Concrete Repair and Restoration:

New Market for EIFS Contractors

By Kent Stumpe

Concrete columns were plagued with scaling and required reconstruction or replacement. The precast caps on the walls surrounding the club had worn down. The failed coatings on the walls held no protective value, and their appearance was becoming an unsightly distraction. Beyond the cement and stucco work, all gutters, sills, and caulk would have to be replaced.

Rob Aird of Robert A. Aird, Inc., Frederick, MD, has specialized in stucco and exterior insulating wall systems for the past 15 years. Aird was interested in the opportunities afforded by the growing concrete repair and restoration markets. He saw concrete restoration as being compatible with his existing business.

Aird and Saul Mazur, the regional sales manager for Powercrete, Sto’s concrete repair and restoration products division, prepared and presented a renovation proposal to the club’s board. They recommended the repairs be performed using Powercrete’s environmentally safe, water-based products, stressing to the board members the benefits which these advanced products would ensure: their long-term durability would bring an end to the frequent disruptions caused by crews hired to patch and mend with conventional stucco.

The stucco facade of the Congressional Country Club, Bethesda, MD, was restored with minimal disruption of club routine—and with beautiful results.

The Congressional Country Club in Bethesda, MD opened in the 1920s. One of the nation’s most prestigious clubs, members and guests have included government officials, captains of industry and many others distinguished in their own fields.

Over the years routine maintenance was performed to uphold the appearance of the exterior, stucco walls have been painted and patched many times. But by 1991 the main building and surrounding walls needed major repairs.

Scope of the required work extensive

Much of the 18,500 sq ft of stucco was cracked, permitting some isolated water intrusion to become a problem. The stucco facade of the Congressional Country Club, Bethesda, MD, was restored with minimal disruption of club routine—and with beautiful results.

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and concrete repair materials; the structure’s appearance would replicate the aesthetics of the original materials; the work could proceed and be completed quickly; and one manufacturer would stand behind the complete group of repair products.

After hearing their presentation and reviewing Aird’s reputation for delivering quality work on a timely basis, the club confidently accepted their proposal. This was Aird’s first major renovation of stucco and his first use of Powercrete products.

An Accommodating Plan
In November 1991, Aird developed and submitted his detailed plan and estimated scheduling requirements. In addition to providing lasting renovation solutions, Aird’s goal included minimizing inconveniences to members. His workers would perform the bulk of the work on the clubhouse when the facilities were used the least—during the coldest months. Fifty foot scaffolds and tenting would enable the crews to work through the cold weather. The mixing/staging/storage area for the work was situated in an outer parking area. To facilitate the transportation of mixed materials in an inconspicuous manner, the club graciously made a golf cart available for this purpose.

The Renovation Begins
The initial stage of the project consisted of chipping away all loose or failing material. This was accomplished by scraping, followed by power washing the entire surface. Sample remnants of the removed coatings had previously been sent for testing to determine their vapor permeability. Since they proved to be reasonably permeable, only the scraping of loose paint was required. Had they not been vapor permeable, sandblasting would have been necessary before proceeding.

The old mortar was cut from the joints which were then filled with a highly flexible, elastic (1000% elongation), acrylic dispersion based crack filler.

After the scraping was completed, the crew treated all wall surfaces with a sprayer or roller applied surface conditioner and adhesion intermediary. This liquid product is water-based and safe for the environment and the applicator, easy to apply and easy to clean from application tools.

Within four hours of applying the conditioner, the surface was adequately dried to permit the next step—the repairing and leveling of the deteriorated stucco. A covering of a polymer modified, cement based ground coat was applied to a thickness of ¼ in. to ½ in. over the entire exterior. Corner, casing and expansion beads were added where necessary, embedded using this same concentrate.

After leveling the surface of each exterior wall of the clubhouse and allowing about three days for drying, the renovation crew applied a decorative, protective coating in a coarse white finish over the walls. A similar colored, smooth finish was used on sills. The highly elastic (450% elongation in test results), flexible acrylic polymer-based coating is specifically designed to provide excellent adhesion over cementitious surfaces like Congressional’s clubhouse and running walls.

The concrete columns supporting the trellises on the second floor also needed repairs. The widespread scaling on surfaces of the columns foretold that more serious problems would be imminent unless corrective measures were taken. Loose concrete on the columns was scraped away. They were then treated just as the walls had been with the bonding agent, base concrete and elastomeric coating sequence.

Project Completed: Members Satisfied
Aird completed his work before the cherry blossoms were off the trees. In all there was minimal disruption of club routine, and ultimately great pleasure was expressed in the results.

The club has a long and illustrious history in golfing circles nationwide, and the new clubhouse facade will continue to uphold Congressional’s image for many years to come. □