

# STATEMENT OF PASSING OVER INFORMATION

This information has been supplied by the vendor or the vendor's agents. Accordingly, Ownly (REAA 2008) and Sold On Kapiti Limited is merely passing over the information as supplied to us by the vendor of the vendor's agents.

We cannot guarantee its accuracy and reliability as we have not checked, audited, or reviewed the information and all the intending purchasers are advised to conduct their own due diligence investigation into the same.

To the maximum extent permitted by law Ownly (REAA 2008) and Sold On Kapiti Limited does not accept any responsibility to any person for the accuracy of the information herein.

# SOLD ON KĀPITI



#### **COMPREHENSIVE PROPERTY REPORTS**

0275485573 cprnz@outlook.com https://www.cprnz.nz



#### 2025 | COMPREHENSIVE WEATHERTIGHTNESS REPORT H/V

42 Harry Shaw Way Paraparaumu, Wellington 5032





irispector

#### Travis Mackay

Trade Qualified Building Inspector. Structural Engineer. Master Carpenter. Level 3 Certified Thermographer. Property Investor. Renovation Specialist. Mediation Resolution Expert. 25+ Years Industry Experience.

0275485573
cprnz@outlook.com

## TABLE OF CONTENTS

1: PROPERTY DETAILS   CLIENT AND INSPECTOR INFORMATION	7
2: OVERALL SUMMARY	8
3: INTERIOR INSPECTION RESULTS AND SUMMARY	12
4: EXTERIOR INSPECTION RESULTS AND SUMMARY	28
5: BUILDING INFORMATION	41
6: INFORMATION   MAINTENANCE	54
7: LIMITATIONS & STANDARDS OF PRACTICE	66
Standards of Practice	69

# -NZ STANDARDS-WEATHERTIGHTNESS INSPECTION REPORTPUBLISHED BY -COMPREHENSIVE PROPERTY REPORTS LIMITED-



#### WWW.CPRNZ.NZ

**CPRNZ** have tailor made our weathertight templates to exceed the standard nz requirements.

**CPRNZ** use a double blind inspection system that maintains a 100% accuracy rate over 1000s of published reports.

**COMPREHENSIVE PROPERTY REPORTS LIMITED** 

**BUILDING REPORTS YOU CAN INVEST IN** 

# CPRNZ USE THE LATEST TECHNOLOGY WITH PROUD ENDORSEMENTS FROM:









**WWW.FLIR.COM** 

WWW.DJI.COM

#### **SUMMARY**

# -NZ STANDARDS-WEATHERTIGHTNESS INSPECTION REPORTPUBLISHED BY -COMPREHENSIVE PROPERTY REPORTS LIMITED-



#### WWW.CPRNZ.NZ

**CPRNZ** have tailor made our weathertight templates to exceed the standard nz requirements.

**CPRNZ** use a double blind inspection system that maintains a 100% accuracy rate over 1000s of published reports.

#### **COMPREHENSIVE PROPERTY REPORTS LIMITED**

**BUILDING REPORTS YOU CAN INVEST IN** 

# CPRNZ USE THE LATEST TECHNOLOGY WITH PROUD ENDORSEMENTS FROM:









**WWW.FLIR.COM** 

WWW.DJI.COM

## **COLOUR CODING GLOSSARY**







**HANDYMAN** 

TRADE QUALIFIED

TRADE EXPERT

#### MOISTURE LEVELS AND/OR DEFECTS RECORDED

**0% - 16% ACCEPTABLE LEVELS** 

17% - 40% ELEVATED LEVELS

70% - 100% UNACCEPTABLE LEVELS

#### **COMPREHENSIVE PROPERTY REPORTS LIMITED**

WWW.CPRNZ.NZ | 0800 677 328 | CPRNZ@OUTLOOK.COM

- 3.1.1 INTERIOR INSPECTION RESULTS AND SUMMARY INTERIOR INSPECTION RESULTS AND SUMMARY: INTERIOR INSPECTION DOCUMENTATION
- 3.1.2 INTERIOR INSPECTION RESULTS AND SUMMARY INTERIOR INSPECTION RESULTS AND SUMMARY: THERMAL IMAGING T560 DOCUMENTATION
- 3.1.3 INTERIOR INSPECTION RESULTS AND SUMMARY INTERIOR INSPECTION RESULTS AND SUMMARY: ENDOSCOPIC CAMERA DOCUMENTATION
- 4.1.1 EXTERIOR INSPECTION RESULTS AND SUMMARY EXTERIOR INSPECTION RESULTS AND SUMMARY: THERMAL IMAGING DRONE DOCUMENTATION
- 4.1.2 EXTERIOR INSPECTION RESULTS AND SUMMARY EXTERIOR INSPECTION RESULTS AND SUMMARY: ENDOSCOPIC CAMERA DOCUMENTATION EXTERIOR
- 4.1.3 EXTERIOR INSPECTION RESULTS AND SUMMARY EXTERIOR INSPECTION RESULTS AND SUMMARY: THERMAL IMAGING INDICATORS THAT REQUIRE FURTHER INVESTIGATION
- 4.1.4 EXTERIOR INSPECTION RESULTS AND SUMMARY EXTERIOR INSPECTION RESULTS AND SUMMARY: THERMAL IMAGING T560 DOCUMENTATION

# 1: PROPERTY DETAILS | CLIENT AND INSPECTOR INFORMATION

#### **Information**

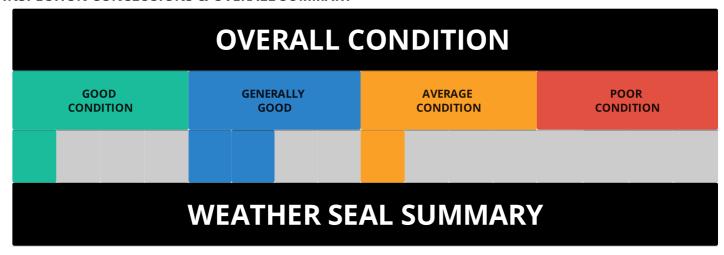
#### **PROPERTY & CLIENT INFORMATION**

PROPERTY & CLIENT INFORMATION						
ADDRESS:	42 Harry Shaw Way, Paraparaumu, Wellington 5032					
CLIENT:						
DATE:	23/06/2025					
PROPERTY DETAILS						
DECADE OF CONSTRUCTION:	2000s					
LEVELS:	02					
CLADDING SYSTEMS:	DIRECT FIX TEXTURE COAT SYSTEM, MASONRY BLOCK					
ROOF COVERINGS:	METAL ROOFING					
FOUNDATION SYSTEM:	CONCRETE					
WEATHER CONDITIONS:	HUMID, WARM					

## 2: OVERALL SUMMARY

#### **Information**

#### INSPECTION CONCLUSIONS & OVERALL SUMMARY



#### **INSPECTION CONCLUSIONS:**

#### **VISUAL INSPECTION**

- The interior of this property showed very minimal indicators of any moisture issues and the interior maintenance appears to have been kept up to a good standard.
- The plaster cladding has recently been weather sealed. With professional repairs made to minor observations. We are comfortable noting the overall plaster condition as acceptable.
- We were afforded the ability to perform invasive inspection techniques on areas we deemed high detail and potential risks. One area was identified to have minor prolonged ingress. This was due to an after-construction modification and not a construction defect. All other areas that were opened have had systems upgraded and the timber framing was all treated with FrameSaver before being resealed professionally. This does not mean the building is entirely without issue or possibility of future issues. It is not realistic for us to inspect inside every cavity without removing all wall linings (both interior and exterior). However, we performed a very high-level inspection and we are happy with the results.
- All of our documented points of inspection will require maintenance moving forward. No matter the cladding type, if you don't keep up a good maintenance schedule it will bite you in the arse a few years down the track.
- We would like to note that the original construction of this property appears of a high quality. We documented building practices that you just don't see with today's builders. But, again, all of that means nothing if the property's maintenance is allowed to lapse.
- The construction era and/or design style of this property means it has sections of siding too close and/or in full contact with the ground. This is quite common for monolithic clad homes. \*Requires close monitoring.

#### NOTE:

• Our choice for weather sealing this type of plaster cladding system is: Texturite WGTN. Having their 5 year weather seal guarantee is worth its weight in gold.

#### NON-DESTRUCTIVE MOISTURE TESTING & SEMI-INVASIVE PIN-PROBE MOISTURE TESTING

- Moisture references were set individually for each section inspected (ranging from 0.0% to 19.5%). We were able to clearly record in all sections/rooms.
- One area showed fluctuations over the 17% moisture threshold. This has now been investigated, corrected and ruled out as a concern.
- Any images showing a higher reading should have been investigated further and ruled as either bracing elements and/or a building material with a higher density than its surroundings. We will clearly advise you if an area has a concerningly elevated moisture level and requires further investigation or a more invasive inspection.

#### THERMAL IMAGING

- After a complete thermal scan of both the interior and exterior wall and joinery sections we found:
- Moderate temperature differentials that were investigated further and have been ruled out as being a concern.

#### **ENDOSCOPIC CAMERA**

- We use the endoscopic camera to gauge the condition of the timber framing within the wall cavities.
- The bottom plates showed only minor tea staining in one or more sections, with no indication of ever reaching full fiber saturation. The rest of the wall frames inspected showed only the expected age-related defects for a building of this age.

#### **NOTE:**

• \*\*Please remember we are not able to inspect every wall cavity at each property. We will make small inspection holes where possible if we have prior authorization to do so. Otherwise we are limited to removing the switch sockets on the perimeter walls, then trying to fight the camera past any insulation, utilities, and framing to take a photo of a single face of a 300mm x 90mm piece of framing.

When we find rot, it is very definitive. However, it is not definitive that the building is free of issues just because we didn't find any in the limited areas we could inspect.

#### **OVERALL SUMMARY**

- With the information accumulated during our inspection, we conclude the inspected property overall has a generally good weathertight seal.
- Our inspection revealed a small handful of visual defects, that have since been professionally corrected.
- The plaster cladding shows a good overall painted weather seal.
- With the correct ongoing maintenance and resealing when due, the property should remain protected against future concerns of moisture ingress through the cladding's envelope for many years to come.
- As always, we offer our discounted re-inspection service from 6 months after the publication of this report. Buyers should have full peace of mind when buying any property. If it's a property inspected by CPRNZ, we try to guarantee that peace of mind with this service.
- We also provide property maintenance training for the homes we inspect. Proactive prevention of moisture issues should be encouraged. Plus, the better you look after your property, the easier our job will be next time we inspect it.
- Please don't hesitate to contact our inspectors directly if you have any questions, on 0800 677 328.

#### **HOW TO READ OUR OBSERVATION RATINGS & MOISTURE %**

#### **HOW TO READ OUR OBSERVATION RATINGS**

## MOISTURE % GLOSSARY THIS MOISTURE % GUIDE IS EXACTLY THAT. IT IS A GUIDE ONLY.

#### 0-16%

Low level moisture readings (within the NZ Standards) were detected at the time of inspection. This is not uncommon in dwellings of this age and construction era. If multiple low moisture levels are found in a close proximity to each other, it can be an early warning that the area has a developing issue.

#### 17 - 40%

MOISTURE DETECTED (MODERATE LEVELS) 17% - 40% Moderate level moisture readings can be caused by many different things, a lot of which are relatively minor defects. Severe weather forcing rainwater past normally good weatherproof barriers. Directional weather systems on areas that would otherwise be weathertight. e.g. concentration of rain on a misfit and/or short glazing seal at one end of a joinery section. \*Prolonged condensation build up in one area is a common cause for elevated moisture readings, that if gone unnoticed and/or left unchallenged can be a catalyst to major framing damage. It can amplify the swelling and contracting of materials and cause cracks in cladding that then allow yet more moisture ingress through into the wall cavity. This is why readings at this level are often an early warning sign of a developing issue. The cladding, joinery, flashings and/or general weather seal in this area may need attention, and if dealt with sooner rather than later shouldn't progress into a major repair.

#### 70 - 100%

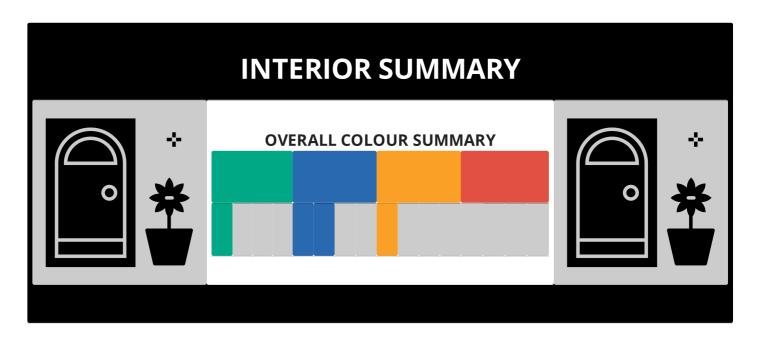
MOISTURE DETECTED (HIGH LEVELS) 70% - 100% High level moisture readings are a definitive sign that strongly warrants further investigation to find the exact cause of the moisture ingress and prevent any further damaging effects. When readings at these higher levels are identified it is important to fully gauge the overall extent of damage to the building materials within the cavity. We may recommend having a fully invasive inspection done sooner rather than later, by either CPRNZ or another independent inspector. There can sometimes be a sizable cost involved to complete the work needed to correct these issues.

0% NO CURRENT ISSUE 16% 17% MOIST 40% DAMP 70% WET 100%

### 3: INTERIOR INSPECTION RESULTS AND SUMMARY

#### **Information**

**INTERIOR INSPECTION RESULTS AND SUMMARY: INTERIOR SUMMARY** 



#### **INTERIOR INSPECTION RESULTS AND SUMMARY: MOISTURE INSPECTION RESULTS 1/3**

MOISTURE INSPECTION RESULTS: 1/3	YES	NO	RELATIVE %	HIGHEST %
ENTRY		•	0.0%	12.9%
GARAGE		<b>√</b>	0.0%	3.1%
RUMPUS AND KITCHENETTE		<b>✓</b>	0.0%	10.8%
LAUNDRY		<b>✓</b>	2.3%	12.8%
SEPARATE TOILET		<b>✓</b>	0.0%	7.8%
BATHROOM	•		0.0%	20.0%
REAR BEDROOM		<b>✓</b>	0.2%	8.0%
MASTER BEDROOM		<b>✓</b>	0.0%	14.4%
ENSUITE		•	2.3%	15.9%
FRONT BEDROOM		<b>✓</b>	0.0%	8.1%
LIVING ROOM		<b>✓</b>	0.5%	16.7%
DINING ROOM		<b>✓</b>	0.0%	16.3%
KITCHEN		<b>✓</b>	0.0%	13.2%
OFFICE		1	0.0%	10.8%

**NOTES:** Slightly elevated moisture detected on rear wall of bathroom.

# MOISTURE RESULTS MR60 AND OR MR55







Bathroom - 20.0%

#### **INTERIOR INSPECTION RESULTS AND SUMMARY: INTERIOR INSPECTION RESULTS 2/3**

# OVERALL INTERIOR INSPECTION RESULTS: 2/3 YES NO ISO PREV

ACCEPTABLE OVERALL MOISTURE LEVELS?	1			
MINOR ELEVATED MOISTURE READINGS?	<b>✓</b>		<b>✓</b>	Bathroom
MODERATE ELEVATED MOISTURE READINGS?		•		
HIGH ELEVATED MOISTURE READINGS?		•		
SWOLLEN SKIRTING BOARDS?		•		
CONDENSATION DAMAGE SIGHTED?	✓		1	
MOISTURE DAMAGE SIGHTED?		•		
MOULD SIGHTED IN ROOM?	✓		•	
MOULD SIGHTED AT JOINERY?	✓		1	
MOULD SIGHTED AT IN WALL CAVITY?		•		

NOTES:

**ISOLATED - PREVALANT - SYSTEMIC** 

COMMENT:

#### **INTERIOR INSPECTION RESULTS AND SUMMARY: INTERIOR INSPECTION RESULTS 3/3**

# OVERALL INTERIOR INSPECTION RESULTS: 3/3

	YES	NO	ISO	PREV	COMMENT:
MOISTURE STAINS ON TIMBER FRAMES?	Χ				
DETERIORATION OF TIMBER FRAMES? (DRY ROT)		X			
DETERIORATION OF TIMBER FRAMES? (WET ROT)		X			
THERMAL ANOMALIES SIGHTED?	Χ		X		
MODERATE TO MAJOR TEMPERATURE DIFFERENTIALS?	X		X		
TREATED BASE PLATES?		X			
TREATED WALL FRAMING?		X			
TIMBER FRAME REPLACEMENT REQUIRED?		X			
TIMBER TREATMENT RECOMMENDED?	X		X		
FURTHER INVESTIGATION RECOMMENDED?		X			

#### **ISOLATED - PREVALANT - SYSTEMIC**

NOTE: The tick boxes above may only apply to a single area / observation. And or they may apply to the majority of the structure.

One isolated area showing mold is one too many with monolithic clad buildings. So if we inform you of a weather tight observation, that means it needs to be addressed sooner rather than later. Or, you will be risking your investment.

#### **Observations**

#### INTERIOR INSPECTION DOCUMENTATION





The areas documented below, are not all moisture related. Some are age related wear and tear, or general damage.

We recommend gap filler where required for the more minor touch ups and replacing any Gib that shows signs of mold and or moisture damage.

#### **INTERIOR JOINERY OBSERVATIONS**

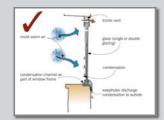
#### One or more of the following may apply:

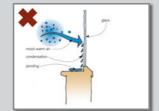
- Hardware operation may be substandard.
- Joinery may show damage.
- Draught seal may require attention.
- Water damage around windows can be caused by condensation or leaks.

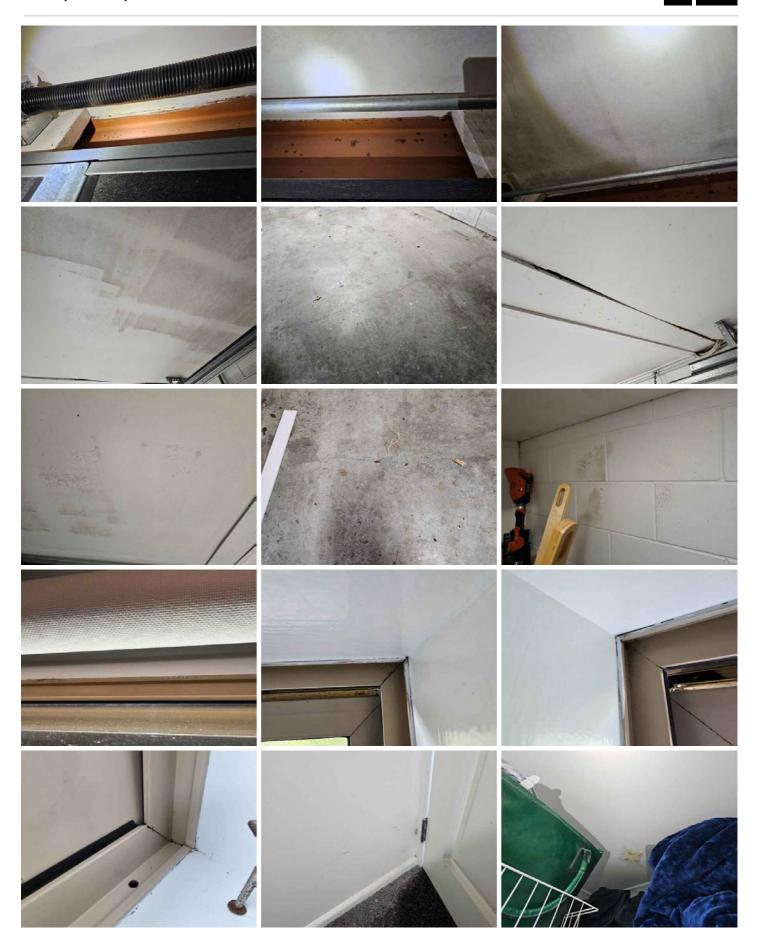
Try to reduce the amount of condensation in your home.

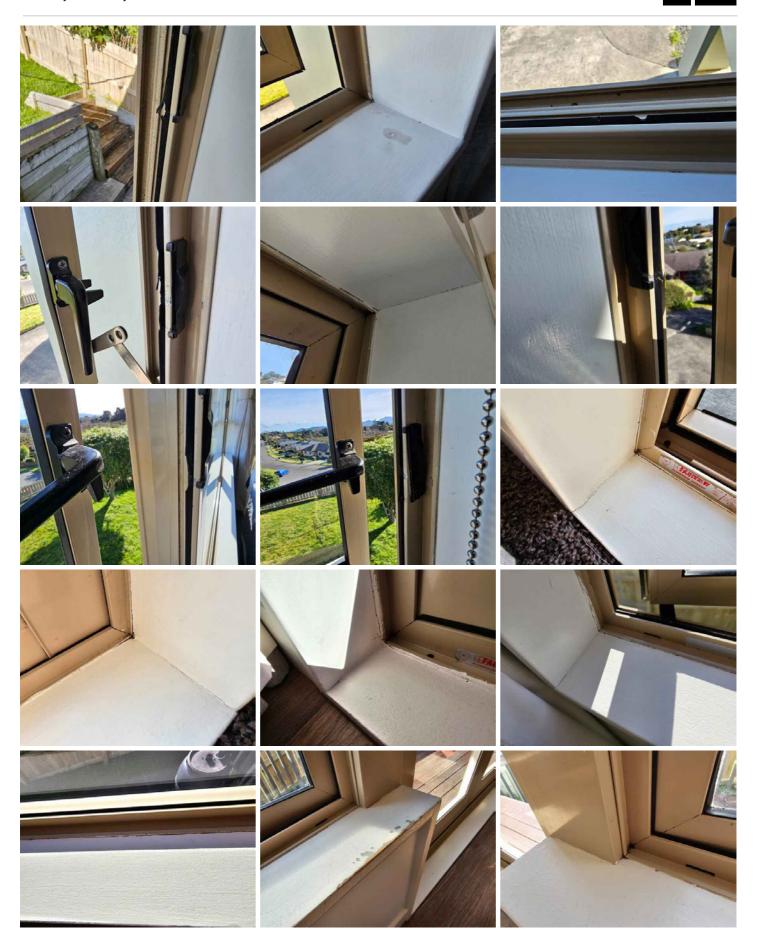
These joinery observations may appear or be quite minor. However, we include them all because of how often we see moderate to major damage within wall cavities from condensation caused defects. A single 1x1mtr window can produce 0.75 Litres of water "per day" in the optimum conditions. These types of observations may or may not be classed an aesthetic issue, Regardless, if it's left unsealed and/or exposed to the elements for too long it may become a much larger issue and more expensive repair/replacement. For timber joinery and/or surrounding cladding materials, buff/key the surface before applying any weather sealing paint and/or paintable silicone products.

#### **CONDENSATION DAMAGE AT JOINERY**















3.1.2 INTERIOR INSPECTION RESULTS AND SUMMARY

#### THERMAL IMAGING T560 DOCUMENTATION



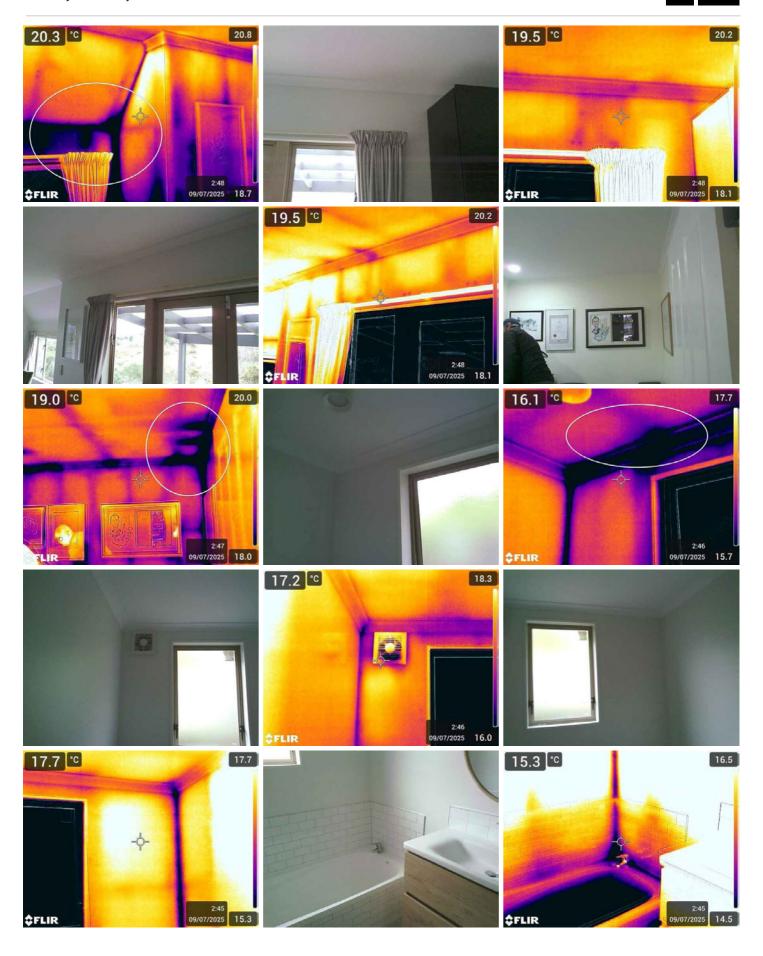


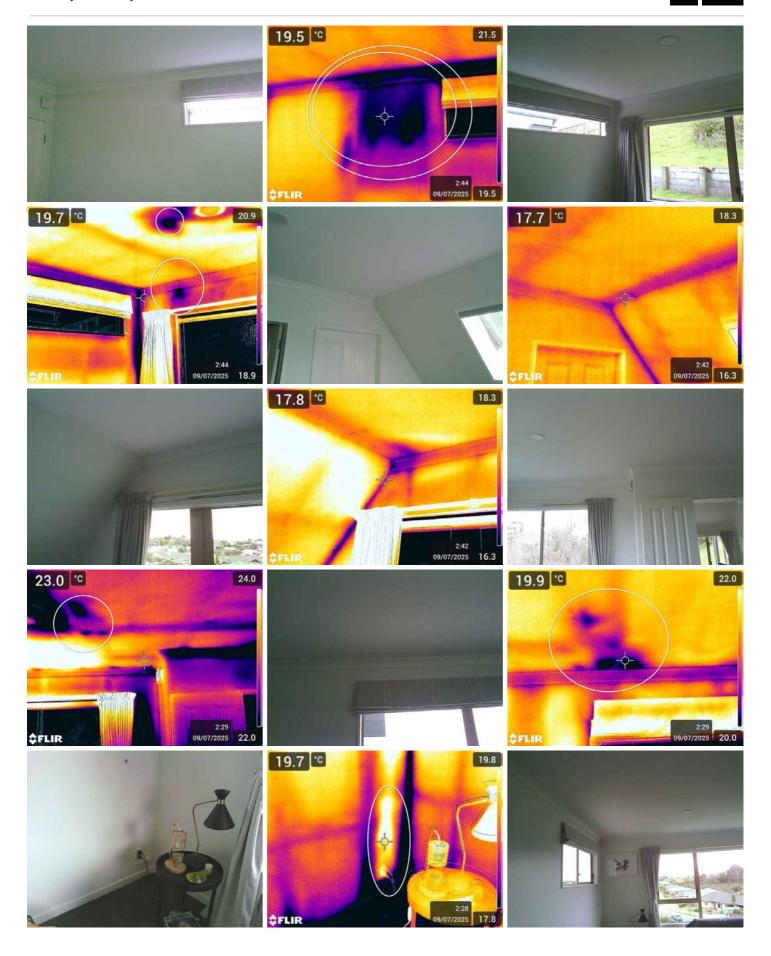
- Moisture may, or may not have been detected with definitive certainty in all theses particular areas of observation. However, these areas were indicating a moderate to major temperature differential through the FLIR T560 Thermal imager and/or visual signs of moisture ingress/damage may also have been observed.
- The areas marked with a white CIRCLE have been investigated further via invasive measures.
- All areas have now been cleared for current moisture ingress.
- These areas must still be monitored moving forward.









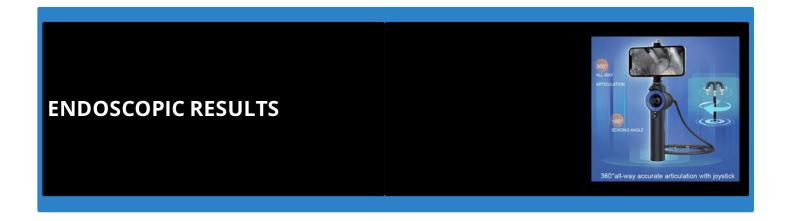


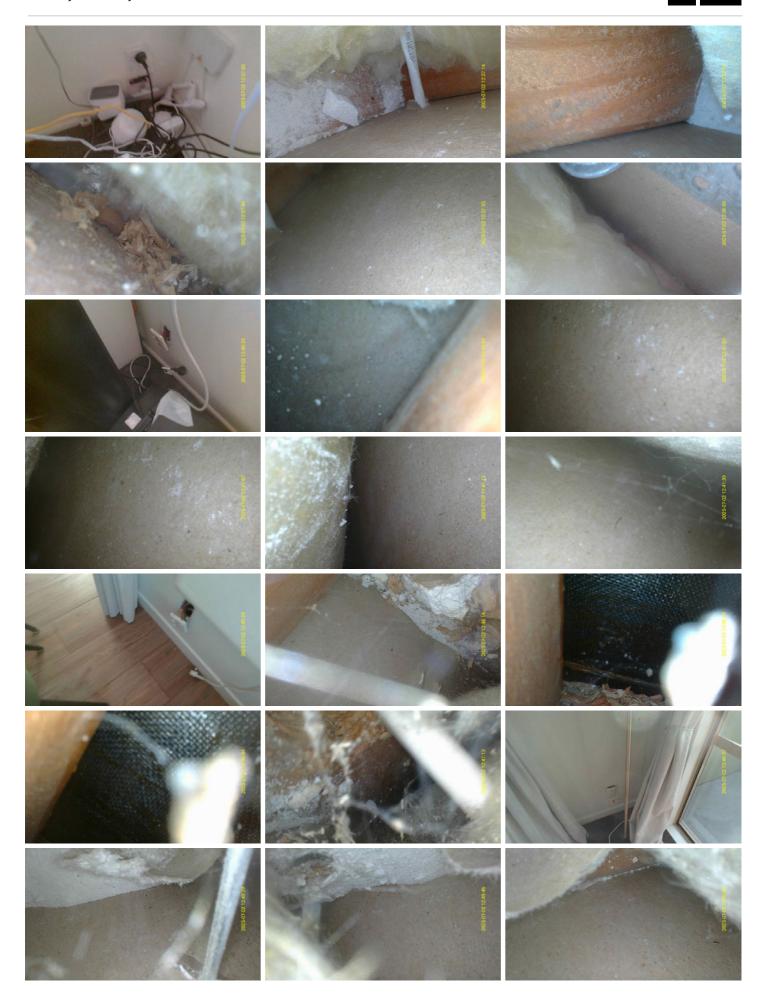


3.1.3 INTERIOR INSPECTION RESULTS AND SUMMARY

#### **ENDOSCOPIC CAMERA DOCUMENTATION**



















## 4: EXTERIOR INSPECTION RESULTS AND SUMMARY

#### **Information**

**EXTERIOR INSPECTION RESULTS AND SUMMARY: EXTERIOR SUMMARY** 



#### **EXTERIOR INSPECTION RESULTS AND SUMMARY: EXTERIOR INSPECTION RESULTS**

#### **INSPECTION RESULTS:** YES NO ISO **PREV** COMMENT: ACCEPTABLE OVERALL CONDITION? Χ **CLADDING MAINTENANCE** Χ Χ **REQUIRED?** Χ TRADE LEVEL REPAIRS REQUIRED? Χ PAINTED WEATHER SEAL DUE? Χ MESH COAT RECOMMENDED? Χ ACCEPTABLE GROUND CLEARANCE? ACCEPTABLE JOINERY TO Χ **CLADDING JUNCTIONS?** ACCEPTABLE ROOF TO Χ **CLADDING JUNCTIONS?** ACCEPTABLE DECKING TO Χ **CLADDING JUNCTIONS?** ACCEPTABLE ATTACHMENTS Χ

**OVERALL EXTERIOR** 

NOTES:

**ISOLATED - PREVALANT - SYSTEMIC** 

NOTE: Some areas may require weather sealing but the rest of the building may still be acceptable.

#### **Observations**

& PENETRATIONS?

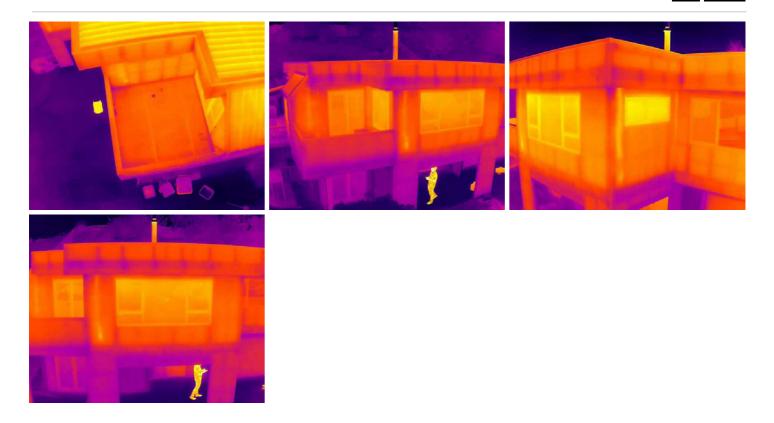
4.1.1 EXTERIOR INSPECTION RESULTS AND SUMMARY

#### THERMAL IMAGING DRONE DOCUMENTATION





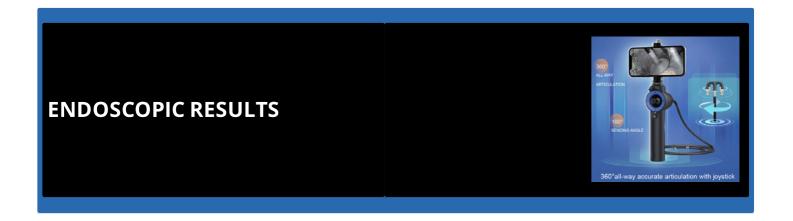




4.1.2 EXTERIOR INSPECTION RESULTS AND SUMMARY

#### **ENDOSCOPIC CAMERA DOCUMENTATION - EXTERIOR**







Inside cavity beneath front deck (via downpipe exit)





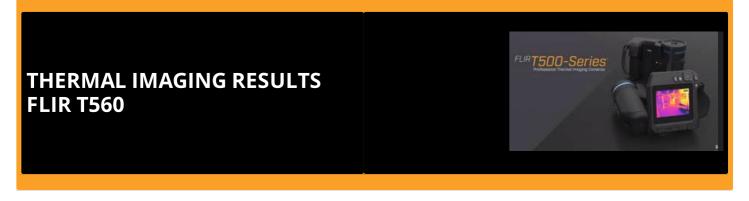




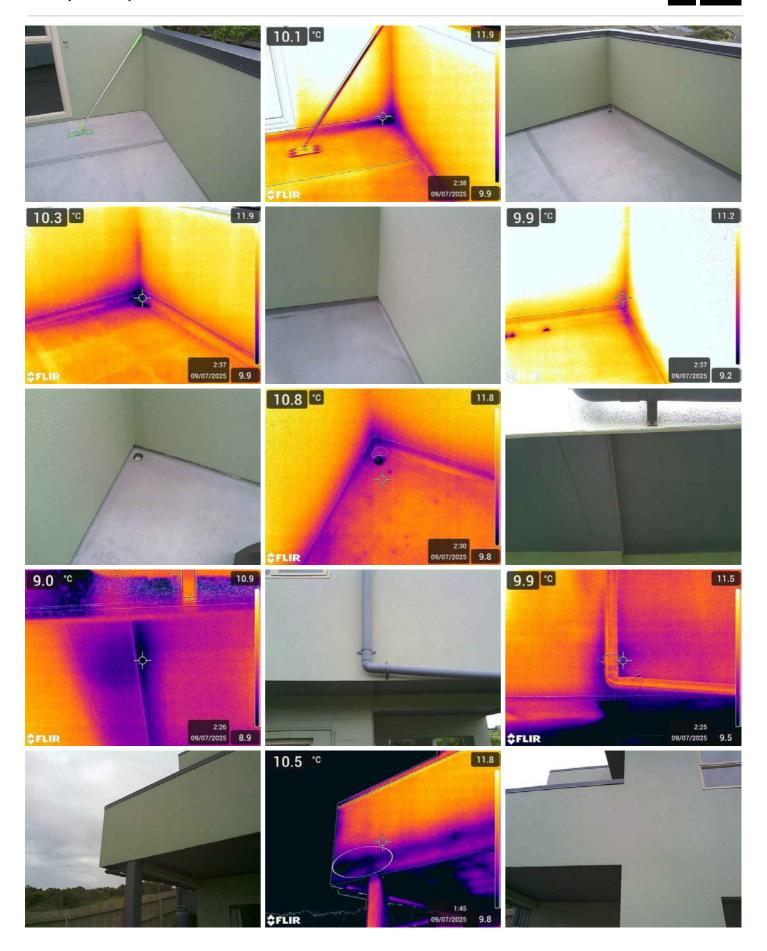
4.1.3 EXTERIOR INSPECTION RESULTS AND SUMMARY

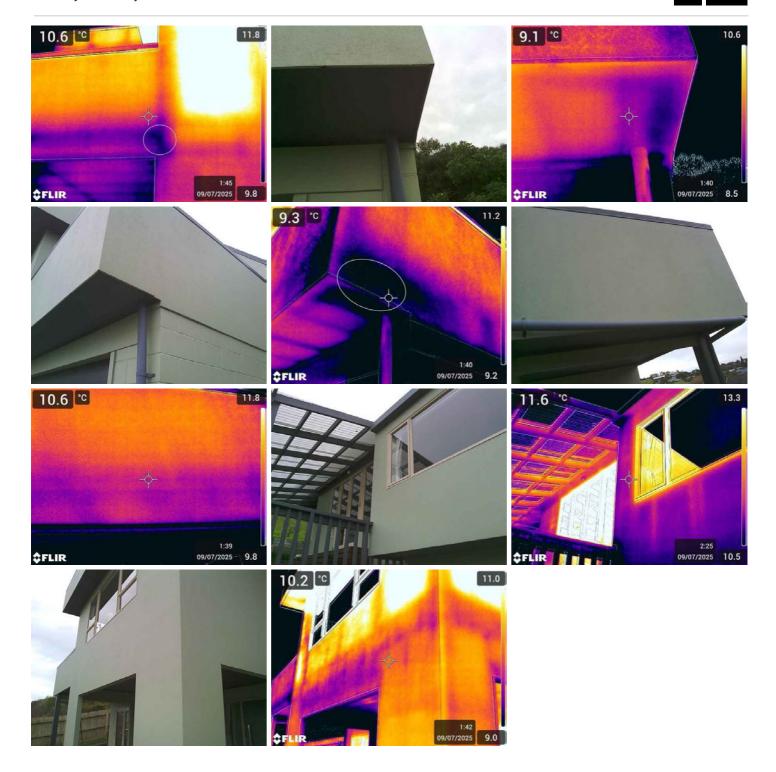
## THERMAL IMAGING INDICATORS THAT REQUIRE FURTHER INVESTIGATION





- The areas marked with a white circle were investigated further via invasive measures.
- All areas have now been cleared for current moisture ingress.
- These areas must still be monitored moving forward.





4.1.4 EXTERIOR INSPECTION RESULTS AND SUMMARY

#### THERMAL IMAGING T560 DOCUMENTATION

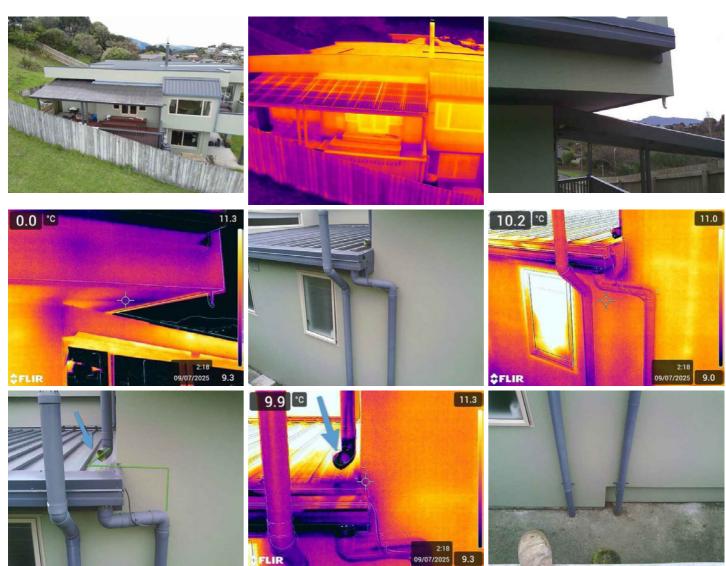






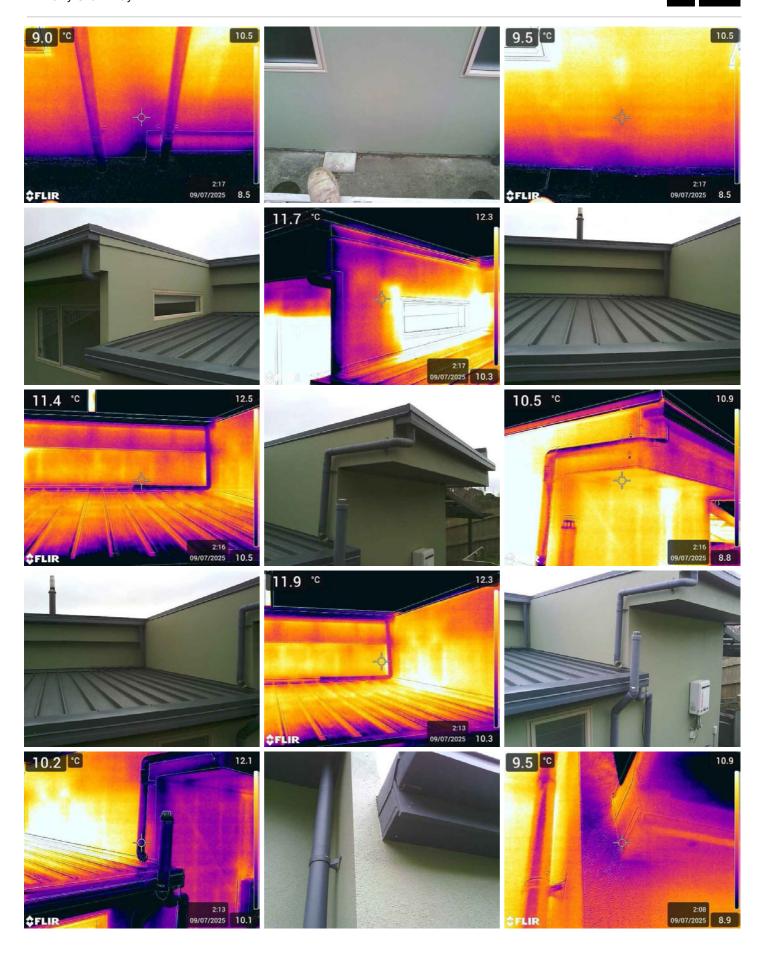
## **TEMPERATURE DIFFERENTIALS**

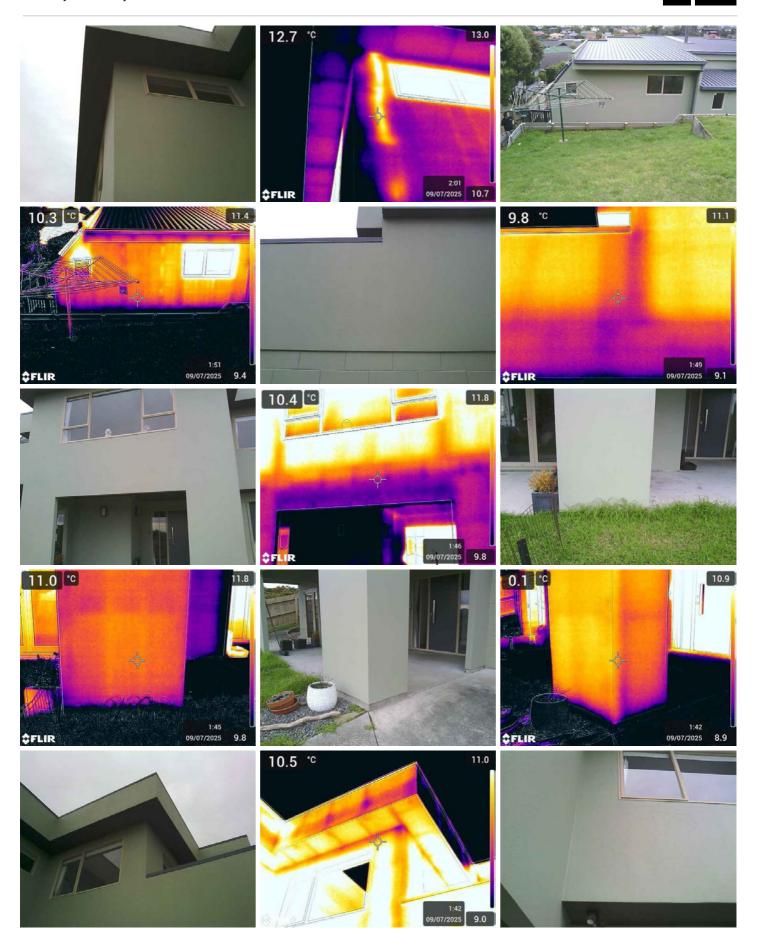
•

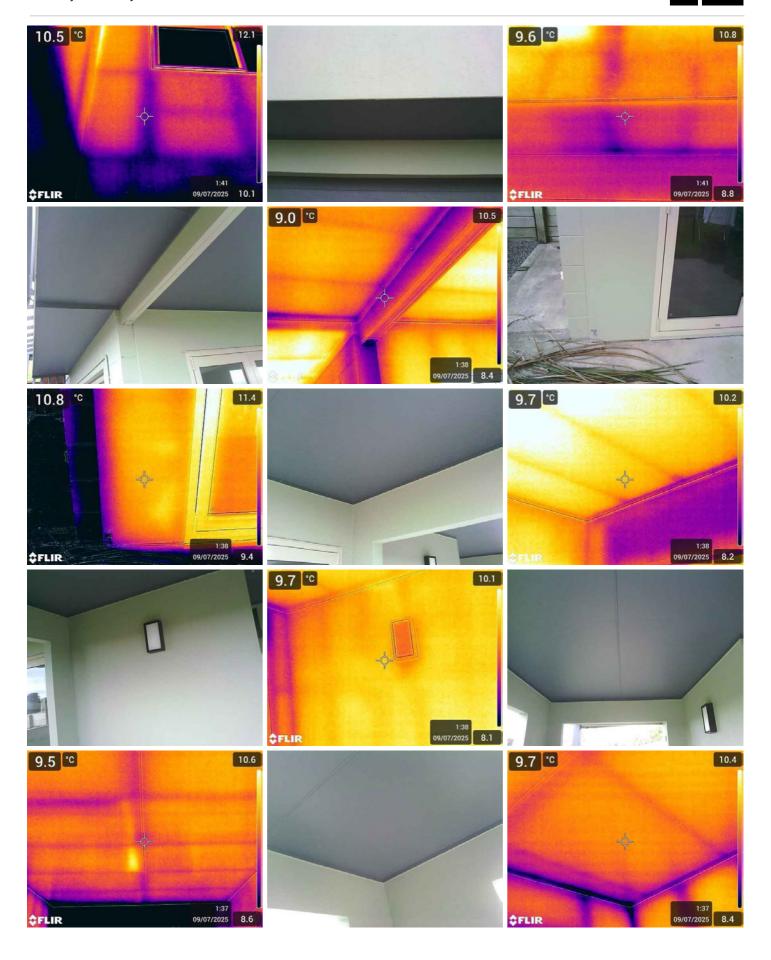


Modification to downpipe has now been made

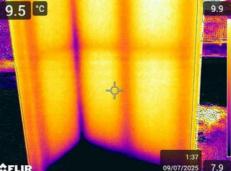
Modification to downpipe has now been made



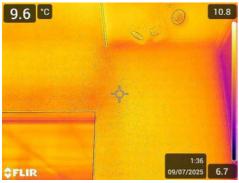








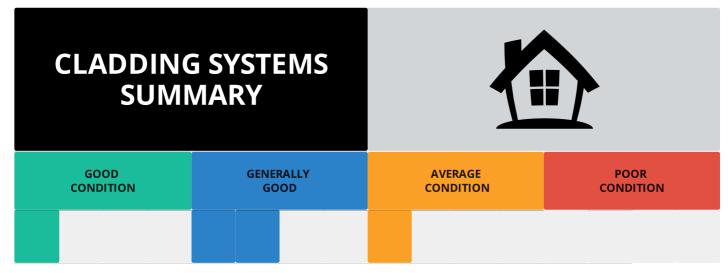




# 5: BUILDING INFORMATION

## **Information**

**CLADDING: CLADDING SUMMARY** 



#### **CLADDING: TEXTURE COAT CLADDING SYSTEMS**

# **TEXTURE COAT CLADDING**

Brick, Weatherboard, Monolithic or Mud hut, Maintenance is the key to protecting your property investment. "Paint before painting is due"

Texture coated fibre cement: These cladding sheets are made from cement, fine sand and cellulose, with a textured coating applied and painted after the sheets have been installed onto the walls. This type of cladding has been around since the 1970s. Fibre cement exterior wall coverings come in the form of panels and weatherboards. Vertical sheet joints can be made with plastic jointers or covered with vertical timber battens. It is important that manufacturers' jointing and flashing recommendations are followed. Where the sheets have flushed joints and a plastered surface, the cladding is known as a monolithic cladding.

# INFORMATION ON THE TWO MOST COMMON TYPES OF PLASTER CLADDING

#### **OPEN-JOINTED FLAT FIBRE-CEMENT SHEET**

The sheets are installed with an 8–10 mm gap between sheets, both vertically and horizontally, over a neoprene or butyl (or similar) backing strip behind the joints that restricts water penetration. The system is very reliant upon the installation and robustness of the joint backing system for weathertight performance.

The entire installed system is then coated with an exterior finish paint system to make it weathertight, and this requires regular maintenance to ensure that it remains weathertight. Uncoated sheet edges are very vulnerable to moisture absorption, and they can wick water from adjacent surfaces. Sheet edges need to be well coated.

The weathertight performance of these systems is very dependent on careful detailing and construction, as horizontal joints in particular have a high failure rate. Consider the use of a specialist monolithic weather sealer.

#### Open-jointed flat fibre-cement sheet systems are vulnerable to:

- thermal movement
- moisture penetration around the joint seal
- moisture penetration at sheet edges.

#### FLUSH-JOINTED FLAT FIBRE-CEMENT SHEET

Fibre-cement sheet is available in a range of sheet sizes and thicknesses and in a range of material compositions. The durability and performance of different systems varies considerably. Designers should ensure that the system that has been specified is fit for purpose, and designers and builders should be aware of all the system's installation requirements.

Fibre-cement is a very absorbent material, and the sheets must be coated on the outside to make them weathertight and durable. This is done with a texture-finish plaster that incorporates a paint exterior finish, or the textured plaster must be coated with a paint exterior finish after it has been applied. Dark paint colours must be avoided to prevent thermal movement that can stress the sheet jointing system and the coating, as this can result in cracks that allow moisture to penetrate.

Texture-coated flush-jointed fibre-cement sheets are used to create a monolithic finish on a building. The paint coating exterior finish creates a weatherskin and a face seal to the cladding that is very airtight. Uncoated sheet edges are very absorbent, and they will also wick water from adjacent surfaces such as waterproof decks and roofs. All exposed sheet edges must be well coated.

#### Texture-coated flush-jointed fibre-cement sheet systems are vulnerable to:

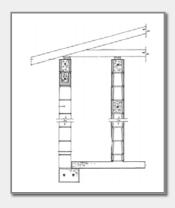
- thermal movement
- · building movement
- poor installation (there are a number of high-skill processes involved in jointing and coating)
- joint cracking (followed by moisture absorption)
- · poor surface coating application
- moisture absorption at poorly coated sheet edges
- lack of maintenance.

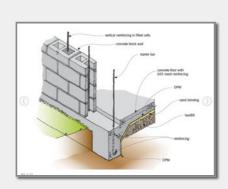
#### **CLADDING: CONCRETE BLOCK CLADDING**

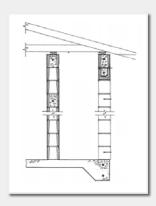
# **MASONRY CLADDING**

**Concrete Block** or **Poured Concrete** may act as both the structure and the cladding. It is recommended that each cladding system needs a proper underlay system for it to work and avoid the future risk of water leak. If the underlay system is properly constructed the cladding types should have no moisture ingress issues.

### **CONCRETE BLOCK CLADDING**



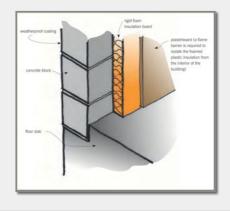


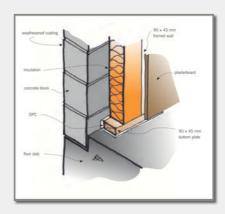


**Advantage:** Good thermal insulation performance, little water leakage, good sound insulation performance, basically no maintenance, good fire resistance. Concrete block can be used both internally and externally, Concrete cladding systems can last 80-100+ years if well looked after and repointed when needed.

**Disadvantage:** Masonry is heavy and requires structural support plus a continuous foundation. It is weathertight, but also very rigid, thus prone to damage in an earthquake.

#### **CONCRETE BLOCK INSULATION**



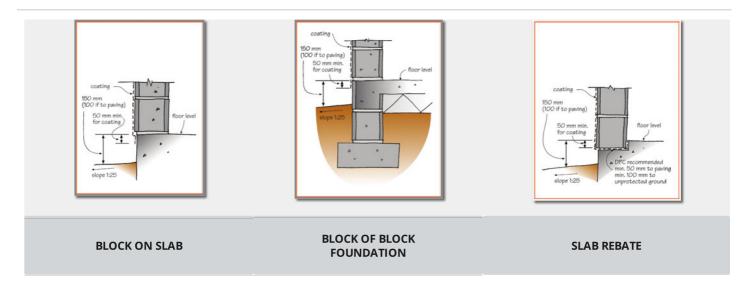


Good thermal insulation performance, little water leakage, good sound insulation performance.

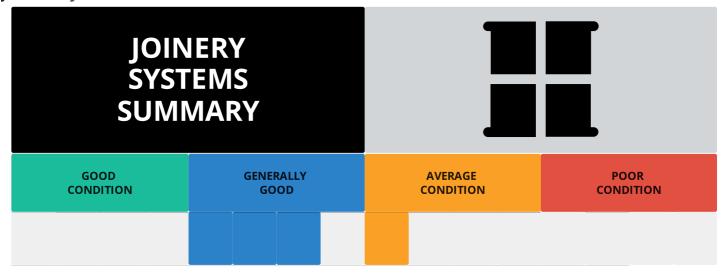
#### **GROUND CLEARANCE**

It is important to keep any yard build up cleared from your cladding systems edges.

#### **CONCRETE BLOCK MASONRY**



## **JOINERY: JOINERY SUMMARY**



#### **JOINERY: PLASTER/TEXTURE COAT JOINERY SYSTEMS**

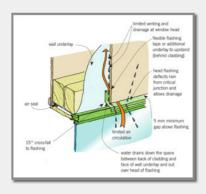
# **PLASTER CLADDING | JOINERY & FLASHINGS**

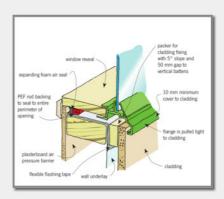
**WINDOW HEAD** The window head and joinery seals at either sides should have a complete seal to prevent water from draining back into the cladding and entering the wall cavities.

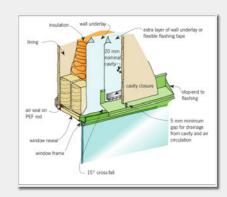
**WINDOW SILLS** Joinery sills on Stucco/ Texture Coat cladding systems are high risk for multiple reasons. We recommend being extra vigilant when performing your own home inspections, as it can take less than a year for moderate to major moisture damage to occur within your wall cavities around these areas.

**DRAINAGE & VENTILATION** A drainage and ventilation gap may be present between the bottom of the cladding above the flashing and the top of the sloped flashing. This opening will allow water to drain from the assembly and air to enter.

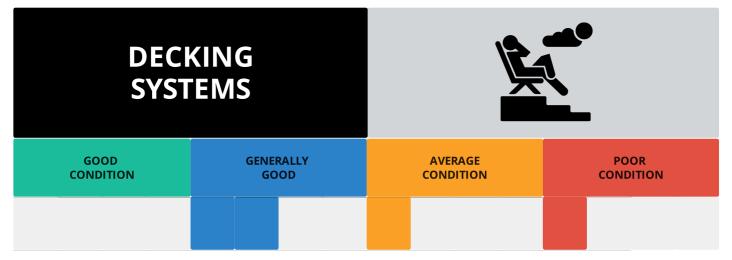
### **EXAMPLES DETAILS MAY NOT APPLY EXACTLY TO THE SYSTEMS USE ON SITE**





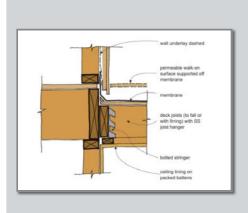


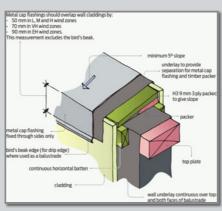
## **DECKING: DECKING SUMMARY**

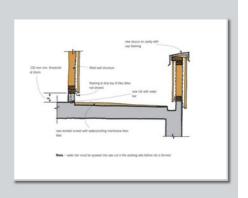


#### **DECKING: MEMBRANE DECKING SYSTEMS & ENCLOSED BALUSTRADES**

# MEMBRANE DECKING SYSTEMS & ENCLOSED BALUSTRADES







**SHEET MEMBRANE AND DECKING COVERS:** Waterproofing is achieved with either a sheet membrane that is heat welded to make it monolithic, or a liquid membrane applied to the sub-floor. The membranes are thin and vulnerable to damage and need to be protected by a durable floor surface.

A decking material may be installed over the sub-floor. It is often advisable to raise the deck off the waterproof sub-floor to create a drainage layer that will move water away quickly so that standing water is avoided and the risk of leaks is minimised.

Fixing the decking material down to the sub-floor is a challenging exercise as any penetration will increase the risk of leaks no matter how well it is sealed. Adhesives may be useful in bonding the framing of the deck to the sub-floor without creating holes. Some decking materials have high thermal expansion and contraction, which should be considered when investigating fixing methods.

#### Sheet membrane decks

Sheet membrane covering is often used on low slope decks and may be subject to high foot traffic. This makes it prone to surface damage. Low slope decks should always have an overflow outlet for each main outlet in case the down pipe gets blocked. roofs, balconies and/or decks enclosed with parapets should have a minimum of two outlets.

#### Paint-on membrane decks

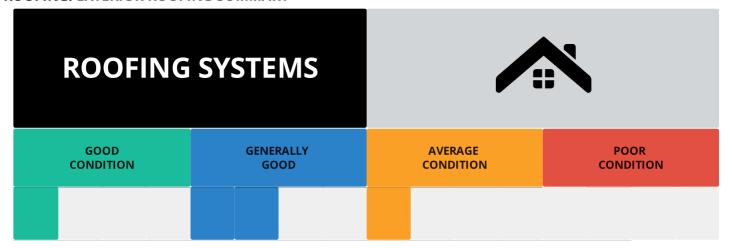
Paint-on membranes must be regularly re-coated, generally at 4-7 year intervals. Many site-applied membranes are covered by a manufacturer's warranty. Approach the applicator for redress under the warranty if the membrane is failing prematurely.

#### **ENCLOSED BALUSTRADE TOPS**

While E2/AS1 requires that parapets must have an exposed metal or membrane cap flashing, extra options for enclosed balustrade walls are the use of stucco plaster, EIFS and flush-finished fibre-cement with a back flashing.

A plastered finish requires the slope to be increased from 5° to a minimum of 10°. Also, an applied waterproof membrane needs to be applied as a secondary under flashing – over the sloped balustrade top and under the final finished coating. This membrane should be as specified by the manufacturer of the actual finish coating being used.

#### **ROOFING: EXTERIOR ROOFING SUMMARY**

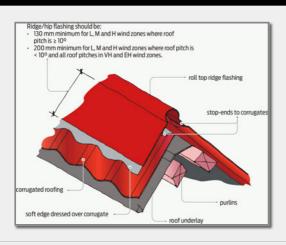


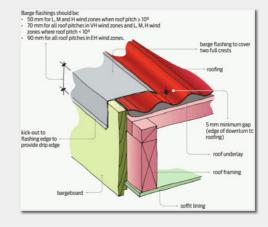
**ROOFING: METAL ROOF COVERINGS** 

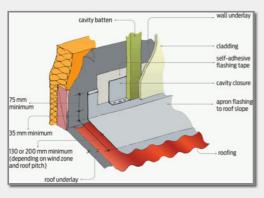
# **METAL ROOF COVERINGS**

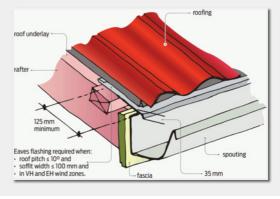
Metal roofing comes in long run and short run vertical panels, pressed metal tile detail or shingles resembling slate, tile and shake – and lasts about 60 years. Metal excels at sloughing off heavy snow and rain, won't burn and resists high winds. It is lightweight and can be installed over existing roofs. However, metal can be noisy during rainstorms, and may dent from hail. Average cost can range between suppliers, depending on type and style of metal, Corrosion also varies by material.

## ALWAYS MONITOR THE CONDITION OF YOUR ROOF FLASHINGS









Flashings play a vital role in keeping water out of buildings. The type of roof flashings depends on what part of the roof is being flashed and what the roofing material is. Flashings are designed to stop water entering the building and should be designed to deflect water away. **Images provided are examples only** 

# **UTILITIES PENETRATIONS**

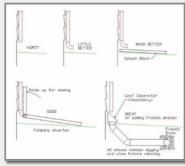
We recommend inspecting any roofing penetrations every six months or more. Moisture ingress around roofing penetrations can go unnoticed for some time, by the time you realize there is a problem the damage has already been done and the cost to repair has already gone through the roof. (Pun intended)

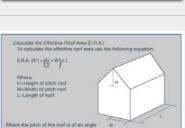
# **BOOT & CHIMNEY FLASHINGS**

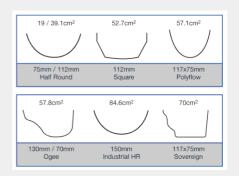
A boot flashing is a proprietary EPDM flashing designed to weatherproof cylindrical penetrations protruding from a roof or wall. The top is trimmed to form a tight weatherproof collar around the penetration, and the base is formed with a series of concentric rings to the underside and a malleable stiffener of aluminium which is dressed to conform to the shape of the roofing profile. It is generally top-fixed to the roof surface with screws or rivets, and sealant.

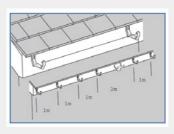
#### **ROOFING: ROOF DRAINAGE**

# **ROOF DRAINAGE**







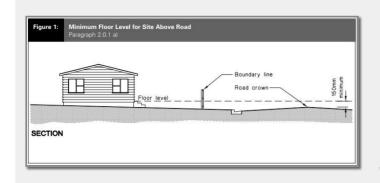


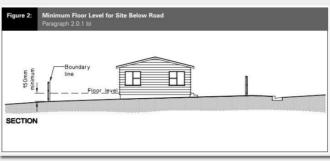
The roof's purpose is to protect the structure, the people, and the things below. This means keeping your home sheltered from weather elements like wind, sun, and rain. Your roof's drainage system is an integral part of keeping your home protected since it controls the flow of water to prevent it from causing damage.

#### **GROUNDS: DRIVEWAY/PAVING & YARD/SITE GRADIENTS**

# SITE GRADIENTS & GROUND DRAINAGE







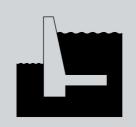
Having the floor level wrong can lead to on-going moisture problems. It could also bring serious Building Code compliance problems and potential drainage problems due to insufficient heights of flooring above ground and/or lack of fall to the drains. The Building Code states that houses must be built so that a 50-year flood will not enter the building. Acceptable Solution E2/AS1 says that, on near-level sites, the floor level must be no less than 150 mm above the crown of the road or the lowest point of the boundary. For steep sites, specific design and consent as an Alternative Solution is required. E2/AS1 gives minimum heights of finished floor levels above ground for concrete slab floors and suspended timber floors, the measurements depending on whether there is grass or paving outside. NZS 3604 sets a minimum height above ground for wood-based products used for flooring. E2/AS1 also gives a minimum threshold height of 100 mm at an opening onto a waterproof deck.

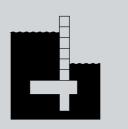
# **PATHWAYS**

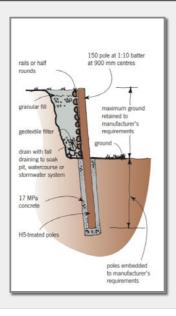


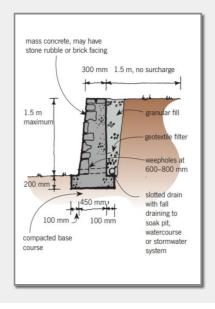
#### **GROUNDS: RETAINED & NON RETAINED SLOPES**

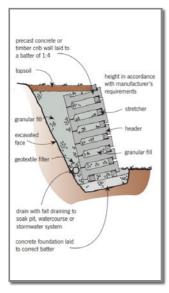
# TYPES OF RETAINING WALLS

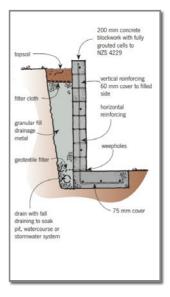












**A retaining wall** is built to hold back a bank of earth where there is a change of grade. There are different types of retaining walls, and not all require a building consent. See **STRUCTURAL INFORMATION** section for more details on retaining.

# 6: INFORMATION | MAINTENANCE

## **Information**

#### **END OF REPORT DOCUMENTATION**

# END OF REPORT DOCUMENTATION

# THE FOLLOWING CONTAINS GENERAL INFORMATION & MAINTENANCE TIPS

IF YOU ARE PRINTING A PDF COPY OF THIS REPORT YOU MAY WITH TO ONLY SELECT THE DOCUMENTATION ABOVE THIS SECTION.

#### **GENERAL INFORMATION**

# THE GENERAL INFORMATION IN THE SECTION BELOW SHOULD BE READ THOROUGHLY AND USED TO HELP PROTECT YOUR INVESTMENT

#### WEATHER SEALING YOUR INVESTMENT SHOULD BE THE PRIMARY OBJECTIVE OF ALL HOMEOWNERS

The majority of homeowners are not fully aware of the maintenance requirements necessary to ensure their investment is kept weather tight. This is true for all cladding systems. Weatherproofing maintenance should be kept to a strict schedule. 90% of moisture ingress observations can be avoided by proactively weather sealing. Especially around joinery to cladding junctions.

#### JOINERY DEFECTS ACCOUNT FOR AROUND 40-60% OF MOISTURE INGRESS IN RESIDENTIAL HOMES

Think of a blank wall with no windows. The only entry points for moisture ingress are; Rising damp from poor ground clearance, utilities penetrations, joins in the cladding and/or cracks in the cladding. Now cut a giant hole in that same wall. To correctly fit a window it must have: Head flashings, sill flashing, flashing tape, expanding foam, building paper, external sill detail, side details, beading and/or scribers, no more gaps and/or silicone, weather proofing paint seal. Then there is the operational aspect of the joinery: Glazing seals, gap tolerances, hinge tolerances, condensation gutters and drains, inter flashings for drainage. etc etc All or any of these components can be installed poorly or with defects or fail over time. Maintain the weather seal around joinery and reduce the chance of moisture ingress up to 60%, ignore it and you are 60% more likely to lose the cost of the repair and/or replacement at settlement. **Maintain the weather seal around joinery** 

#### **ALL BUILDING MATERIALS HOLD DIFFERENT MOISTURE AVERAGES**

Those averages can vary from building to building and even from room to room, for multiple reasons. Some of the more common variables are: Environment, maintenance, age, exposure, absorption, installation techniques, thickness of primers and weather sealing paints. The list of possible variable influencences is in the thousands. As an inspector, establishing if a particular area and/or material behind another material has an elevated moisture level or not, can not be done by simply holding a moisture meter to a wall and reading the screen.

**EXTERIOR DEFECTS WE LOOK FOR ARE:** Cracks in cladding. Historic repair work. High detail area with substandard weather seal. Decking, Pergola and/or after construction attachment to cladding. Possible forced moisture ingress due to severe weather. Short and/or no eaves. Material and/or weather seal deterioration. Lapsed maintenance. Weather seal defects roofing. Weather seal defects joinery. Ground clearance issues.

**INTERIOR DEFECTS WE LOOK FOR ARE:** Swollen timbers. Wall lining defects. Material deterioration. Material discolouration. Mould. Musty odours. Condensation damage.

#### TO STATE THAT AN AREA HAS A MOISTURE INGRESS ISSUE. AN INSPECTOR MUST:

- IDENTIFY POINT OF INGRESS (WEATHER SEALING DEFECTS)
- IDENTIFY VISUAL CUES OF MOISTURE DAMAGE (LISTED ABOVE)
- RECORD ELEVATED MOISTURE READINGS ON AT LEAST TWO DIFFERENT MOISTURE READING TOOLS.
- RECORD MODERATE TO MAJOR TEMPERATURE DIFFERENTIALS WITH A THERMAL IMAGING CAMERA. (DEPENDING ON CONDITIONS DURING THE INSPECTION, THIS MAY NOT ALWAYS BE POSSIBLE)

**MAINTENANCE IS KEY:** With all buildings and cladding types, the key to protecting your property investment is keeping up a strict maintenance schedule. By scheduling ahead of time, any weather sealing and painting requirements, you can save a considerable amount of extra costs over time and guarantee the longevity of your investment. We will happily help you plan out a maintenance schedule for this property if you require it.

\*\*NOTE: If we have or have not identified moisture and/or moisture damage within the wall cavity we have inspected then this documentation / observation applies to the specific section noted only. It does not mean there was no moisture in any other wall cavities. There may be areas deemed inaccessible and/or areas that where it was not possible to view by eye and/or the endoscopic camera was not able to be used in a useful manor. There may be defects identified both internally and externally of the room, indicating a higher chance of through wall moisture ingress. However, not all defects identified within an observation will be directly related to a current moisture ingress issue. We may have noted an area of "potential" risk to the cladding systems weatherproof envelope. The defect may require maintenance ,repair and/or re-sealing. We recommend any areas of moderate and/or major exposure be weather sealed by a cladding expert sooner rather than later.

\*\* SEE BUILDING INFORMATION SECTION AT THE END OF THIS REPORT FOR THE MAINTENANCE INFORMATION REGARDING THE COMPONENTS USED AT THIS PARTICULAR PROPERTY.

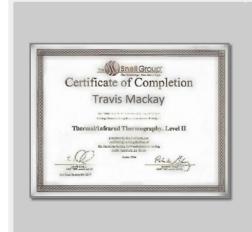
#### INSPECTOR INFORMATION: T MACKAY

## **INSPECTOR:**

### TRAVIS MACKAY

#### **COMPANY:**

#### **COMPREHENSIVE PROPERTY REPORTS LTD**







## **QUALIFICATIONS AND BACKGROUND:**

**Trade Qualified Inspector NZS 4306:2005:** 7000+ Published Reports. Expert Mediation/Trial Witness Testimonials (Multiple Specialized Skill sets).

Engineering Qualifications and Structural work history: Professional Engineer: Aeronautical Engineering. Structural Engineering. Qualified Fitter Welder (All tickets held, all positions) - (NDT Inspector level). MS Structural Reinforcement, Design, Fabrication and Fit-out of EQC buildings (Residential and Commercial). EQC Assessment Expert. General Construction and Conventional Cladding work history: 25+ years in the residential and commercial engineering and building sectors. Builder, Property investing, Building new spec homes, Renovating 100+ year old villas and bungalows, Maintenance scheduling and maintenance work on all construction eras and systems.

Monolithic Construction and Leaky Homes work history: Original cladding systems install, Repair work of moisture damaged homes, Full recladding of homes on the now abolished Leaky Homes Register. Qualified L3 Thermographer. (Designer of this ANZ Accepted Inspection Report Template and Inspection System)

Other Related Qualifications: Autodesk Certification in Draft and Design AutoCAD. 6x Current International Tool Patents in the Structural Fabrication Fields and 1x Current International Design Patent in the Automotive Industry.

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 inspection and I am competent to undertake this inspection. An inspection carried out in accordance with NZS 4306:2005 is not a statement that a property complies with requirements of any Act regulation or bylaw, nor is the report a warranty against any problems developing after the date of the inspection. This report represents the general condition of the home listed above. As with all homes it is important to remember that maintenance and improvements to a house will be required from time to time. The improvements recommended in this report are not considered unusual for a home of this age or type. NZS 3602 Timber and wood-based products for use in buildings NZS 3640 Chemical preservation of round and sawn timber NZS 3604 Timber-framed buildings

24/7

# **24 HOUR AFTER REPORT ASSISTANCE**





0800 677 388 | 027 548 55 CPRNZ@OUTLOOK.COM THERMAL IMAGING AND MOISTURE METERING INFORMATION: CPRNZ MOISTURE INSPECTION SYSTEMS BY FLIR & DJI

# FLIR & DJI MOISTURE TESTING EQUIPMENT





**FLIR T560** 







FLIR MR27 Moisture Hygrometer IGM™ Moisture Meter & MSX® IR Camera FLIR Lepton microbolo meter

FLIR MR27 Moisture Hygrometer IGM™ Moisture Meter & MSX® IR Camera FLIR Lepton microbolo meter





FLIR MR59 Ball Probe Moisture Meter FLIR MR55
Pin Probe Moisture Meter

# **Commercial & Residential Building Inspections with FLIR**

Missing, damaged, or inadequate insulation, building envelope air leaks, moisture intrusion, and substandard work are costly to residential and commercial building owners. Thermal imaging can help you quickly target the source of the problem so you can help customers make informed decisions on repairs.

#### THERMAL IMAGING AND MOISTURE METERING INFORMATION: MONOLITHIC CLADDING MAINTENANCE

### MONOLITHIC CLADDING MAINTENANCE

When it comes to monolithic cladding systems including EIFS, texture coated fibre cement sheeting, stucco and the like, maintenance of them can become complicated due to the following factors:

Cladding repair of this type of cladding is no longer the Builder's job. In fact very hard to find out who is the right professional for its maintenance, could be either the carpenter, painter, exterior plasterer, waterproofer or combination of them. Depends on the condition of a particular cladding, it is not easy to work out who is the right person to refer. When you use a wrong person to do this type of cladding maintenance, the job can turn into a disaster.

Maintenance can be significant or minor depending on the condition of the cladding system. When the cladding system is systemically defective the maintenance can mean a total re-cladding. In other cases, when not much wrong with a cladding system, maintenance can be a simple washing-off.

There is no clear line when the re-coating is due. Due to the high possibility of defective recoating job, we do not recommend carry out any total re-coating work to any monolithic cladding without expert's opinion. We have seen too many recoating disasters.

#### How can you tell if your cladding is due for maintenance?

No clear answer. But very common when somebody has realised that the cladding is due for maintenance, it is too late to realise that. So having your cladding checked every couple of years by an Expert is a wise way rather than decide yourself unless you are an Expert.

The main things to look for are: Places where water can get into the framing, and Signs that water has already got in. Water might get in through holes, cracks, loose cladding, fixings, joints that have separated, around doors and windows, anywhere where the sealing has failed, and any area where water can pool against the cladding.

Signs that water has got in include:

- · Cracks and splits in the cladding or joints.
- Moisture staining or other visible water damage.
- · Musty smells.
- Efflorescence (white chalky substance) at junctions or cracks.
- Mould, moss or colour degradation.
- Blistering or fading paintwork or bubbling or peeling wallpaper.

#### Vulnerable areas to pay attention to:

- Check around the house to make sure the cladding is at least 175mm above the ground (lawn or garden) or 100mm from paved surfaces.
- Check pergolas, cantilevered decks, fascias or guttering penetrating the cladding, poorly formed flashings and meter boxes which are not sealed or flashed.
- Check any areas where the cladding is penetrated by bolts, screws or handrails.

Some useful clarifications when thinking about maintenance of monolithic type cladding: Most of monolithic cladding coating systems are not "paints" normally applied on timber weatherboard, fence palings, garage doors and the like. Normally carpenters are not specialised on fixing a minor damage on monolithic cladding, nor painters. Interior plastering and exterior plastering are totally different trades. In fact since March 2012 exterior plasterer now need to be licensed. Based on the fact that most monolithically clad houses were built 10++ years ago, today most of those houses' wall claddings are due for total maintenance. There are very limited amount of companies are competent in doing that.

Significant amount of monolithic houses have wall cladding somehow integrated with roof parapet or even roof cladding and deck balustrade, which make maintenance more challenging. When there is no clear line between a leaky house and a non-leaker, furthermore the exterior wall cladding coating is regarded as a part of the whole weathertight system for this type of cladding, it can be hard to find any company specialised in maintenance of plaster system which can issue workmanship warranties.

For general maintenance, wash the cladding regularly. You may be required to wash at specific intervals to keep the warranty valid. Follow the manufacturer's recommendations. Washing the cladding will extend the life of the materials. It is particularly important for houses near the sea. To wash, use a soft brush and low-pressure hose, concentrating on areas rain does not reach, like walls sheltered by eaves. For sea spray, moss and lichen, you might have to use specific cleaning products or a 1-part bleach to 4-parts water solution and soft brush. Hose off residue with plenty of water and avoid using ladders around wet areas as much as possible. Check with the manufacturer of your cladding and your local hardware store if you are unsure.

**Problems with monolithic cladding** Many plaster cladding homes don't have a cavity system installed and worse still, they don't have treated timber framing. This can cause considerable problems over time. Water can get in through

cracks in the plaster, anywhere the sealant has broken down including windows, doors, pipes – the list goes on. Because the water can get in but can't get out, it can cause major problems which is why you see so many homes having to be completely re-clad costing hundreds of thousands of dollars. However, if you put in place a fairly simple maintenance schedule you should be able to protect your home from potentially catastrophic damage and expensive plaster crack repairs in the future. A monolithic clad building needs to be painted every 2-4 years so the cost of this must be factored into a buyers budget, because not painting this type of cladding is not a option. Also if the property appears like it hasn't been painted every 2-4 since being built.... It is going to have some weather tight issues somewhere. But please remember, ALL cladding systems will allow moisture ingress if MAINTENANCE is not kept up. You may be able to make minor repairs to cladding yourself, but for any monolithic cladding system you should contact the manufacturer for advice on the correct products to use. If you do not know which system you have, try to identify a similar system and follow the general advice from that manufacturer. We do NOT recommend you do any maintenance on these cladding systems yourself. If the cladding is a specialised system and less than 15 years old, it may still be under warranty. Again, contact the manufacturer if you know who this is. If your house is a leaky building, you'll need professional help. If the house is less than 10 years old, you may be able to make a claim under the Weathertight Homes Resolution Act 2002.

#### **LEAKY BUILDINGS**

Some homes with monolithic cladding types are at risk of being leaky buildings. Design and installation are critical factors in ensuring your home is protected from being a leaky building. If the design is inherently flawed, comprehensive work beyond maintenance may be required to solve the leaking long term.

If your home is at risk of being a leaky building, you need to be especially vigilant in your maintenance checks. Carry out a careful inspection of the cladding at least once a year.

For stucco check carefully for cracking of the plaster, check around flashings and other penetrations through the plaster and seek professional advice if you have any concerns.

For texture coated fibre-cement look particularly for cracks in the jointing. Cracks in joints should be raked out and reformed, do not attempt to seal with sealant. Contact an approved applicator to carry out repairs to the

cladding. Check the waterproof coating to ensure re-painting is not required.

For EIFS pay particular attention to the corners of windows and exposed edges and anywhere that the paint finish might wear or crack. Do not attempt to repair with sealant but contact an approved applicator. It may

be that only certain areas require recoating. Many EIFS systems in New Zealand are specialised systems. If you can identify which system your home has, follow the manufacturer's specific instructions for maintenance and repair. If you cannot establish the specific cladding system at your home, the literature on the product which it most closely resembles will give you some generic guidance on maintenance.

Look for signs that moisture might be soaking up into the cladding, often indicated by darker colorations along the bottom edges of the cladding. If you have concerns that you may have a leaky home, you should seek professional advice.

Organizations that can provide further information on the leaky building issue include:

The government's Weathertight Homes Resolution Service. Call them on 0800 116 926 between 8.30am and 7.00pm (Monday to Friday).

Before you wash, check for cracks or damage.

Do not use a high-pressure water blaster to clean your monolithic clad property. It WILL damage the cladding! When you see cracks on the monolithic cladding surface, simply squeezing a tube of silicon is not the solution!!! It's often the cause of a bigger disaster by allowing moisture damage to continue to worsen unchallenged.



# THERMAL IMAGING & MOISTURE METERING

Thermal imaging does not provide our inspectors with X-ray vision! It is a tool used to indicate areas that may require further investigation with other moisture detecting equipment.

Thermal Imaging does not detect moisture! Put simply, it is used to identify areas that show "Temperature Differentials". Not so simply put, Thermal imaging does not directly measure temperature, it measures radiated thermal energy. Temperature is then derived from the amount of energy detected. For example: Moist areas of a wall will show greater temperature loss because water is a better conductor of heat. The thermal camera can also "indicate" what lies behind walls. Often the studs can be seen because the wood, which has a lower R-value than the insulated walls, serves as a "thermal bridge" for heat flow.

\*NOTE: Forced moisture ingress is not the same as prolonged moisture ingress. All cladding types will allow some moisture past the first layer or layers of protection under severe enough weather conditions. This does not mean they are defective. These observations should drain and dry out in time. They must still be monitored for any signs of mould and/or other indicators the area is not drying as it should.



# THERMAL IMAGING & MOISTURE METERING

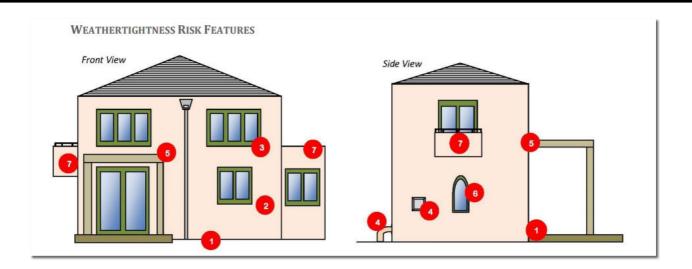
**Our Unique Moisture Testing System works by** having two person teams at every property inspection. Both inspectors have a thermal imaging camera and separate moisture detection equipment, these are calibrated upon arrival to site, with baseline resistance levels set at entry to each room. (On-site, room by room calibrations allow for the varied density levels and overall moisture absorption of each tested material and/or tested area) Each tool is used independently from the other and both inspectors follow the same procedure but with one in reverse order. (Senior Inspector uses Thermal imaging to identify where best to test for possible moisture ingress. Second Inspector uses Contact Moisture testing indications, that are then substantiated and traced with Thermal imaging)

**How the double-blind system works:** If one inspectors meter and/or camera indicates an area that requires further investigation, the inspector will flag the area through our software, thus notifying (at the end of inspection) the other inspector to double check the area with their independent moisture detecting equipment. This unique double-blind moisture inspection system was developed to eliminate incorrect identification of elevated moisture and equally confirm, trace and isolated moisture ingress to the affected areas only.

In some inspections, a vendor may attempt to distract us from the process as we near an area that they know to have issues. Our two-person inspection processes, with in app flagging for areas to revisit won't allow us to ever miss anything accessible. Other times vendors and/or tenants may try to disguise a problem by drying affected areas prior the inspection, installing new linings, painting over surfaces and/or placing furniture in front of problematic areas. As our standard inspections are non-invasive and is of a visual nature, we cannot move the vendor's furniture and/or belongings without explicit consent in writing. Therefore, we can't be held liable for unidentified observations that were concealed and/or disguised at the time of inspection. Obtaining a vendor statement about the house's moisture condition and a final pre-settlement inspection when the house is empty is highly recommended. If any areas of concern are sighted once the dwelling is vacant, Immediate notification about the newly identified problem areas to your solicitor and/or inspector would be strongly advised.

#### THERMAL IMAGING AND MOISTURE METERING INFORMATION: WEATHERTIGHTNESS RISK FEATURES

# **WEATHERTIGHTNESS RISK FEATURES**



FRONT VIEW SIDE VIEW

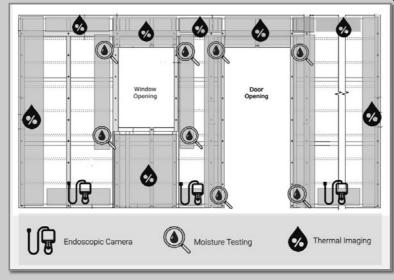
- **1. Ground Clearance:** Inadequate clearance between the cladding and ground, paving or deck, or insufficient fall away from the building's perimeter. Clearance to solid ground (concrete, asphalt, paving, decking timber should be 150mm; clearance to soil should be 225mm.
- **2. Cracking in Cladding:** Look for hairline cracks in the cladding, typically found close to windows and doors; or discolouration of cladding in these areas.
- 3. Joinery: Check for cracks along the joinery seals, between the joinery and the cladding.
- **4. Penetrations:** Check all penetrations in the cladding (e.g.: around pipes, vents or meter boxes) for gaps and lack of sealant. Also check to ensure meter boxes are correctly flashed. Any lack of flashing or reliance on sealant may allow water to penetrate.
- 5. Pergolas: Pergola frame penetrating or direct fixed through the cladding may result in water ingress.
- **6. Windows:** Check window flashings round, shaped or corner windows are difficult to flash, increasing the risk of water ingress.
- **7. Enclosed Balcony / Cantilever Deck:** These can result in a multitude of risks. (a) A lack of fall on the balustrade. (b) Hand railings attached through the plaster cladding. (c) Poorly applied waterproof membrane. (d) Insufficient drainage holes allowing water to pool after rain. (e) Lack of clearance between the cladding and deck floor.

**Interior Signs:** These can include swollen or cracked skirting boards or architraves; mould on the inside of curtains and window liners; floor coverings showing signs of water damage; swelling, cracking and popping of water liners.



# **MOISTURE TESTING LOCATION KEY**

## THIS IS A GUIDE ONLY TO SHOW WHERE WE USE SPECIFIC EQUIPMENT



# 7: LIMITATIONS & STANDARDS OF PRACTICE

**Information** 

#### **LIMITATIONS**

# **LIMITATIONS**

Limitations listed may or may not directly apply to the specific inspection. This list is to show some of the possible limitations faced during the inspection.

Area/s Not accessible. During the time of the inspection the inspector will check that insulation has been installed in accessible visual areas only. Septic system not inspected Tub / sink overflows not tested. Service size cannot be determined. The inspector is not required to and does not physically walk on roof surfaces in excess of a 3.6 metres, roofs inaccessible by an 3.6 metre ladder, covered by moisture, moss, debris or frost, or of any type not intended to be walked on (e.g. slate, clay tile, concrete tile, aluminium, wood shingles, wood shakes, etc). The inspector is not required to determine or report the age or life expectancy of any roof coverings. Roofs that cannot be accessed directly by the inspector may have defects which are not visible from the ground or the roof's edge. This report neither addresses future leaks nor does it certify that the roof is leak-free. The roof space was not inspected due to limited or no access visible at the time of inspection. Chimney flues not inspected. Insulation can not be seen in the wall cavity areas, unless looked at invasively. Service size could not be determined. Service wires could not be sized and fuse ratings (if applicable) could not be read. Structural inspection limited to visible and accessible areas of the foundation only, as per inspection package or client request. Buried tanks are not included in the inspection. Environmental Consultants can assist if this is a concern. Chimney inspection limited by inaccessibility of roof. Foundation inspection limited to visible and accessible areas only. NO ACCESS TO UNDER FLOOR. Security systems, including smoke detectors, may have been sighted but not tested. Storage in attic. Visual inspection not possible, or incomplete. The main disconnect cover was not removed. Car in garage. Visual inspection not possible, or incomplete. Continuity of air / vapour barrier not verified. Old sewer lines are prone to blockage. Roof inspected by ladder at the edge of the roof and/or by drone. The crawlspace was inspected by entering the area. The power was turned off throughout the house. Weather Distortion. Access Blocked. Due to typical construction constraints, evaluation of plumbing components is limited to readily accessible, visible areas. Furniture and/or other objects restricted access. No access to garage. Visual inspection not possible, or incomplete. Obstructed. The foundation is a slab-on-grade configuration. It is not possible to inspect under this type of foundation during a normal home inspection. The fuse block(s) were not pulled. The roofing inspection was limited by being too fragile to walk on. Typically, roofs covered in anything other than asphalt shingles should not be walked on as the covering is easily damaged. Box cannot be opened without shutting off the power or breaking the lock. Exterior wall(s) inaccessible. Visual inspection not possible. Inspection of chimneys, flues and vents is limited to readily accessible and visible external conditions only. Generally, flues, liners and footings are not visible for inspection. Limited access to sub floor, insulation may not have been sighted. Recreational facilities, such as spas, saunas, steam baths, pools, tennis courts, or exercise/entertainment equipment, is not inspected. The knee-wall space was not inspected due to limited or no access visible at the time of inspection. Unable to sight Drainage pipe work. Concrete tiles become porous over time and would need resealing to exterior or replacement. Gas shut off. Limited or no access to ceiling space - insulation may not have been sighted. No comments/recommendations made with respect to cosmetic finishes. Safety controls, whether automatic or manual, are not tested because these controls are rarely used by the homeowner (other than in an emergency) and activating these safety controls could damage the controls or equipment. These controls should be tested during annual servicing. Storage against exterior wall(s). Visual inspection not possible. There may be defects hidden behind the finished walls or insulation which are not visible at the time of inspection. The service box was locked by the utility. Finishes, insulation and/or storage, at the time of the inspection, conceal structural components which may, or may not, have defects. Flashing inspection limited by inaccessibility of roof. Heat loss calculation are not done as part of the home inspection. These calculations are usually done prior to construction in order to determine the required capacity of the heating system. There are specialists available if this is a concern. Main valve not located. Plants and/or Garden growth restricted access. Safety hazard to inspector. The system ground was not visible or was inaccessible. Vegetation (vines, shrubs, trees, etc) against the build restricted visual inspection. Complete heat exchanger is not visible or inaccessible. At most, only 10% of the heat exchanger is visible through visual inspection. There may be problems with the heat exchanger that are not apparent with this inspection. Main shut off valve not tested., New finishes, paint and/or trim hide historical clues to condition of house. No access to wall space. The roofing inspection was limited by slope (more than 3.6 metres). The service panel / main disconnect was not accessible. Access to the power service panel / main disconnect was restricted. Isolating / relief values not tested. Restricted or no access under decks. Storage in some areas limited inspection. The roofing inspection was limited by restricted or no access. Absence of historical clues due to new paint/finishes. Ceiling Space sighted from manhole, very limited access. Concealed plumbing not inspected. Restricted or no access under steps. The attic was inspected by entering the area. The roofing inspection was limited by height. Not easily accessible. Electrical tests could not be performed and equipment / appliances requiring electricity could not be operated. Elevators not inspected. Limited pool inspection. The objective of our limited visual pool inspection is to determine if the pool and related equipment may benefit from a more thorough inspection by a qualified pool specialist. The scope of our inspection includes a limited visual inspection of the pool electrical system, primary circulation system, pool barrier system, the pool interior surface and surrounding deck. We do not dismantle components such as filters, pumps and heaters. We do not test water chemistry. We do not test or operate pool heaters, cleaning systems, control valves, chemical injectors or similar components. Radiator / Zone Values Not Tested. The roofing inspection was limited by trees. Water treatment equipment not tested or inspected. Concealed electrical components are not inspected. Fascia and soffits not fully accessible or visible. Inspection limited to visible, accessible areas only. Quality of chimney draw cannot be determined. The roofing inspection was limited by another building. Exterior inspection from ground level and/or by drone. Lead may be present in paint if the house was built prior to 1978. Testing for the presence of lead paint is not part of this inspection. Environmental Consultants can assist if this is a concern. Neither the condition

nor flow can be evaluated through underground or covered water or sewer/waste lines. The power was turned off in some areas of the house. Electrical tests could not be performed and equipment / appliances requiring electricity could not be operated. The roofing inspection was limited due to installed solar panels. Asbestos may be present in many building products and materials. Environmental Consultants can assist if this is a concern. The roofing inspection was limited by slippery, wet conditions. The system has been shut off or is otherwise inoperative. As turning the system on could result in an unsafe situation, the appliance(s) will not be able to be tested. Asbestos may be present in many building products and materials. Environmental Consultants can assist if this is a concern. Moisture problems may result in visible or concealed mould growth. Environmental Consultants can assist if this is a concern. Lead may be present in exterior paint if the house was built prior to 1992, or in the soil. Testing for the presence of lead is not part of this inspection. Environmental Consultants can assist if this is a concern. Step flashing installation and material restricted by the use of sealant. Assessment of flashings is limited to readily accessible and visible sections only. Most roof leaks will occur at the flashings. Poor weather may have limited the inspection process. Roofing/material type comments are intended to provide a general description of materials used. Actual materials were not verified

## **MOISTURE DETECTION INFORMATION**

With limited time at each inspection, there could be areas of moisture not detected at the time of inspection. Any moisture readings and/or absence of elevated moisture levels, found at the time of inspection only apply to the date and time they were inspected. The opposite side of any moisture detection is also checked to identify possible causes and/or damage. Areas indicated to show moisture/thermal differences are usually first found with the FLIR Thermal Imaging Camera and where possible they are double checked and confirmed with a FLIR Pin Probe and/or FLIR Moisture Meter. The photos provided are to show the areas of concern, and not the definitive example of moisture. It is not possible to fully document our inspection process as it would take time and distract from the inspection system itself.

Thermal imaging: Thermal imaging does not show "moisture" As the name states, it identifies different temperatures. Thermal imaging is used to locate areas of concern that we can then investigate further. It is also used to track moisture through thermal patterns to its point of origin.

There could be areas with excessive wear and tear not visible at the time of inspection. Some individual items featured in an observation, may only be noted with a photo. This is because we deem the photo in itself explanation enough. If you decide to have the work quoted by the appropriate trades person/s. We have provided a list of contractors that we consider to be reliable, honest trades people. However we can not be held responsible for any quotes and/or work carried out by these trades people. You will find a list of generic and custom limitations that may have restricted or otherwise inhibited the inspection, located at the end of this report. **NOTE:** Any and all observations noted within this report apply to the time and date the of inspection only.

# STANDARDS OF PRACTICE

#### LIMITATIONS & STANDARDS OF PRACTICE

#### The inspector shall perform:

a non-invasive visual examination of the readily accessible, visible, and installed systems and components of the building (listed in Section 4.0 <u>Standards of Practice</u>) moisture, temperature and humidity measurements (refer to Section 4.8 <u>Moisture, Humidity, and Temperature</u>)

mold samples according to the IAC2 Mold Sampling Procedures (refer to Section 5.0 IAC2 Mold Sampling Procedures)

#### The inspector shall report:

moisture intrusion, water damage, musty odors, apparent mold growth, or conditions conducive to mold growth; results of a laboratory analysis of all mold samplings taken at the building; and any system or component listed in Section 4.0 Standards of Practice that were not inspected and the reason(s) they were not inspected.

#### Interior

The inspector shall inspect: A. a representative number of doors and windows by opening and closing them; B. floors, walls and ceilings; C. stairs, steps, landings, stairways and ramps; D. railings, guards and handrails; and E. garage vehicle doors and the operation of garage vehicle door openers, using normal operating controls. II. The inspector shall describe: A. a garage vehicle door as manually-operated or installed with a garage door opener. III. The inspector shall report as in need of correction: A. improper spacing between intermediate balusters, spindles and rails for steps, stairways, guards and railings; B. photo-electric safety sensors that did not operate properly; and C. any window that was obviously fogged or displayed other evidence of broken seals. IV. The inspector is not required to: A. inspect paint, wallpaper, window treatments or finish treatments. B. inspect floor coverings or carpeting. C. inspect central vacuum systems. D. inspect for safety glazing. E. inspect security systems or components. F. evaluate the fastening of islands, countertops, cabinets, sink tops or fixtures. G. move furniture, stored items, or any coverings, such as carpets or rugs, in order to inspect the concealed floor structure. H. move suspended-ceiling tiles. I. inspect or move any household appliances. J. inspect or operate equipment housed in the garage, except as otherwise noted. K. verify or certify the proper operation of any pressure-activated auto-reverse or related safety feature of a garage door. L. operate or evaluate any security bar release and opening mechanisms, whether interior or exterior, including their compliance with local, state or federal standards. M. operate any system, appliance or component that requires the use of special keys, codes, combinations or devices. N. operate or evaluate self-cleaning oven cycles, tilt guards/latches, or signal lights. O. inspect microwave ovens or test leakage from microwave ovens. P. operate or examine any sauna, steam generating equipment, kiln, toaster, ice maker, coffee maker, can opener, bread warmer, blender, instant hot-water dispenser, or other small, ancillary appliances or devices. Q. inspect elevators. R. inspect remote controls. S. inspect appliances. T. inspect items not permanently installed. U. discover firewall compromises. V. inspect pools, spas or fountains. W. determine the adequacy of whirlpool or spa jets, water force, or bubble effects. X. determine the structural integrity or leakage of pools or spas.

The Inspector/s is Not Required and Shall Not Move items of furniture during the Inspection. We here by make note, that any issues concealed and / or not inspected due to the restrictions of any such household items, therefore not included in the final report are advised to be re-inspected at a time and cost agreed by parties involved. With our disclosure being that costing may well total the sum of a secondary report.

#### **Kitchen**

10.1 The inspector shall inspect: F. installed ovens, ranges, surface cooking appliances, microwave ovens, dishwashing machines, and food waste grinders by using normal operating controls to activate the primary function. 10.2 The inspector is NOT required to inspect: G. installed and free-standing kitchen and laundry appliances not listed in Section 10.1.F. H. appliance thermostats including their calibration, adequacy of heating elements, self cleaning oven cycles, indicator lights, door seals, timers, clocks, timed features, and other specialized features of the appliance. I. operate, or con rm the operation of every control and feature of an inspected appliance.

#### **Attic: Ventilation and Insulation**

The inspector shall inspect: A. insulation in unfinished spaces, including attics, crawlspaces and foundation areas; B. ventilation of unfinished spaces, including attics, crawlspaces and foundation areas; and C. mechanical exhaust systems in the kitchen, bathrooms and laundry area. II. The inspector shall describe: A. the type of insulation observed; and B. the approximate average depth of insulation observed at the unfinished attic floor area or roof structure. III. The inspector shall report as in need of correction: A. the general absence of insulation or ventilation in unfinished spaces. IV. The inspector is not required to: A. enter the attic or any unfinished spaces that are not readily accessible, or where entry could cause damage or, in the inspector's opinion, pose a safety hazard. B. move, touch or disturb insulation. C. move,

touch or disturb vapor retarders. D. break or otherwise damage the surface finish or weather seal on or around access panels or covers. E. identify the composition or R-value of insulation material. F. activate thermostatically operated fans. G. determine the types of materials used in insulation or wrapping of pipes, ducts, jackets, boilers or wiring. H. determine the adequacy of ventilation.

#### **Foundation**

The inspector shall inspect: A. the foundation; B. the basement; C. the crawlspace; and D. structural components. II. The inspector shall describe: A. the type of foundation; and B. the location of the access to the under-floor space. III. The inspector shall report as in need of correction: A. observed indications of wood in contact with or near soil; B. observed indications of active water penetration; C. observed indications of possible foundation movement, such as sheetrock cracks, brick cracks, out-of-square door frames, and unlevel floors; and D. any observed cutting, notching and boring of framing members that may, in the inspector's opinion, present a structural or safety concern. IV. The inspector is not required to: A. enter any crawlspace that is not readily accessible, or where entry could cause damage or pose a hazard to him/herself. B. move stored items or debris. C. operate sump pumps with inaccessible floats. D. identify the size, spacing, span or location or determine the adequacy of foundation bolting, bracing, joists, joist spans or support systems. E. provide any engineering or architectural service. F. report on the adequacy of any structural system or component.

#### **Heating**

The inspection of the heating system is in conjunction with the NZS4306:2005 Residential Property Inspection Standard guidelines. According to the guidelines, the home inspector will inspect the installed heating equipment, the vent systems, flues and chimneys where readily accessible.

#### **Roof**

The inspector shall inspect from ground level or the eaves: A. the roof-covering materials; B. the gutters; C. the downspouts; D. the vents, flashing, skylights, chimney, and other roof penetrations; and E. the general structure of the roof from the readily accessible panels, doors or stairs. II. The inspector shall describe: A. the type of roof-covering materials. III. The inspector shall report as in need of correction: A. observed indications of active roof leaks. IV. The inspector is not required to: A. walk on any roof surface. B. predict the service life expectancy. C. inspect underground downspout diverter drainage pipes. D. remove snow, ice, debris or other conditions that prohibit the observation of the roof surfaces. E. move insulation. F. inspect antennae, satellite dishes, lightning arresters, de-icing equipment, or similar attachments. G. walk on any roof areas that appear, in the inspectors opinion, to be unsafe. H. walk on any roof areas if doing so might, in the inspector's opinion, cause damage. I. perform a water test. J. warrant or certify the roof. K. confirm proper fastening or installation of any roof-covering material.

#### **Exterior**

The inspector shall inspect: A. the exterior wall-covering materials, flashing and trim; B. all exterior doors; C. adjacent walkways and driveways; D. stairs, steps, stoops, stairways and ramps; E. porches, patios, decks, balconies and carports; F. railings, guards and handrails; G. the eaves, soffits and fascia; H. a representative number of windows; and I. vegetation, surface drainage, retaining walls and grading of the property, where they may adversely affect the structure due to moisture intrusion. II. The inspector shall describe: A. the type of exterior wall-covering materials. III. The inspector shall report as in need of correction: A. any improper spacing between intermediate balusters, spindles and rails. IV. The inspector is not required to: A. inspect or operate screens, storm windows, shutters, awnings, fences, outbuildings, or exterior accent lighting. B. inspect items that are not visible or readily accessible from the ground, including window and door flashing. C. inspect or identify geological, geotechnical, hydrological or soil conditions. D. inspect recreational facilities or playground equipment. E. inspect seawalls, breakwalls or docks. F. inspect erosion-control or earth-stabilization measures. G. inspect for safety-type glass. H. inspect underground utilities. I. inspect underground items. J. inspect wells or springs. K. inspect solar, wind or geothermal systems. L. inspect swimming pools or spas. M. inspect wastewater treatment systems, septic systems or cesspools. N. inspect irrigation or sprinkler systems. O. inspect drain fields or dry wells. P. determine the integrity of multiple-pane window glazing or thermal window seals. The inspection of this home's exterior system is carried out in conjunction with the NZS4306:2005 Residential Property Inspection Standard.

According to the guidelines, the home inspector will inspect the exterior wall covering, flashing and trim; all exterior doors, attached decks, balconies, stoops, steps, porches, and their associated railings; the eaves, soffits, and fascias where accessible from ground level; the vegetation, grading, surface drainage, and retaining walls on the property when any of these are likely to adversely affect the building; walkways, patios, and driveways leading to dwelling entrances. The inspector will describe the exterior wall covering. The home inspector is not required to inspect screening, shutters, awnings, and similar seasonal accessories; fences; geological, geo-technical or hydro-logical conditions; recreational facilities; outbuildings; seawalls, break-walls, and docks; erosion control and earth stabilization measures.

See the NZS4306:2005 Residential Property Inspection Standard for more detail.

While every effort is made to find all areas of concern, some problems may go unnoticed. The inspection is not meant to be technically exhaustive. Please keep in mind that the inspector has your best interest at heart. Any repair items mentioned in this report should be considered before purchase. It is highly recommended that qualified contractors be used to further inspect or repair issues identified in this inspection report.

Gutters, downspouts, lot grading, window wells, walks, patios, driveways and landscaping all contribute to basement leakage. Basements can leak even if cracks are not visible. That being said, a basement, which is not leaking today, may leak at any time for any number of reasons.

This inspection is not a guarantee that the basement will never leak.

Fascia and soffits are generally inaccessible and not fully visible. Often, this area is prone to concealed rot, insect and pest damage.

#### **Electrical**

The inspector shall inspect: A. the service drop; B. the overhead service conductors and attachment point; C. the service head, gooseneck and drip loops; D. the service mast, service conduit and raceway; E. the electric meter and base; F. service-entrance conductors; G. the main service disconnect; H. panelboards and over-current protection devices (circuit breakers and fuses); I. service grounding and bonding; J. a representative number of switches, lighting fixtures and receptacles, including receptacles observed and deemed to be arc-fault circuit interrupter (AFCI)-protected using the AFCI test button, where possible; K. all ground-fault circuit interrupter receptacles and circuit breakers observed and deemed to be GFCIs using a GFCI tester, where possible; and L. smoke and carbon-monoxide detectors. II. The inspector shall describe: A. the main service disconnects amperage rating, if labelled; and B. the type of wiring observed. III. The inspector shall report as in need of correction: A. deficiencies in the integrity of the service entrance conductors insulation, drip loop, and vertical clearances from grade and roofs; B. any unused circuit-breaker panel opening that was not filled; C. the presence of solid conductor aluminium branch-circuit wiring, if readily visible; D. any tested receptacle in which power was not present, polarity was incorrect, the cover was not in place, the GFCI devices were not properly installed or did not operate properly, evidence of arcing or excessive heat, and where the receptacle was not grounded or was not secured to the wall; and E. the absence of smoke detectors. IV. The inspector is not required to: A. insert any tool, probe or device into the main panelboard, sub-panels, distribution panelboards, or electrical fixtures. B. operate electrical systems that are shut down. C. remove panelboard cabinet covers or dead fronts. D. operate or re-set over-current protection devices or overload devices. E. operate or test smoke or carbon-monoxide detectors or alarms F. inspect, operate or test any security, fire or alarms systems or components, or other warning or signaling systems. G. measure or determine the amperage or voltage of the main service equipment, if not visibly labeled. H. inspect ancillary wiring or remote-control devices. I. activate any electrical systems or branch circuits that are not energized. J. inspect low-voltage systems, electrical de-icing tapes, swimming pool wiring, or any time controlled devices. K. verify the service ground. L. inspect private or emergency electrical supply sources, including, but not limited to: generators, windmills, photovoltaic solar collectors, or battery or electrical storage facility. M. inspect spark or lightning arrestors. N. inspect or test de-icing equipment. O. conduct voltage-drop calculations. P. determine the accuracy of labeling. Q. inspect exterior lighting.

#### **Plumbing**

The inspection of the plumbing system is in conjunction with the NZS 4306:2005 Residential Property Inspection Standard guidelines. According to the guidelines, the home inspector will inspect the interior water supply and distribution systems including all fixtures and faucets, the drain, waste and vent systems, the water heating equipment, the flues and chimneys where applicable, the fuel storage and fuel distribution systems where applicable and the drainage sumps, sump pump and related piping.

The inspector will describe the water supply, drain, waste and vent piping materials, the water heating equipment including the energy source, and the location of the main water and fuel shut-off valves.

The home inspector shall operate the systems using normal operating controls. Safety and shut-off controls (eg. valves), whether automatic or manual, are not tested because these controls are rarely used by the homeowner (other than in an emergency) and activating these safety controls could damage the controls or equipment (usually by leaking).

The inspector will open readily accessible panels provided by the equipment manufacturer or installer for routine maintenance by the homeowner.

The home inspector is not required to inspect the interiors of flues or chimneys which are not readily accessible, the clothes washing machine connections, wells, well pumps, or water storage related equipment, water conditioning systems, solar water heating systems, fire or lawn sprinkler systems, or private waste disposal systems. (Septic tank).

The inspector is not required to determine whether water supply and waste disposal systems are public or private, or the quantity or quality of the water supply.

See the NZS 4306:2005 Residential Property Inspection Standard for more detail.

While every effort is made to find all areas of concern, some problems may go unnoticed. The inspection is not meant to be technically exhaustive. Please keep in mind that the inspector has your best interest at heart. Any repair items mentioned in this report should be considered before purchase. It is highly recommended that qualified contractors be used to further inspect or repair issues identified in this inspection report.