

Project Completion Report Reline of GRP Tank Alder Hey Children's Hospital - Liverpool



Project Overview

Site address: Alder Hey Children's Hospital, Liverpool

Project Time: 5 Days

Project Brief: Reline of 1no sectional GRP water tank measuring 6m x 4.5m x 3m. The

tank is currently leaking into the plant room.















Scope of Works

- Arrival Tank to be drained down by Titan Mechanical Services. Complete
- Surface Preparation All accessible bolts tightened, and mastic joints assessed and repaired where necessary. All surfaces then abraded to raise a surface profile of ~75microns. - Complete
- All joints and connections to be sealed with a fiberglass bandage.
- Solvent free polyurethane coating Where necessary, dehumidification/heating equipment will be used to ensure correct curing conditions are achieved. The solvent free polyurethane coating is applied by brush or roller to give a uniform even thickness of a nominal 500microns per coat. A minimum of two coats will be required to achieve a nominal specified thickness of 1000microns (1mm). Complete
- Application of Stripe Coat Product is applied by brush to all joints, edges, bolt heads, struts and other sharp protuberances to ensure any high-risk areas are secured and enable subsequent coating to be a seamless membrane. - Complete
- Application of First Coat Product is applied by roller to all internal surfaces to a minimum 500-micron wet film thickness. - Complete
- Application of Second Coat Product is applied by roller to all internal surfaces to a minimum 500-micron wet film thickness to achieve a desired 1000-micron total coating thickness on all internal surfaces. - Complete
- Re-commissioning Upon completion of works, the tank will be refilled and disinfected
 in accordance with the requirements of PD855468:2015, before being returned to
 service. A disinfection certificate will be issued along with a completion report. Complete















Photographic Evidence of Works Completed

CWST was in poor condition prior to preparation and had heavy contamination along the walls and base.

The photos below show the tank at various stages of the process, from preparation of the surface, (current page) to the final application of the 2^{nd} coat (last page).



















Photographic Evidence of Works Completed

The photos below show sealing of the bandage and application of the stripe coat.



















Photographic Evidence of Works Completed

The photos below show the final application of the 2^{nd} coat. A dry film thickness test was carried out during the process, with an average thickness of more than 1000 microns achieved on all surfaces.















