Market Application

Health Care / Institutional / Veterinary Clinics

Industrial Flooring

Project: Owner: Flooring Contractor: Year: Project Background: Vet Med III — Davis, California University of California - Davis School of Veterinary Medicine Creteguard, Inc. 2006 New Construction



The need for improved facilities for veterinary education and research led University of California's Davis Campus to the construction of a new five-story, \$77 million tower. The Veterinary Medicine 3A building, or "Vet Med III," features 98,000 square feet of teaching, diagnostic and research laboratories, research support services, academic offices, clinical services, and administrative offices, enabling UC-Davis to centralize its veterinary medical activities while increasing the quality and number of students it graduates annually.

Approximately 24,000 square feet of Vet Med III's 98,000 square feet of flooring is freshly poured concrete, primarily in its research areas and laboratories. As in any health care facility, these floors require a specialized concrete coating that not only stands up to heavy traffic—human and otherwise—but also resists chemical spills, staining from medical by-products, and the aggressive cleaning agents needed to maintain a

hygienic surface. These requirements would be a tall order for any flooring system; however, adding to the challenge was California's tough environmental laws that severely restrict VOC emissions.

Here's where Sika Industrial Flooring and CreteGuard, Inc., a Santa Fe Springs California flooring contractor, teamed up to provide Vet Med III with the ideal flooring system, resulting in an improved setting for veterinary teaching and research.

CreteGuard brought the vast industry experience of its project managers, technicians and installers to this job. In addition, it won the bid through a combination of competitive pricing plus extensive project preparation that included an on-site mock-up of a seamless floor system utilizing Sikafloor 110 Epoxy Mortar Flooring resurfacer topped with a decorative quartz finish.

Thomas Nucum, CreteGuard's CEO, explains: "As professionals in the flooring industry, the biggest decision we had to make was singling out the best resurfacer for the fresh concrete. Sikafloor 110 epoxy-based mortar flooring met our criteria in that it was VOC compliant while also providing the needed chemical, moisture and impact resistance. Plus, I was impressed by the aggregate's uniform appearance and its ease of application."

Sika Industrial Flooring representative consulted with CreteGuard: "The flooring system at Vet Med III is subjected to everything from trampling by horse hooves to being used in a pit for bone grinding. Sikafloor 110 was the perfect choice.



Sika's System Approach to Resinous Flooring

Sika also recommended a decorative guartz finish using Sikafloor 225 Ultra UVR Epoxy. This water-clear, high solids epoxy offers outstanding UV resistance, and is further differentiated from conventional epoxies by its excellent chemical resistance, low odor, environmentally friendly low VOC's, and low viscosity for improved adhesion. This versatile coating can be installed as a clear or a pigmented body or finish coat; or, as was the case throughout UC Davis' Vet Med III project, Sikafloor 225 serves as a color-stable, non-yellowing binder and grout coat for decorative guartz broadcast systems.

Besides selecting materials, another challenge for CreteGuard was timing, says Nucum: "Construction deadlines required our team of 5-7 installers to coordinate its work around electricians, drywallers and other trades that were still in the building. We put in 12 hour shifts, seven days a week for nearly four months to get the job done right."

CreteGuard divided up the 22,000 square feet of concrete into sections, tackling each one individually based on availability. Floor preparation consisted of flash patching and filling in seams on the new slabs to create a smooth, monolithic and level floor surface, ready for the floor covering installation. Because Vet Med III is made up of a several small rooms, CreteGuard hand troweled the 1/4" Sikafloor 110 rather than use a power trowel, assuring a more precise application. "Most of the rooms in Med Vet III measure only 300-400 square feet, plus there are drains in virtually every one," said Nucum. "Hand troweling is the best method to use in these types of situations, and thankfully Sikafloor 110 made it easy."

Sikafloor 110 was met with approval by CreteGuard's hardworking installers, who found it is simple to mix and trowel. It also required far less clean-up than sticky resin products. Moreover, they appreciated that the Sikafloor 225 would sit on top of the Sikafloor 110 rather than sink in, saving them the hassle of a recoat. While Vet Med III was almost exclusively a flooring job, there were some exceptions. For example, its specimen review room features coliseum style seating for approximately 25 people. Here, CreteGuard used the Sikafloor 110/Sikafloor 225 system for the floors, the seating area, as well as for the walls.



"Everyone associated with the Vet Med III project worked hard," says Nucum. "The result is an on-time, on-budget flooring system that is certain to last for years."

Sika Products

Sikafloor® 110 Quartz Epoxy-Based Mortar Flooring: A nominal 1/4 " trowel-applied (or power-troweled) 100% solids epoxy/modified polyamine concrete floor resurfacer. Finished with colored guartz broadcast to produce a decorative, slip-resistant, abrasion resistant surface.

Sikafloor® 225 Ultra UVR Epoxy: A water clear modified epoxy finish coat or stand-alone coating. Suited for use in slurry broadcast decorative quartz systems. Superior UV stability.

Sika... One Name. One Source. Worldwide.

Responsible Care Good Chemistry at Work



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Sika Industrial Flooring

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