

Thermal Imaging Inspection Report



CHRISTCHURCH INDEPENDENT
THERMAL IMAGING SERVICES

Moisture & Leak Investigations
Thermal Imaging Building Inspections
Pre Purchase & Pre Sale Thermal Imaging Building Inspections
COV & Annual Electrical Equipment Verification & Inspections
Certified Switchboard Thermal Surveys
Energy Efficiency Assessments

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VISUAL NON-INVASIVE THERMAL IMAGING PROPERTY CHECK



10 Thomas Lane, Rangiora

ADDRESS	10 Thomas Lane, Rangiora
CLIENT	Simon & Vicki Ensor
INSPECTION DATE	12pm Thursday 2 nd July 2026
Vendors' INSURANCE	N/A
INSPECTION INSTRUCTIONS	Visual Non-Invasive Thermal Imaging Inspection

Interior Walls and Exterior Cladding		
WALL LININGS	A specified interior check was carried out using an E8 FLIR Thermal imaging camera. Moisture readings throughout the house were in the dry to marginal zone where tested. Please be aware that readings on the Trotec meter, as shown in the image gallery, need to be understood as follows: 40 or below = Dry/normal range 40-80 = Moderate moisture levels (ongoing monitoring recommended regardless of the reasons suggested for the levels in the report) Above 80 = High moisture range.	
EXTERIOR WALLS	A visual and thermal examination and image coverage was carried out on multiple sections of the external walls and nothing untoward was identified with the technology used. Cracks to cladding were noted in areas on the south gable, below the meter box, and the north gable. Note: Results can vary and/or be skewed by different material and cladding types and the effects of prevailing weather conditions.	

N.B. Moisture testing
The tester used is a Trotec T660 Moisture Tester
This meter measures the moisture content of wood from up to 40mm deep. On this particular meter readings between 0 and 40 are considered dry. Readings from 40 to 80 are considered marginal and 80 and above is high levels of possible moisture.
It is up to clients to arrange an invasive inspection if they consider it necessary which may require the removal of linings etc. to confirm, prove or disprove the actual situation.
Independent Thermal Imaging Services cannot prove dampness or wetness. This can only be done by directly and invasively checking which is not the purpose of our report.
All moisture testing is done with care and experience as to where and what should be checked.
The ' Trotec T660 ' is regarded as a reputable non-invasive moisture meter.

General Comments and Conclusion

The purpose of our inspection, using a recognised quality thermal imaging camera, was to carry out an interior and exterior thermal imaging check to establish if any temperature/moisture issues were able to be detected by the highly regarded FLIR E8 thermal imaging camera used. Walls and ceilings in selected locations throughout the house were tested.

Over 400 thermal images and extensive moisture readings were taken at the property then analysed. A selection of images has been included in the body of this report, some may have been commented on. Please always read this report in conjunction with the builder's report if one is available.

Thermal imaging and non-invasive moisture testing were clear at the time of inspection, with no thermal anomalies or elevated moisture readings identified internally where tested.

Some cracking was noted externally to the cladding, including areas on the south gable, below the meter box, and the north gable. These areas should be sealed, monitored, and maintained as part of normal exterior maintenance to reduce the risk of future moisture ingress. Ongoing maintenance of cladding cracks, sealants, penetrations, joinery junctions, and exterior paint coatings remains important, particularly with this style of cladding.

NB: Non-invasive thermal imaging and moisture testing can assist in identifying areas of elevated moisture and potential concern; however, they cannot definitively confirm moisture ingress into framing or concealed building elements. If a property is occupied and or furnished at the time of inspection, some areas may have been concealed by furniture, stored items, window coverings, fixtures, or personal possessions. These items are not moved as part of this inspection, and therefore some wall, floor, ceiling, or junction areas may not have been fully accessible for assessment. Where there is uncertainty, or where confirmation of moisture ingress into framing is required, this can only be established

through further specialist assessment, such as a weathertightness inspection and/or targeted invasive investigation. If concerns remain following a weathertightness inspection, targeted invasive testing may be recommended to confirm the condition of concealed framing and to guide any required remedial work.

G. DUVAL

Certified Infrared Thermographer

Certificate No. ITP 23-08-1826

Independent Thermal Imaging Services

0800 653 123

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N.B. Please read this report in conjunction with **Note / Disclaimer**, the final page of this report.

PHOTO GALLERY

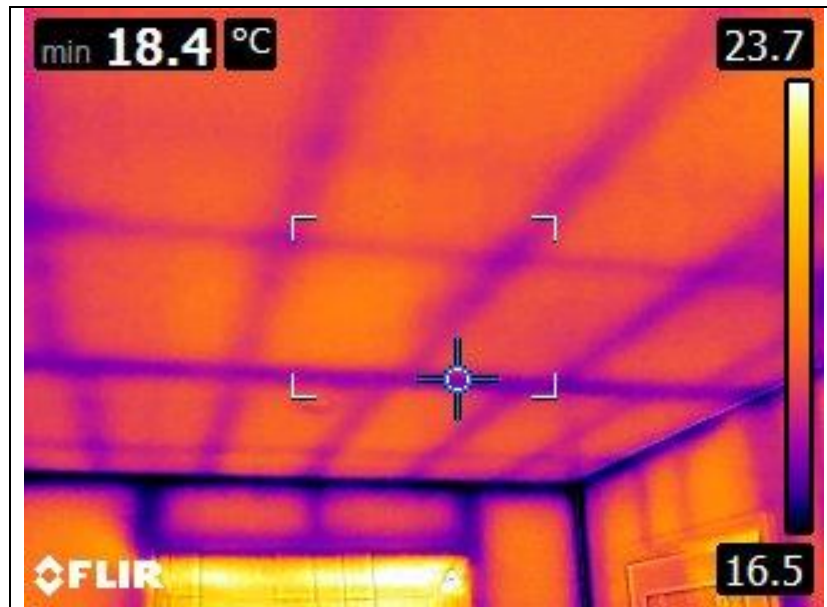
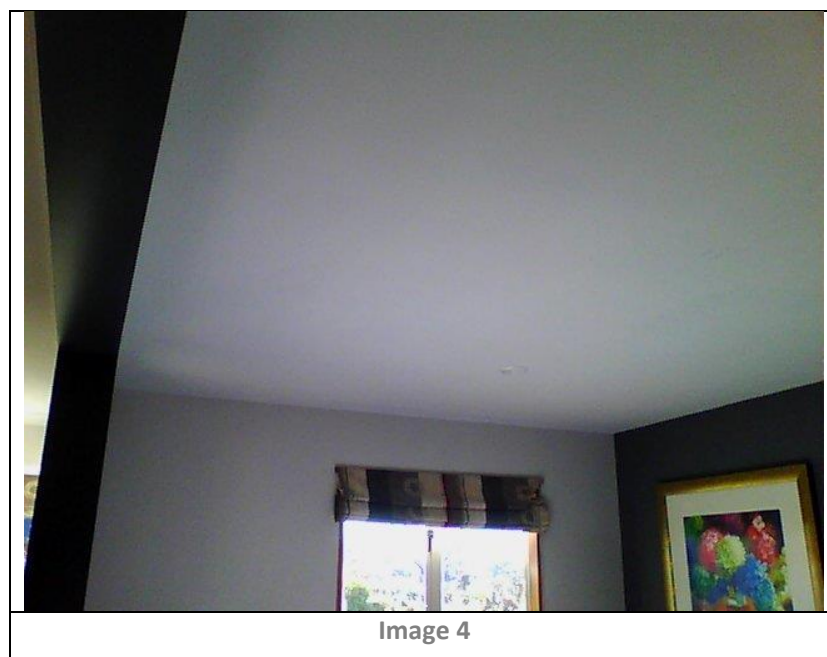
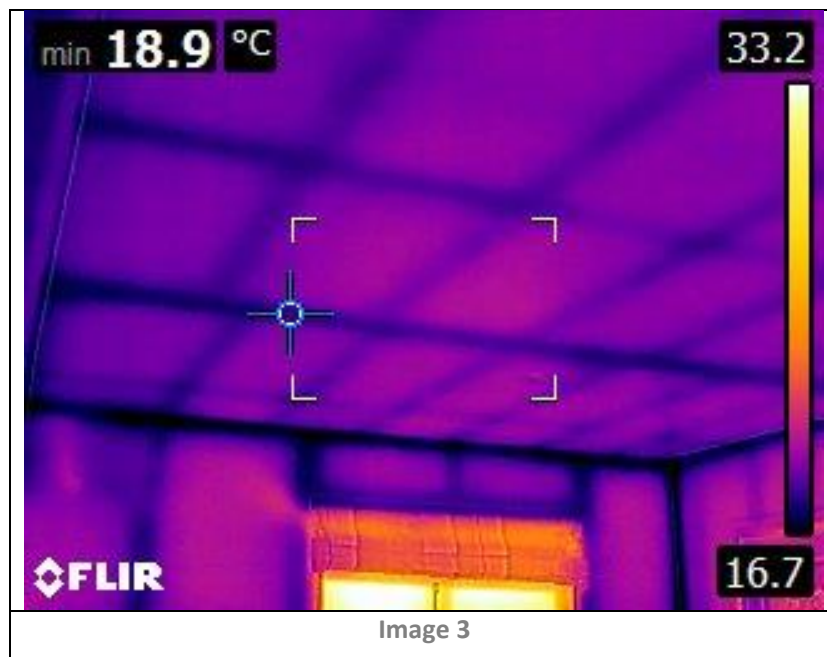


Image 1



Image 2



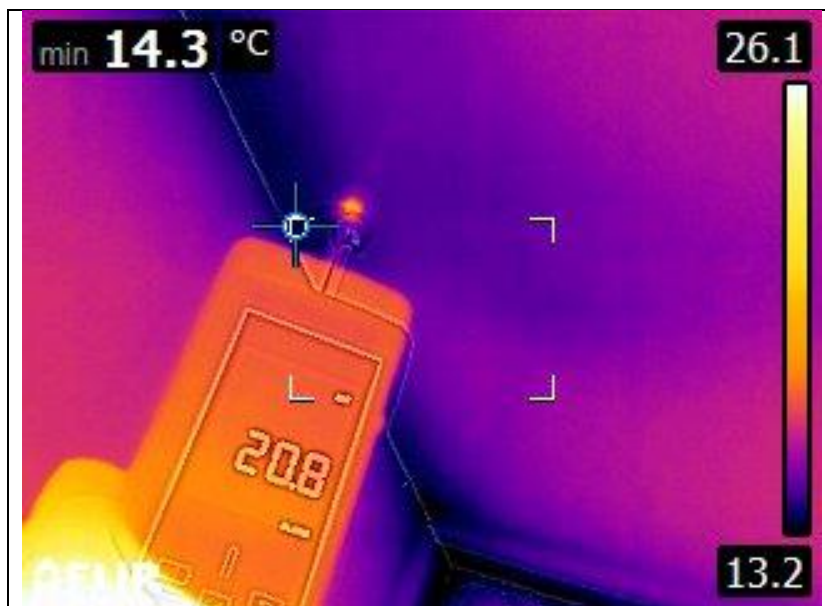
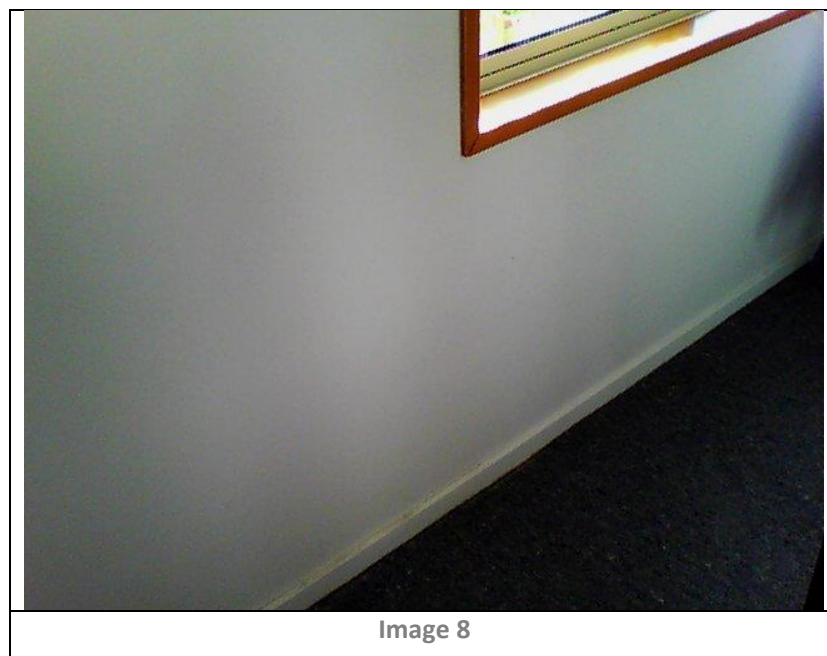
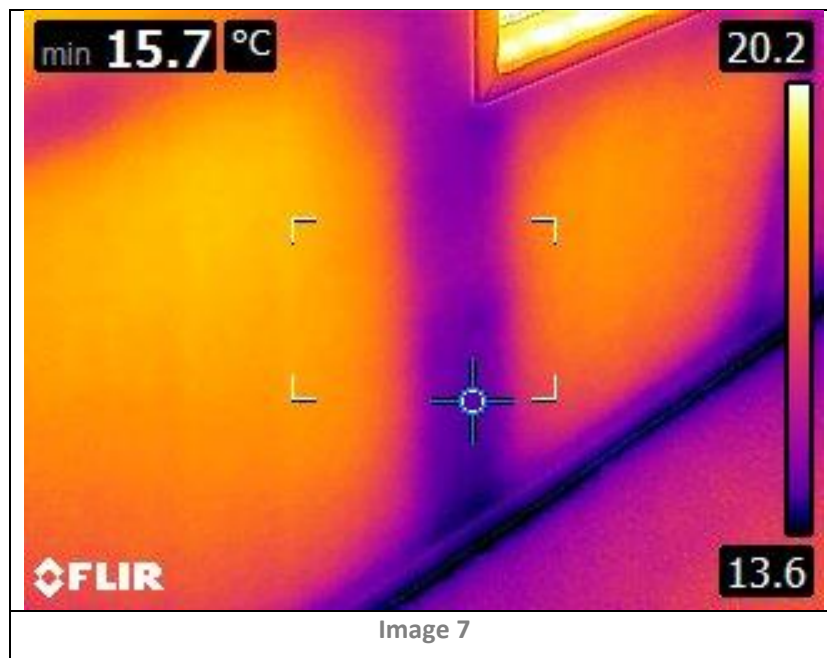
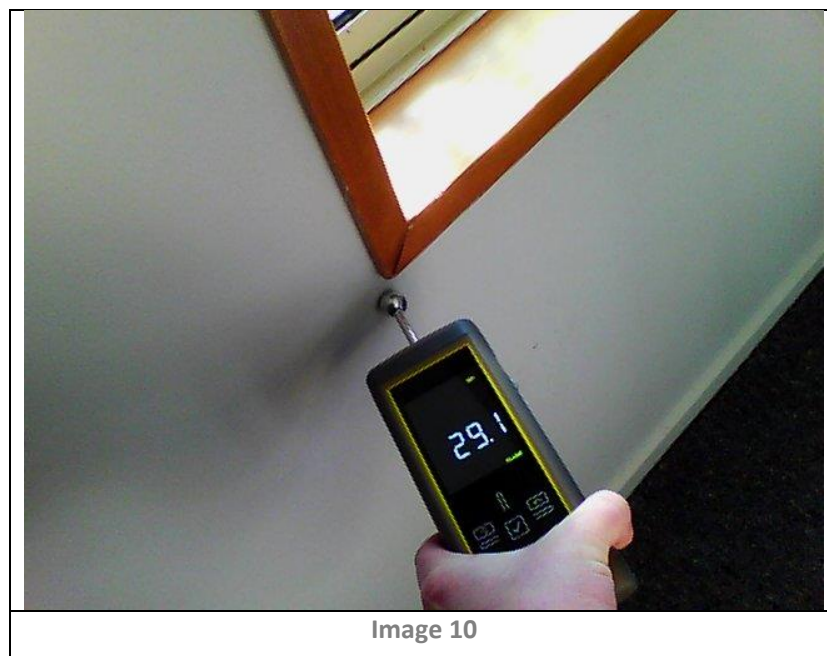
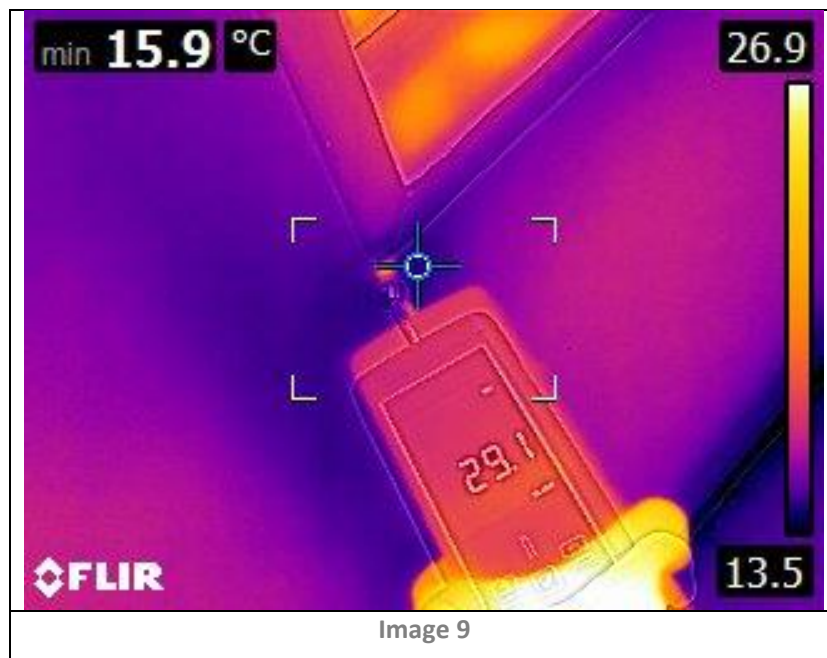


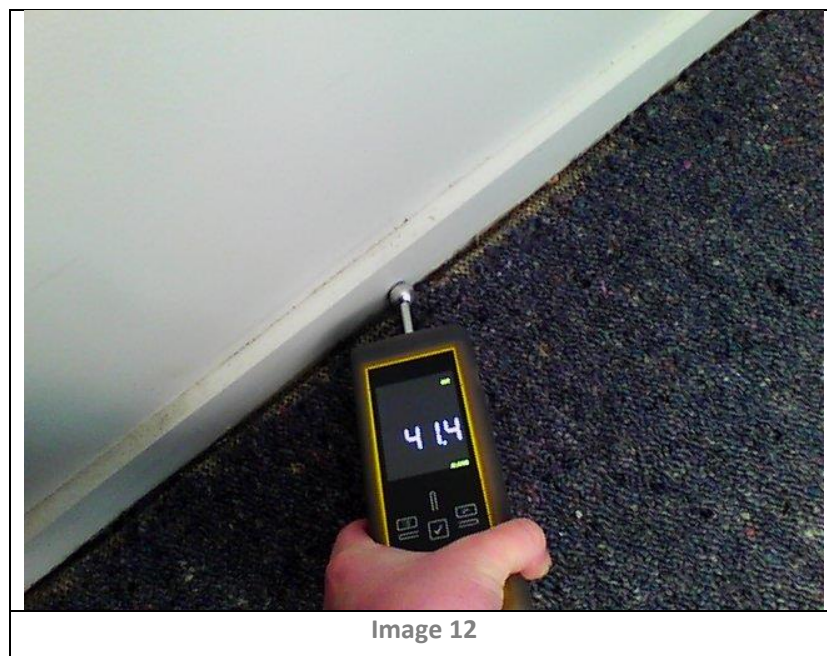
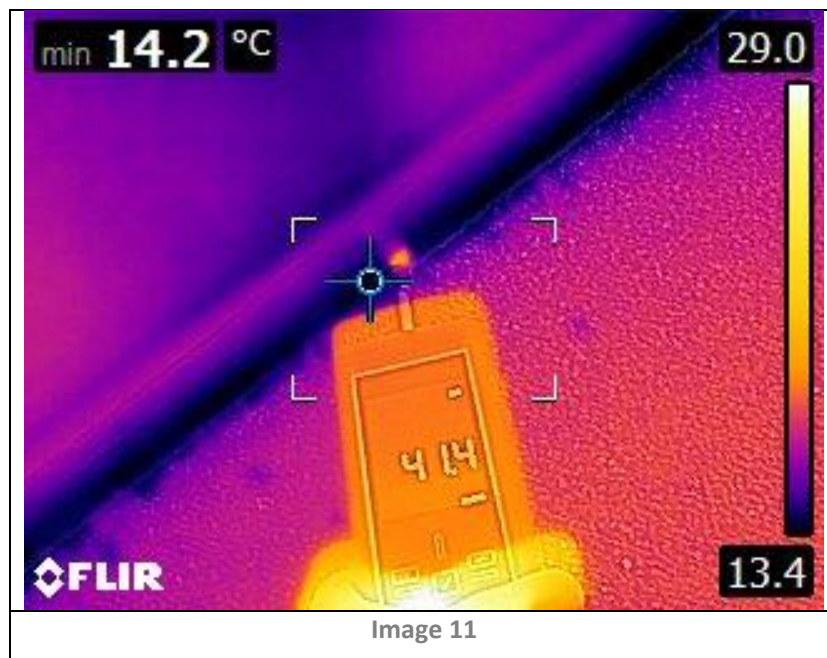
Image 5 - All accessible suspicious darker areas identified on thermal images were double checked with our moisture meter to ensure they were not returning elevated readings.

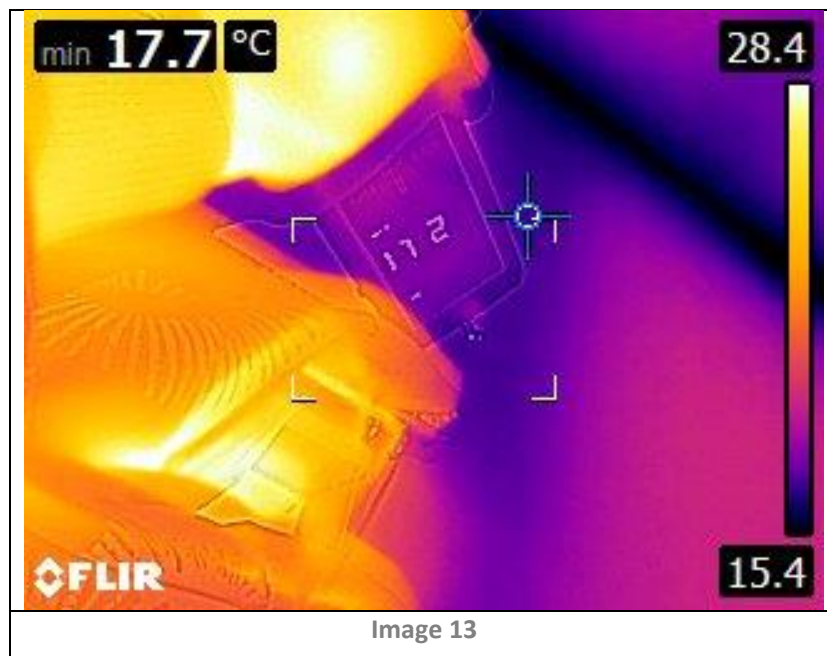


Image 6









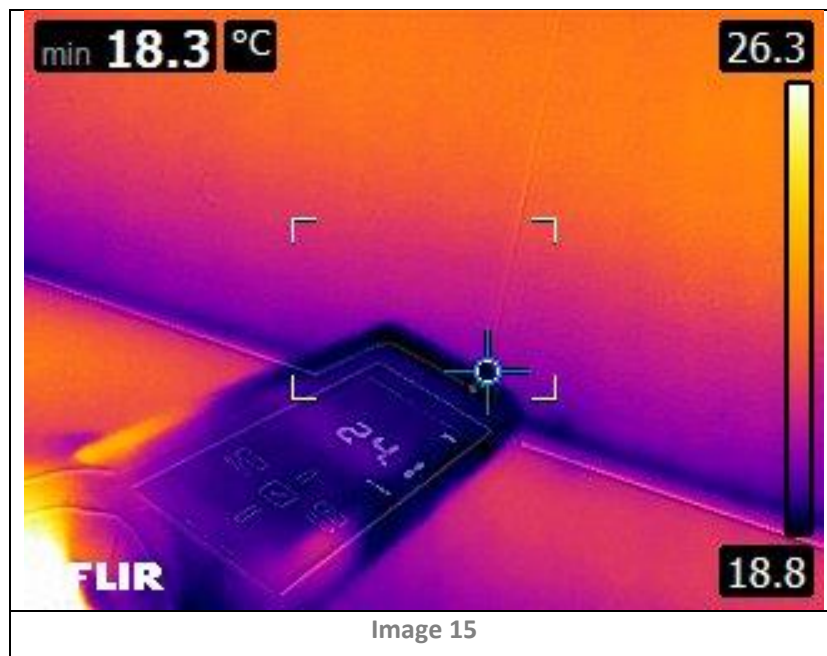




Image 17

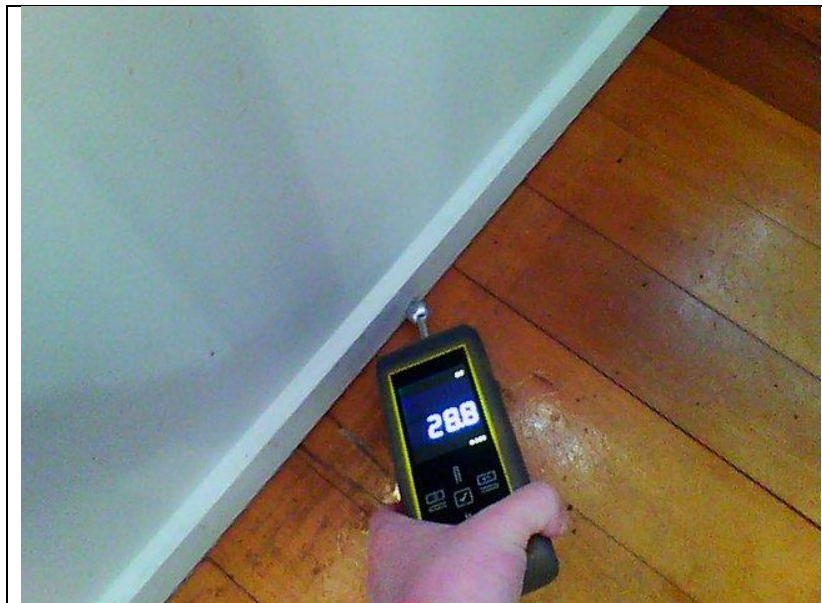


Image 18



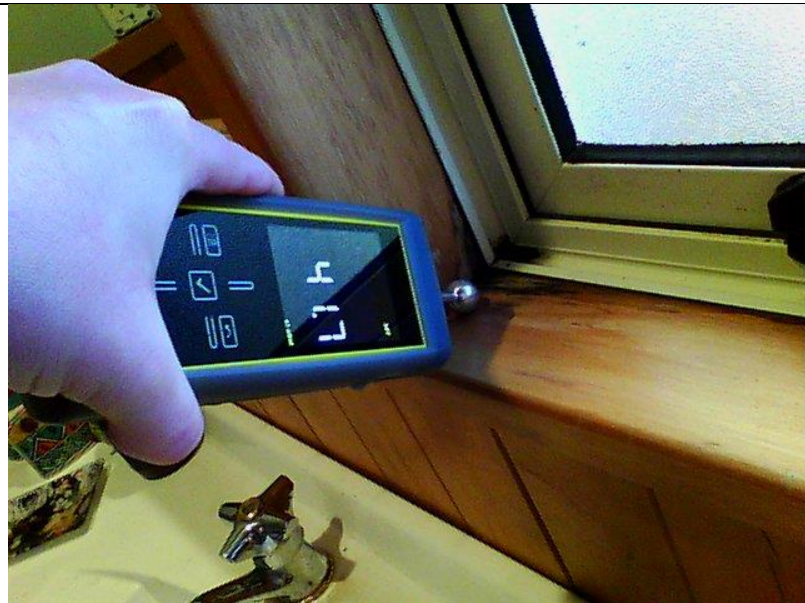


Image 21

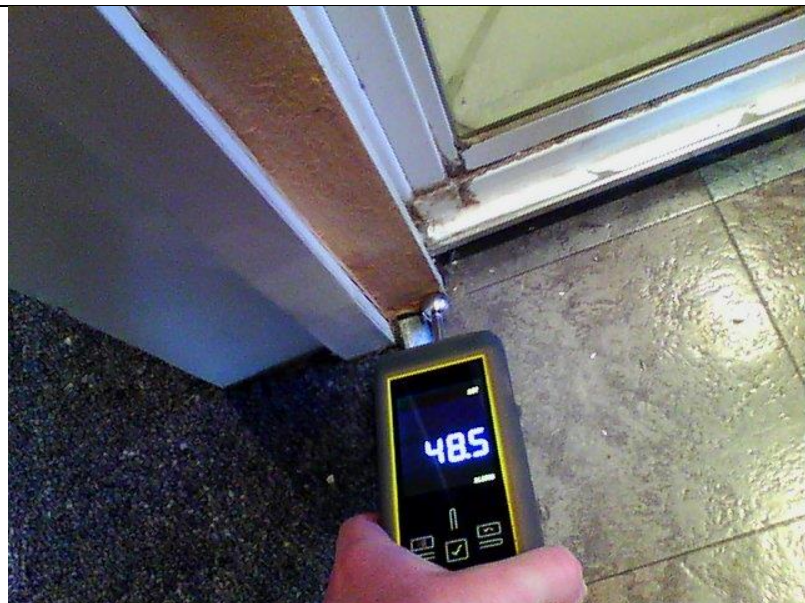


Image 22

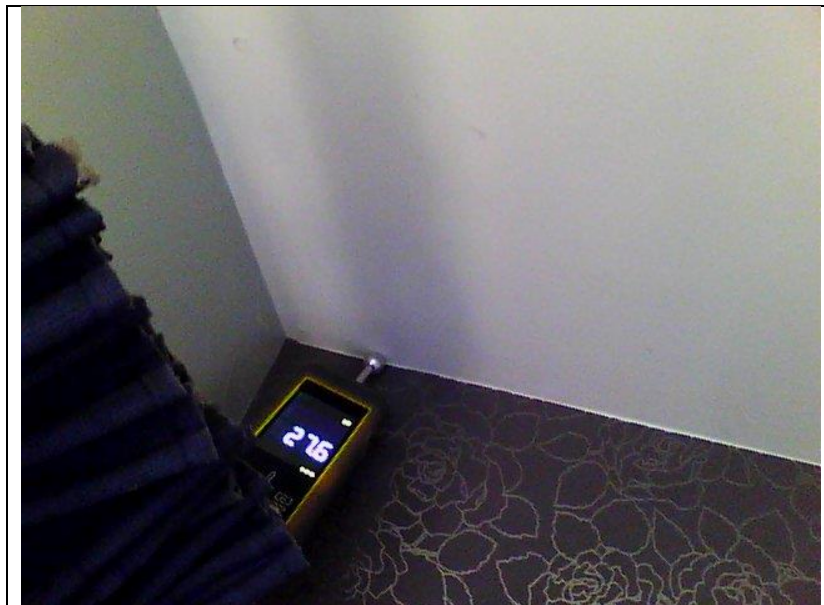


Image 23



Image 24

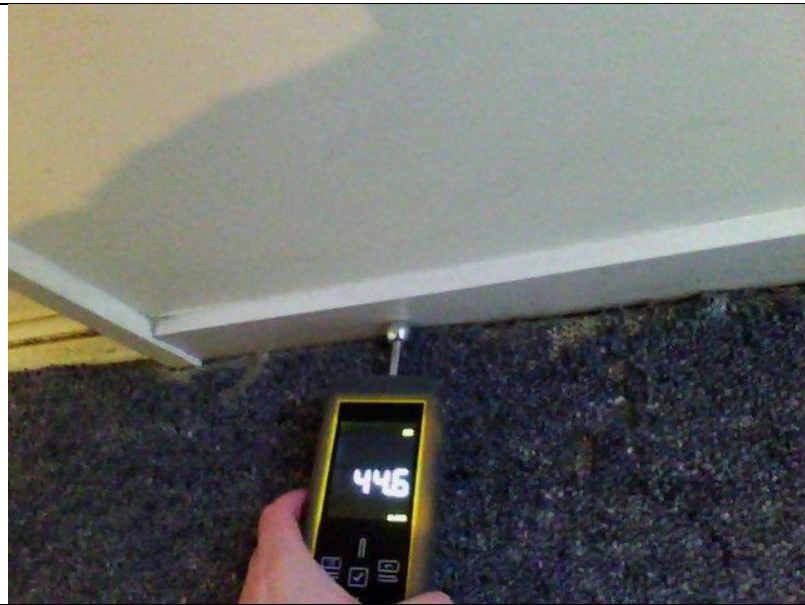


Image 25



Image 26

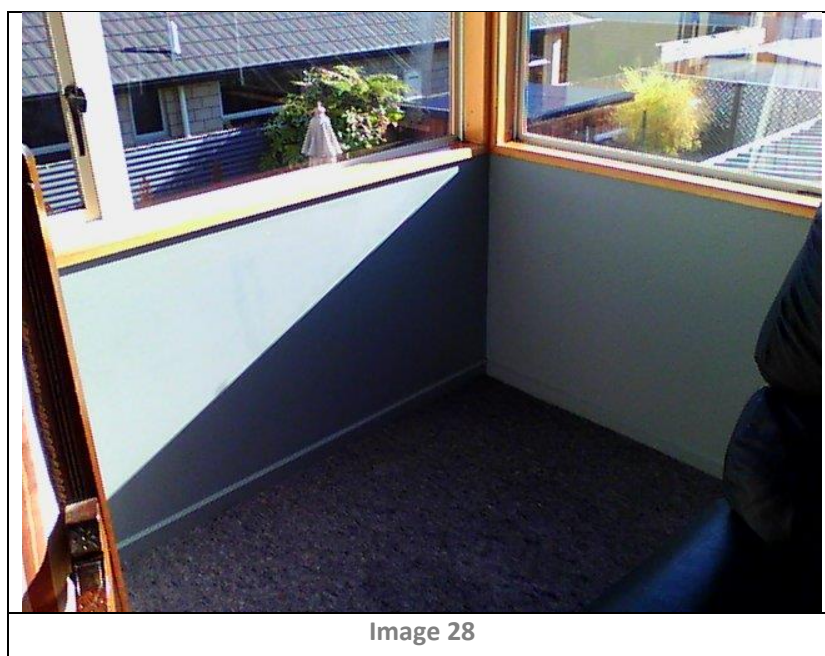
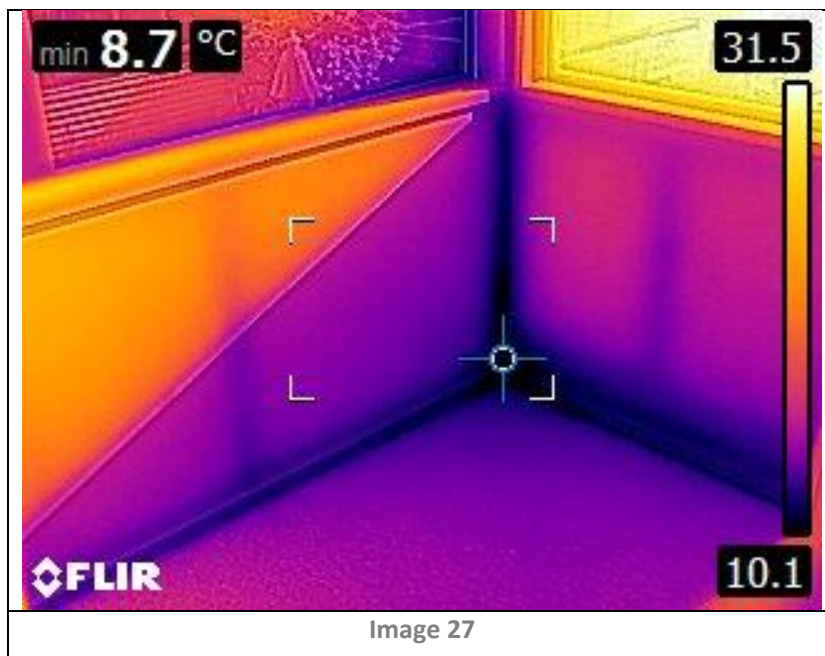




Image 29



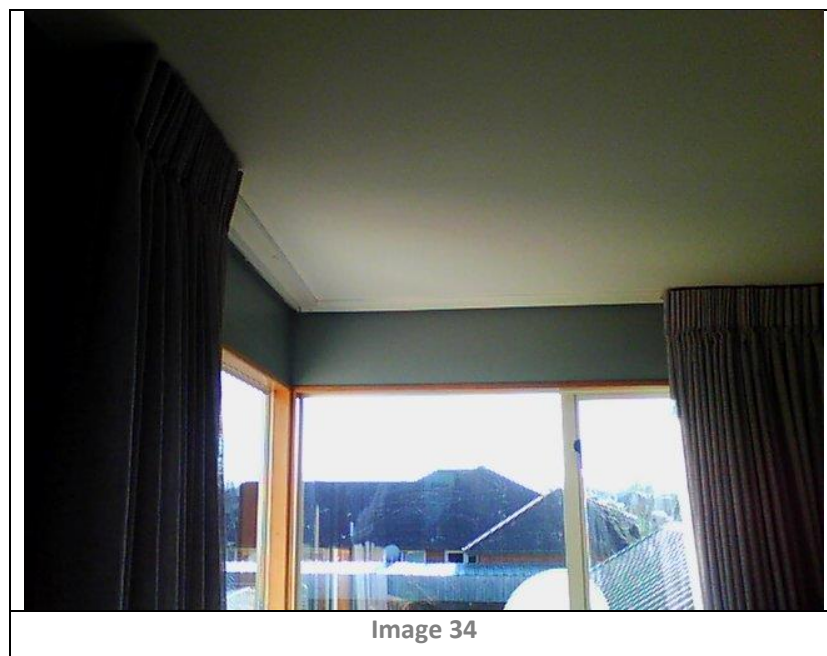
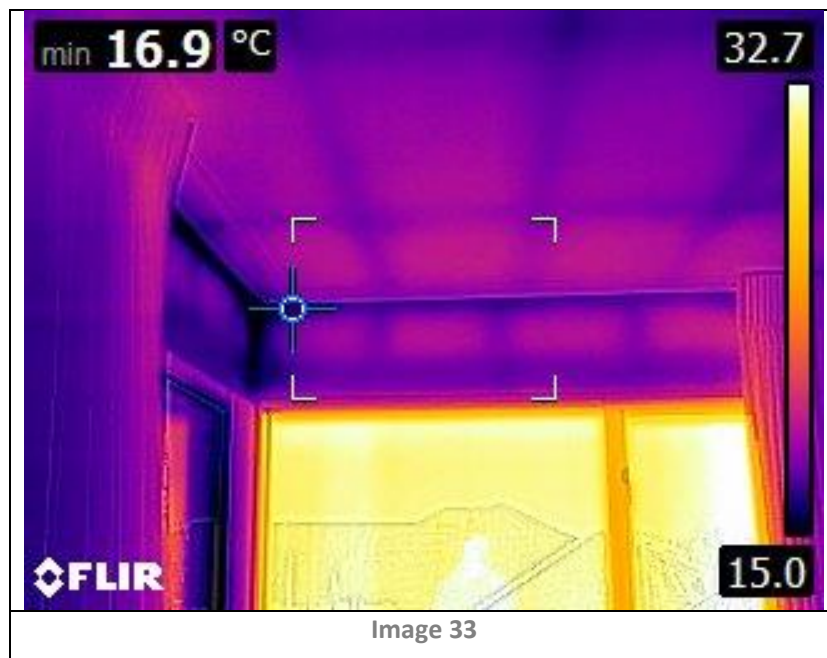
Image 30

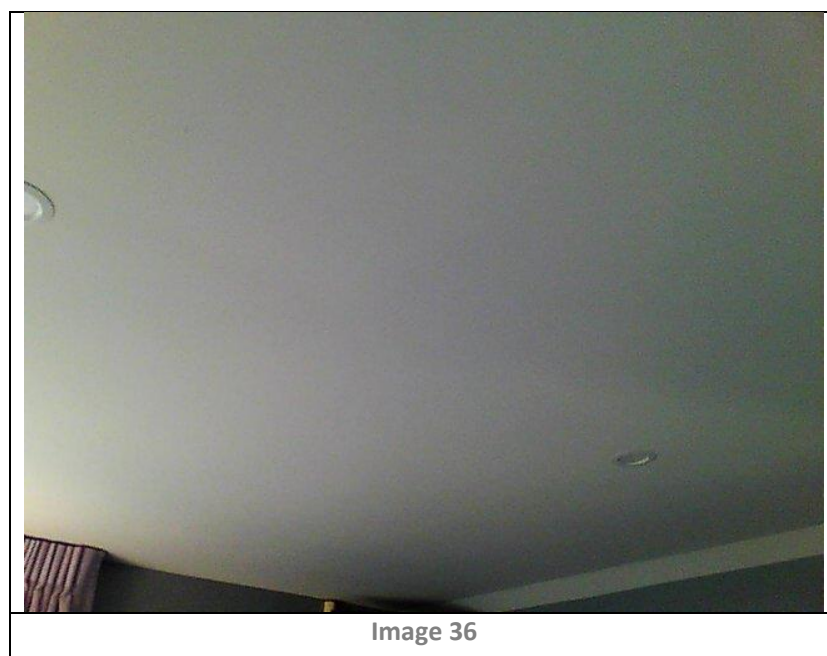
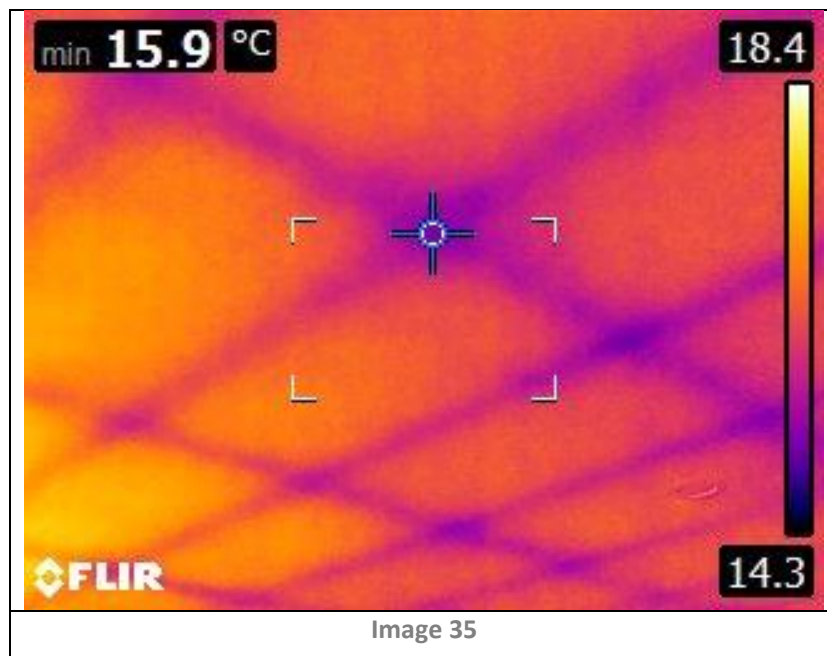


Image 31



Image 32





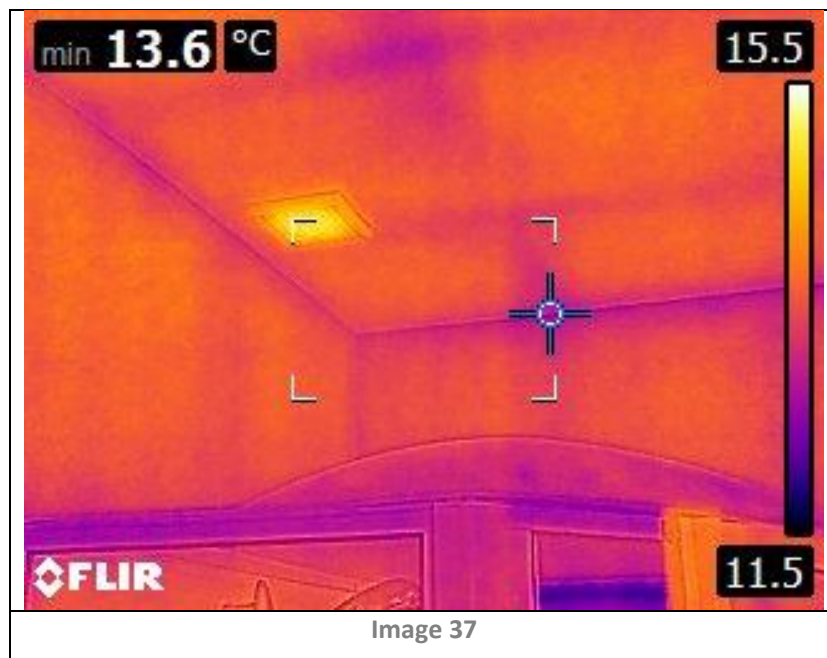




Image 39

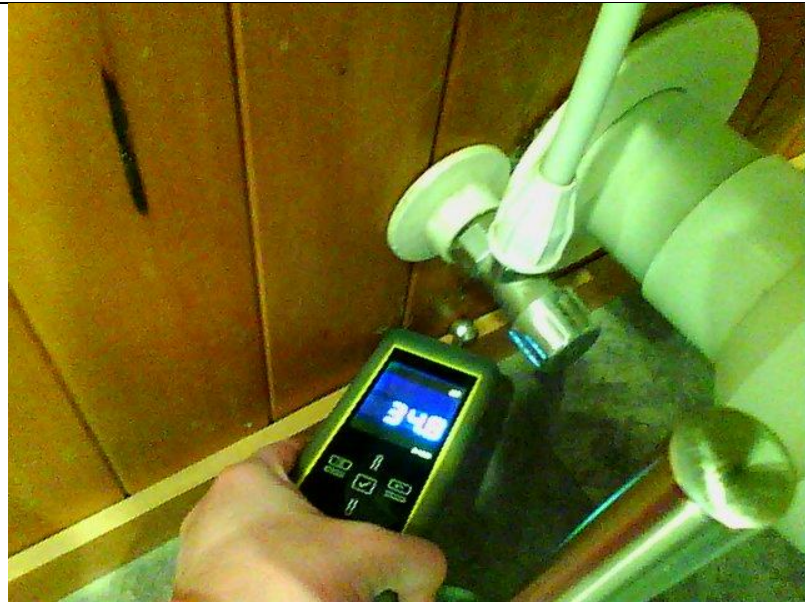


Image 40

IMPORTANT NOTE/DISCLAIMER

Please note: **This report is a non-invasive visual inspection report and not a structural report.** This report does not seek to address the structural integrity of the buildings on the property or provide authoritative advice on structural matters. If the commissioner of this report has concerns regarding the structural issues a separate report should be obtained from a professional structural engineer.

This report excludes asbestos testing which is beyond the scope of this inspection; we have no expertise in this specialised area and we do not advise on whether there is asbestos present in the dwelling. Tests can be arranged for you by contacting the New Zealand based companies listed in the Yellow Pages if there is any reason to suspect the presence of asbestos.

This inspection excludes chattels and all floor coverings although our Inspector may choose to make an observation if there are any obvious or apparent defects

The inspection of electrical components, plumbing and drainage has not been carried out by a registered person and is a visual inspection of these aspects only. Appliances including stoves, ovens, heat pumps, night stores and other are tested by simply switching on and there is no guarantee that such electrical appliances are operating correctly. The purchaser is advised to seek assurances from the real estate salesperson/agent or directly from the vendor as to the status of all appliances in the home.

Since the inception of the Building Act 1991, Councils can no longer issue retrospective building permits.

The legal boundaries information is shown on the Certificate of Title that your solicitor or the listing agent will supply. Independent Thermal Imaging Services accepts no liability for the accuracy of any boundary lines or the position of fences. Independent Thermal Imaging Services accepts no liability that any alterations or renovations comply with building permits or consents issued or for any defects concealed, unable to be seen or evident.

At all times clients should rely on their own judgment when purchasing a property.

This report is based on a non-invasive inspection (thermal) of the aspects mentioned in the report and applies to the property at the date of inspection only. **No liability is accepted for areas within the house and on the property not inspected for whatever reason including because of inadequate or blocked access or where areas are obscured with occupier's personal effects, furniture etc.**

It is important to note that Infrared Imaging is not capable of confirming the presence of moisture or mould. Infrared cameras detect thermal patterns that may be associated with moisture. A traditional moisture meter is used to confirm what Infrared "sees".

We can only infer that a location is likely wet using a thermal imaging camera and this is why we employ, wherever deemed necessary, a backup check with a Trotec T660 moisture meter to confirm the presence of moisture. However, no method is entirely conclusive and we can simply interpret the images we see and rely on the moisture meter readings taken to make determinations.

No liability can be accepted for defects, faults or sub-standard workmanship or illegal alterations that are covered by various materials and/or cladding or underground services. No liability can be accepted for any weather-tightness or watertightness issues affecting the building or for Independent Thermal Imaging Services failing to identify any ingress of moisture/water issues.

With claddings such as Polystyrene and Monolithic or similar, including roughcast over other cladding like weatherboards, block etc, or where there may be no cavity between the cladding and the framing we are unable to determine conclusively that moisture ingress has not occurred and will not do so in the future. Homes classed or categorized as "Leaky Homes" require an invasive inspection to conclusively determine issues relating to weather and watertightness and our own findings are limited to what can be determined by a visual, non-invasive inspection, the images the camera reflects and our interpretation of those images. Clients are advised to proceed to an invasive inspection, which may require the removal of linings or cladding for absolute confirmation of the status of their properties with respect to these weather/water issues. There is also no guarantee where houses are built in high wind zone areas or when there is heavy rain and winds that the house will not leak.

The inspection of showers is limited to testing only using the provided shower rose or hand-held rose from outside the shower which limits the ability to find leaks.

Work carried out before the implementation of the Building Act 1991 would have been subject to the issuing of the necessary permits by the appropriate Local Body and would have been the responsibility of the owner at the time.

Independent Thermal Imaging Services limits its responsibility to the client who commissioned this report only for their own use or for general maintenance/repairs and not to any third party including any vendors or proposed purchasers.

A Land Information Memorandum from the Council may not disclose unauthorised work but this document should contain Building Consents or permits for any additions or alterations that may have occurred over the life of the residence. Your solicitor normally obtains a copy from the Council on your behalf.

If we may be of further assistance, please do not hesitate to contact our office. Thank you for the opportunity to provide our service to you.

Phillip Duval

General Manager

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