

Eastbourne sewage treatment works

Case study 2009

Focus products: Intercrete® 4820,
Intercrete® 4840

Client: Southern Water

Contractor: GPB (Mastics) Limited

Summary: Repair and protection of underground concrete outfall tank suffering from chemical attack

Background

Southern Water operates 400 sewage treatment works and their facility, located on the outskirts of Eastbourne, was constructed in 1990. The reinforced concrete of the underground outfall tank was failing due to acidic and bacterial attack above the water line, necessitating a remedial programme.



The solution

In deciding upon a remedial solution, one of the requirements was to provide a high degree of chemical resistance for the concrete with a system which could be applied onto damp surfaces. Effective preparation was carried out with high pressure water following which all surface imperfections and blow holes were filled with Intercrete 4820 a cement-based polymer modified and fibre reinforced fairing coat. Intercrete 4820 is both quick to apply and highly economical in use as bagrugging technique is used. This creates an ideal surface to support a 2mm coating of Intercrete 4840, an advanced epoxy cementitious hybrid coating with excellent resistance to chemicals which would typically threaten the integrity of concrete.