

Project:

Concrete Interceptor Tanks

Location:

East Sussex

Owner/s:

Southern Water

Applicator/Contractor:

Corroless Eastern

Market sector:

Wastewater Industry

Products used:

MasterSeal 586
MasterSeal 7000 CR based on
Xolutec technology comprising:
MasterSeal P 770 Primer
MasterSeal M 790 Topcoat

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Concrete Chemical Interceptor Tanks, East Sussex Waterproofing and concrete protection of tanks



Our reference in East Sussex (United Kingdom): Concrete Chemical Interceptor Tanks

The background

Ground water ingress had forced the existing HDPE tank linings away from the walls. The structures required the concrete to be relevelled and protected with a chemically resistant coating.

The challenge

The contract called for removal of the tank liners and all contamination back to sound concrete and levelled with a cementitious mortar to re-profile the concrete surface.

A moisture tolerant primer was needed that could be applied onto a hardened mortar with a high relative humidity.

A moisture tolerant, flexible top coat with a proven chemical resistance was a prerequisite.

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Concrete Chemical Interceptor Tanks, East Sussex

Waterproofing and concrete protection of tanks



Our reference in East Sussex (United Kingdom): Concrete Chemical Interceptor Tanks

Our solution

A tank lining specification which would resolve the ground water ingress and guard against chemical attack was required. This is not as simple as it sounds as where a negative pressure of water is present over sealing with vapour impermeable chemical resistant resins can lead to tank lining failure and osmotic blistering.

Following preparation, the three interceptor tanks were waterproofed using MaterSeal M586 cementitious render applied by trowel. This resolved the water ingress and provided a suitable surface for the tank lining to be applied to.

All surfaces were primed using MasterSeal P770 as per the manufacturer's recommendations. As per the rest of this tank lining system this primer is vapour permeable, making it particularly suitable for below ground applications where water ingress and a moisture drive could be present. This primer is also highly damp tolerant, which gives advantages in being able to apply the tank lining sooner after the application of the tanking system.

MasterSeal M790 tank lining was then applied in three coats of contrasting colour as per best practice. The thicknesses of the tank lining were checked during application using wet film thickness combs. Once cured the lining was checked for pin holing using a DC holiday spark tester as per our standard quality assurance.

The customer's benefit

The concrete surface was treated with high pressure water to remove all contaminants and levelled with MasterSeal 586 a cementitious mortar 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.

MasterSeal 770 primer could be applied onto a solid, surface dry but damp; concrete or repair mortar. MasterSeal 790 resists chemical attack whilst remaining flexible to accommodate seasonal thermal movement.

Projects facts at a glance

- Concrete Chemical Interceptor Tanks in East Sussex
- Xolotec technology
- Moisture tolerant Primer and Topcoat applied; resistant to chemical attack and biogenic sulphuric acid corrosion

Master Builders Solutions by MBCC Group

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Master Builders Solutions is built on the experience gained from more than a century in the construction industry. At the core of the Master Builders Solutions brand is the combined know-how and experience of a global community of construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:
www.master-builders-solutions.com