

Healthy Homes Inspection Report



Client	The Property Owner c/- Quinovic Property Management - Whangarei
Property Address	11 Spedding Road , Tikipunga, Whangarei, 0112
Date of Report	18/11/2021
Inspection ID	88886



**Betta Property
Compliance**

PROTECTING EVERYDAY KIWIS

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0800 422 386

info@bettagroup.co.nz

www.bettapropertycompliance.co.nz

INSPECTION DETAILS

James Day on behalf of Healthy Dwellings Ltd trading as Betta Property Compliance

Office: PO Box 11157, Hastings, 4158

Free Phone: 0800 422 388

info@bettagroup.co.nz

Thursday, 18th November 2021

The Property Owner c/- Quinovic Property Management - Whangarei

RE: HEALTHY HOMES INSPECTION

Inspection date:	18/11/2021
Reference number:	88886
Property address:	11 Spedding Road , Tikipunga, Whangarei, 0112
Inspector:	James Day

Purpose

The purpose of the Healthy Homes report is to establish whether the property complies with the Residential Tenancies (Healthy Homes Standards) Regulations 2019. The inspection report will document what is required to either confirm the PCBU is compliant with the current Healthy Homes regulations or provide enough information for the PCBU to understand what is required to make the property comply.

NOTE: the inspector is completely independent and is acting impartially at all times.

Methodology

The inspector will systematically work their way around the interior and exterior of the property documenting the six key standards of a Healthy Home (Heating, Insulation, Ventilation, Moisture, Drainage, Draught Stopping) plus any smoke alarms.

Limitations

- Every care has been taken in carrying out this inspection to communicate an accurate record of the property's current level of compliance with the Residential Tenancies (Healthy Homes Standards) Regulations 2019.
- The inspection is a record of what was inspected on the day of the inspection. Compliance aspects of the house can change from time to time.
- Furniture, fixtures and fittings or any chattels in the property including the tenant's personal possessions will not be moved during the course of the inspection. This can make it difficult and at times impossible to make comment on areas of the property. If this is the case, this will be noted in the report.
- The report is based on a VISUAL inspection only.
- This report is not a structural, electrical, building, asbestos or methamphetamine report, nor does it focus specifically on any other aspects of the property other than the six standards that make a healthy home (for the avoidance of doubt these are Heating, Insulation, Ventilation, Moisture, Drainage, Draught Stopping).
- The statements contained in this report are prepared solely for the purposes of determining the health of a building. It is not to be interpreted or utilized in any other manner whatsoever (including but not limited to soundness of the structure or defects)
- The smoke alarm was not tested, and the battery life or effectiveness where not determined
- The report is prepared for the client to whom this report is addressed and no liability will be accepted for any third party, incorrect use or omission.
- This report is to be read in conjunction with the Betta Property Compliance terms of trade.

Other

Photographs of the property were taken at the time of the inspection unless the client expressly requested otherwise.

Areas that could not be accessed do not form part of this report.

If you have any questions regarding the scope of the inspection, please do not hesitate to call 0800 422 386 to discuss.

Thank you for choosing Betta Property Compliance to undertake your Healthy Homes inspection report.

Kind Regards

James Day on behalf of Healthy Dwellings Ltd trading as Betta Property Compliance

INSPECTION RESULTS INTERPRETATION

Within the report data sheets, the below color rating has been attributed to each of the Healthy Home elements.

Compliance of an element

Color Rating	Rating	Definition
	Complies	The inspector has determined that the Healthy Homes element complies (bymeeting the minimum required standard) with the Residential Tenancies (HealthyHomes Standards) Regulations 2019.
	Does NOT comply	The inspector has determined that the healthy homes element does not meet the minimum required standard of the Residential Tenancies (Healthy Homes Standards) Regulations 2019. Work is required to meet compliance.

Minimum Insulation Requirements

INSULATION MINIMUM VALUES			
Zone 1 and 2		Zone 3	
Ceiling	R2.9	Ceiling	R3.3
Underfloor	R1.3	Underfloor	R1.3

Map of climate zones



Definitions (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

Bathroom:

means a domestic living space in which a bath or shower is installed.

Domestic Living Space

means an interior space of a building that is a space for activities normally associated with domestic living.

Extractor Fan

means an extractor fan that vents extracted air to the outdoors.

Habitable Space

means a domestic living space excluding any bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for extended periods.

Kitchen

means a domestic living space in which an indoor cooktop is installed.

Living Room

means a room that consists of, or includes, a habitable space that is for use, or could reasonably be expected to be used for general everyday living, whether as a lounge room, dining room, sitting room, family room, or other similar use.

Room

room means an area within residential premises that

- (a) consists of, or includes, 1 or more habitable spaces; and
- (b) is or can be fully enclosed by the floor, the ceiling, floor-to-ceiling walls, and closeable windows and doors.

Meaning of not reasonably practicable to install

It is not reasonably practicable to install something at any premises or tenancy building if, because of the way the premises or tenancy building is designed or built,

- (a) a professional installer cannot access the relevant area of the premises or tenancy building to install the thing without
 - (i) carrying out substantial building work; or
 - (ii) causing substantial damage to the premises or tenancy building; or
- (b) a professional installer cannot install the thing without creating greater risks to the health or safety of any person than are normally acceptable when something of that kind is being installed by a professional installer; or
- (c) it is otherwise not reasonably practicable for a professional installer to install the thing.

SUMMARY

Below is a summary of the ratings for each compliance component.

HEATING

Refer to page 5



INSULATION

Refer to page 7



VENTILATION

Refer to page 10



DRAINAGE & GUTTERING

Refer to page 15



DRAUGHTS

Refer to page 18



MOISTURE BARRIER

Refer to page 20



SMOKE ALARM

Refer to page 22



HEATING

This section covers the heat source. Only the heat source in the main living area is assessed in this report. The functionality of the heat source was not inspected or commented on, nor was its efficiency. This report only comments on its compliance with the Residential Tenancies (Healthy Homes Standards) Regulations 2019. No heat sources were operated or tested as part of this inspection.

Where any technical knowledge or any specific tools or skills are required, the landlord is generally required to maintain the heating device including cleaning any filters. This comes under their obligation to keep the heater source in good working order. Eg. A flued gas heater must have its fixtures and fittings in good working order to ensure there is not gas leak. Additionally a wood burner must have its flue and chimney in good working order to ensure it is safe to operate. The inspector is unable to ascertain this information from the inspection and this is not reported on within this report.

In order to meet Healthy Homes compliance, gas heaters must be flued.† Approved gas heaters should have a compliance label on the side stating kW or BTU output. †If there is no label, then the landlord or property manager is required to check compliance / engage the services of a gas filter / heating specialist & ascertain safety.

Wood and pellet burners require a building consent for installation or modification and must meet council requirements, plus any National Environmental Standards for Air Quality.† This has been unable to be confirmed by the inspector, therefore this has not been commented on in this report.

Required heating capacity (calculations on Appendix One) are calculated using a custom-built calculator not the online calculator provided for the public. Results may vary slightly from online calculators.

Restrictions:

None.

Heat source type:

Heat pump.



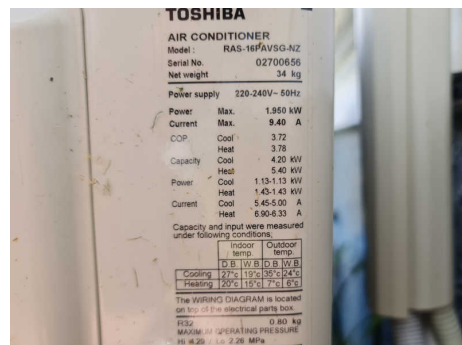
Heat source make:

Toshiba.



Heat source rating/capacity:

5.40kW



Required heating capacity
(calculations on Appendix One): **4.94kW**

Is the heat source positioned to heat
the main living room: **Yes.**

Does the heat source have thermostat: **Yes.**

Heat source condition: **Good.**

Compliance:



Additional comments: **As per the calculator, the Heating required for the living area is 4.94kW. The current heat source provides 5.40kW, therefore the heating complies with the Healthy Homes Standards.**

Heating requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019)

8(1) The main living room of the premises must be heated by 1 or more qualifying heaters with a total heating capacity of at least the required heating capacity for the main living room.

9(1) A heater is a qualifying heater if

(a) it is installed as a fixture to the premises; and

(b) either

(i) the heater (or if it is a fixed heat pump, the indoor unit) is in the living room; or

(ii) the heater supplies heat directly into the living room (for example, through a duct or

(c) it has a heating capacity of at least 1.5 kW; and

(d) if it is an electric heater or a fixed heat pump, it has a thermostat; and

(e) it is not an unacceptable heater.

(2) Each of the following is an unacceptable heater:

(a) an open fire:

(b) an unflued combustion heater:

(c) if the required heating capacity for the living room is greater than 2.4 kW, an electric heater.

(3) In this regulation,

electric heater means an electric heater that is not a fixed heat pump

fixed heat pump means a heat pump that is permanently wired into the premises' electrical system.

INSULATION

This section covers the roof and underfloor spaces. Due to Health & Safety requirements the subfloor and roof space is only inspected from the manholes, and therefore those areas which could not be viewed from the manholes could not be commented on.

Ceiling

Restrictions:

Our visual inspection was made from the inspection hatch. Only areas visible from the inspection hatch were observed and comments included in this report.

Insulation type:

Insulfluff topped up with fiberglass batts.



What is the thickness of the insulation: 120mm+



Estimated R-value:

R2.9



Insulation condition:

Good Condition.



Compliance:



Additional comments:

The ceiling insulation complies due to the insulation exceeding the minimum R2.9 / 3.3 rating required for this climate zone.

Underfloor

Restrictions:

Our visual inspection was made from the inspection hatch. Only areas visible from the inspection hatch were observed and comments included in this report.

Insulation type:

Polyester.



What is the thickness of the insulation?: 100mm.



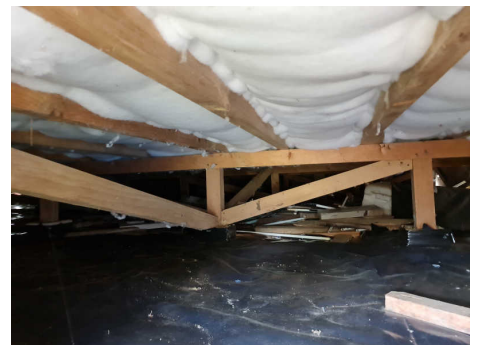
Estimated R-value:

R1.5



Insulation condition:

Good Condition.



Compliance:



Additional comments:

The underfloor insulation complies due to the insulation exceeding the minimum R1.3 rating required.

General

Wall insulation details:	Unknown
Installation date for ceiling:	Unknown
Installation date for underfloor:	Unknown
Installation date for walls:	Unknown

Insulation requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

14 Qualifying ceiling insulation

(1) Ceiling insulation is qualifying ceiling insulation if all of the following apply:

- (a) the insulation's R-value, when it was installed, was,
 - (i) if the premises are in zone 1 or zone 2, at least 2.9; or
 - (ii) if the premises are in zone 3, at least 3.3;
- (b) the insulation was installed in accordance with NZS 4246:2016: (located on page 3 of this report)
- (c) the insulation is in a reasonable condition (or better).

(2) If the ceiling insulation for an area of ceiling consists of 2 or more products installed on top of each other, the insulation's R-value for the purposes of subclause (1)(a) is to be determined by

- (a) determining the R-value of each product when it was installed; and
- (b) adding those R-values together

16 Qualifying underfloor insulation

(1) Underfloor insulation is qualifying underfloor insulation if all of the following apply:

- (a) the insulation's R-value, when it was installed, was at least 1.3;
- (b) the insulation was installed in accordance with NZS 4246:2016: (located on page 3 of this report)
- (c) the insulation is in a reasonable condition (or better).

(2) If the underfloor insulation for an area of floor consists of 2 or more products installed on top of each other, the insulation's R-value for the purposes of subclause (1)(a) is to be determined by

- (a) determining the R-value of each product when it was installed; and
- (b) adding those R-values together

18 Determining whether insulation is in reasonable condition

(1) In determining whether insulation is in reasonable condition (or better), the following matters must be taken into account:

(2) Without limiting subclause (1), ceiling insulation is not in reasonable condition if the minimum thickness of the insulation material is less than 120 mm.

(3) However, subclause (2) does not apply if the landlord proves that

- (a) the insulation's R-value, when it was installed, was the value specified in regulation 14(1)(a)(i) or (ii) (as applicable); and
- (b) the current thickness of the insulation material is 70% or more of its thickness when it was installed (even if its current thickness is less than 120 mm).

In addition

Ceiling insulation installed before 1 July 2016 is exempt from R-Values provided the minimum thickness of the insulation material is at least 120 mm. If records show it was installed post 2016, then it will need to be topped up to meet the R2.9 / R3.3 requirement for this climate zone.

VENTILATION

This section covers the ventilation of each habitable space. This report only comments on its compliance with the Residential Tenancies (Healthy Homes Standards) Regulations 2019. No mechanical ventilation was tested as part of this inspection.

Ventilation

Restrictions: The quantity of furniture / storage within the house meant we had limited ability to inspect the ventilation mechanisms in this property.

Kitchen/s

Mechanical Ventilation Type: Rangehood.

Mechanical Ventilation Condition: Good.



Is the size of the Mechanical Ventilation adequate: Yes.



Are all Mechanical Vents ventilating to the exterior: Yes.



Compliance:



Additional comments: This kitchen has an externally ducted rangehood that is in good working order and complies with the Healthy Homes Standard for kitchen ventilation.

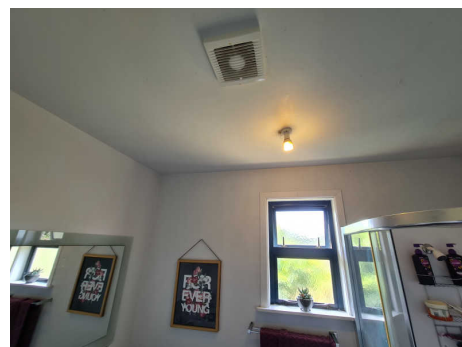
Bathroom/s

Mechanical Ventilation Type: **Mechanical Extractor unit.**

Mechanical Ventilation Condition: **Good.**



Is the size of the Mechanical Ventilation adequate: **Yes.**



Are all Mechanical Vents ventilating to the exterior: **Yes.**



Compliance:



Additional comments: **This bathroom has an externally ducted extractor fan that is in good working order and complies with the Healthy Homes Standard for bathroom ventilation.**

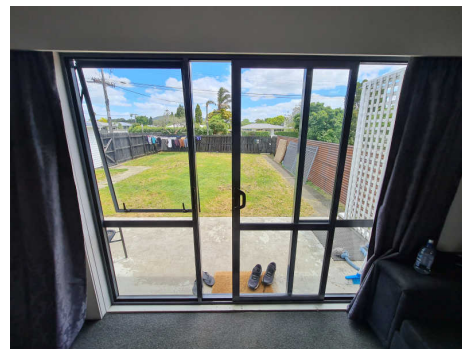
Windows

Does the area of the window meet the minimum 5% requirement of floor space in each room: **Yes.**

Is there one opening window or door in each habitable room: **Yes.**

Are all exterior opening windows and doors able to be fixed in position:

Yes. Living Room.



Are all exterior opening windows and doors able to be fixed in position:

Yes. Living Room.



Are all exterior opening windows and doors able to be fixed in position:

Yes. Dining Room.



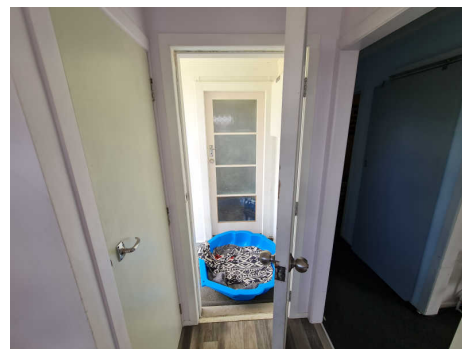
Are all exterior opening windows and doors able to be fixed in position:

Yes. Kitchen.



Are all exterior opening windows and doors able to be fixed in position:

Yes. Kitchen.



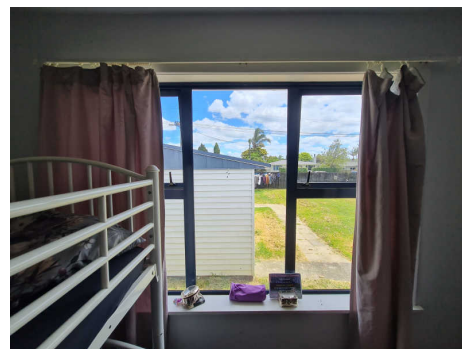
Are all exterior opening windows and doors able to be fixed in position:

Yes. Bedroom One.



Are all exterior opening windows and doors able to be fixed in position:

Yes. Bedroom Two.



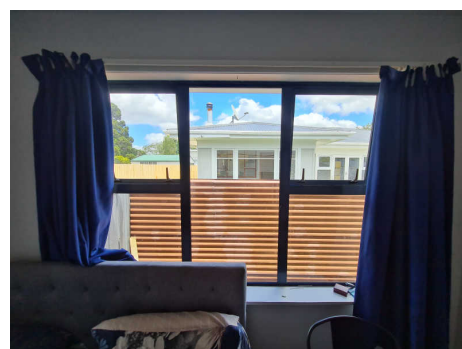
Are all exterior opening windows and doors able to be fixed in position:

Yes. Bedroom Three.



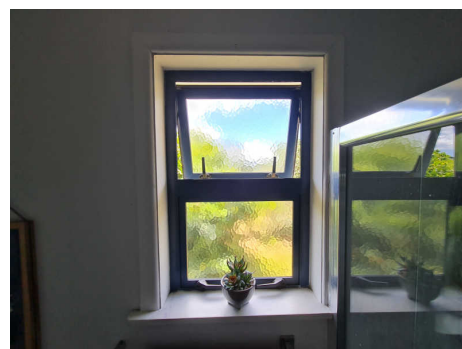
Are all exterior opening windows and doors able to be fixed in position:

Yes. Bedroom Four.



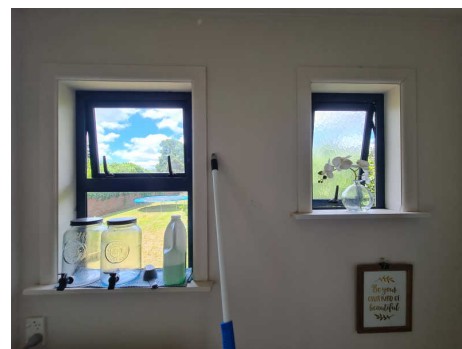
Are all exterior opening windows and doors able to be fixed in position:

Yes. Bathroom.



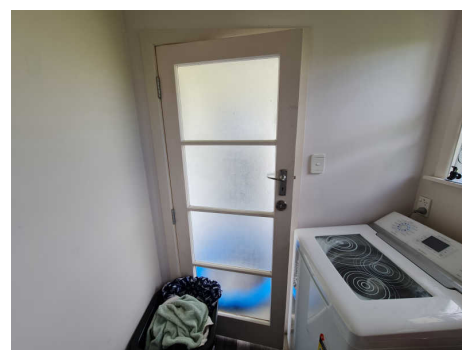
Are all exterior opening windows and doors able to be fixed in position:

Yes. Laundry.



Are all exterior opening windows and doors able to be fixed in position:

Yes. Laundry.



Compliance:



Additional comments:

The window ventilation section of this report is fully compliant.

Ventilation requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

21 Openable windows or external doors

- (1) Each habitable space in the premises must have 1 or more qualifying windows or doors.
- (2) The total openable area of the qualifying windows or doors in the habitable space must be at least 5% of the floor area of the habitable space.
- (3) A window, skylight, or door is a qualifying window or door if it
 - (a) opens to the outdoors; and
 - (b) is designed and built in a way that allows it to remain fixed in the open position during normal occupation of the premises
- (4) The openable area of a qualifying window or door is its net openable area on the internal face of the building element in which it is located.

23 Extractor fans for kitchens and bathrooms

- (1) Each kitchen and bathroom in the premises must have an extractor fan installed in it.
- (2) For a kitchen,
 - (a) the fan and all exhaust ducting must have a diameter of at least 150 mm; or
 - (b) the fan and all exhaust ducting must have an exhaust capacity of at least 50 l/s.
- (3) For a bathroom,
 - (a) the fan and all exhaust ducting must have a diameter of at least 120 mm; or
 - (b) the fan and all exhaust ducting must have an exhaust capacity of at least 25 l/s.

In addition (as per tenancy services release Aug 2019) :

Extractor fans installed BEFORE 1 July 2019: No minimum size or performance requirements but fans must be in good working order and ventilate to outdoors. This means that the range hood or extractor fan must not vent back into the kitchen or bathroom, into a roof space or other space. Any ducting must be connected, intact (i.e. without tears or holes) and installed so that extracted air can flow freely through it (e.g. no unnecessary kinks or compressions). Any grills or filters must be unclogged.

DRAINAGE & GUTTERING

This section covers site drainage and roof water management. It does not comment on the weathertightness of the property or any water ingress. The report only comments on its compliance with the Residential Tenancies (Healthy Homes Standards) Regulations 2019. Due to the nature of some sites inspection may be limited for both the site drainage and guttering systems due to factors such as planting, elevation and site contour. The efficiency of the drainage or guttering systems where not tested. The systems were visually inspected only.

Restrictions:

It was not raining on the day of the inspection; therefore the efficiency or operation of the guttering and drainage system could not be determined, Roof was inspected from the ladder, access to the roof was not gained.

Is there any evidence of stormwater pooling/ponding around the site:

No.



Do all the roof areas have gutters & downpipes catching the roof water:

Yes.



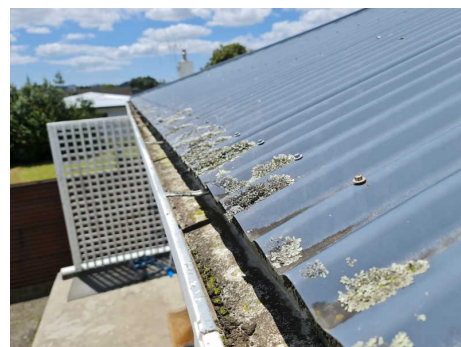
Gutter & Downpipe condition:

Good.



Gutter & Downpipe condition:

Good.



Gutter & Downpipe condition: **Good.**



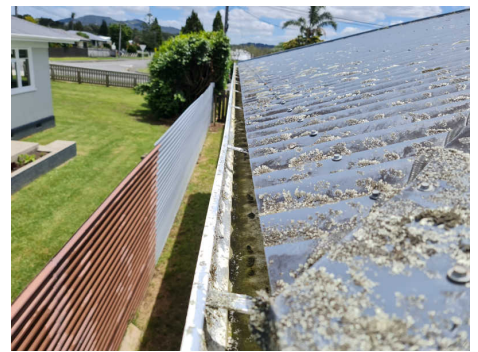
Gutter & Downpipe condition: **Good.**



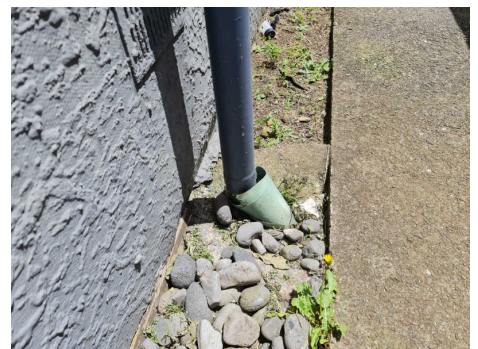
Gutter & Downpipe condition: **Good.**



Gutter & Downpipe condition: **Good.**



Do the downpipes discharge into a stormwater reticulation system: **Yes.**



Do the downpipes discharge into a stormwater reticulation system: **Yes.**



Compliance:



Additional comments: **Drainage & Guttering Complies with Healthy Homes Standards at the time of inspection.**

Drainage System requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

27 Tenancy building to have efficient drainage system

- (1) The tenancy building must have a drainage system that efficiently drains storm water, surface water, and ground water to an appropriate outfall.***
- (2) The drainage system must include appropriate gutters, downpipes, and drains for the removal of water from the roof.***

DRAUGHTS

This section covers the draughts between the interior and exterior of the building. Draughts can vary in severity depending on building movement, and may be affected by thermal expansion. Only major draughts consisting of a gap of over 3mm will be commented on.

Draughts

Restrictions:

The quantity of furniture / storage within the house meant we had limited ability to inspect the property for potential draughts.

Are there any open fires located in the dwelling that are not adequately sealed:

No.

Are there any gaps or cracks larger than 3mm which may cause draughts:

Yes. Kitchen door.



Are there any gaps or cracks larger than 3mm which may cause draughts:

Yes. Kitchen door.



Are there any gaps or cracks larger than 3mm which may cause draughts:

As above.



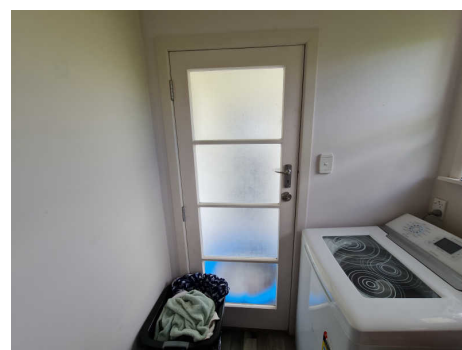
Are there any gaps or cracks larger than 3mm which may cause draughts:

Yes. Laundry door.



Are there any gaps or cracks larger than 3mm which may cause draughts:

As above.



Compliance:



Additional comments:

The dwelling does not comply with the Healthy Homes Standard. Draughts were found on the kitchen and laundry wooden doors. We recommend draught excluders / foam strips be installed to reduce these gaps.

Draught Stopping requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

25 Open fireplaces to be blocked

- (1) If the premises have an open fireplace, it must be closed off, or its chimney must be blocked, in a way that prevents draughts into and out of the premises through the fireplace.
- (2) However, subclause (1) does not apply if
 - (a) the tenant requests in writing that the fireplace be available for use; and
 - (b) the landlord agrees to the request
- (3) If subclause (1) is disapplied under subclause (2), the fireplace and its chimney must be
 - (a) free from gaps or holes that allow draughts into or out of the premises and that are not necessary for the safe and efficient operation of the fireplace; and
 - (b) maintained in good working order.

26 Gaps and holes that allow draughts

- (1) The premises must be free from gaps between, and holes in, building elements that
 - (a) are not intentional parts of the construction of the premises (such as drainage and ventilation openings); and
 - (b) allow draughts into or out of the premises; and
 - (c) are unreasonable.
- (2) In determining whether a gap or hole is unreasonable for the purposes of subclause (1)(c), the following matters may be taken into account:
 - (a) the size and location of the gap or hole;
 - (b) the extent of the draught that is allowed through the gap or hole;
 - (c) if there is more than 1 gap or hole at the premises, the extent of the total draught that is allowed through those gaps and holes;
 - (d) the likely impact that a draught through the gap or hole will have on heat loss from the premises;
 - (e) any other relevant matters, subject to subclause (3).
- (3) In determining whether a gap or hole is unreasonable for the purposes of subclause (1)(c), the age and condition of the premises or tenancy building must not be taken into account.

MOISTURE BARRIER

This section covers the moisture barrier in the subfloor. It does not comment on the weathertightness of the property or any water ingress. The report only comments on its compliance with the Residential Tenancies (Healthy Homes Standards) Regulations 2019. Due to Health & Safety requirements the subfloor is only inspected from the manhole, and therefore those areas which could not be viewed from the manholes could not be commented on.

Restrictions:

Our visual inspection was made from the inspection hatch. Only areas visible from the inspection hatch were observed and comments included in this report.

Is the subfloor enclosed:

Yes.



Is there an adequately installed ground vapour barrier:

Yes.



Is the subfloor ventilated:

No.



Compliance:



Additional comments:

The moisture barrier complies with the healthy homes standards at time of inspection.

Drainage System requirements as documented in the (as per the Residential Tenancies (Healthy Homes Standards) Regulations 2019).

28 Suspended floors to have ground moisture barrier

- (1) This regulation applies if*
 - (a) the tenancy building has a suspended floor; and*
 - (b) the subfloor space is enclosed.*
- (2) The tenancy building's subfloor space must*
 - (a) have a ground moisture barrier that*
 - (i) is made of a material that meets the specifications for an onground vapour barrier set out in section 8 of NZS 4246:2016; and*
 - (ii) was installed in accordance with section 8 of NZS 4246:2016; or*
 - (b) have an alternative ground moisture barrier that*
 - (i) has a vapour flow resistance of at least 50 MN s/g; and*
 - (ii) was installed by an appropriate professional installer.*
- 3) A subfloor space is enclosed if the airflow into and out of the space is significantly obstructed along at least 50% of the perimeter of the subfloor space by 1 or more of the following:*
 - (a) a masonry foundation wall;*
 - (b) cement boards, timber skirting, or other cladding;*
 - (c) other parts of the building or any adjoining structure;*
 - (d) any other permanent or semi-permanent structure that significantly obstructs airflow;*
 - (e) rock, soil, or other similar material.*

SMOKE ALARM

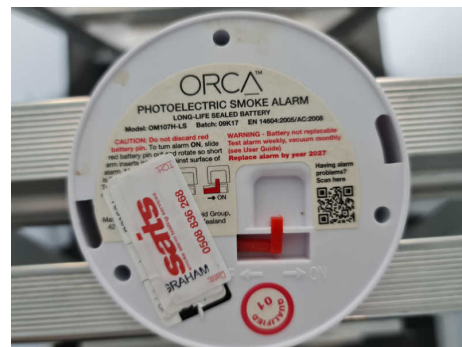
This section covers the smoke alarm/s in the interior of the property. It does not comment on the operations of any alarms or their effectiveness in the event of activation. The report only comments on its compliance with the Residential Tenancies Regulations. Due to Health & Safety all ceiling mounted smoke alarms are viewed from the finished floor level.

Restrictions:

No Restrictions.

Smoke Alarm Type:

Long-Life photoelectric alarm.



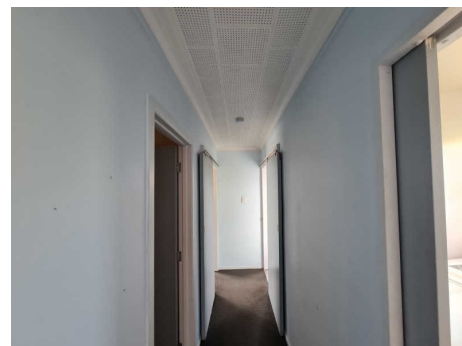
Smoke Alarm Type:

Long-Life photoelectric alarm.



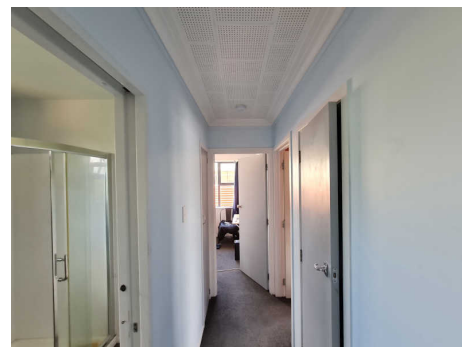
Location of Alarm:

Within three meters of bedrooms one and two.



Location of Alarm:

Within three meters of bedrooms three and four.



Compliance:



Additional Comments:

The smoke alarm section of this report is compliant.

Smoke Alarm requirements as documented in the Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016

5 Smoke alarms to be qualifying smoke alarms and installed in certain locations: tenancies other than boarding house tenancies

- (1) The requirements set out in subclauses (4), (6) and (8) are imposed on all landlords for the purposes of section 54(1)(ba) of the Act.
- (2) The requirements must be met as at the commencement of the tenancy and at all subsequent times during the tenancy.
- (3) The requirements are subject to the following:
 - (a) regulation 8(2) (which relates to hard-wired smoke alarm systems).
 - (b) regulation 9(4) (which relates to tenant's responsibilities to replace worn-out smoke alarm batteries).
- (4) Every smoke alarm that is installed at the premises must be a qualifying smoke alarm.
- (5) Subclause (6) applies to every sleeping space at the premises.
- (6) There must be at least 1 qualifying smoke alarm installed-
 - (a) in the sleeping space; or
 - (b) otherwise at the premises within 3 meters of the entrance (of main entrance) to the sleeping space
- (7) Subclause (8) applies to every storey or level of the premises on which there is 1 or more habitable spaces.
- (8) There must be at least 1 qualifying smoke alarm installed on the storey level in the habitable space or at least 1 of the habitable spaces (as the case may be).
- (9) In this regulation, **sleeping space**-
 - (a) means a space that is for use, or that can otherwise reasonably be expected to be used as a bedroom or other sleeping space; but
 - (b) does not include a space in a tent or similar type of shelter.

7 Definition of qualifying smoke alarm

- (1) A qualifying smoke alarm is a smoke alarm that meets the following requirements:
 - (a) The alarm must be fully operational and otherwise in full working order, with no faults, defects or damage.
 - (b) The alarm must be installed at a location that accords with the manufacturer's instructions for the alarm.
 - (c) The alarm's recommended replacement date must not have passed;
 - (d) Unless the alarm is a hard-wired alarm-
 - (i) The alarm's recommended replacement date must be displayed on the alarm.
 - (ii) The alarm must be a photoelectric alarm.
 - (iii) The manufacturer's instructions for the alarm must include a certification or other statement to the effect that the alarm has been manufactured in accordance with-
 - (A) AS 3786-1993; or
 - (B) an equivalent smoke alarm standard specified in the certification or other statement.

HEATING CALCULATIONS - APPENDIX ONE

The required heating capacity for a living room is to be calculated using the following formula:

$$h = [t + v + (f \times 40)] / 1000$$

Where-

- h is the required heating capacity for the living room (kW)
- t is the transmission heat loss of the living room (W)
- v is the ventilation heat loss of the living room (W)
- f is the area of the floor of the living room (m²)

Calculations:

$$h = 4.94 = [3184.95 + 435.20 + (33.00 \times 40)] / 1000$$

SUMMARY OF COMPLIANCE - APPENDIX TWO

Below is a summary of the ratings for each compliance component.

HEATING	
	As per the calculator, the Heating required for the living area is 4.94kW. The current heat source provides 5.40kW, therefore the heating complies with the Healthy Homes Standards.
INSULATION	
	The ceiling insulation complies due to the insulation exceeding the minimum R2.9 / 3.3 rating required for this climate zone. The underfloor insulation complies due to the insulation exceeding the minimum R1.3 rating required.
VENTILATION	
	This kitchen has an externally ducted rangehood that is in good working order and complies with the Healthy Homes Standard for kitchen ventilation. This bathroom has an externally ducted extractor fan that is in good working order and complies with the Healthy Homes Standard for bathroom ventilation. The window ventilation section of this report is fully compliant.
DRAINAGE & GUTTERING	
	Drainage & Guttering Complies with Healthy Homes Standards at the time of inspection.
DRAUGHTS	
	The dwelling does not comply with the Healthy Homes Standard. Draughts were found on the kitchen and laundry wooden doors. We recommend draught excluders / foam strips be installed to reduce these gaps.
MOISTURE BARRIER	
	The moisture barrier complies with the healthy homes standards at time of inspection.
SMOKE ALARM	
	The smoke alarm section of this report is compliant.



TAX INVOICE

Quinovic Property Management - Whangarei

Invoice Date
30 Nov 2022

Invoice Number
INV-0501

Reference
WH14778SG / WH110249 -
11 Spedding Rd

GST Number
118-906-306

Whangarei Lock and Joinery
Services
Ph. 09 438 4918
Email.
accounts@whangareilockand
joineryservices.co.nz
Attention. Karen King

Description	Quantity	Unit Price	Amount NZD
Spedding Rd, Tikipunga. Fit draught excluder to kitchen and laundry door and m insulation where necessary.	1.50	90.00	135.00
Foam insulation (mtr)	5.00	4.20	21.00
Flip draught excluder.	1.00	27.28	27.28
Brush draught excluder	1.00	22.00	22.00
Fixings misc.	1.00	15.00	15.00
		Subtotal	220.28
		TOTAL GST 15%	33.04
		TOTAL NZD	253.32

Due Date: 20 Dec 2022

Please make payments into the following bank account on or before the due date:

*** NOTE OUR NEW BANK ACCOUNT NUMBER ***
12-3099-0133842-00

Thank you, Rob King
Whangarei Lock and Joinery Services
Ph. (09) 438 4918

Received Date	W/C not Closed	Supplier Id
Approved by S6	Bond Claim VIN	OPMS Batch No 21119
Property Id 110249	253.32	Misc Charge Date 8/12
Tenancy Id		Tenancy Charge Date
MYOB Entered Date	Paid Date	Inv Input Complete

8.5