

## TE WHAKAMAU PŪNGAO ENERGY EFFICIENCY

### MĀ MĀTOU KOE E AWHI. WE CAN HELP YOU.

I tēnei ao hurihuri he mahi whakahirahira te whakamau pūngao. Mehemea ka whakauru koe i ngā matapihi, ngā tatau hoki ahakoa te kounga o ēnei rauemi, ka mōumou tonu te pūngao mai i tō whare.

Mā tō mātou mahi, ka kitea e koe ngā hua, hei rongoa mō tō whānau, mō tō whare hoki.

Ngā āuatanga ārai kāore i te pai, ngā āputa mai i ngā kōrere me ngā pūahatanga, te haumākū ki rō whare me ērā atu o ngā take nunui, me kī ngā raru ka pāngia e ngā matapihi o te whare, ngā tatau hoki. Mā ēnei raru katoa ka makariri, ka noho mōrearea te whānau katoa.

In today's market place energy efficiency is a buzz word for almost any project. Even if you put in the best windows and doors, you can still be losing the energy battle in other areas of the home.

Through our testing services you can see what other issues you may be having.

Bad insulation, gaps around pipes and outlets, moisture penetration and other issues can make your door and window installation look like it is not performing to expectations.

### HE KŌRERO WHAKAMĀRAMA. ABOUT US.

Kua whitu tau inaiānei a Malcolm Pasley e mahi ana i tēnei momo mahi. He pouako ia i tēnei mahi te Mātātuhi ngāwhā, arā te mahi pōkākā. Kua whiwhi a ia i tana tohu taumata tahi (i tēnei mahi) mai i te "Infrared Training Center-Kura hīhī pōkākā" i Huītene (Sweden). Mai i te tau rua mano tekau mā wha kua whakamahi a ia i tētahi taputapu whakahirahira anō, ko te "Blower door testing"- Te whakamātau tatau mā te pūpuhi, nō Kānata (Canada) tēnei rauemi nā te kamupene o "Retrotec". I eke Tangaroa ia, ā, i whiwhi i tana tohu taumata tahi me te tohu taumata rua. He mema hoki a Malcolm i te roopu "International Passive House Association" he kamupene nō Ūropi (Europe) he kamupene nō te ao nui. E āhei ana koe te hoko i ngā rauemi nei mai i Aotearoa whānui hoki.

He tohu Kāmura hoki tōna, ā, he nui ōna mātauranga me ōna pūknega i tēnei mea te Blower door testing, te arotake mākū me te Thermography.

Malcolm Pasley has several years' experience as a trained specialist in the use of Thermal Imaging known as Thermography, and has Level One training from the "Infrared Training Centre", based in Sweden. Also since 2014 he has integrated another powerful diagnostic tool, the "Blower Door Testing" technology developed by Canadian giant "Retrotec" and passed their required Level 1 and 2 qualifications.

Malcolm is also a member of the "International Passive House Association" a European based international organisation with a sales/standards branch in New Zealand.

Malcolm has a background in building maintenance and a wide range of experience in Thermography, Blower Door Testing and moisture detection.

### MĀTĀTUHI NGĀWHĀ. THERMAL IMAGING.

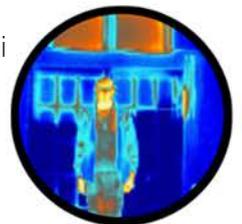
Ka whakatutuki i te mātātuhi ngāwhā mai i tētahi kāmera, ko tētahi anō mahi o tēnei kāmera ka whakamahi hīhī autōhiko, ā, ka tāea hoki te pūngao pōkākā. Mā tēnei mahi ka kitea kei whea ngā wāhi o te whare e ngaro haere ana te pōkākā. He nui ngā wāhi o te whare ka pēnei mai, atu i ngā matapihi me ngā tatau.

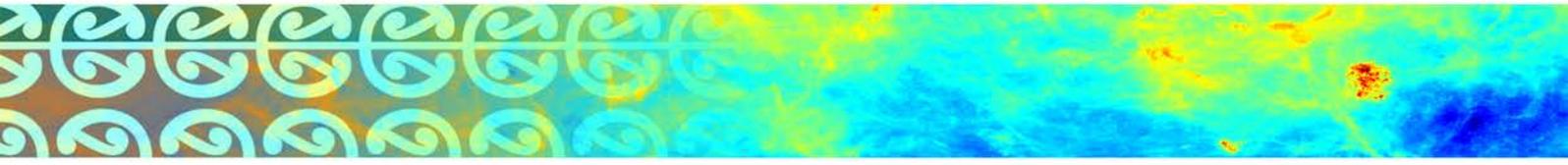
Ko tā mātou mahi ka arotake i tō whare i mua i te hokonga he "arotakenga ngāwhā me te arotakenga mākū (thermal inspections and moisture surveys) ka noho pūmau ēnei momo whakahaerenga i Whakatū. Engari ka hokona atu ētahi o ngā toa o te takiwā nei.

Thermal Imaging is performed with an infra-red heat sensitive camera that clearly shows areas where heat is escaping.

There are many areas of a home that lose vast amounts of energy besides the windows and doors.

We provide confidential pre-purchase "Thermal Inspections & Moisture Surveys" and are based in Nelson but travel the region.





## HEI ĀWHINA. SERVICES.

### AROTAKENGA NGĀWHĀ ME TE AROTAKENGA MĀKŪ. THERMOGRAPHY INSPECTION & MOISTURE SURVEY.

#### I MUA I TE HOKO ME TE TIAKITANGA PRE PURCHASE & MAINTENANCE

Ko te Infrared Thermal imaging-Mātātuhi ngāwhā hīhī pōkākā me te Blower Door testing he tukanga tino pai hei arotake i te mākūtanga o te whare, hei āta titiro hoki i te puruhekaheka, me ērā atu o ngā raruraru i runga i ngā mātū o ngā whare katoa. Ka arotake hoki e ia i ngā ārai te whare mehemea e turuturu ana e te hau takiwā.

Infrared Thermal Imaging combined with Blower Door testing is the easiest method to indicate moisture, mold and anomalies on building surfaces that include a check for insulation faults and air leakage.

### HE WHAKAMĀTAUTAU I TE WHARE ME KAHA O TE TURUTURU HAU TAKIWĀ. PASSIVE HOUSE AIR TIGHTNESS TESTING.

#### WHAKAMĀTAUTAU MAU HAU TAKIWĀ AIR TIGHTNESS TESTING

Ko te mahi o te mīhini blower door hei ine i te mau o te hau takiwā i ngā whare. Ka ine hoki i te rere o te hau mai i tētahi whare ki tētahi atu wāhi, ka whakamātau i te ara hau takiwā me te mau o te hau takiwā hoki. Ka aro kit e wāhi e turuturu ana i te whare  
A blower door is a machine used to measure the air tightness of buildings. It can also be used to measure airflow between building zones, to test duct-work air tightness and to help physically locate air leakage sites in the building envelope.

Koinei momo whare, me kī ngā whare 'Passive' ka mau kaha i te makariri pērā i te pouaka makariri. Kua kaha te ārai i ēnei momo whare, he iti te 'U value' nō reira he iti te kaha o te wera e rere ana i te whare. He iti hoki te turuturu i te hau takiwā o te whare nei, ā, he whare whakamau pūngao. Ki te hiahia koe i tētahi whare pēnei, he nui te utu kia panonin pēnei mai. Engari me matua whai i ēnei tikanga mō tō ake whare i ngā rā kei te heke mai ka kaha heke te pūtea hei utua e tō whānau i te pūngao.  
The most efficient homes, for example "Passive House" designs, act like an esky. Highly insulated, low U value (low conductivity) glazing and extremely low air leakage in addition to correct solar orientation. While retrofitting to this standard is expensive, the principles remain, reducing the conditioned air leaving the house and restricting energy loss through conduction are the best improvements that can be made to increase energy efficiency.

### HE PAPAHIKO PŪKAHA HIKO MĀTĀTUHI NGĀWHĀ. ELECTRICAL SWITCHBOARD THERMAL IMAGING.

Ka arotake i ngā mahi hē o te pūkaha hiko (Ngā wāhi wera me ngā taura hiko o te papahiko).

Checking for electrical faults. (Switchboard hot spots and wiring inspections) together with a Registered Electrician.

### NGĀ WHAKAMĀTAU EHARA I TE OROTĀ. NON DESTRUCTIVE TESTING.

Ka whakamahia te tokomaha o ngā kamupene i tēnei momo mahi te whakamātau ehara i te orotā pēnei i te – kamupene pūkahaatanga, ngā kamupene hokohoko whare, ngā kamupene nō te moana, ngā kamupene ahumahi me whakahaere rererangi.

Ka arotake i ngā mahi hē o te pūkaha hiko. (Ngā wāhi wera me ngā taura hiko o te papahiko me te tangata kaihiko kua rēhitatia)  
Ka āta titiro hoki mō te korohū, te hau takiwā, te koroahu, me ngā turuturu wai.

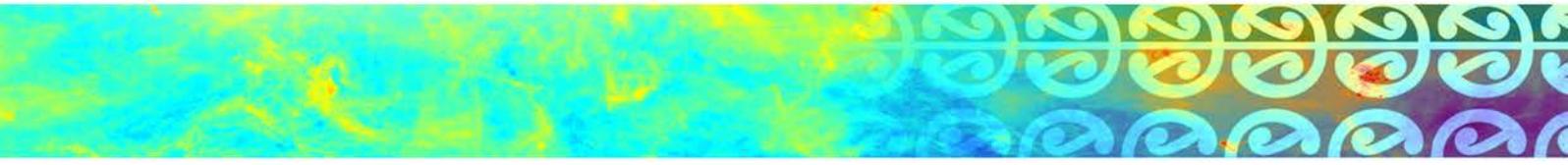
Ka āta titiro ahakoa he whare ake rānei he whare mahimoni rānei ( ka āta titiro me te haukū, te ārai me ngā turuturu wai)

This is used in a range of industries – including Engineering, Property, Marine, Industrial and Aviation.

Checking for electrical faults. (Switchboard Hot Spot and Wiring Inspections with a Registered Electrician)

Checking for Gas, Air, Steam and Water leaks.

Commercial and private property inspections. (Moisture, Insulation and Leaky homes).



## HEI ĀWHINA. SERVICES.

### HE KĀMERA IRIRANGI HE ATAATA IRIRANGI. UAV AERIAL PHOTOGRAPHY & VIDEO.

Ka whakamahi mātou i ngā mātanga kāmera irirangi, ā, ngā mātanga ataata irirangi hoki. Nō mātou kē ēnei rauemi papai rawa i tēnei takiwā.

Utilising some of the latest technology and sophisticated aircraft & camera systems we deliver some of the highest quality and best value UAV services available in the region.

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## KUPU TAUTOKO. TESTIMONIALS.

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Kua ea mātou te hoko pa ii tō mātou nei whare. He mihi nui tēnei ki a koutou katoa me ngā mahi papai rawa, ngā pūrongo pain ā koutou i mahi. Nā ēnei mahi i whakaae ngā kaihoko ki te hoko. Ki te kore te pūrongo Thermfit kāore e kore, kihai tō mātou whare i hoko. Nō reira e te iwi, me haere koe ki ēnei tohunga mā rātou koe e awhi, mehemea e hoko ana koe i tō ake whare, wāea mai.

It's great to finally sell our house. Thanks for the great report which gave our buyers the confidence to complete the sale. Without the Thermfit report you have provided we would probably still be having open homes and unable to purchase our dream home. I would recommend anybody to use this great marketing tool to help sell their home..

- T Watson, Brightwater

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Nā tētahi atu tangata ahau i whakamōhio mai me tēnei tangata me āna mahi whakamātau whare. I mua i taku mahi whakatikatika, me aku mahi whakapaipai i tōku whare i kī mai ia, me whakamātau ahau i te whare kia mōhio pai mēnā he whare mau pūngao. Ko te manako kia hokona atu te whare nei, nō reira i kaha whakaae ahau. He mahi kamura taku nei mahi, ā, a te wā i mutu a Thermfit i te pūrongo nei, i kitea e au ngā hua o tēnei mahi. Ka whakaiti i taku ake mahi nei. Ka mihi atu ki a koe me ngā mahi nei, ā, te āta titiro hoki i tōku nei whare kia kite mehemea he pai kāore rānei.

It was recommended to me to use the service provided by Thermfit to ensure the quality of my home before doing any further renovations and listing the house for sale. I am a carpenter and the information provided in the report saves a lot of extra work. Thanks for the great report and inspection service.

- F Riley, Stoke

I whakamārama mārika mai rātou i a mātou it e rangi tuatahi. I mahia e rātou it e mahi i runga it e pono i runga i te tika. I kaha manaaki rātou i te whānau whānui, nā rātou te whare nei.

The testing technique and equipment were clearly explained to us on arrival. The survey was carried out methodically and efficiently, with consideration for the extended family renting the property.

- G Clover, Richmond

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He mihi ōhatu tēnei ki a koe e Malcolm, me āu mahi tino pai rawa atu. Te mutunga kē mai o te pai o tāu mahi. I te hiahia mātou te hoko i tētahi whare hou, i mōhio pai ai mātou me whakamātau i te whare nei, kia mōhio marika mēnā he whare mau pūngao. He tere raw ate mahi, ā, he pukumahi koe. He ringa ngaio tōu, he tangata pukumahi hoki koe e Malcolm. Ka mōhio pai koe ki ngā mahi nei koia kei a koe me te mātauranga, me ngā pūkenga. I pai ō māua āwangawanga i te wā i mutu ait e pūrongo mō taua whare, kei te hari, kei te koa māua ko Anna.

I just want to say a big thank you to Malcolm for the very efficient service he provided us last Saturday. As we were going unconditional on a house purchase, it was important we got the house quickly checked, so we really appreciate the quick report. Malcolm is very professional and knowledgeable with his equipment and I just want to say that he is a real asset to Thermfit. Anna and I felt quite assured that the report he provided would be professional and are happy with the report presentation.

- M Stevens, Murchison

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