
Project: **Re-roofing works, St James CE Church, Brownhills**

Title: **Roof inspection**

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An area of around fifty tiles were stripped from both the Nave and Transept.

The underlying structure was found to be in satisfactory condition – roof timbers and sarking felt appeared intact, although tile battens were a little undersized to current standards – when installed 40 years ago they would comply with the standards at that time.

The overwhelming majority of the tiles are handmade clay tiles with a single nib, which appear to have been reclaimed from elsewhere (the staining on the tiles suggests that they were originally 'torched' (bedded in mortar) as they were laid, however none of this torching was present. These handmade tiles also did not appear to have any nail holes and from the sample locations it seemed that only one tile in every twelve courses had been nailed with a single nail (presumably using a drilled hole). This is a long way short of the current British standard of two nails in each tile of every fifth course.

Whilst the single nib is nowadays considered as insufficient in its own right, the shape of the nibs themselves was very inconsistent amongst the sample group (see photos).





Some had a very pronounced nib, whereas many had a malformed nib. Two or three did not seem to have much of a nib at all and will have only been relying on friction and the weight of the tile above to keep them in place. The nib defect would explain the very sporadic way in which tiles have been falling.

An upgrade to the thermal properties of the roof with insulation was investigated. The building is not listed, and thermal levels would need to comply with current levels of insulation required in the Building Regulations Approved Document L which would lead to major alterations to the roof and potentially an increase in height. Compliance is not required, however, due to a caveat exempting places of worship under the relevant building regulations.

In terms of conclusion, it would seem necessary to replace the roof tiles with new tiles having both a minimum of 2No. nail holes pre-formed and a minimum of 2No. hanging nibs on the rear. Existing battens and felt appear to have plenty of life left, however, given that the battens are now considered undersized to current standards and for warranty purposes the PCC have indicated their approval to replace felt and battens as well as tiles.