

Project:
Victoria Service Reservoir

Location:
Surrey

Owner/s:
South East Water

Applicator/Contractor:
J Browne

Market sector:
Clean Water Industry

Products used & amounts:
MasterSeal 586 - 4 tonnes
MasterSeal M 808 - 1 tonne

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Service Reservoir, Surrey

Waterproofing of joints and concrete protection



Our reference in Surrey (United Kingdom): Service Reservoir

The background

This service reservoir in Surrey, was built in 1897 and is one of the oldest in the water companies network. The reservoir is constructed of concrete walls with the roof supported on vaulted brick arches. The underground reservoir required joint replacement and internal waterproofing to prevent moisture loss or ingress.

The challenge

The contract required the removal of all existing coating back to sound concrete. A moisture tolerant adhesive and joint bandage were needed to seal the leaking joints. A cementitious levelling mortar to re-profile the concrete surface. A coating to protect the concrete surfaces from the effects of water. All materials required a fast return-to-service time to minimise the down time of the asset.

All materials to be Regulation 31 approved for use in contact with potable water.

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Service Reservoir, Farnham

Waterproofing of joints and concrete protection



Our reference in Surrey (United Kingdom): Service Reservoir

Our solution

The concrete surface was treated with high pressure water to remove all contaminants. MasterSeal 930 bandage was applied onto MasterSeal 933 moisture tolerant adhesive to seal the vertical and horizontal joints. MasterSeal 586 was applied by wet spray in one layer to re-profile the concrete walls. MasterSeal M 808 was applied by roller and brush onto the walls, columns and arches. Contrasting grey colours were used to identify the correct coverage rate. A light grey finish was applied to provide a bright environment for future inspections.

The customer's benefit

- MasterSeal 933 adhesive can be applied to surface dry concrete, avoiding the extra cost of heating to dry the concrete. The fast return to service of 10 days at 7°C ensured the water tightness of joints prior to completion of the other works.
- MasterSeal 586 can be wet spray applied enabling the full thickness of mortar to be placed quickly in a single layer. The rapid return to service time of 3 days at 3°C ensured there was no delay between completing the re-profiling works and commencing the application of the MasterSeal M 808 coating.
- MasterSeal M 808 forms an elastomeric membrane, which accommodates any potential movement in the structure once filled and it is chemically resistant to protect the concrete from the effects of potable water. MasterSeal M 808 has a rapid return service time of 7 days at 7°C, enabling the reservoir to be recommissioned on schedule.
- MasterSeal 930 Bandage, MasterSeal 933 adhesive, MasterSeal 586 levelling mortar and MasterSeal M 808 polyurethane coating are all Regulation 31 approved for use in contact with potable water.

Projects facts at a glance

- Potable water service reservoir, Farnham
- Preparation of the concrete and brick surfaces
- Wet Spray application of levelling mortar
- Regulation 31 approved joint bandage, levelling mortar and polyurethane coating applied

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