

SIGNIFICANT STRUCTURAL FAULTS OVERCOME DURING BARN CONVERSION

Client: Private homeowner
Location: Puckrup, Tewkesbury

A 100 years old dilapidated brick barn, suffering from a wide range of structural faults, needed to be stabilised prior to its conversion into a modern private residence.

The double storey barn was affected by historic settlement that had resulted in failed arch lintels, relaxed arches, cracked and failed masonry and a loss of lateral restraint to the main rear elevation.



HELIFIX SOLUTION

- Helifix engineers devised a sympathetic repair programme using the concealed Helibeam System to secure the structure
- To secure and reinforce the brickwork and reinstate lintels, long length HeliBars were bonded into channelled-out mortar beds at various levels, forming masonry beams to distribute the structural loads. Individual cracks were stitched using shorter HeliBars and the failed arches re-pinned with DryFix ties.
- To stabilise the rear elevation, that was held in place with scaffold props, BowTies were installed through clearance holes in the masonry and driven into the ends of internal roof beams and joists before being bonded to the brickwork. Grouted CemTies were also used to reconnect separated walls and further secure the main elevations

CS032.05.08