Designers Find That EIFs Represent More Than Just “Bid and Build” Options

In Stamford, CT, a Plastering Contractor First Built the Entire Project in His Mind Down to the Last Detail and Then Applied His Experience With the Product Into a Successful Job

Meticulous attention to detail and more than half a century of contracting know-how were the keys to a recent EIFS retrofit, part of a condominium conversion at the 12-story Royale Pavilion Hotel in Stamford, Connecticut.

Plastering contractor Mariano Cardillo and Sons, Inc., field applied approximately 65,000 square feet of Senerflex, a thin-coat, 100 percent acrylic, polymer-based exterior insulating finish system (EIFS) manufactured by Senergy Inc. of Cranston, Rhode Island.

According to company president Mike Cardillo, “We don’t just bid and build on any job. In preparing a bid, I never rely on formulas. I build the job in my mind down to the last detail, including every piece of equipment, every scrap of material, every laborer we’ll need to do it right.”

Cardillo’s firm employs 60 people (30 of them year-round), many of whom have been with him close to 20 years. In the busy season, he employs 28 plasterers, usually maintaining a ratio of one or two apprentices to four journeymen. He works closely with the 13 plastering unions in Connecticut to keep a good supply of apprentices coming up through the ranks.

The company works on as many as eight to 10 jobs at any one time. Annual volume is $4 million to $5 million a year, including lath work, interior gypsum systems, portland cement, stucco, exterior steel stud systems, and EIFS.

According to Cardillo, “Our attention to detail has earned us a reputation for making sure the job comes out right every time, whatever it takes. We get lots of referrals and repeat business because of it. I’m fussy about who I work for, but general contractors know that I’m on their side and I’ll stick by my work. It’s an attitude that grows from experience and pride.”

That concern for details continues throughout every job. Cardillo visits each site every one or two days. He
Attaching the 2-by-4-foot EPS insulation board to the pre-cast split-ribbed concrete wall—not the typical flat EIFS substrate—testifies to the wall system’s excellent adhesiveness.

acts as his own estimator, buyer, and road supervisor, and his only office staff is his sister, who does the books. In all his years in business, Cardillo says, he’s never needed a lawyer and never suffered any major losses in contract disputes.

For the Royale Pavilion job, general contractor Kapetan, Inc., assigned all exterior work to Cardillo, who subcontracted the caulking and installation of special aluminum windowsills. “Our taking complete responsibility simplifies life for the general contractor,” Cardillo explains. “We have better control over the finished product, and the GC doesn’t have to juggle so many subs.”

The original exterior of the Royale Pavilion was a series of precast, ribbed concrete panels with many expansion joints. As Cardillo recalls, “The building resembled a giant set of dominoes, heavily cracked, with definite signs of water penetration.

“The developers were considering a roll-on sealer, but I advised against it. The cracks would have opened again within a year.” Instead, Cardillo recommended the thin-coat Senerflex system. Since 1980, his firm has installed more than two million square feet of Senergy wall systems, representing about 95 percent of his EIFS volume.

To convince the developers, Cardillo field tested the bonding power of the system, by installing a sample 4-by-8-foot panel. “A week later, it was so secure, we couldn’t chisel it off,” he says. “We test every EIFS retrofit this way. It takes extra time, but it’s worth it to head off potential problems.”

In addition, to match a special shade of white specified by the building’s owner, Senergy mixed nine different samples of finish coat. Then, just to be sure of a good match, Cardillo installed a 10-by-20-foot panel of the
chosen shade for the owner’s inspection and approval.

On the job site, Cardillo used two foremen, one for plasterers and one for laborers. The total work force consisted of 10 plasterers—two apprentices and eight journeymen—along with four laborers to mix and carry materials and eight laborers to work on scaffolding.

The 22 were divided into three rotating crews, working one eight-hour shift to complete the job in about five months. One crew erected and dismantled scaffolding, one installed the EPS insulation board and applied the base coat and fiberglass reinforcing mesh, and a third applied the finish coat.

The job required 1,400 scaffold frames, covering about two-thirds of the building circumference, top to bottom, at any one time. The first crew built a 220-foot section, then moved on to build the next section, while the plasterers went to work.

It took about three weeks to erect each section of scaffolding, but this system worked efficiently to bring the job in slightly ahead of schedule in spite of heavy rains in April and May.

Cardillo uses this scaffolding on any job higher than one story for several reasons. “The cost of renting or buying mechanized scaffolding platforms can be prohibitive, but cost is only one concern,” he explains. “I prefer the stability of a scaffolding system built from the ground up. I think my workers feel more secure, and when they feel safe, their workmanship is better and productivity is greater.

“Stationary scaffolding also allows us to put two people on two landings to complete a joint in one smooth sweep. If we had to keep moving a platform up and down, we could have a problem with dry joints.”

Because some condominium units were already occupied, the inside elevator was not available, and Cardillo’s crews moved most materials via rope and well-wheel. “Fortunately,” Cardillo explains, “Senerflex is lightweight and easy to handle. We cut the board and fabric with a knife, and mix the base and finish coats, pail-by-pail at a central location. Even on a tall building with no elevator, on-site fabrication was no problem.”

Senergy’s technical service people worked closely with Cardillo throughout the five-month job, recommending several installation modifications. On their advice, the contractor installed 3/4-inch expansion joints on every third floor, reducing the number of joints by about 90 percent. Senergy also suggested new aluminum sills for the building’s 146 windows, to complete the sealed envelope formed by the EIFS.

“They really care about how each job turns out,” says Cardillo. “And if there’s a problem, they won’t run away and leave the applicator hanging out to dry alone. If you qualify, they provide a full five-year warranty on both materials and labor.

“Their attitude is a lot like my own. If there’s a problem or something doesn’t seem quite right, we stop and look into it. That’s what I teach my workers, and that’s what I want from my subs, vendors, and general contractors. If I don’t think I’ll get it, I turn down the job. People think I must have a lot of money to be able to turn down work. Actually, I just have a lot of pride.”