

Case History – Gateway FS, Waterloo, IL

Gateway FS, Inc. is a locally owned agricultural cooperative serving producers in Monroe and Randolph counties in Illinois. Formed in 1931, Gateway FS, Inc. is a leader in meeting producer needs in production agriculture and crop marketing. They were having problems with concrete deterioration in their chemical mixing and fill areas. They'd tried several different flooring solutions but they all failed due to heavy traffic and chemical attack. They looked to International Coatings rep, Dan Deckert of TCR Coatings, for a solution.

Dan knew that it would take a substantive system for the heavy loads that drive over this area and since this it sees many different chemicals in many different combinations a highly chemical resistant coating application was required. Dan recommended ICO Hi Guard applied at a ¼" thickness. ICO Hi Guard is a novolac epoxy with excellent chemical resistance to many concentrated acids, most alkalis and some solvents. The enhanced toughness of the system allows for better resistance to thermal and mechanical shock compared to more conventional materials.



Grinding the Curb



Fiberglass Embedded in Epoxy



Trowelling the ICO Hi Guard

The first step was to remove all of the old coatings and prep the concrete by shotblasting and grinding. There was a curb that was to be coated as well and because of the amount on movement Dan recommended embedding fiberglass scrim cloth into the system. Keyways were cut at all the termination points to provide a solid anchor. The ICO Hi – Guard was then trowel applied at at ¼" thickness.



Finished Floor



Floor Termination Detail



Drain and Joint Detail

After a year of service, the film is holding up exceptionally well, with no sign of wear and tear. For non traffic areas, such as secondary containment, a thin film version of the ICO Hi Guard is available. The customer has been extremely pleased with the toughness and durability of the system and it has exceeded their expectations.