

Case Study: Firehouse Floor

The Shreveport, LA Fire Department had been in the habit of having to recoat their floors about every year with a thin film epoxy coating. Because of the brittle nature of the coating, as well as the thickness of about 10 mils, they found that before too long, dropped hoses and other equipment caused significant chipping and gouging of the floor. Wanting a "showroom" quality look, the department approached our local distributor, Caddo Paint, on suggestions for a more durable floor that could be easily maintained and would last for at least five years.

Two suggestions were made: the first was a quarter inch trowelled floor of our flexibilized epoxy, ICO Floor 51, and the second was our one eighth inch ICO Floor SL self levelling floor. Both products are flexibilized, resin-rich epoxies that hold up very well to impact and washdowns. While the quarter inch system can be expected to out-perform thinner systems, because of budgetary concerns, the Floor SL system was selected.

Because the firehouse had to be kept in operation readiness, the floor was done in two sections. After removing the old coating and getting down to bare, clean concrete, the applicator applied a thin coat of Primer LVFC, followed a few hours later by application of the Floor SL. The half floor was returned to service after a total downtime of 48 hours, including prep, application and cure. The second half was completed the following weekend in a similar fashion.

Fire officials were very pleased with the results. Because the 100% solids epoxies had very little odor, operations were not disrupted during application. More importantly, the floor has held up well for over three years without any need for recoating. While some gouging has occurred, the greater thickness has prevented penetration all the way thru to the concrete. Maintenance has been easily accomplished by damp mopping and occasional solvent wiping of grease and oil.

Looking at firehouse floors in the short run proved to be a poor economic decision when labor costs of redoing the floors on an annual basis were factored in. The Floor SL system paid for itself by lasting more than two years and with continued vigilant maintenance should easily last a couple of more years before recoating is necessary.

