

Private and Confidential

**Client name: John Inglis
EQC review & Floor Level survey**

At

Address: 28 Laing Cres, Heathcote, Christchurch



Survey undertaken by Risknet Limited, Stuart Fletcher. Director

Date: 14.09.2021

Description of dwelling

1980's era Type B2 foundation (Timber floor on concrete perimeter foundation supported by piles) with Brick Veneer Cladding, Concrete Tile roof, set on a flat section.

Risknet Limited

Contents

Client name: John Inglis	1
Address: 28 Laing Cres, Heathcote, Christchurch	1
Scope of assessment	2
Building Assessment (Recommendations /comments in Red colour)	2
Floor Level Survey	6
Floor levels recorded.....	6
Floor levels Images taken on site (In-situ, not adjusted for hard floor coverings)	7
Images Building Elements	8
.....	9
Floor levels Methodology	10
Table 2.1 Foundation types. Ministry of Business and Innovation (MBIE)	11
Explanatory notes to Table 2.3	13
Terms and conditions.....	14
Date: 29 th September 2021	15
Appendix	16

Scope of assessment

Risknet was engaged by the client to undertake an EQC review of damage(s) assessed, repaired and remediated, and to provide a comprehensive Floor level Survey. This report is to provide the vendors with an assurance that any damage(s) to the property have been completed to a satisfactory level.

Building Assessment (Recommendations /comments in Red colour)

From visual observations on site, comparing with the EQC information supplied CLM/2011/172520 (10/10/2011), the property presents well. The floor levels as recorded are 24mm (+/3mm). Refer to Plan.

The EQC works are noted by location as below.

The vendor has confirmed all items have been completed. Where the below states “completed” this indicates that the elements present in a repaired state. All the works are checked against the EQC Scope of works and discussed with the vendor. From a visual perspective all works have been completed to a satisfactory level. No evidence of unrepaired EQC works were observed.

No significant issues that would warrant any weathertightness concerns were noted onsite.

Concrete Ring Foundation.

- **EQC. No Damage.**
- No significant cracks were observed. Both sides of the foundation were observed (external and internal via the subfloor). One hairline crack on the N/E corner circa 1mm. No action warranted.

Subfloor.

Damp Proof Membrane (DPM) on the ground (installed pre current vendors) lapped and taped around piles. Insulation to underside of flooring. R1.8 Polyester Insulation blanket Installed correctly. Label of installer stated

Piles

Piles are all in sound condition. 2 piles look to have been replaced (vendor stated this was before their time). Poured in-situ.

Roof cladding (concrete tiles).

- EQC. Repoint ridge capping. Complete
- Roof in sound condition. Some lichen present – suggest moss and lichen treatment.
- The visible staining on a rafter (close to the manhole) looks to be caused by a broken tile which has subsequently been replaced.

Brick Veneer Cladding.

Mortar lines all good. No step cracks or anything of concern.

Soffits.

All in good condition with good coverage (>450mm)

Spouting and Downpipes.

All secured in place and functional. The day of the inspection we had light rain. **Downpipes - leaf debris needs to be removed.** Gully Traps and turndowns to risers present.

Roof Space.

- A rafter had visible staining (from previous cracked tile) location close to the manhole. Tile had been replaced.

Fencing and Paths

All Timber fences and gates observed in sound condition.

Paths in satisfactory condition, a few hairline cracks not noted in any documents reviewed. Path to Garage crack with vegetation growth. Not a tripping hazard.

Garage.

- **EQC:** Floor. Grind out and epoxy fill (9.00lm). Observed repairs. Completed.
- **EQC:** Block Wall. Grind out re-mortar (8.00lm) 2/3s of garage walls could be observed. No signs of damage. Vendor confirms all works required have been completed.
- Garage used as a workshop.

Lounge

- **EQC:** Wall covering Rake out, plaster and paint. Completed

Kitchen

- **EQC:** Joinery repair units. Completed. Kitchen upgraded and replaced by current vendor.
- **EQC:** Wall Covering rake out plaster and paint. Completed.
- **EQC:** Work Top remove, supply etc. Completed. Kitchen upgraded and replaced by current vendor.
- Rangehood installed and tested
- Kitchen has a 9kg Gas bottle. Installed outside with a weather shroud. Vendor confirms they can supply the details of the gas fitter.

Laundry

- **EQC:** Wall covering Rake out plaster and paint. Completed
- **EQC:** Wall covering Remove, dispose and replace lining paper. Completed.

Entry

- **EQC:** Rake out plaster and paint. Completed
- **EQC:** Remove, dispose, and replace lining paper. Completed
- Entry floor is squeaky. Vendor is aware of this and confirms to attend to this when the Vinyl is uplifted and replaced as part of the current renovation upgrade.

Hallway

- **EQC:** Ceiling scrape off, Re-stipple. Stipple not replaced. Works Completed with new gib lining
- **EQC:** Paint Ceiling. Completed
- **EQC:** Ease Door. Completed
- **EQC:** Walls Rake out plaster and Paint. Completed
- **EQC:** Remove, replace lining paper. Completed.

Toilet

- **EQC:** Walls Rake out paint. Completed
- **EQC:** Remove dispose lining paper. Completed
- Extractor Fan installed and tested. This is on a timer and has a delay prior to starting.

Heating

Lounge Heat pump: Hitachi 6.5kw output. Remote tested OK.

Bedrooms Heat pumps (x3) installed in each bedroom (above doors).

Ventilation

All spaces within the property provide adequate ventilation.

Window and Door Joinery

Aluminum windows double glazed. All spaces provide sufficient natural light. Windows and doors all functional.

Internal linings.

The vendors were renovating at the time of the inspection - updating the colours within the lounge, laundry, and dining room. The linings were in a repaired stated (EQC works completed) All walls, and wall/ceiling junctions were in a satisfactory condition. The vendor confirmed the painting would be completed prior to marketing the property.

Smoke Alarms

Existing smoke alarms sighted. **Recommend to all buyers to replace all smoke alarms with new.**

Power (Circuit board)

The main dwelling circuit board is a mix of new breakers and fuses. The vendor confirms they can supply the details of the electrician that completed works at the property.

Insulation.

The roof space has plenty of head room. Pink Batts installed. Likely installed at the same time of the underfloor Polyester. No label observed. Width 180mm deemed at least R3.3. Good coverage with a few batts moved during installation of new downlights.

Underfloor insulation R1.8 Polyester plus Damp proof membrane (lapped and taped) in place and installed correctly 09/07/2010)

Wall Insulation. Unknown. Vendor may be able to supply these details.

Floor Level Survey

A Floor level survey was undertaken to record, and report on the current Post-Quake™ floor variations in relation to MBIE guidelines. Refer to tables at the end of this report.

Any photos contained within this report were taken on the day of inspection or have been supplied to Risknet from third parties. Any subsequent movement or alterations or damage to the property are outside the scope of this report.

Floor levels recorded

Refer to the floor plan for specific details.

High + 8mm recorded at Bedroom First left off Hallway (Carpet)

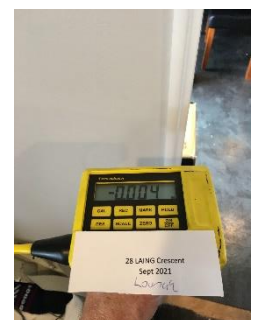
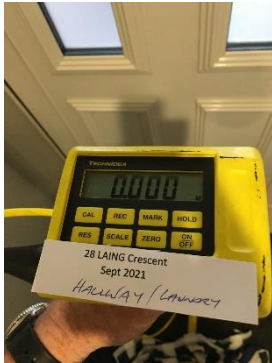
Low - 16mm recorded at Bathroom (Tiles: Adjusted levels)

The variance in floor levels for the Main dwelling as recorded is 24mm* Tolerance (+/-3mm) *

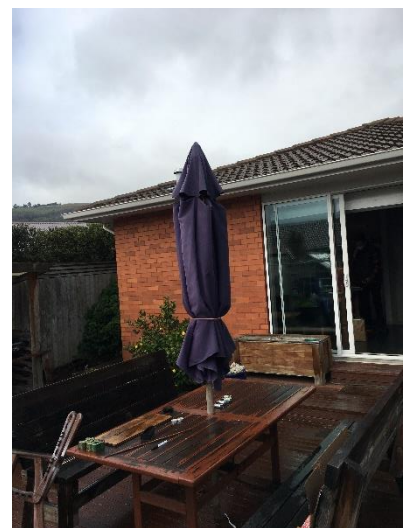
The floor variation across the floor plane is under the 50mm threshold as per the guidelines set by Ministry Business, Innovation & Employment (MBIE) as per **Table 2.3** *Indicator criteria for floor/foundation relevel or rebuild*.

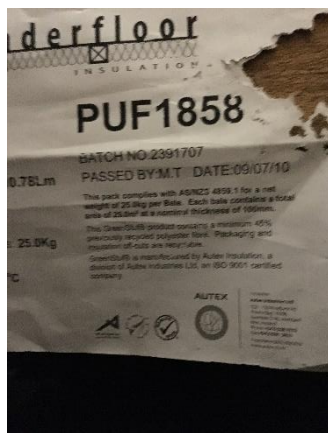
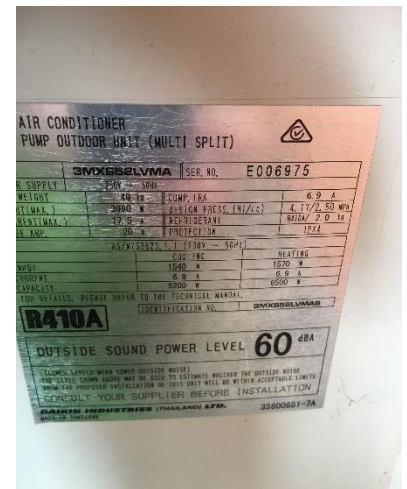
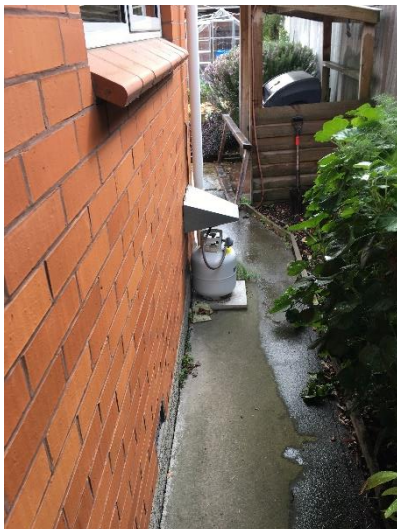
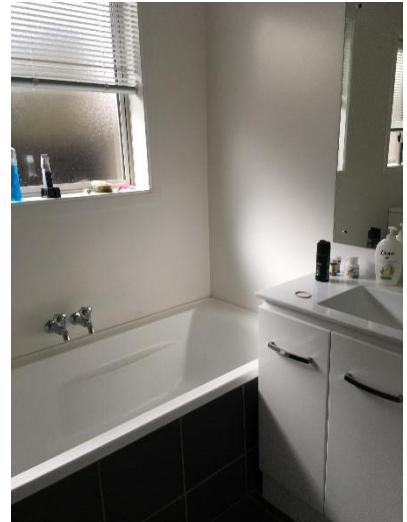
Sample images below. References to the MBIE guidelines contained within.

Floor levels Images taken on site (In-situ, not adjusted for hard floor coverings)



Images Building Elements





Floor levels Methodology

Levels were recorded using a Zip Level Pro, to New Zealand Institute of Surveyors (NZIS) recommended methodologies.

A satisfactory number of elevations were recorded on site.

- Levels undertaken by Stuart Fletcher
- Zip Level Pro unit number 31056
- Zip level serviced March 2021 (Supplier recommends 24monthly)
- Acclimatized on site (minimum 20mins) Actual >28mins
- Zip Level Pro Calibrated on site
- Temperature was noted.
- 'Spiked tip' on staff

Levels are taken using a solid metal staff attached with a '**spiked tip**' to **penetrate soft floor coverings** (carpet/rugs) that enables consistency throughout the dwelling and ensures that levels are not unduly affected by thickness of carpets, rugs underlays and the like.

Hard surfaces, including direct fixed coverings such as Vinyl, Cork, Hardwoods, Parquet or laminate or floating flooring, tiles, and any other elements, we note that these can affect the elevations recorded. Risknet records levels on hard surfaces at face-value 'in-situ' with any adjustments been noted on the floor plan.

The datum will be shown on the plan and set as 'o' (zero). All levels recorded will either be positive (above zero) or negative (below zero and negative levels prefixed by a '-' 'minus sign').

Considerations in relation to observations, comments, and recommendations

It is preferable to consider a broad range of criteria. Considerations not limited to but may include the following.

The age and location of the dwelling, the land designation (TC1-TC3) as determined by CERA, documented alterations and additions, Earthquake related information including Earthquake Commission information, Private Insurer information, Trades information, Consultants reports, Scope of works, invoices, producer statements, quotations for repairs, or repairs/remediation undertaken, information gathered from external sources such as MBIE and BRANZ, and of the specific locations of the high/ low elevations.

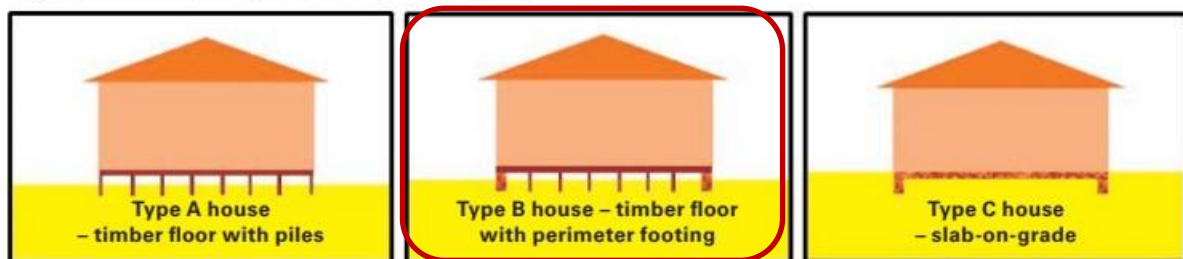
The aforementioned items for consideration are purely dependent on any information being made available, offered, and supplied to Risknet, whether written or orally. Risknet has no responsibility whatsoever to investigate the veracity of any of the information that the vendor or any third parties may provide in relation to the property.

Table 2.1 Foundation types. Ministry of Business and Innovation (MBIE)

2.1 Typical dwelling foundation types

Three broad groups of dwellings have been used in the subsequent sections of this document to describe dwellings on the flat, as represented in Figure 2.1.

Figure 2.1: Dwelling foundation Types A, B and C



The Type B and C house foundations have been further subdivided into those supporting light- and medium-weight claddings (B1 and C1) and those supporting heavy claddings such as brick veneer (B2 and C2) (see Table 2.1).

Table 2.1: House foundation and floor types on the flat

Type A	Timber-framed suspended timber floor structures supported only on piles. Stucco, weatherboard or light texture-clad house.
Type B1	Timber-framed suspended timber floor structures with perimeter concrete foundation. Stucco, weatherboard or light texture-clad house.
Type B2	Timber-framed suspended timber floor structures with perimeter concrete foundation. Brick or concrete masonry exterior cladding (veneer).
Type C1	Timber-framed dwelling on concrete floor (slab-on-grade). Stucco, weatherboard or light texture-clad house.
Type C2	Timber-framed dwelling on concrete floor (slab-on-grade). Brick or concrete masonry exterior cladding (veneer).

Table 2.3: Indicator criteria for floor/foundation relevel or rebuild (see also Figure 2.2)

Column 1	Column 2	Column 3	Column 4	Column 5
Floor type	NO foundation relevel considered necessary	Foundation relevel indicated	Foundation rebuild indicated (Partial or full)	House rebuild may be indicated
Type A Timber-framed suspended timber floor structures supported only on piles	The slope of the floor between any two points >2 m apart is <0.5% (1 in 200) [Note a] and The variation in level over the floor plan is <50 mm	The variation in floor level is >50 mm and <100 mm Note that the floor relevel is expected to be achieved by packing the piles	The variation in floor level is >100 mm [Note c] over the floor plan or The floor has stretched >50 mm [Note d] Note that full or partial re-piling is expected to be undertaken to achieve a level floor	The house has fully or partially collapsed off the piles and repair may be uneconomic This will relate to the degree of superstructure damage [Note f]
Type B Timber-framed suspended timber floor structures with perimeter concrete foundation	The slope of the floor between any two points >2 m apart is <0.5% (1 in 200) [Note a] and The variation in level over the floor plan is <50 mm	The variation in floor level is >50 mm and <100 mm [Note b]	The variation in floor level is >100 mm [Note c] over the floor plan or The floor has stretched >20 mm [Note e]	The house has fully or partially collapsed off the piles and repair may be uneconomic This will relate to the degree of superstructure damage [Note f]

Table 2.2: Indicator criteria for foundation damage not requiring structural repair (all technical categories)

Dwelling Foundation Type	Settlement Status	Lateral stretch status	Crack widths/Other
Type A	Vertical differential settlement <50 mm and floor slope less than 1 in 200 between any two points >2 m apart	and <20 mm ² and	Pile tilt <15 mm per 1 m height and no floor framing damage
Type B			<5 mm cracks in perimeter foundation
Type C			<5 mm cracks in the floor slab

Explanatory notes to Table 2.3

- a. Floor and superstructure damage repair may still be required, even if these indicator limits are not exceeded. Floor slopes are normally established by recording levels at the intersections of grid lines spaced at approximately 2 m in both directions and at obvious high spots and low spots.
- b. For veneer cladding to Type B construction, there may be a need to rebuild the veneer.
- c. Pile packing in Type A and B construction is considered to be unstable at greater than 100 mm.
- d. For most fully timber-framed (Type A) buildings, an overall stretch of less than about 50 mm can be pulled together again.
- e. Where perimeter concrete foundation walls are present (Type B construction), there is unlikely to be an opportunity to pull the foundation together again.
- f. This is an economic decision for any of construction Types A, B, or C on a particular property.
- g. Any abrupt changes in floor level may require at least local relevening, depending on the type of floor covering.
- h. Dwellings will have different degrees of damage, and in some cases the rebuilding of foundations may only be needed in the vicinity of the damage
- i. More restrictive limits may be appropriate if there is concern those distortions in the floor from earthquake damage may cause superstructure damage over time. For example:
 - damage to partitions (gravity load bearing and/or non-gravity load bearing) supported by a floor or foundation which undergoes angular distortion. Note: Damage limits applicable to specific types of partition are given in other Standards (e.g., AS 2870 Table 8.1, ISO 4356 Annex D Table 1). AS/NZS 1170.0 Table C1 also provides guidance on acceptable deflection limits for wall linings.
 - damage to external claddings leading to a contravention of the various Building Code performance requirements (e.g., E2).
- j. Foundation rebuilds are triggered by excessive differential settlements or excessive floor stretches, as covered in Table 2.3. However, the size of crack widths determines only whether or not a structural repair is required, and this indicator criterion is already covered in the last column of Table 2.2.
- k. **The indicator criteria provide guidance, they are not absolutes, as suggested by the dotted vertical lines between the columns.**
- l. The column title which states “NO foundation releve considered necessary” is intended to imply “– if all of the criteria below are met”. Accordingly, all of the criteria listed below the title, which are actually upper limits on slopes and levels below which the floor must be performing, must be satisfied (ie “AND” should be used). When a releve or rebuild is triggered by any of the situations described in the columns to the right of column 2, the recommendation is to at least regain all of the maximums stated in column 2

<https://www.building.govt.nz/assets/Uploads/building-code-compliance/canterbury-rebuild/repairing-and-rebuilding-houses/canterbury-guidance-part-a.pdf>

Terms and conditions

The Purpose of a property inspection is to work within the scope of engagement.

Risknet Limited undertakes visual non-invasive observations only and makes recommendations based on these observations, also considering limitations that may impede or restrict inspectors from performing certain tasks as well as agreed terms of reference for the clients. Risknet Limited has no responsibility whatsoever as to the condition of the property, any repairs or maintenance undertaken on or at the property, nor any express or implied responsibility as to the standard of work completed by others, in the past or future.

A report must not be solely relied upon without the consideration of other forms of evidence that is generally available, including the current or previous vendors knowledge, written reports, Council records, EQC and Private Insurance assessments, communications, and settlements, as well as contractors, painters and other trades who have undertaken or have knowledge of work undertaken at the specific location.

Unless stated within the report, Risknet has not been provided, nor reviewed any documentation whatsoever in relation to the address inspected, prior to completing this report. The reports produced by Risknet Limited have express limitations where, If the information is learned after the report has been produced and submitted to the client, unless this is determined by Risknet to pose a health and safety risk to any person or property, Risknet Limited will not be responsible for the passing over of any information to any person or organization.

All comments, considerations, and recommendations are based purely on a non-invasive visual observation only, taking into account reasonable and safe access, whilst having to rely upon the Inspectors knowledge of, or familiarity of specific elements that make up a structure and apply that knowledge, taking into account various Limitations that may impede the Inspections, as well as the Health and Safety Legislation, Risknet Internal H&S Policies, as well as applying where practicable, best practice and common sense to mitigate damage or injury to self, the clients, and any neighbouring property.

Inspectors are not to be regarded as experts in any specific field, rather observers with knowledge gained from professional bodies, practical knowledge and experiences learned and passed on by others, therefore recommendations shall be considered in context, and where recommendations have been made by inspectors for specialist reports, these recommendations have been made in the best interests of the client. Specialists Reports, for example in the case of a property deemed high risk in relation to weather tightness, may be referred to Weather tightness Specialist Consultant.

Risknet additionally make the report findings conditional and will not be responsible whatsoever if future inspections reveal defects not reported by Risknet Limited including but not limited to;

The assessment of any apparent defect which may be subject to prevailing weather conditions,

Information provided by the person, the employees or agents of the person requesting the report, accuracy, or relevance to an inspection,

The specific areas of expertise of the consultant specified in the report apparent concealment of possible defects,

The assessment of any apparent defect which may occur intermittently or usually occurs after regular uses,

The presence of chattels, furnishings and personal effect or any other factor limiting the preparation of this report.

The client agrees to indemnify and hold harmless Risknet Ltd, its officers, directors, employees and all affiliates and their respective successors, assigns and any person, if any, who control any thereof, against any loss, liability, claim, damage and expense whatsoever (including but not limited to, any and all expenses whatsoever reasonably incurred in investigating, preparing or defending, including all reasonable lawyer's fees, against any litigation commenced or threatened or any claim whatsoever) arising out of or based upon any false representation or warranty of breach or failure by the undersigned to comply with any covenant or agreement made by the undersigned herein or in any other document furnished by the undersigned to any of the foregoing in connection with this contract. In consideration for preparing and producing this report the client(s) hereby agrees to pay the Risknet's invoiced amount within five (5) days of receipt. E&O accepted.

Signed



Stuart Fletcher
Director


















Date: 29th September 2021

Appendix

Council records



If you think this information is inaccurate please claim your home to add your own features.

 Car spaces 2	 Floor area 120 m ²	 Land area 569 m ²	 Deck Yes
 Property contour Level	 View: living area None: There Is No View	 View type None	 Decade built 1980
 Certificate of Title CB20A/89	 Legal description Lot 13 DP 41355	 Council Christchurch City	 Condition External Walls: Good Roof: Good
 Construction External Walls: Brick, including clay and concrete bricks Roof: Tiles, including all materials with a tile profile	 Zone 9A	 Category RD198B	 Valuation Number 23651/7400
 Land Use Residential Houses of a fully detached or semi- detached style			