Inspection & Contra-Charge Report

A detailed structural inspection report prepared for Plot 329, — a two-storey new build dwelling. The inspection was carried out by A&S Contractors Ltd following reports of persistent creaking, cracking and unusual noises emanating from the first-floor structure and the ceiling below.

Development

Foxwood,

Plot

329

Client

Contractor

A&S Contractors Ltd

1. Instruction

A&S Contractors were instructed to undertake a detailed inspection of the affected floor and ceiling areas following reports from the homeowner of ongoing creaking, cracking and unusual noises emanating from the first-floor structure and the ceiling below. The scope of the inspection was broad and methodical, covering all reasonably practicable avenues of investigation.

1

Assess Movement

Assess areas exhibiting movement, deflection and/or creaking throughout the affected floor and ceiling zones.

2

Investigate Cause

Investigate, as far as reasonably practicable, the likely cause of the defects, including installation, materials and workmanship.

3

Intrusive Works

Undertake minor intrusive investigation where required to access and inspect the concealed floor structure.

4

Responsibility

Provide an assessment of likely causation and responsibility where reasonably determinable from the evidence gathered.

2. Homeowner Statement & Inspection Methodology

Homeowner Statement

The homeowner advised that creaking, cracking and unusual noises have been present for a prolonged period. Several previous inspections and remedial attempts have been undertaken by various contractors; however, none have provided a successful long-term solution. To demonstrate the issue, the homeowner walked across the first-floor landing and adjoining areas whilst observations were made from the ground floor below. The areas producing the most significant noise were identified and marked on the inspection plan.

Inspection Methodology

The inspection consisted of a visual inspection of all accessible areas, a dynamic assessment whilst the floor was subjected to foot traffic, and identification of areas of excessive movement and noise. Structural floor beam positions were located, and a localised access opening was formed within the foor to inspect the floor structure, including the timber i beam flange orientation and plasterboard installation.

Upon completion, the access opening was reinstated using timber battens, adhesive and screws. Carpet and underlay were reinstated and all affected areas left clean and safe.

3. Findings – Areas of Concern

The most significant creaking and cracking noises were identified within the first-floor landing area adjacent to the staircase. Movement was observed to coincide directly with loading of the floor structure above the inspected ceiling area, confirming a clear relationship between foot traffic and the reported noise.

Finding 1 – Timber bottom flange Orientation

Inspection of the exposed floor structure identified noggings incorporated within the floor construction. The bottom flange nogging assembly had been installed in a **vertical orientation** rather than in accordance with the approved design details and construction drawings. This orientation differs from the expected arrangement.

Finding 2 – Ceiling Plasterboard Installation

Inspection of the ceiling lining revealed that the plasterboard sheets were **not fixed tightly** against the underside of the supporting floor structure. Visible gaps were noted between the plasterboard and the lower flange/supporting elements in several locations. The lack of mechanical contact between the plasterboard and the timber beam allows movement to occur under normal floor loading conditions, generating cracking, creaking and friction-related noises.

4. Assessment of Cause

Based upon the observations made during the inspection, the reported noises are likely attributable to movement occurring between the floor structure and the ceiling lining system. Two distinct and potentially concurrent contributing factors were identified during the investigation.

PLASTERBOARD NOT TIGHT TO THR TIMBER JOIST

VERTICAL NOGGING

Both factors are capable of independently generating the reported symptoms. However, the combination of an incorrectly oriented beam flange and inadequately fixed plasterboard is likely to compound the degree of movement and noise experienced by the homeowner under normal day-to-day floor loading conditions.

5. Responsibility Assessment

Based on the evidence available during the inspection, responsibility for the identified defects is considered to fall across two distinct trades. Final allocation of responsibility should be confirmed following review of the approved structural drawings and original installation details.

Joinery / Structural Installation

The floor structure and steel beam arrangement appear inconsistent with the intended construction detail and approved drawings. Subject to confirmation against the structural design information, this may indicate an installation issue attributable to the joinery or structural installation phase. The incorrect vertical orientation of the I-beam lower flange is the primary concern.

Drylining / Plastering Contractor

The ceiling plasterboard was found not to be fixed tightly to the supporting structure. This condition is consistent with poor board fixing and/or inadequate boarding installation practices and may be attributable to the drylining or plastering contractor responsible for the ceiling installation works.

⚠ At the time of inspection, both the floor structure installation and the ceiling boarding installation are considered to have the potential to contribute to the reported defects. Final responsibility must be confirmed following review of approved structural drawings.

6. Remedial Works Undertaken During Inspection

The following works were completed during the inspection visit to facilitate access, carry out the investigation and reinstate the property to a safe and habitable condition. It is important to note that no permanent remedial works to the floor structure or ceiling system were undertaken during this visit — the scope was limited to investigation and temporary reinstatement only.

01

Access Opening Formed

A localised ceiling access opening was formed to allow direct inspection of the concealed floor structure and beam arrangement.

02

Structural Arrangement Inspected

The beam orientation, lower flange arrangement and plasterboard fixing were inspected through the access opening.

03

Access Opening Reinstated

The access opening was reinstated using timber battens, adhesive and screws to restore the ceiling to a safe condition.

04

Carpet & Underlay Reinstated

Carpet and underlay were reinstated to the affected areas. All areas were left clean and safe upon completion of the inspection.

7. Recommendations

The following recommendations are made to address the identified defects and ensure a permanent, compliant resolution. These steps should be undertaken in sequence to confirm the extent of the installation issues before committing to full remedial works and reinstatement.

Review Structural Drawings

Obtain and review the approved structural floor drawings and manufacturer installation details for the I-beam arrangement to confirm the intended lower flange orientation.

Verify Compliance

Verify whether the lower flange orientation as installed complies with the approved design. Undertake further opening-up works where necessary to establish the full extent of the installation issue.

Ceiling Plasterboard

Installation of timber firing peices and glue and fix to both the plasterboard and joist in 4no rooms. remove sections of ceiling if required.

Full Reinstatement & Reassessment

Following rectification of any structural installation defects, carry out full ceiling reinstatement and decoration. Reassess the floor and ceiling upon completion to confirm elimination of movement and associated noise. Check areas of metal strapping ontp of joists to ensure no noise is being emitted from these locations.

Report Conclusion

This report has been prepared by A&S Contractors Ltd following a detailed inspection of Plot 329. The findings presented are based solely upon observations made during the inspection visit and should be read in conjunction with the approved structural drawings and original installation records once obtained.

> Both the floor structure installation and the ceiling boarding installation have the potential to contribute to the reported defects. Final allocation of responsibility should be confirmed following review of the approved structural drawings and original installation details.

Property

Plot 329,

Client

Inspector

A&S Contractors Ltd

Status

Awaiting structural drawing review & permanent remedial works. Proposed scope has been provided with costs.

Locations of main noise concern:

This report is intended for use by (Client) and associated parties only. No permanent remedial works were undertaken during the inspection visit. All recommendations should be actioned in sequence following confirmation of the approved structural design. *client information and specific address information has been removed.