



9th May 2025

Affinity Architects
FAO Stuart Nash

Our ref: SJ/23147 - LR

Please quote our reference when replying

Dear Stuart

RE: 10 The Close, Salisbury

Further to your request to inspect and report on the roof over Bed 3, I report as follows.

1.0 Introduction

- 1.1 The inspection was carried out by Stephen James of Alexander Associates on 8th May 2025. The weather was fine but overcast at the time of the inspection with an air temperature of 12°C.
- 1.2 Due to its urban location, the building has a low degree of exposure to the prevailing wind.
- 1.3 The property was built in the 18th Century with additions since then.

2.0 Description

- 2.1 The roof over Bedroom 3 is the principal focus of this report.
- 2.2 Externally the roof is a cropped hip construction with plain clay tiles to the three roof slopes, the east slope only having sarking felt beneath the tiles.
- 2.3 The ceiling joists create a raised tie truss although there is a raised tie truss that supports purlins on either side. These purlins span from the end gable wall beneath the cropped hip, over the truss and onto the wall of Bedroom 3.

3.0 Condition

- 3.1 The roof has a high tie and so the roof space is quite restricted (Fig 1).
- 3.2 The condition of the timbers is variable with some more recent rafters having been installed on the west face in particular (Fig 2).
- 3.3 The most significant visible defect is the purlin on the east face which has fractured at the truss (Fig 3). A relatively modern purlin has been placed from



the inner wall to the truss with rafters being chocked from this (Fig 4) (please note that the modern ceiling joists have been installed to allow safe access into the roof void and can be easily removed).

- 3.4 On the east slope, the rafters appear to stop at the ceiling level or just below and it is not clear how the battens and roof covering are being supported (Figs 5 and 6). Some rafters appear to have been added when the purlin failed but there is too much debris, insulation and other material in the space between rafters to allow a full inspection. There has been a lot of packing out of the roof where the purlin failed, in order to achieve a plane roof slope (Fig 7). This has not been carried out well.
- 3.5 Some of the rafters have been weakened by significant knots (Fig 8).
- 3.6 It was noted during an earlier visit that the outer surfaces of the hip rafters and the rafters on the cropped hip were softened by water penetration, but this is not overly significant. The connection between the hip rafters and the ridge board is not very secure and will need some work carried out on it.

4.0 Conclusions and Recommendations

- 4.1 The condition of the roof structure is difficult to assess due to the lack of access and the existing roof covering. Given the visible condition of the structure, it would not be prudent to strip one side of the roof without the other, but this is difficult to carry out at the moment without better access.
- 4.2 Given the poor attempt at creating plane surfaces to the slopes of the roof it is likely that additional rafters will be needed by the side of the existing ones. We may also need to replace the purlin that fractured but would need to check the connection between the principal rafter and the tie of the truss, as well as checking on the support at the bottom of the rafters. We will also need to check the rafters to determine whether there is continuity or not, or whether we have some other means of support. As the purlin on the east has fractured, seemingly by furniture beetle infestation, it is likely that the lath and plaster ceiling may need to be removed as the weight of the ceiling and skilling is being supported by it and the bearing is extremely poor. Indeed, the ceiling in the bedroom below has a distinct curve where the skilling meets the ceiling where the purlin has failed.
- 4.3 Once the roof tiles are removed a more thorough inspection can be carried out and remedial actions proposed.

We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are, therefore, unable to report that any such part of the property is free from defect. Minor defects, which are not considered to be structurally significant, or other matters which would be attended to during routine maintenance, may not have been mentioned.

If you have any queries regarding this report, please do not hesitate to contact me.



Yours sincerely

STEPHEN JAMES
BSc(Hons) MBA CEng MICE MStructE

Encs: Photographs



Fig 1 View from the roof access into the loft space over Bedroom 3.



Fig 2 Additional rafters against the original ones on the west roof slope.



Fig 3 Fractured purlin at truss tie, east side of roof.



Fig 4 Packing out between rafters and more modern purlin on east side of roof.
Note horizontal members added only for temporary access.



Fig 5 Packing of rafters on east slope looking down the skilling.



Fig 6 Note that more modern rafters are cut just below level of ceiling – east slope.



Fig 7 Poor packing to achieve plane slope on east side of roof.



Fig 8 Significant weakening of rafter due to large knot – west slope of roof.