

Project Profile - Civil Engineering & Infrastructure



PROJECT

Jubilee Bridge, Ashton-under-Lyne, Greater Manchester

SUMMARY

Repair and protection of concrete elements of the bridge

PRODUCTS

Steel Reinforcement Protector 841, Monomix, Monodex Ultra

CLIENT

Tameside Metropolitan Borough Council

ENGINEER

Wilde Consulting Engineers

CONTRACTOR

Dale Structural Repairs Ltd
(Sub-contractor to AE Yates Ltd)

BACKGROUND ►

Jubilee Bridge was originally constructed in 1935 and was named to commemorate the silver jubilee of King George V. Based in Ashton-under-Lyne, the bridge spans the National Cycle Network Route 66 which runs from Hull to Manchester.

As a result of carbonation and chloride attack, the structural integrity of the bridge needed to be reinstated as the steel reinforcement had corroded significantly and the concrete had spalled. An effective repair and protection system was required for the concrete elements of the bridge to complement other strengthening work and ensure the refurbished structure had a design life of 120 years.

THE SOLUTION ►

A complete Flexcrete repair system was specified comprising the application of **Steel Reinforcement Protector 841** first. **841** forms a highly alkaline coating which protects steel from aggressive acid gases, moisture and chlorides, and passivates the steel surface chemically to prevent further rust formation. **Monomix**, a low density, high strength cementitious mortar, was then used for structural repairs and profiling of the surface. **Monomix** is exceptionally rapid hardening and facilitates easy high build trowel application.

For decorative, anti-carbonation protection, the whole surface was overcoated with **Monodex Ultra**, an advanced acrylic masonry coating which is waterproof and provides excellent resistance to weathering. Water-based, it releases no hazardous solvents or heavy odour during application and resists the growth of mould and fungi, ensuring an attractive appearance throughout its lifespan. Its elastomeric properties allow substrate and thermal movement without cracking or flaking of the coating. **Monodex Ultra** is available in a range of colours and light grey was chosen for this project.

Steel Reinforcement Protector 841, Monomix and **Monodex Ultra** are all CE marked in accordance with EN 1504, the pan-European concrete repair standard, and have an excellent international track record of use on this type of refurbishment work.



FM 41091
EMS 597350
OHS 597351

Quality
Environmental
Health & Safety

Flexcrete Technologies Limited
Tomlinson Road • Leyland
Lancashire • United Kingdom
PR25 2DY

Tel: +44 (0) 845 260 7005 • **Fax:** +44 (0) 845 260 7006
Email: web@flexcrete.com • **Web:** www.flexcrete.com

