

Project:

Wastewater Manhole Chamber

Location:

Norwich

Owner/s:

Anglian Water

Applicator/Contractor:

SCH Maintenance

Market sector:

Wastewater Industry

Products used & amounts:

MasterEmaco N 52000
MasterSeal 7000 CR based on
Xolotec technology comprising:
MasterSeal P 770 Primer
MasterSeal M 790 Topcoat

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Wastewater Manhole Chamber, Norwich

Waterproofing and concrete protection of chamber walls



Our reference in Norwich (United Kingdom): Waste Water Manhole Chamber

The background

The wastewater manhole chamber had shown signs of biogenic sulphuric acid corrosion which had eroded the concrete lining. The structure required the concrete to be relevelled and protected with a coating resistant to this form of attack from Anaerobic bacteria.

The challenge

The contract required the removal of all existing contamination back to sound concrete. The contract required a cementitious levelling mortar with a fast return to service time to re-profile the concrete surface.

A moisture tolerant primer was required that could be applied onto a hardened mortar with a high relative humidity. A moisture tolerant, flexible top coat was required with a proven resistance to biogenic sulphuric acid corrosion.

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Our solution

The concrete surface was treated with high pressure water to remove all contaminants. MasterEmaco N 5200 cementitious rapid setting levelling mortar was applied at 5 mm thick to re-profile the concrete surface. After 3 days MasterSeal 770 primer, followed on consecutive days by 3 coats of MasterSeal 790 top coat, initially Red, followed by two coats of Grey. Before each primer or top coat was applied a hot air blower was lowered into the chamber to remove any condensation on the concrete surface.

Benefits to the customer

- MasterEmaco N 5200 can be applied to damp concrete and the rapid setting properties allow over coating with 3 days.
- MasterSeal 770 primer can be applied onto a solid, surface dry but damp; concrete or repair mortar.
- MasterSeal 790 will resist biogenic sulphuric acid corrosion whilst remaining flexible to accommodate future movement or vibration from vehicular traffic.

Projects facts at a glance

- Waste Water Chamber in Norwich
- Repair of concrete surfaces
- Xolutec technology
- Moisture tolerant Primer and Topcoat applied; resistant to biogenic sulphuric acid corrosion

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