A FAST TURNAROUND

Flexcrete Technologies recently ensured minimal disruption to services when renovating resin flooring at the premises of a vehicle fleet company.

When it comes to the refurbishment of large industrial or warehouse floors, one of the primary objectives is often to waterproof and renovate the floor with a durable flooring system.

This needs to take place within the minimum timescale, to enable facilities to be returned to normal operation as soon as possible.

Flexcrete Technologies has recently been involved in a demanding flooring project at the premises of a vehicle fleet company in Southport, Merseyside. The 460m2 concrete warehouse floor was fully repaired and waterproofed, prior to the application of a resin flooring system, before the completed floor was put back into service just seven days after commencing the refurbishment. Ordinarily when resin flooring systems are laid onto concrete floors, new concrete has to be 28 days old or existing concrete has to be completely dry before overcoating to prevent the risk of osmotic blistering. This didn't need to be the case with this project.

The concrete floor dated back to the early 20th century and over the years, it had become worn and uneven with areas of unsound and delaminated concrete, as well as heavy oil contamination. The premises had previously been used as a bus maintenance garage and a car refinishing facility, so there was evidence of old inspection pits, weigh bridges and other internal structures. Preparation work started on the Monday and involved chasing out and removal of existing timber battens and failed concrete around the bay areas. A mechanical handheld grinder was used to roughen up the edges and create a key before a floor



scabbler was used to remove 2-5mm of the existing concrete to provide a sound substrate. Cracks and the perimeter of hollow or uneven areas were chased out to a depth of 10mm using a disc saw.

"The concrete warehouse floor was fully repaired and waterproofed before being put back into service just seven days later."

The repair area was fully saturated prior to the application of Flexcrete Fastfill, a rapid setting cementitious repair mortar which requires no primers and can be bulked out with standard 6-10mm granite aggregate for larger areas of concrete repair. Water is simply added to Fastfill to create a pourable material that is very easy to apply. Fastfill is ideal for use in areas requiring rapid reinstatement as it develops its strength extremely quickly, setting in just 10 minutes at 20°C.

On the following day the floor was primed with Cemprotec EF Primer before the application of Cemprotec Levelling Coat, a self-levelling compound designed for concrete

floors. Cemprotec Levelling Coat was applied to the main floor area at a nominal 3-6mm thickness, and up to 60mm is possible. This product levels and waterproofs uneven concrete floors but it can also be used as a stand-alone waterproofing coating. It can also act as an underlayment or as a wearing screed to provide

resistance to abrasion and trafficking.

Cemprotec Levelling Coat hydrates and gains strength quickly, allowing pedestrian traffic within just four hours. With a water-based formulation, it releases no hazardous solvents or heavy odour so is safe to use in enclosed or public areas. A key advantage is that it can be overcoated within just 24 hours of application and is compatible with most proprietary top coat systems, including polyurethanes, PMMA resin flooring, polyureas and epoxy-based systems.

On the third day all moisture measurements confirmed that the floor was dry enough to allow the application of an epoxy primer. This was then left 24 hours to cure before the application of the epoxy coating. A further 24-hour cure period was required before the application of the first coat of a matte polyurethane top coat and the second coat was applied a further 24 hours later. The floor was then put back into service on the Monday morning, just seven days after starting work, ensuring absolutely minimal disruption to the client and allowing an array of high value prestige vehicles to be stored in the facility once again.

www.flexcrete.com