 3.5 in. (89 mm) of factory-applied closed-cell foam insulation, which is able to achieve an R-value of 24. Despite their light weight, SlenderWall panels are able to withstand winds up to 226 mph.

In all, Smith-Midland manufactured 451 SlenderWall panels (28,578 ft² [2654.9 m²]), as well as 88 traditional architectural precast concrete panels (4637 ft² [430.8 m²]) for the project. Smith-Midland not only manufactured and delivered the panels but also installed and caulked them.

"The SlenderWall panels are placed around the living areas," says Chris Grogan, business development manager for Smith-Midland. "The architectural panels are placed in the parking areas, as well as in other locations where there is not a need for stud-wall backup."

One challenge of the project, Grogan says, was that the shape of the building was not regular. "There were a lot of different angled corners," he says. "Not all of them were 90 degrees, so we had to take these into account during the layout. However, the panels tend to be very flexible in terms of manufacturing different sizes and shapes, so we were able to address these corners."

The key to success, Grogan says, was working closely with the owner, architect, and construction manager to maximize the efficiencies of Smith-Midland's system, and at the same time ensure that there would be as much open window area as possible on the building.

—William Atkinson

This new five-star, oceanfront, multifamily development in Long Branch, N.J., designed by James Monteforte of Monteforte Architectural Studio, uses Smith-Midland Corp. SlenderWall precast concrete building panels for their aesthetics, light weight, strength, durability, and energy efficiency. Courtesy of Costea Photography Inc.