

Floor Condition Survey Report

Address: 29 Genista Close, Brizlincote Valley, Burton on Trent

Survey Date: June 2025

Surveyor: james@rightfit-interiors.co.uk

1. Instruction & Scope

RightFit-Interiors has been instructed to investigate complaints of *squeaking and uneven floors* on the first floor of the above dwelling. The brief was to carry out a non-destructive inspection, review client-supplied photographs, and produce recommendations for remedial action. This report records all observations made to date and is expected to be refined after client review and any further intrusive investigation.

2. Property Overview

- Two-storey, mid-1990s masonry cavity-wall house under a pitched tiled roof.
- Ground floor layout is generally open-plan with an assumed load-bearing block wall supporting the first-floor joists.
- First-floor partitions are lightweight timber studwork.
- Significant inflection in joists, mainly towards the center and front of the property.
- The original chipboard subfloor has undergone previous levelling attempts in places, resulting in different floor heights between the office and hallway. Some chipboard flooring has been removed in the hallway, where only laminate flooring is laid directly onto the joists. The entire first floor is finished with high-grade laminate flooring.

3. Existing Floor Construction (First Floor)

Based on photographs showing visible board edges where flooring was lifted, and underside views captured during previous works on the kitchen:

Item	As Observed
Joist Material	Softwood C-grade (exact grade unconfirmed)
Joist Size (approx.)	Believed to be 47 × 195 mm at 400 mm centres (to be confirmed)
Span Direction	Front to back – perpendicular to the principal kitchen wall.
Decking	18 mm P5 chipboard, tongue-and-groove; some areas previously levelled.
Insulation/Services	Plumbing and electrical services routed through notches and drilled holes in the joists

4. Observations

4.1 From Within the Dwelling

- Walking across bedrooms and the landing produces audible squeaks and noticeable deflection, especially mid-span between the front of the property and the kitchen wall.
- Localised deflection of 5–10 mm was measured with a straight-edge over a 1.8 m run beside the landing balustrade.

4.2 From Client-Supplied Photographs

- Underside view shows joists bearing on wall plate; evidence of historic ceiling levelling consistent with previous movement.
- Joist notched at top edge to accommodate pipework. Notching may exceed the permitted one-eighth depth.

4.3 From Annotated Plan

- Illustration of joist spans relative to structural walls. Spans between red-marked supports are approximately 5.0–5.2 m, near or exceeding the safe span limit for 47 × 195 mm joists at the specified spacing.

5. Assessment & Likely Causes

1. **Overspan & Deflection** – Joist size appears marginal for the span length, resulting in noticeable bounce and uneven flooring.
2. **Compromised Sections** – Services notched or drilled outside BS 8103-3 guidance have reduced joist integrity and stiffness, contributing to squeaking.
3. **Inadequate Subfloor Fixing** – Chipboard not fully screw-fixed at 150 mm centres; loose boards move against ring shank nail fixings, generating noise.
4. **Irregular Levelling** – Uneven application of levelling conceals sagging but creates soft spots and movement under load.

6. Recommendations

Priority	Action	Purpose
HIGH	Install a supplementary load-bearing beam (e.g., 152 x 152 x 23 UB) beneath or in line with the joists at the front third of the property, supported on padstones at masonry walls.	Reduce joist span to ~2.6 m, stiffen floor, and reduce deflection.
HIGH	Conduct <i>targeted intrusive investigation</i> at the landing and Office to confirm joist sizes, bearings, and presence of noggin.	Verify structural adequacy before finalising the scope.
HIGH	Introduce additional strutting/nogging at mid-span to share load and reduce flexure.	Improve rigidity and vibration performance.
HIGH	Re-fix existing or replacement chipboard at 150 mm staggered centres using 5 x 60 mm screws; use polyurethane expanding adhesive at board joints and between boards and joists.	Eliminate squeaks caused by board movement.
MED	Where notches exceed safe limits, sister joists with 47 x 150 mm timbers glued and bolted at 400 mm centres.	Reinstate full section strength.
MED	Consider using acoustic underlay and re-laying laminate ensuring correct expansion gaps.	Improve acoustic comfort and decouple finished floor.
LOW	On redecoration, monitor for ceiling cracks or nail pops over the following 12 months.	Identify and address cosmetic settlement following remedial work.

7. Limitations

- No floorboards or ceiling finishes were removed; all findings are based on visual inspection, photos and information gathered from the customer.
- Joist sizes and grades are estimated from photographic evidence; confirmation requires localised opening-up.
- Moisture levels, timber treatments, and concealed services were not assessed.
- This report does **not** serve as a structural design; any alterations must be approved by a chartered structural engineer.

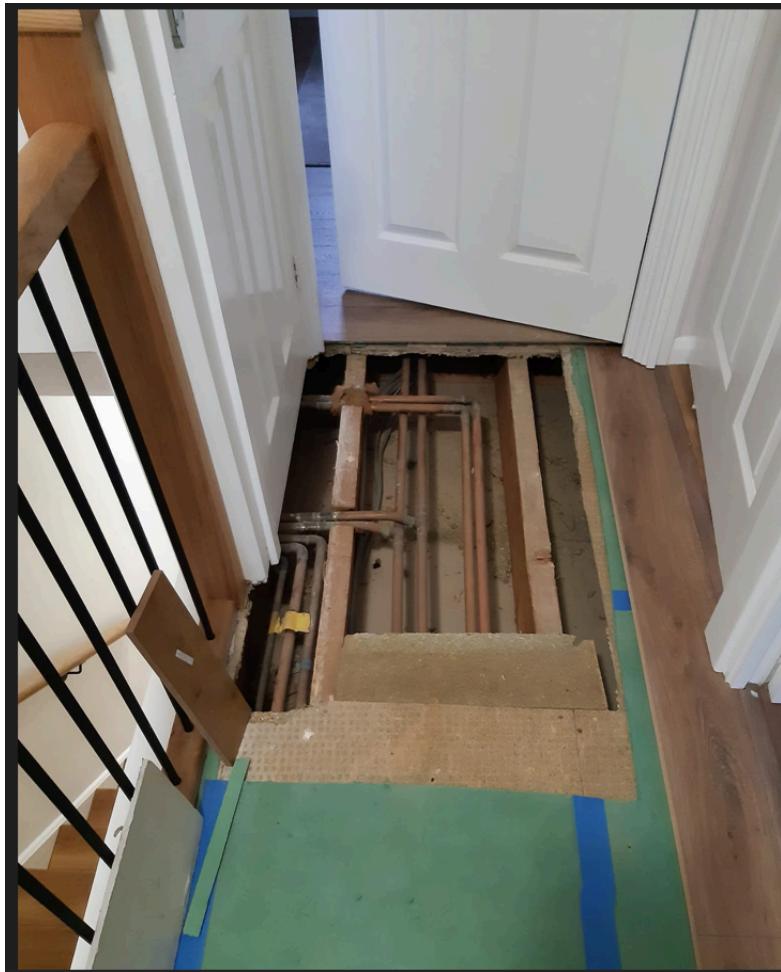
8. Next Steps

1. **Appoint a structural engineer** to validate my findings and specify the new beam (Material, sizing, padstone, Beam position - inline or Under) and submit details to Building Control.
 2. If Engineer needs a more intrusive survey, the client should authorise targeted opening-up of approximately two areas (~1 m² each); allow for a half-day on site.
 3. Surveyor to record confirmed joist dimensions, supports, and any existing structural beams revealed.
 4. Update this report and issue a final version with design drawings and installation specification using recommendations from the structural engineer.
 5. Get quotes for the outlined work.
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Appendices







Rough not to scale current joist layout based on site visit and photos provided by the customer.

Red = downstairs solid walls

Orange = upstairs stud walls

Black = joists not to scale, showing direction and possible wall landing points

Green = suggested beam position

