



A NEW BASIS of Operation

PROJECT SUMMARY

- Refinishing the floor of the large animal surgery room at the North Carolina State University Veterinary Hospital
- Project included the buildup of a 4-inch cove edge around the room to facilitate easier cleanup and some high coating buildup to restore liquid flow to existing drains
- Decorative medium brought aesthetic appeal and texture to the finish

PRODUCTS IN USE

- Sherwin-Williams Envirolastic Polyurea Floor System



Perhaps it should be no surprise that warping was evident and cracks were visible in the epoxy-finished concrete floor that provided a footing for activity in the large animal surgery room at North Carolina State University's College of Veterinary Medicine.

After all, the Raleigh, N.C., building's foundation appeared to be in constant movement over the years, to such a degree that the floor of the 500 square-foot room had developed a slope that ran away from drains originally built into the floor.

That made cleanup, a critically important task and a tremendous challenge in such an environment, an even more daunting project.

"When they start lavaging during the course of equine surgery, there can be quite a bit of fluid in here," says Donna Hardin, the manager of the Central Procedures Laboratory. "This room just gets saturated. As a result, the whole room must be sprayed down and decontaminated afterwards."

Spraydown occurs with a quaternary ammonium compound, and the resulting chemical solution cleans and disinfects to such a degree that bacteria colonies measured on the floor must achieve certain standards before another operation can be performed in the room. The process is not only hard on a coating, but on the concrete surface below it as well.

The continuing shifts in the building's foundation meant that concrete repair or replacement followed by another epoxy finish would be a short-term solution at best, and Hardin had seen dozens of ordinary epoxy finishes produce largely unsatisfactory results in other rooms in the facility.

So Hardin's wish list for a new floor was growing: it must be properly sloped to allow for better drainage, flexible enough to withstand movement in the building's foundation, and durable enough to withstand repeated cleanup with harsh chemicals. And since she was asking, could she also have a textured finish that would be less slippery than the old finish even when wet, as well as a more attractive appearance than the old floor?

"I wanted aesthetics," Hardin admits. "Battleship gray doesn't do anything for me."

And then the kicker. Whoever measured up to the task of finishing the floor had a three-day window to get it done. A 1,500-pound horse in need of surgery waits for no maintenance project.

"I thought it might be possible to get everything we wanted, but it had to be the right company," says Hardin.

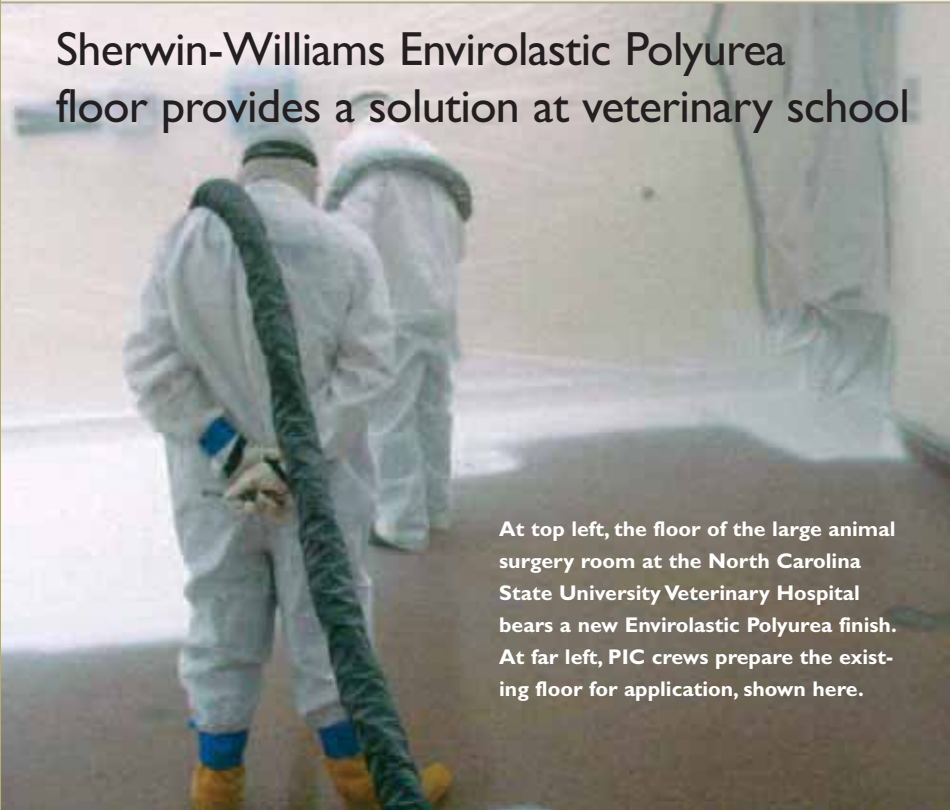
PIC AND POLYUREA

When Professional Industrial Coatings, Inc., of Kernersville, N.C., went to discuss the possibility of recoating the floor at the veterinary school's surgery room, company president Brad Joyce had an ace up his sleeve, one that none of his competition for the project had. Joyce had completed a Sherwin-Williams certification program that qualified his company to apply a Sherwin-Williams Envirolastic Polyurea floor system.

Joyce has only been at the helm of his firm for three years, but his approach to business is polished and professional, and he had little trouble selling Hardin on the abilities of his company and the system he would use.

For starters, the Envirolastic Polyurea system has elongation properties up to 520 percent, which means

Sherwin-Williams Envirolastic Polyurea floor provides a solution at veterinary school



At top left, the floor of the large animal surgery room at the North Carolina State University Veterinary Hospital bears a new Envirolastic Polyurea finish. At far left, PIC crews prepare the existing floor for application, shown here.

CONTRACTOR SPOTLIGHT



PIC president Brad Joyce, Sherwin-Williams representative Sid Oakes and PIC vice-president John Elliott (l-r) study the flexibility of an Envirolastic Polyurea floor mat they created, adding value to a customer's recent floor finishing project.

A Professional Edge

Brad Joyce saw a tremendous opportunity in the industrial painting business, and it had almost nothing to do with painting.

Joyce, who started Professional Industrial Coatings, Inc., in Kernersville, N.C. three years ago with a \$2,000 credit limit and little else, recognized that a higher degree of professionalism could set his fledgling business apart from the competition. Judging from the fact that he expects to turn \$7.2 million in business in 2003, he was right.

"We try to do everything first class," says Joyce, who recently partnered with vice-president John Elliott to help handle the company's rapid growth. "The highest compliment I can receive is when a customer tells me how professional our crew and our operation appeared."

To that end, Joyce invests in high-quality equipment, training such as the Sherwin-Williams General Polymers contractor certification program and the use of high-quality coatings, such as Sherwin-Williams Industrial and Marine coatings and floor systems.

"We're at a point where the work we do is our most effective advertising," says Joyce. "Word travels fast."

that the floor could withstand the movement that would fracture an ordinary epoxy-on-concrete floor system. It has extremely high-build properties, to 250 mils or more, which meant that applicators could return the slope of the floor back toward the drains. And importantly, given that Envirolastic Polyurea cures to the point that it can be walked on within minutes of application, the project could be completed in the school's three-day window of opportunity.

Joyce also promised that he could provide a decorative finish, as well as a textured profile that would offer better traction in the operating room no matter what spilled to the floor.

"I was practically sold before we started talking about the product, but this Polyurea system truly was going to give us everything we wanted," says Hardin.

BUILDING A BUBBLE

The first step was to seal off the room, and PIC's crew of four did so with sheets of plastic.

"Basically we made the room a bubble," says Joyce. "The product has low odor and no VOCs, but in this type of environment, we wanted to completely contain the project."

Shot blasting and diamond grinding removed the existing epoxy finish. The crew did some patching work wherever damage to the concrete merited it, then applied a moisture-tolerant primer. Polyurea application followed, and the ultra-high-build product achieved up to one-half

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inch thickness in some areas to restore proper slope toward the drains. Then followed a broadcast of the color quartz decorative medium that would bring the "ceramic carpet" appearance to the finish.

"We had one person on the hose and three guys following right behind him doing nothing but broadcast," says Joyce. "This product gels in 45 seconds, so they had to move quickly. There really is a considerable amount of expertise that goes into this application."

Two coats of epoxy resin were then separated by a light broadcast of the decorative medium. The broadcast granules that were not absorbed into the epoxy resin were swept up. Then, a chemical-resistant urethane finish coat was applied to complete the system.

The new floor has met all the criteria on Hardin's wish list: the floor now drains properly and it was completed over the course of a holiday weekend when it wouldn't interfere with lab operations. It's also attractive and is guaranteed to stand up to harsh chemical cleanup. Only the test of time will tell if the floor system will endure the shifts in the building, but based on the remarkable elongation properties of the Envirolastic system, Joyce is confident that it will.

"We're very pleased with the floor," says Hardin. "We couldn't afford to start from scratch with this room, and it looked like that might be our only option."

Adds Joyce, "The Envirolastic Polyurea system provided the perfect solution." ▣