# STONHARD Solutions

## Pioneer in Stem Cell Research Looks to Stonhard to Solve Unique and Significant Flooring Quandary

Products used at Coriell Institute:

• Stonclad GS/GS4

The subject of stem cell research evokes reactions around the world, as it appears in news headlines and emerges on political agendas. How then, does a worldwide polymer flooring company find itself involved in the provocative field of biomedical research?

When the Coriell Institute for Medical Research, an internationally known, not-for-profit biomedical research facility in Camden, New Jersey encountered a serious flooring dilemma in their stem cell research/cord blood storage facility, they asked Stonhard to solve their problem.

Since that time, the relationship between this biomedical research giant and globally successful flooring manufacturer and installer has flourished, resulting in respected business relationships and problem-solving results.

#### **Background**

During the 1940s, Dr. Lewis Coriell played a major role in bringing the Salk polio vaccine to the public by using cell cultures to study human viral diseases. Impressed with Dr. Coriell's work, local business leaders helped him to establish a basic research facility. Dr. Coriell and his colleagues pioneered many cell culture techniques, which are now standard throughout the world. The Coriell Cell Repositories maintain the world's largest collection of human cells, the raw materials of human genetic discovery.

Currently, the Coriell Institute occupies a five-story laboratory facility in Camden, New Jersey. This location fosters a triple partnership for basic research, education and medical care in Southern New Jersey. In 2000, Coriell renovated an existing facility, creating new areas for stem cell research. Scientists conducting stem cell research use umbilical cord blood to generate specific cell types that can then be used to treat injury or disease.

Both the cord blood storage area and human cell repository store liquid nitrogen cryogenically in large, insulated



Stonclad GS with GS4 floors provide lasting protection from impacts, chemical spills and thermal shock in Coriell's research facility.

vessels. Spills of liquid nitrogen will cause thermal shock to the floor. This area requires a floor that can not only withstand impact from vessels and other wheeled equipment, but also combat the chemical spills and thermal shock.

### The Solution

Stonhard recommended Stonclad GS, a general service epoxy mortar system that offers outstanding impact, abrasion and chemical resistance. Stonclad GS is also a long-wearing and easy to clean floor. To address the issue of thermal shock, Stonhard included fiberglass reinforcement to the system for increased surface strength. The surface veil of fiberglass was applied after the epoxy overlayment and then sealed with Stonkote GS4, a two component, 100%-solids epoxy coating to further protect the floor. The coating also increases chemical and abrasion resistance.

The final result yielded a seamless, smooth, easy to clean and sanitary floor that resists chemical spills and damage from moving vessels or other heavy equipment. Coriell was able to maintain operations without disruption from Stonhard installers.

The installation was done by Stonhard's own installation crew and coordinated by the local Stonhard Project Manager, who was an integral part of the project throughout the course of the project – so much so that Coriell management remarked on the Stonhard Project Manager's extraordinary dedication to details and daily involvement in the project.



Stonhard floors protect areas around tanks in a cord blood storage area within Coriell Institute.

While the research and work done at Coriell Institute is enormous in scope, the promise of durable, easy to clean and high performance floors allows them to carry on their tasks – tasks that are pivotal not only to the local southern New Jersey community, but to the medical world.

#### The Stonhard Difference

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



