HELIFIX
SUSTAINABLE STRUCTURAL SOLUTIONS

Case Study

Hidden sympathetic repairs for listed brewery

Client: Hook Norton Brewery

Location: Hook Norton, Oxfordshire

Structural Engineers: Solid Structures

Main Contractor: Midland Building Services

Approved Installers: Profix Property Preservation

This Grade II listed solid brick building is 170 years old and is a fine example of a traditional Victorian Tower Brewery. These are arranged in a tower form in order to facilitate production flow during the brewing process by using gravity rather than pumps.

The original maltings building was being converted into a new kitchen and visitor café but was suffering from the failure of 15 brick arches in the 600mm thick external walls. The arches had relaxed following decay of internal timbers and movement due to general aging of the surrounding masonry. This had caused cracking, both internally and externally, in the brickwork above.

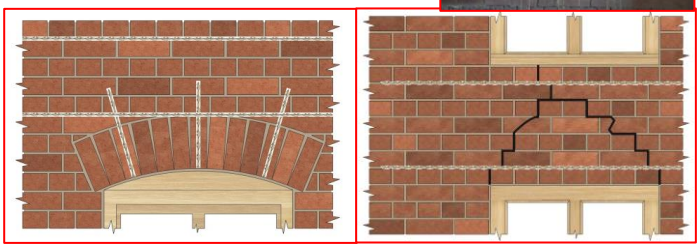
Effective sympathetic repairs were needed that would restore integrity and retain the aesthetics of this important listed structure.

The Helifix solution

A programme of fully concealed repairs was devised by the engineers, using Helifix stainless steel HeliBars, that would reinforce and secure the masonry.

- Pairs of HeliBars were bonded into channeled-out mortar beds, with HeliBond cementitious grout, at two levels above each opening on both the interior and exterior faces of the walls. These formed masonry beams that reinforced the brickwork, supported the weight of the wall above and spread the loads.

- On the upper floor the arches had decorative stepped brickwork internally and to accommodate this profile HeliBars were installed at four levels on the interior face above the windows.



- Various other cracks were stitched using single 1m long HeliBars bonded across the cracks.

The repairs were completed quickly, efficiently and economically. All original materials were retained and, following repointing, there was little evidence of the sympathetic structural stabilisation work that had been carried out.

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