



## Structural Repair

We provide a wide range of repair solutions to address structural problems including cracked or compromised masonry, bowing walls, failed structural elements, partial collapses and subsidence issues. We're well versed in the repair of structural concrete and the installation of masonry reinforcement systems.

### 1 Saville Row

Works to address widespread failure of exposed aggregate pre-cast concrete panels. Steel reinforcement was fully exposed, cleaned and treated. Polymer modified mortar was made to give the desired strength characteristics and allow the 40mm whinstone aggregate to be embedded into the repair, thus replicating the original appearance.

### 2 Sunderland Empire

Discreet yet major structural repairs to stabilise masonry using Helifix stainless steel reinforcement to reinstate the structural integrity. Concrete repairs were undertaken to defective lintels and heavy duty metal window bars which had contributed to cracks in the masonry were removed. The scheme also required extensive repointing.

### 3 Lockbridge Mill

Non-disruptive repair scheme to restore full structural integrity to the tower of a 19th century former mill house which had experienced a partial collapse after bulging was discovered. Approx. 200m of paired helical bar was installed to tie-in and reinforce the stonework and around 700 Cemflex ties were also installed to consolidate the rubble fill walls.

### 4 Clairville Stadium

St Astier was commissioned to carry out a structural survey of the reinforced concrete elements on the three external elevations of the stadium building. Following on from the survey, we carried out a programme of repairs to the concrete columns and ring beams of the grandstand and applied elastomeric coatings as a protective measure.

### 5 Wainford Bridge

Structural repair and stabilisation works using to the grade II listed Wainford Bridge spanning the river Till in Northumberland. A series of Cintec anchors were installed to reconnect the downstream arch of the bridge which, had over the years become detached along the top line of the voussoirs as result of surface water from the adjacent hills.

### 6 Bridge House

Concrete repairs to exposed aggregate concrete panels on a multistorey office building in the heart of Newcastle. Repairs were carried out from cradles due to the busy city centre location and access restrictions. Works centred on the removal of defective concrete, cleaning and protection of steel reinforcement and application of repair mortars.