INDUSTRIAL CASE STUDY



RESERVOIR INSULATION AND WATERPROOF MEMBRANE





SITUATION

The Goytre Reservoir is located near Port Talbot in southern Wales. Welsh Water repaired the aging roof but was concerned that these repairs could not withstand the weight of stone and soil used to insulate the tank. Poor quality construction of a roof slab on the concrete tank reduced the effective depth of the slab, reducing its structural capability, resulting in moderate cracks over a large section of the slab, particularly around column heads.

Welsh Water needed an innovative and cost-effective solution to reduce the loading on the structure and better seal the tank from water ingress.

SOLUTION

LINE-X came up with the solution to use a WRAS approved spray applied foam to the surface of the reservoir and then top coat with the WRAS approved XS-350 polyurea in green to blend in with the surrounding Countryside.



RESULTS

The Insu-Prime foam provided the insulation required to eliminate the need for heavy topsoil, and the WRAS approved XS-350 offered a seamless membrane to prevent any water or contaminants from leaching into the reservoir. The 1,100m2 application was completed in under three days offering a fast return to service.

LINE-X effectively solved the problem, and regular maintenance checks show that four years later there are no leaks.

PROJECT OVERVIEW: Light Weight Insulation Layer (Insu-Prime) And Waterproof Barrier (XS-350) For Reservoir Roof

PRODUCTS USED: LINE-X XS-350; Insu-Prime Foam

