



Dover Air Force Base Medical Group Building

Retrofit of Dover Air Force Base Medical Facility Brings it Back to Life

In northeast Delaware, an important Dover Air Force Base Medical Group building was on its last legs and starting to flat line. SpecPro Environmental Services, LLC (SES), a prime contractor for the Air Force Medical Services Agency (AFMSA), was called in to look at this and other bases' medical facilities, each with laundry lists of problems, to prioritize the projects. Dover AFB 's 436th Medical Group, Building 300, was made a priority and SES' senior project manager and general contractor, Dave Blank, formed a team of experts to restore this facility back to health.

Sto Products: - StoGuard®

- StoTherm[®] NExT[®]
- StoCoat[®] Lotusan[®]
- Stolastic Smooth

Architect:Davis Stokes CollaborativeApplicator:Level OneContractor:SpecPro Environmental Services, LLCContact information:www.stocorp.com













The four-story medical clinic was built in the 1950s and its original brick facade did not have any weepholes, allowing moisture to get behind the brick and causing big problems. This included many areas where the water had built up so much that the pressure was actually pushing the brick out. The brick face was also delaminating in places on the building. It was obvious, that before anything else could happen, there was extensive repair work needed to be done. Blank called on Rick Bianchini, owner and president of United States Restoration, Inc. (USRI) to restore the exterior. The team also included Shawn Frey, construction manager and owner of Level One Construction Group, LLC, and architect Lyndon Brown of Davis Stokes Collaborative.

"There were problems with the building envelope and we needed to design it so as to tighten up the envelope and make it more energy efficient," said Brown. Once Brown and the team had completed the design work, which included Exterior Insulation and Finish System (EIFS) for the cladding, Bianchini and his team fixed all of the structural elements. Bianchini then called on Sto Corp. and the Stolastic Smooth coating, which was applied over the deteriorating brick around the first floor of the entire building. Stolastic is an elastomeric, acrylic-based, decorative coating that weatherproofs and bridges hairline cracks. The balance of the project, approximately 60,000 square feet, used StoTherm Lotusan NEXT[™] to cover the leaky brick.

"We were so impressed with the coverage rate of Stolastic Smooth, which covered so many of the openings of the failing brick facade. In fact, we used another 600 gallons of it at the main hospital at another base in Biloxi, Mississippi," said Bianchini. "This product is a shining, glowing example of what can be done with foresight."

Next up was Shawn Frey who served as the sub-contractor on the project. Shawn chose StoTherm Lotusan NExT to cover the flawed brick. The system combines StoGuard[®] spray-on waterproof air barrier, StoTherm[®] insulated wall cladding and Stolit[®] Lotusan[®] textured finish. It integrates three proven components – a continuous waterproof air barrier, exterior insulation and a textured finish with self-cleaning properties – into a sustainable wall cladding. The system delivers energy efficiency and durability required for building sustainable construction projects. "I chose this system because I wanted to provide the best system possible, knowing the government wanted the best quality, best value, and that Sto Corp.'s two ISO certifications meant something to them," said Frey. "Sto's system matched all of the qualifications."

According to Brown, StoTherm Lotusan NEXT solved all of the previous problems – moisture protection, color range and flexibility of design. "The color needed to be a standard color for the base and it needed to flow with the rest of the base, not stick out as it had before. Wrapping the building with a lightweight product sealed it for moisture protection and gave us the flexibility of design that we needed," said Brown. Not only did the entire facade need to be repaired and covered, but also the windows and doors needed to be replaced.

According to Blank, the biggest challenge, however, was that the facility stayed operational for the 10 months needed to complete the project. Because it was a clinic with daytime hours, some of the work needed to be completed after hours and on weekends, so patients would not be disturbed. Even with the inconveniences, all involved in the project were pleased with the results.

According to Bianchini, his company is in the business of restoration and he calls this job a transformation. "I've been in this business for more than 30 years and this building's transformation is next to unbelievable," said Bianchini. As Frey sums it up, "The brick was failing and we essentially brought the building back to life."