Keith and Bronwyn Langham
11b Lemari Avenue,
Nelson 7011
Keith 0273444265
Bronwyn 0212472323

Residential property inspection report.

Property Address:
Report requested by:

Present at time of inspection: usually the agent, or the owner/tenant.
Inspector/s: Keith and Bronwyn Langham, ASAP Building Inspections Ltd.

Inspectors qualifications: Over 46 years building industry experience including 7 years as a council building inspector.
National Diploma in Construction Management,
New Zealand Certificate in Building; IQPI; NZCQS;
Current role as independent Building Consultant - 14 years. (2020)

Weather conditions at time of inspection:

Date of inspection:

Scope;
To carry out a pre purchase inspection of the property at your dream home and then, provide a written report on its current condition. We have not inspected or reported on minor damage, wear and tear etc and have not reviewed the council files.

Equipment used;
Flir Bcam infrared thermal image camera.
The thermal review revealed no thermal anomalies.

Delta 2550 and an Exotek 160 non-invasive moisture meters.
Non-invasive meters return a number based on its perception of what is inside the wall, usually a higher number means the possibility of moisture but they are affected by other factors such as timber density, cladding type, wall paper, steel etc. Because of this it cannot be stated categorically that high readings mean a house is leaking or that the reading is in fact moisture related.
We take moisture readings in internal wall linings and skirtings to determine typical readings for the dwelling and compare these to readings in the external walls and around areas like showers, etc. Generally readings in wall linings range between 5 and 14 depending on the environment, lining materials and age of the dwelling. Readings in exterior walls are generally slightly higher than those in the internal walls, usually by approximately 2.0 more on the meter, but can be higher in dwellings where there is no insulation, or where there is foil insulation, in the exterior walls.

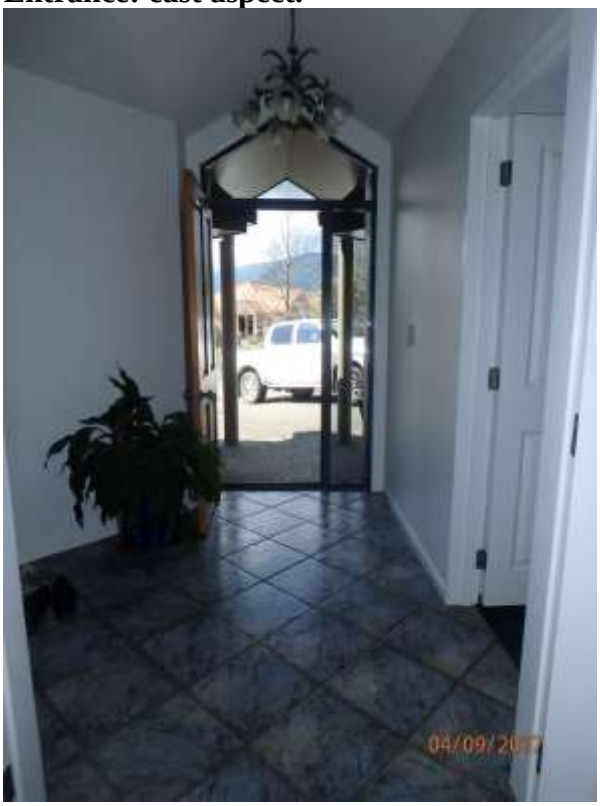
Moisture readings taken in the internal wall linings of the hallway adjacent to bedrooms ranged between 5.4 and 7.8. Readings in the skirtings on these walls ranged between 9.7 and 11.7.
Moisture readings described in our report as "no elevated readings found." were within this acceptable range.

Where we state moisture readings appeared elevated they are showing outside this range.
Further testing of these areas with an invasive moisture meter may help clarify if these elevated readings are moisture related.

Summary:
This is a single storey house on a flat site well above the crown of the road. The house and attached garage sit on a concrete floor. It is clad in 40 mm polystyrene fixed directly to the wall frames over building wrap with a modified plaster coating. Windows are single glazed in aluminium frames, it has closed soffits right round with some gable ends also clad in plaster, steel roof fascia and gutter and is generally well above ground level.
Fences are timber paling and in sound condition but with a low fence to the back yard reducing privacy. You may not be allowed to build a higher fence.
The cladding needs some repair in the way of new sill flashings and cracks to the northeast and northwest facing windows and the plaster finish is in need of fresh paint. I recommend Resene X200 as this is specially designed for monolithic claddings. The curved wall in the front garden also needs paint but its life is quite limited as water is getting in and will rot the timber frame.
Around some parts of the house the gardens have been built up too high and must be lowered at least 100 mm or so.
There is a Kent tile fire that was probably installed at the time of construction, as part of this installation a significant roof truss was cut out.
Adjacent to the house on the south east side is a walkway to the school.

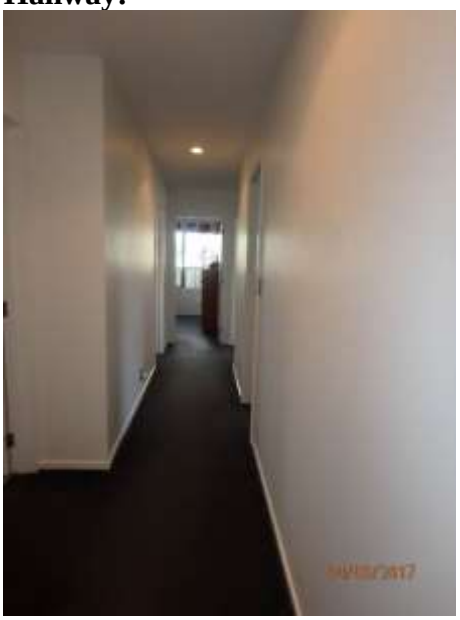
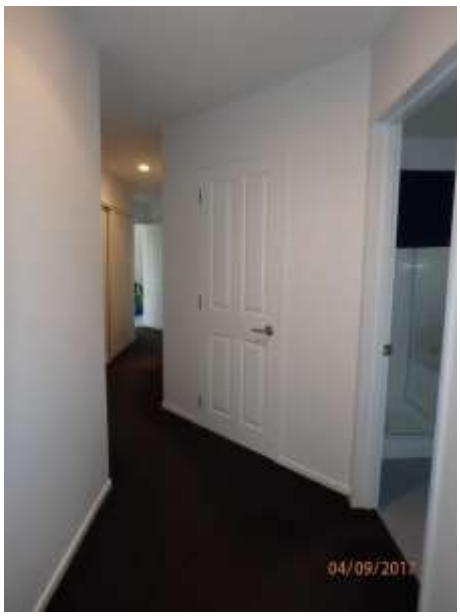
Internal;
The main entrance has an easterly aspect and is located in an angled internal corner between the kitchen and the garage. The entrance foyer has double doors into a lounge, a door into the kitchen area and a door into the hallway. The lounge/ dining area and kitchen are open plan. The hallway has internal access to the garage with laundry and a small office, the four bedrooms, master with ensuite bathroom, the bathroom and the separate toilet.
Ceilings: ceilings throughout the dwelling are standard height painted plaster board. There is no cornice.
Wall linings appear to be wallpapered plaster board that has been painted over. There are a few wall tiles in the bathroom. The skirting is painted and is a standard profile. It is probably MDF rather than timber. Walls and skirtings appear to have been re-painted.
Floors: flooring is a concrete slab. There are ceramic tiles in the entrance foyer and the ensuite, sheet vinyl in the bathroom and toilet, vinyl tiles in the kitchen and carpet elsewhere. The garage and laundry area floor is bare concrete.
Internal doors are mainly painted panelled doors with painted rebated jambs.
Storage: There is a storage cupboard and a linen cupboard in the hall that houses the hot water cylinder. Bedroom 1 has a walk in robe and bedrooms 2, 3 and 4 have double robes with sliding aluminium framed doors.
Exterior joinery: is single glazed aluminium painted rebated reveals. Windows have condensation channels with drainage holes.
Heating: there is a freestanding Kent tile in the lounge. The use of this solid fuel burner after the sale of the property is most likely not permitted under TDC Richmond Air Shed rules.
Both bathrooms have heat lamps in the heat/light/fan ceiling units and heated towel rails.
Bedrooms 2 and 3 have vents in their ceilings from a heat transfer system from the lounge.
Smoke alarms: NZ Fire Services suggest alarms are located in egress routes and within 3m of bedroom doors. This is enforced by the Building Code for Building Consents issued after August 2003.
There is one alarm in the far end of the hallway near the doors into bedrooms 2, 3 and 4. Although the alarm is within 3m of the doorway to the master bedroom we suggest an additional alarm is installed in the hallway between bedroom 1 and the living area to give warning prior to smoke getting past the bedroom door. There is another alarm in the garage.

Detailed report;
Entrance: east aspect.



This has a timber door with a fixed glass side window in an aluminium frame. The doorway is covered by a portico and the concrete is a good step below floor level.
No significant faults or elevated moisture readings found.

Hallway:

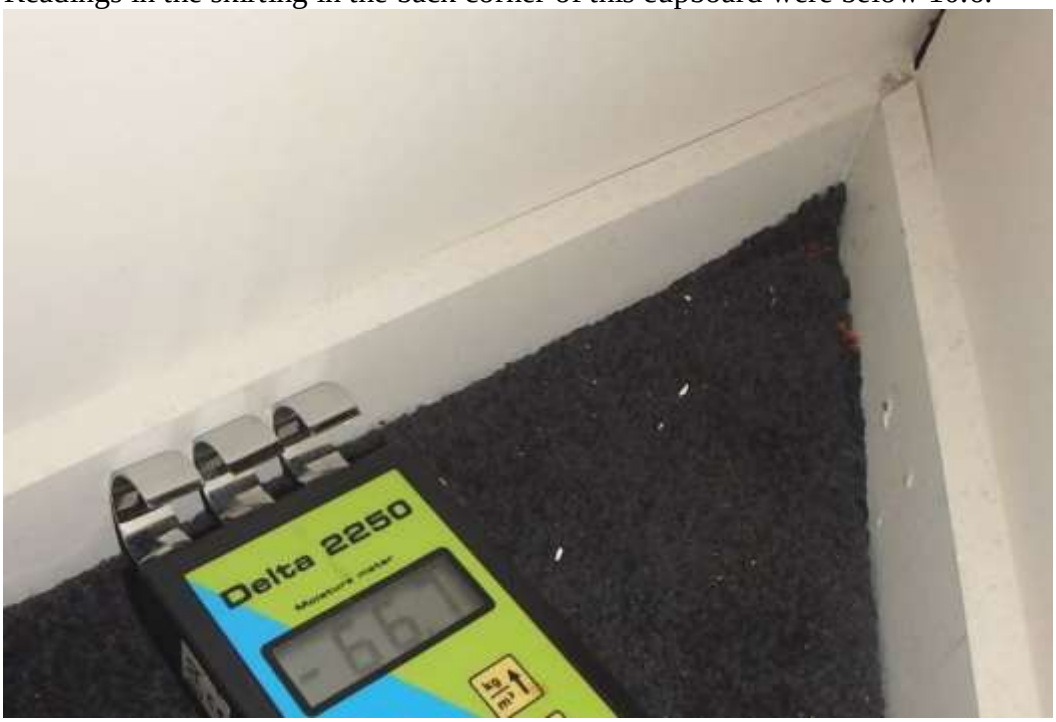



The hot water cylinder is the left end of the linen cupboard. It is dated as manufactured in1998 and is a 180 litre low pressure storage tank. It sits on a framed timber shelf and only has one seismic restraining strap that is secured by standard Gib screws.

There were no elevated moisture readings found in the wall adjacent to the laundry, or in the small area of wall between the storage cupboard and the bathroom.

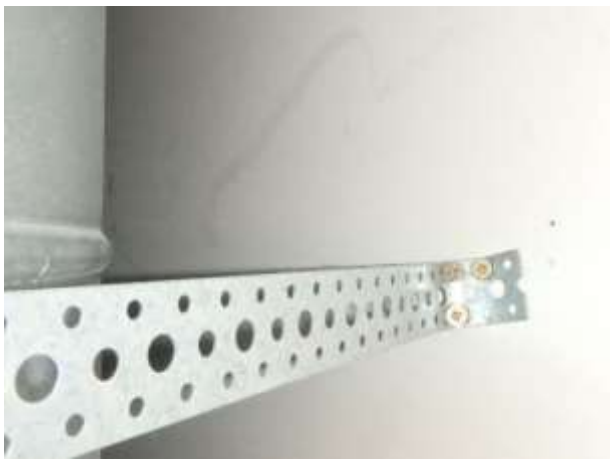
However, there were some very elevated moisture readings up to 67.5 found in the skirting inside the storage cupboard in the area adjacent to the front corner of the shower. The bottom of the skirting was swollen, a sign that MDF has been or is wet. Readings in the plaster board just above the skirting were only slightly elevated at up to 10.9. We suggest the bottom of the framing in this area of wall should be invested further for deterioration. This may also be a good area to try to ascertain where the moisture is coming from.

Readings in the skirting in the back corner of this cupboard were below 10.6.



Very high moisture readings behind the shower suggest a leak or failure.

1998 low pressure HWC


screws should be a bit more substantial

Bedroom one: northwest aspect.

This room has bi-fold doors with opening windows either side in the northwest wall.
There is a bubble under the wall paper just above skirting near the internal door, on the wall adjacent to the hallway. As this is not near any sanitary fixtures it is unlikely to be moisture related and more likely caused by the paint over the paper.
No significant faults or elevated moisture readings found.

Ensuite: northwest aspect.

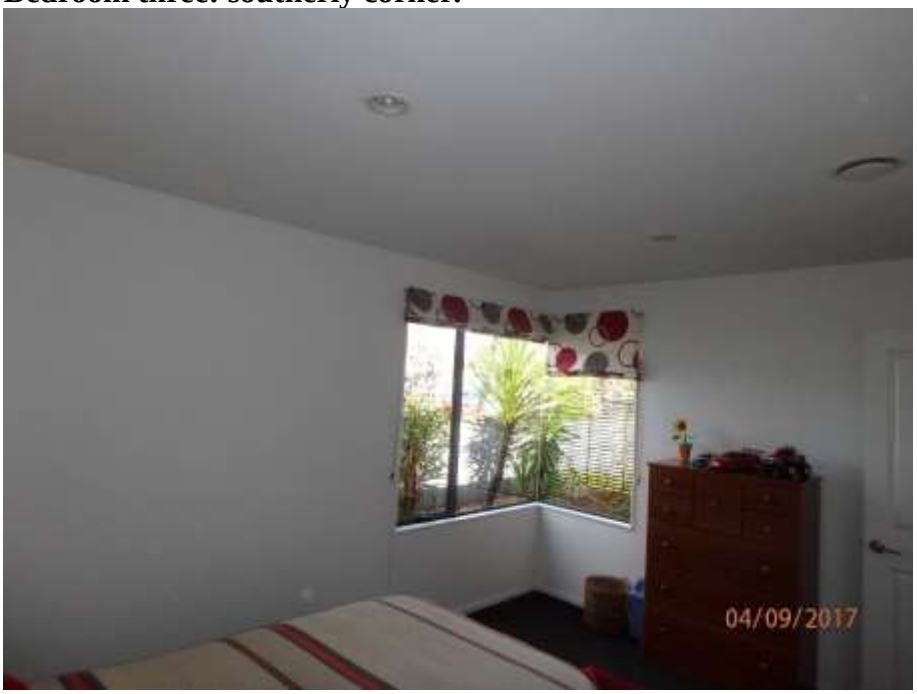
This room has an opening window at approx. 1500 mm high, a vanity, a dual flush toilet and a proprietary shower with acrylic tray, prefinished sheet linings to the walls and glass door and side screens.
The vanity unit has taps with flexible hose pipes and uPVC. The hoses are in poor condition and appear to have corrosion on their surface. Water pressure at the cold tap was very good but pressure from the hot tap was quite a bit lower.
Moisture readings were very elevated readings of up to 66 just above the skirting on the wall adjacent to bedroom 2 between the shower and the toilet. Readings in the skirting were also higher here at up to 21.8 along this piece of wall and the skirting looked swollen, thicker at the end closer to the shower.
This area should be investigated further.

Very high readings suggesting a leak around the shower. Something on the pipes.

Bedroom two: westerly corner.

The larger window in this room faces northwest, the smaller to the southwest.
There are repaired sheet join cracks that run horizontally at each end of the northwest window sill and one that runs vertically under the right end of the southwest window.
There were no elevated moisture readings found in either of the exterior walls and readings in the wall lining and skirting adjacent to the ensuite were not elevated.
No significant faults found.

Bedroom three: southerly corner.

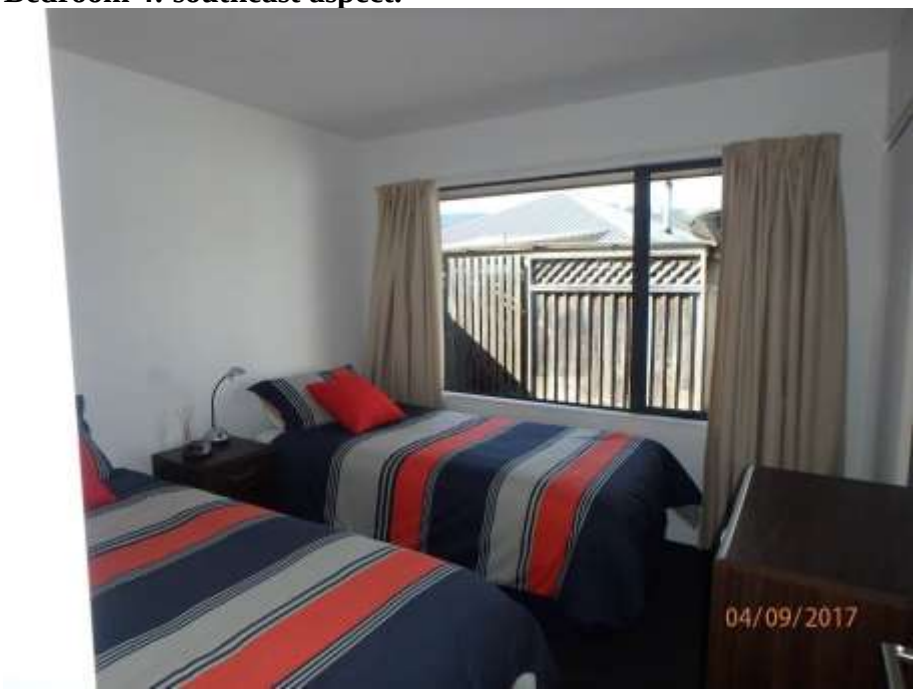


This room has a corner window in western corner where there is a step in the southwest wall.
There were elevated moisture readings of 26 found directly under the right end of the sill on the northwest wall but readings in the skirting and the lower area of wall here did not appear elevated. Readings under the remainder of this window were below 9.8. There is a repaired sheet join crack under this end of the window.
The sills are not sitting flush where they meet at the mitre join in the corner of the window.

Moisture readings were slightly elevated at up to 16.7 in the skirting along the southeast wall and readings in the bottom of the plaster board along this wall were also up a little compared to further up the wall. These readings are not considered high but just noted as being higher than those around the remainder of the house and may be due to the aspect of this wall. Lowering the gardens outside may be all that is required.
The bedroom door could close better; moving the striker plate toward the door stop may pull it in at the top and stop some of the rattle.

Moisture readings are not high but should be monitored for mould or mildew growth.

Bedroom 4: southeast aspect.



No significant faults or elevated moisture readings found.

Bathroom: southeast aspect.

This room has an opening casement in the window which is approx. 1500 mm above the floor.
There is a tiled surround around the top of the bath.
Sealant has been installed along the back and end of the vanity but the bottom edge of the mirror above the upstand is beginning to delaminate thus the blackened areas of the glass. Sealant put between the mirror and the upstand may stop this getting worse.
The vanity hoses are in good condition. The mixer is a little loose.
The proprietary shower has a PVC liner, acrylic tray, glass door and a side screen that sits atop the end of the bath.
The bottom edge of the bathroom door binds on the jamb. This is likely to be due to swelling in the timbers between the door and the shower as elevated moisture readings were found near the shower with 30 in the coved area of the vinyl flooring and 66 in the bottom of the plaster board. The readings reduced moving toward the bathroom door.
This area is adjacent to the high readings found in hallway storage cupboard.

Very high readings to the left of the shower

Toilet: southeast aspect.

This room has a dual flush cistern, a small vanity and an opening window.
The vanity top has its own up stand but there is no sealant between the back of it and the mirror. If water is splashed in this area it could run down the back of the unit and affect the unpainted plasterboard in the back of the cabinet. There is a chip missing off the corner of the melamine of the cabinet. The water hoses to the taps are in much better condition than those of the ensuite vanity.
The striker plate on the door could be moved to eliminate the likelihood of it rattling.
No significant faults or elevated moisture readings found.

Lounge: westerly corner.

This room is open to the dining area and has double doors into the entrance foyer.
There is a bi-fold door and two opening windows in the southwest wall and a window with two opening casements to the northwest.

The freestanding Kent Tile fire is located at the end of the room adjacent to the HWC. There are pipes connecting the cylinder to the fire for boosting the hot water supply. From the label it appears the fire would have been installed between 1994 and 1999. The condition of the fire was not checked. As the property falls under the Richmond Air Shed rules and it appears this burner does not meet the current emission level requirements Building Consent is required to replace the burner with a clean air approved appliance after the sale of the house if a solid fuel burner is wanted.
We make note in the report under "roof space" of a problem with the installation of the flue for this burner in relation to the trusses.

Dining: northerly corner.

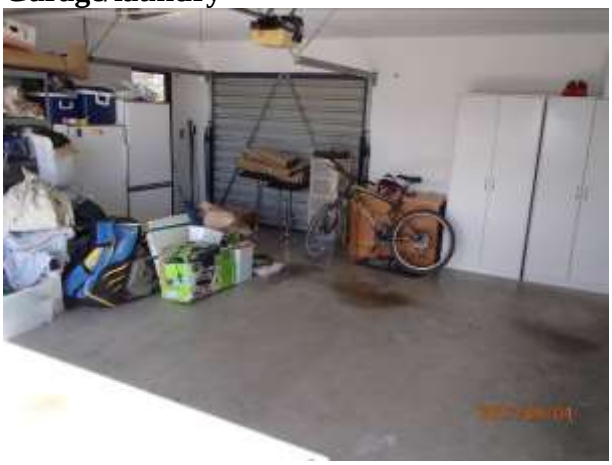
This area is open to the lounge and the kitchen.
There is a bi-fold door and two opening casement windows in the northwest wall and a window with one opening casement in the northeast wall.
No significant faults or elevated moisture readings found.

Kitchen: easterly aspect.

This area has the larger window in the northeast wall over the back of the sink bench and windows in both return walls.
It has Formica benches over melamine cupboards and there is a 1 ¼ bowl stainless steel sink, an under bench dishwasher, under bench electric oven, glass cooking hob with integrated range in the cupboard above and a standard width tall fridge space. The smaller sink has a waste disposal fitted to it. There is a glass splash back between the hob and the range hood; the sink bench has a small upstand up to the window sill.
The toe space edge of the cupboard panels either side of the dishwasher are a bit swollen from water damage and there is also some swelling in the bottom of the toe space under the sink. Moisture readings along the toe spaces ranged between 11 and 19, the higher readings to the right of the dishwasher.

Each side of the dishwasher with a raised reading on the right

Garage/laundry



There is a double garage with internal access, the main door is a double tilting door with an auto opener and there is a single door in the back which is manually operated.
There is also a side door, an internal door a small office and the laundry in the garage.
It is fully lined and painted and currently there is a lot of clutter in the garage.
A smoke alarm is fitted high on one wall.
The laundry area sits on bare concrete and consists of a proprietary steel tub unit with a gap up the side that should have been closed off to prevent water splashing on the wall getting between the tub unit and the wall lining.
The garage floor has a few fine cracks that are typically due to shrinkage of the concrete and do not pose a structural problem.
No significant faults or elevated moisture readings have been identified.

Office

In the corner of the garage is an office or storage room with the access hatch to the ceiling and the power distribution board.
No significant faults or elevated moisture readings have been identified.

Southeast

This side as mentioned has a walkway through to the school. There is a bike shed and a steel storage shed along this side of the property and a single tilting door in the back of the garage to a paved area. This is the services side of the house with the clothesline and a side door to the garage/ laundry.

The plaster on this side is just dirty with a few fine cracks from the corners of the windows just time for a wash and fresh paint.

The exposed aggregate concrete paving is about 60 mm below the bottom of the cladding which is about 50 mm below the floor, not quite as much as suggested but it seems to be working well.

A gully trap here is the correct height above the paving but the grill is missing; the grill is to prevent hedgehogs and the like falling in and blocking the drains.

Along the side wall of the garage is the meter box and a gate.

Cracks like this just need to be coated with a special sealer and the wall repainted.


The wall is generally tidy but the gully trap needs a grill installed. Balls, hedgehogs and even cats can get in here and block the sewer.

Southwest

This area backs onto the school grounds. Bark gardens here are too high and need to be lowered, especially around the western corner where it is above the bottom of the cladding.
Plaster along this wall is not affected by UV or heat so is in better condition just dirty.


The plaster has a lot of grit and grime in the surface and some separation.

These gardens are just too high and must be lowered.

Northwest

This is the outdoor living court area with areas of exposed aggregate concrete paving which has cracked and slumped along the outer edges. I have not seen the drainage plan for this house but I believe the sewer and stormwater run along this side and the paving may have been poured before the backfill over the drains had a chance to compact. It should eventually be replaced. These patio areas are not attached to the house so slumping along the outer edges should have no effect on the house foundations.

Gardens along the bedroom wall are way too high and a gully trap is buried. This should be 100 mm above ground level so the garden has been built up quite a bit.

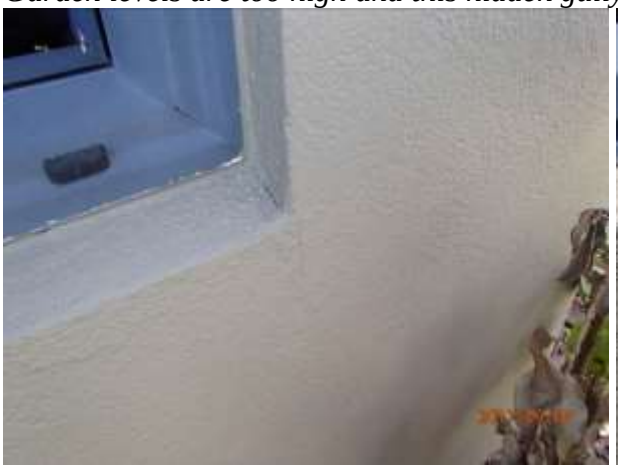
Cracking in the plaster to the corners of windows and the lifting of the plastic sill flashing under the plaster as well as the cracks in the face of the plaster all need to be fixed. The sills should be replaced, all cracks repaired and the wall repainted. Clear sealant is not a suitable repair.

There were no apparent elevated readings internally that might suggest a failure of the cladding at this stage.

There are bruised corners to the plaster which expose the plastic corner flashings. This damage needs to be repaired.

The curved wall is polystyrene over a timber frame and posts. It's a bit wobbly and I believe its life is limited as water is getting in at the top. Even where the gate hinges go into the wall there is movement suggesting there may be rot in the timbers or the hinges do not screw in very far.


Garden levels are too high and this hidden gully is filling with leaves.




Some cracks have not been touched and some are very untidily patched

A lot of the sill flashings along this side and NE are lifting and need to be replaced.


Minor damage to some corners just needs to be repaired before repainting.


Cracks in the wall are letting a lot of water in, would have been better if only one side was plastered because the timbers could have a chance to dry out.

Northeast

This is the front of the house with a sloping lawn, exposed aggregate drive to the garage and path to the front door.

Plaster sills are in poor condition and need urgent repair.
Apart from the damage to the plaster the wall appears to be in very tidy condition and when repaired and painted should be fine.
There is some minor cracking in the concrete driveway but nothing of any significance.

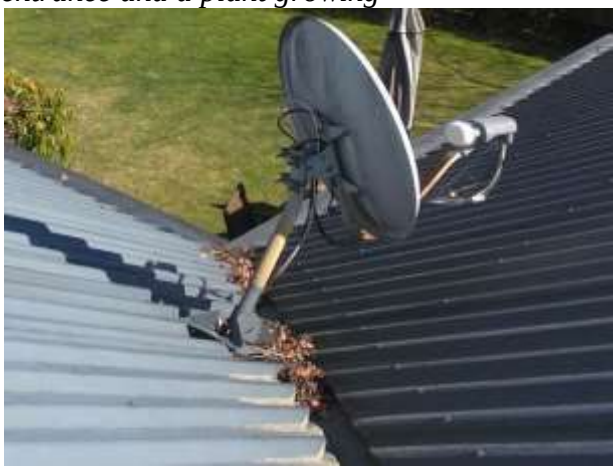

The sills to the windows need to be replaced and all cracks repaired; urgently


Roof

The roof was inspected with the use of a drone and from vantage points.
The roof is a little complicated and clad in trapezoid profile colour coated steel with matching fascia and gutter. It is quite steep providing great run off and plenty of attic space.
It has hips, valleys, ridges and gables with leaf guard on the outer gutters but not on the valley gutters. These are blocked with leaves from the large trees in the adjacent properties and will need to be kept clear and blocked valley gutters restrict the water flow which can cause the gutters to overflow, this is typically inside the house.

There were no current signs of failure due to this but the leaves are building up.

There are a lot of leaves in the valleys over the entrance and a plant growing



Good flashing to the chimney but will not comply for a replacement fire.

more leaves in the valleys gutters

Attic

The attic is accessed via a hatch in the office ceiling.

Insulation is Pink Fibreglass batts which are neatly installed across the house rooms but not the garage. Insulation has been cut away from downlights as required.

Plumbing appears to be copper and is lagged for frost protection.

The extract units have been ducted to the outside.

A heat transfer system has been installed to take excess heat from the lounge and duct it to the bedrooms. When the duct leaves the fan unit there is a sharp bend which will greatly restrict the air-flow.

A plastic header tank is on an elevated platform; this is easily accessed and is seismically restrained.

It looks like a towel has been jammed around the chimney flue so the reason for this should be sorted out but of greatest concern is a significant roof truss has been cut out to allow the passage of the flue form the fire. This will need to be inspected by an engineer and a repair designed and installed. When the replacement fire is installed the flue may be in a different place and may allow an easier repair to the flue.


The batts and header tank are all tidily installed


Bathroom extract duct to outside. Heat transfer has a bend that is probably restricting flow


Roof framing and the insulation all looks tidy

This is of significant concern. The end of the truss has been cut out for the flue.
I do not know what the towel is for.
I can see nothing supporting the flue.
This installation should not have been approved by council.

Truss bottom and top chord just cut out. Bottom chord supports another truss which also supports the header tank platform.

Ref No. 2537-17

CERTIFICATE OF INSPECTION IN ACCORDANCE WITH NZS 4306:2005

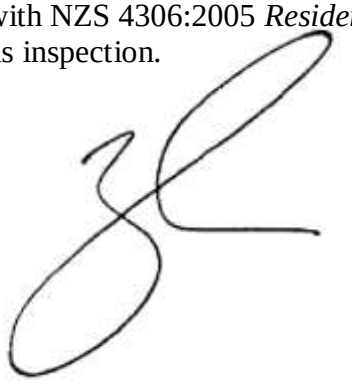
Client:	you
Site address:	your dream home
Inspector- Name:	Keith and Bronwyn Langham
Company:	ASAP Building Inspections Ltd
Qualifications:	National Diploma in Construction Management
Date of inspection:	2017

The following areas of the property have been inspected:

		Yes	No
(a)	Site	☑	☐
(b)	Subfloor	☐	☑
(c)	Exterior	☑	☐
(d)	Roof exterior	☑	☐
(e)	Roof space	☑	☐
(f)	Interior	☑	☐
(g)	Services	☑	☐
(h)	Accessory units, ancillary spaces and buildings	☑	☐

Any limitations to the coverage of the inspection are detailed in the written report.

Certification:
I hereby certify that I have carried out the inspection of the property site at the above address in accordance with NZS 4306:2005 *Residential property inspections* – and I am competent to undertake this inspection.

Signature:  Date: 2017

An inspection carried out in accordance with NZS 4306:2005 is not a statement that a property complies with the requirement of any Act, regulation or bylaw, nor is the report a warranty against any problems developing after the date of the property report. Refer to NZS 4306:2005 for full details.

This report has been produced solely for the benefit of the client as defined in this certificate. It may not be relied on by any other person other than that client and no responsibility, duty of care or liability whatsoever is or will be accepted by ASAP Building Inspections or any of our employees or consultants to any other party in connection with this report.

SUMMARY LIST OF FEATURES INSPECTED

For any feature not present on the property, mark as N/A (not applicable).

SITE

Inspected

	Y	N	N/A
Orientation of living spaces	☑	☐	☐
Site exposure, contour & vegetation	☑	☐	☐
Retaining walls	☐	☐	☑
Paths, steps, handrails & driveways	☑	☐	☐
Fencing	☑	☐	☐
Surface water control	☑	☐	☐

SUBFLOOR

Inspected

	Y	N	N/A
Location of access point	☐	☐	☑
Accessibility	☐	☐	☑
Foundation type & condition	☐	☐	☑
Foundation walls	☐	☐	☑
Ground condition	☐	☐	☑
Ground vapour barrier	☐	☐	☑
Drainage	☐	☐	☑
Ventilation adequacy	☐	☐	☑
Pile type, instability & condition	☐	☐	☑
Pile to bearer connections	☐	☐	☑
Obvious structural alteration	☐	☐	☑
Ground clearance of timber framing	☐	☐	☑
Floor type (timber or suspended concrete)	☐	☐	☑
Timber framing & bracing	☐	☐	☑
Insulation type (approx thickness, coverage & condition)	☐	☐	☑
Plumbing – material types, leakage & support	☐	☐	☑
Electrical – wiring type & support	☐	☐	☑
Insect and pest infestation	☐	☐	☑
Rotting timbers	☐	☐	☑
Debris	☐	☐	☑

EXTERIOR

Inspected

	Y	N	N/A
Construction type	☑	☐	☐
Cladding	☑	☐	☐
Chimneys	☑	☐	☐
Exterior Stairs	☐	☐	☑
Balconies, verandas, patios, etc.	☑	☐	☐

ROOF

Inspected

	Y	N	N/A
Roof material	☑	☐	☐
Roof condition	☑	☐	☐
Roof water collection	☑	☐	☐
Downpipes	☑	☐	☐
Eaves, fascia & soffits	☑	☐	☐

ROOF SPACE

Inspected

	Y	N	N/A
Accessibility	☑	☐	☐
Roof cladding	☑	☐	☐
Thermal insulation type, clearances, approximate thickness & coverage	☑	☐	☐
Sarking	☐	☐	☑
Party walls, fire proofing	☐	☐	☑
Roof underlay & support	☑	☐	☐
Roof frame construction & connections	☑	☐	☐
Ceiling construction	☑	☐	☐
Obvious structural alteration	☑	☐	☐
Insect and pest infestation	☑	☐	☐
Rotting timbers	☑	☐	☐
Discharges into roof space	☑	☐	☐
Plumbing – material types, leakage & support	☑	☐	☐
Electrical – wiring type & support	☑	☐	☐
Tile fixings	☐	☐	☑

INTERIOR

Inspected

	Y	N	N/A
Ceilings	☑	☐	☐
Walls	☑	☐	☐
Timber floors	☐	☐	☑
Concrete floors	☑	☐	☐
Doors & frames	☑	☐	☐
Electrical – operation of switches, etc.	☑	☐	☐
Heating systems	☑	☐	☐
Kitchen – Bench top	☑	☐	☐
Cabinetry	☑	☐	☐
Sink	☑	☐	☐
Tiles	☐	☐	☑
Air extraction system	☑	☐	☐
Bathroom, WC, ensuite	☑	☐	☐
Floor	☑	☐	☐
Cistern, pan & bidet	☑	☐	☐
Tiles	☑	☐	☐
Bath	☑	☐	☐
Shower	☑	☐	☐
Vanity/washbasin	☑	☐	☐
Ventilation	☑	☐	☐
Special features	☐	☐	☑
Laundry – Location	☑	☐	☐
Floor	☑	☐	☐
Tub/cabinet	☑	☐	☐
Tiles	☐	☐	☑
Ventilation	☐	☐	☑
Storage	☑	☐	☐
Stairs	☐	☐	☑
Exterior windows & doors	☑	☐	☐

SERVICES	Inspected		
	Y	N	N/A
Fire warning & control systems	☑	☐	☐
Heating systems	☑	☐	☐
Central vacuum systems	☐	☐	☑
Ventilation systems	☑	☐	☐
Security system	☐	☐	☑
Electricity services	☑	☐	☐
Gas services	☐	☐	☑
Water services	☑	☐	☐
Hot water services	☑	☐	☐
Foul water disposal	☐	☑	☐
Grey water recycling system	☐	☐	☑
Rainwater collection systems	☐	☐	☑
Solar heating	☐	☐	☑
Aerials & antennae	☑	☐	☐
Shading systems	☐	☐	☑
Telecommunications	☐	☑	☐
Lifts	☐	☐	☑

ANCILLARY BUILDINGS	Inspected		
	Y	N	N/A
Exterior claddings	☑	☐	☐
Floors	☐	☑	☐
Roofs	☑	☐	☐
Subfloor	☐	☐	☑

Disclaimer;

a) This is a report of a visual only, non-invasive inspection of the areas of the building which were readily visible at the time of inspection. The inspection did not include any areas or components which were concealed or closed in behind finished surfaces (such as plumbing, drainage, heating, framing, ventilation, insulation or wiring) or which required the removing of anything which impeded access or limited visibility (such as floor coverings, furniture, appliances, personal property, vehicles, vegetation, debris or soil).

b) As the purpose of the inspection was to assess the general condition of the building based on the limited visual inspection described in (a), this report may not identify all past, present or future defects. Descriptions in this report of the systems or appliances relate to existence only and not adequacy or life expectancy. Any area or component of the building or any item or system not specifically identified in this report as having been inspected was excluded from the scope of the inspection.