

Project Profile - Civil Engineering & Infrastructure



PROJECT

Denton Bridge, East Manchester

SUMMARY

Waterproofing, anti-carbonation and decorative protection of a surface area totalling 1,100m²

PRODUCTS

Bond-Prime
Monodex Smooth

CLIENT

Highways Agency

MAIN CONTRACTOR

Balfour Beatty

CONTRACTOR

GPL Civil Engineering Ltd

BACKGROUND ►

This reinforced concrete bridge is based in Denton, East Manchester. Based at a busy location often congested with traffic, the bridge passes directly under the M67 motorway and comprises a total of eight large reinforced concrete piers. The bridge has pedestrian walkways either side and the Highways Agency in conjunction with Tameside Metropolitan Borough Council sought to enhance the aesthetics of the structure as it was very dark and gloomy and needed more illumination to enhance safety to the public.

Graffiti was also a major problem. The concrete had previously been treated with a silane/siloxane coating so it was important that the chosen decorative, protective coating could adhere to the existing substrate whilst remaining compatible with an anti-graffiti coating that was to be applied directly over the top.

THE SOLUTION ►

Following several trials, Flexcrete's products were chosen for application to the underside of the bridge due to their ability to provide outstanding waterproofing, anti-carbonation and decorative protection. Following pressure washing of the surface to remove the existing silane/siloxane coating, **Bond-Prime** was applied to the concrete piers and walls to seal and stabilise the substrate prior to the application of two coats of **Monodex Smooth**.

A waterborne, elastomeric, decorative anti-carbonation coating, **Monodex Smooth** has an anticipated lifespan of at least 15 years before first maintenance and provides excellent protection against water ingress. The low hazard, water-based composition of **Monodex Smooth** was of important consideration for this project which was carried out in a public area as no strong odours or hazardous solvents were released during application. The rapid curing nature of **Monodex Smooth** and its ability to be applied all year round was also crucial, as the refurbishment works needed to be completed quickly to avoid major disruption in the local area and the project was completed in the cold winter months. The colour specified was Fawn Mist which brightened and lightened the whole structure, improving the appearance significantly and enhancing public safety. Once **Monodex Smooth** had cured, an anti-graffiti coating was then applied. **Monodex Smooth** is CE marked in accordance with the demands of BS EN 1504 Part 2, the pan European standard for surface protection systems for concrete.



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

