San Diego Square provides 154 affordable apartments in downtown San Diego for people who are at least 62 years old and living on 60% or less of the area's median income. Building owner Housing Development Partners (HDP), a nonprofit affiliate of the San Diego Housing Commission, plans to preserve the 12-story building as affordable housing for seniors. To do that, however, HDP had to update the building in its first major renovation since it was built in 1979.

The 37-year-old building needed a facelift, new electrical, and fire and plumbing systems. As part of the renovation, new window-wall systems were added to enlarge the units. Because each unit contained a patio or balcony, exterior walls shared by interior living rooms and balconies were torn down and constructed further out onto the balconies, thus making interior living spaces larger.

San Diego-based plastering contractor Walter N. Coffman, Inc. was hired to install stucco on the newly built exterior balcony walls as well as a 4-foot-high parapet that ran along the outside of the roof. Because the work had to be coordinated with other trades, and scheduled around tenants residing in the building, the contractor's biggest challenge was in finding a stucco product that would allow crews to scratch, brown, color, and clean up multiple five-by-nine-foot walls in one workday.

FAST-SETTING CEMENT

The contractor decided to use Rapid Set® Eisenwall® due to its accelerated setting times. It only takes about 75 minutes for the product to set, which then achieves compressive strengths of 1,500 psi after six hours and 2,500 psi after 24 hours.

“Timing was everything,” says Mickey Coffman, general manager with Walter N. Coffman, Inc. “Eisenwall was the only product that would allow us to complete a wall in one day. With other products, we’d have to wait a day or two for the cement to dry and then another week to color.”

Eisenwall is a premium hydraulic cement used for exterior plastering, one-coat stucco and plaster wall repair applications. It can be applied on both wood- and steel-frame construction and over nearly all substrates, new or retrofit. Eisenwall also is resistant to shrinkage cracking and outperforms traditional plastic cement.

The product is applied the same way as plastic cement: by hand or machine (gun spraying). One 88-pound bag covers five square yards at 7/8 inches thick. For this project, one bag was used per unit wall. The product was mixed by hand with four bags of plaster sand and water.

WORKING AROUND TRADES, TENANTS

Over the course of eight months, the contractor completed six units one day a week. A crew installed metal lath to designated unit walls on Thursdays, and the Walter N. Coffman crew came in the following Mondays to apply and score the scratch coat and then apply the brown coat. After 90 minutes of curing, the colored finish coat was applied.

Work had to be performed in a stacked method due to the plumbing work taking place (the plumbing system was installed vertically). For instance, during the first week, a four-person crew started with a unit on the top floor and then moved to the unit directly below. Crew members continued this process until they worked their way down to complete the seventh-floor unit. During the second week, work started on the sixth floor and ended on the first floor. All materials were transported to the balconies via manlift and wheelbarrows.

Coffman says he is pleased with the durability and aesthetics of the finished product. San Diego Square residents now have a more attractive building to call home, with fresh, new walls, larger apartments and upgraded amenities. What’s more, residents now have the peace of mind that they may never have to move out because of a rent increase. Affordable housing will be guaranteed in the building until 2079 through a lease agreement with the city.