

N27. Acrylic Floor Toppings Simplify Decontamination In Nuclear Facilities

An acrylic industrial floor coating system with a substantial history of success in food and beverage plants has demonstrated decontaminability by simple washing techniques, unlike traditional epoxies that require complete removal for decontamination.

One of the factors contributing to the successful performance of the acrylic system is its resistance to water absorption. In the ASTM D-570 Water Absorption Test, the Silikal material has an absorption of 0.01 percent by weight to 0.05 percent. Epoxies, on the other hand, typically score in the range of 0.3 percent to 1.0 percent in the D-570 test, as much as 100 times more than the acrylic. In high traffic, high contamination areas of nuclear facilities, silikal flooring provides exceptional resistance to wear, while at the same time it can be cleaned easily to eliminate radiation exposure from the spill of contaminants.

Its durability and decontaminability eliminate the substantial cost and disruption of scabbling to remove old coatings and concrete.

Other benefits of Silikal flooring include its resistance to delamination, fast curing, and easy topcoatability. The system wears without peeling and does not require routine maintenance.

For more, see Pentek Ink, Volume 5, No. 2, Fall 1989 (Pentek, 1026 Fourth Avenue, Coraopolis, PA 15108).