

Project Profile - Coastal Structures



PROJECT

**Flood Defence Barrier
Refurbishment Project, Essex**

SUMMARY

Corrosion protection of steel piling
on three sites

PRODUCTS

**Cemprotec Clutch Filler
Cemprotec E942**

CLIENT

Environment Agency

SPECIFIER

Atkins

MAIN CONTRACTOR

Interserve

SUB-CONTRACTOR

JB Specialist Refurbishment Ltd

BACKGROUND ►

This project involved the refurbishment of flood defence barriers and sheet pile installations over three site locations in and around Canvey Island, Essex. These installations provide protection to the neighbouring areas of Canvey Island, Benfleet and Pitsea with varying difficulties of access to facilitate the works dependent upon the site location.

All three sites comprised sheet steel pile installations providing bank and flood protection, which upon inspection exhibited extensive signs of corrosion due to continued exposure to salt spray and cyclical tidal immersion. On the river side, this cyclical submersion caused rust staining and corrosion throughout, and as such a high performance anti-corrosion coating solution was sought which would provide years of effective corrosion protection even when applied to the steel in this continually damp environment.

THE SOLUTION ►

Flexcrete products were chosen for this project due to their outstanding track record of use in coastal and marine environments. The fact that Flexcrete's products are developed using waterborne technology was also a vital consideration, as they offer environmental benefits and do not pose any threat to marine life, unlike solvent-based products. Following removal of corrosion by-products by wet grit blasting, **Cemprotec Clutch Filler** was applied with a pointing gun to flush fill the clutches and this was followed by a two-coat application of **Cemprotec E942** using airless spray techniques.

Cemprotec E942 is a rapid curing, water-based, two component cement and epoxy modified polymer modified coating which will withstand early immersion within just two hours of application, offering high resistance to wash-out. Residual surface dampness does not adversely affect adhesion to the substrate and **Cemprotec E942** requires much less surface preparation than alternative products as it achieves bond when just surface rusting has been removed.

CE marked to the rigorous demands of BS EN 1504, **Cemprotec E942** forms a durable barrier to chlorides, oxygen and water, offering an excellent defence to corrosion for years to come.



FM 41091
EMS 597350
OHS 597351

Quality
Environmental
Health & Safety

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