

## Floor Solutions

## Research Center Designed to Take the World into the Future



The Janelia Farms Research Campus in rural Loudoun County, Virginia, houses a world-class research center where scientists from many disciplines gather to collaborate closely, in small teams, on some of science's most challenging problems. This dramatically designed complex includes an expansive laboratory center, conference facilities, and housing, all fashioned to blend into the natural landscape. The scientific program and plans for campus facilities were intertwined, with each section overlapping and influencing the other.

In 2000, Janelia Farms built their new facility with a budget of \$500 million dollars. The facility was created to be a long-term research environment with a flexible lab and support space to accommodate future technology. The site was selected for its proximity to Howard Hughes Medical Institute, headquartered in Chevy Chase, Maryland.

When constructing the lab, everything had to be taken into consideration. Stonhard, the global leader in polymer floors, was brought to the design table. Based on a long-standing relationship with Turner Construction, the general contractor for Janelia Farms, along with the right products for the environment, Stonhard was chosen to manufacture and install floors and walls for the labs, vivarium, and corridors.

The Stonhard installation began by preparing the new concrete. For the vivarium areas, a primer was applied, followed by an epoxy mortar system, Stonclad GS. This system delivers excellent performance under extraordinary conditions, including impact, abrasion, and chemical attack.

Stonhard also installed epoxy wall systems for the facility's vivariums. Seamless, ultra-smooth wall coatings resist abrasion as well as splashes and spills from cleansers and disinfectants commonly found in these spaces. A fiberglass reinforcement was added to the wall system to provide enhanced resistance to cracks and punctures.

The corridors and lab areas in the facility required exceptionally durable floors. Scientists spend countless hours on their feet, so in addition to being easy to clean and stain resistant, the floors needed to be resilient and comfortable. Adjacent to the labs and corridors, sheet vinyl had been installed prior to Stonhard's arrival. Architects were unhappy with the vinyl product because seams collect dirt and bacteria making cleaning and maintaining a hygienic environment a challenge. Stonhard introduced Stonres RTZ, a decorative, urethane-based, poured-in-place, seamless surface to provide acoustic efficiency, ease of maintenance, and stain resistance.



## THE STONHARD DIFFERENCE

Stonhard is the unprecedented world leader in manufacturing and installing high-performance polymer floor, wall and lining systems. Stonhard maintains 300 Territory Managers and 175 application crews worldwide who will work with you on design specification, project management, final walk through and service after the sale. Stonhard's single-source warranty covers both products and installation.

Stonres RTZ was used for the floors in the labs and corridors for its outstanding performance capabilities.

Modern design elements, including Stonhard floors, helped to create a spectacular work environment.



The central objective of the architectural design of the research complex demanded collaboration and flexibility. Stonhard worked within these parameters meeting design requirements and time constraints. Stonhard provided long-lasting, sanitary, stain and impact resistant floors and walls that are not merely functional, but sophisticated for a highly innovative work environment.

The lab facilities were created with a flexible and interchangeable lab bench system. These areas can be quickly converted from bench systems to computer labs or robotic uses. With the seamless flooring in place, this helped make a smooth transition for equipment with no damage to the floor. Some of the vinyl flooring in the lab areas remained while Stonres RTZ was installed in the surrounding areas. The team at Howard Hughes requested a custom color to match the existing sheet vinyl. In the end, Stonhard formed a flawless design transition between the two products. Over 110,000 sq. ft. of Stonres RTZ was installed throughout the research center, making this one of Stonhard's largest Stonres RTZ projects.











