

UK Distributors SMR Projects Ltd

south east water
stonbury
PROJECT TYPE:
Repair and Refurbish

PROJECT LOCATION:
Near Sittingbourne,
Kent

PRODUCTS SPECIFIED:
Concentrate
Patch'n 'Plug


RESERVOIR, KENT

FRESHWATER RESERVOIR

A South East Water fresh water reservoir near Sittingbourne in Kent was in need of some repairs to resolve water ingress and extend the life of the structure.

THE CHALLENGE

The reservoir had an estimated 180 meters of cracks that needed repair, as well as the main element of the concrete that required coating to waterproof and add durability to the concrete structure. The Reservoir was taken out of commission but it needed to be returned to service as soon as possible. To do this, we looked at the order of the processes to ensure the tight time frames could be met.

THE XYPEX SOLUTION

In accordance with the Reg. 31 IFU (Instructions For Use) all cracks were broken out to a minimum depth of 37mm and a width of 25mm. The walls were prepared by removing the laitance and the whole area was saturated.

To stem the ingress of water, every crack that showed moisture was sealed with Xypex Patch'n Plug which sets in seconds stemming the flow.

To meet the required time frame, the Xypex Concentrate coating work was then undertaken to allow it to air cure for the specified time. Once applied, the crystalline technology takes time to migrate deep into the concrete and become fixed within the concrete matrix as a permanent solution. When the curing is complete the coating could be removed if required, in this instance it remained.

During the curing process of the coating, the crack repairs were then filled using Xypex Concentrate as a Dry Pack and then finally topped off with a thin layer of Xypex Patch'n Plug to enable the fast return to service.

Xypex Concentrate

- All crack repairs

Xypex Patch'n Plug

- Stop water flow and allow fast return to service .

THE RESULTS

The allowed time frame meant undertaking the processes out of the normal sequence, but this allowed the repairs to be delivered on time.

The coating was undertaken to increase the durability but also to pick up any minor unidentified cracks. The larger cracks were repaired and sealed using the standard Xypex repair methodology, however ultimately over 300 metres of crack repairs were completed.

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