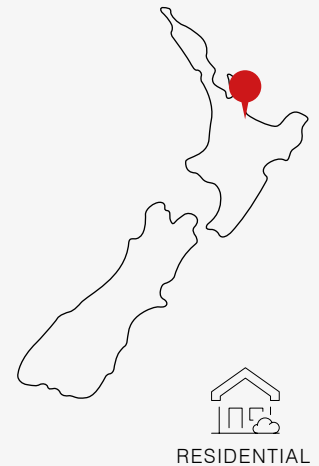


Project Showcase: Tauranga Transformation



TAURANGA

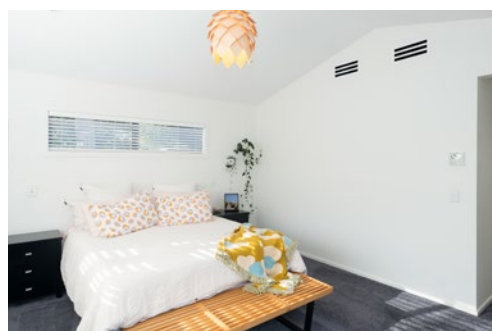


A short drive from Tauranga's CBD in the rural suburb of Tauriko, a 1980s family home is transformed into a modern multi-wing property with expansive valley views. As a result, the family now enjoys total home comfort with Mitsubishi Electric Heat Pump solutions in every room, Lossnay Fresh Air Heat Recovery Ventilation and the ultimate luxury, an Ecodan Hot Water Heat Pump pool heating system to keep their swimming pool at a comfortable temperature even during the cooler months.

The Goal – A Complete Redesign

Once a smaller 1980s home in need of a refresh, the redesigned 269m² 4 bedroom house is now an entertainer's dream. With the help of Tauranga's ATA Architects, the gabled property boasts functional open plan living with spacious dining, cooking and socialising areas at the heart of the building. Large bi-fold doors and windows create a seamless flow onto the 370m² deck that wraps the home, as well as a covered swimming pool to more than cater for alfresco entertaining and summer BBQs – taking advantage of the semi-rural property's privacy.

In the more private wings of the home, the increase in footprint allows for roomy bedrooms including a master with a large walk in wardrobe and ensuite



EQUIPMENT BREAKDOWN

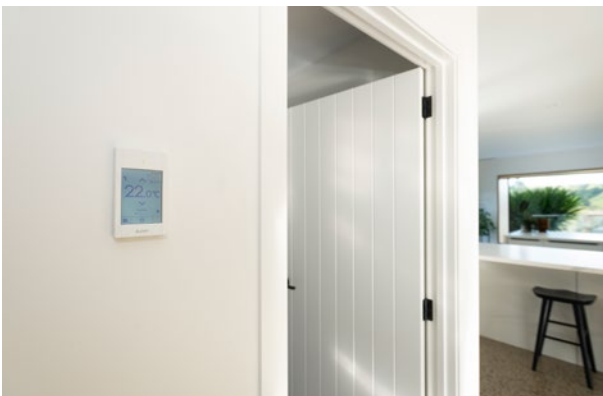
- Ducted Heat Pump combined with Lossnay Heat Recovery Ventilation
- Ceiling Concealed Heat Pump
- Ducted In-line Ventilation Fan
- Ecodan Hot Water Heat Pump
- Wi-Fi Control Interface
- Wall Controllers

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separate to the main bathroom. And because a new double garage was added to the home with internal access, the separate 60m² shed now acts as the couple's home office and gym.

The Challenge

Of the original building, only 12 roof trusses, 2 external walls and the main concrete slab remain. But with plans to upscale and incorporate different zones into their home, the family needed heating, cooling and ventilation solutions to ensure the space is as comfortable as it is visually stunning.



The Mitsubishi Electric Total Home Solution

Unobtrusive Heating and Cooling with Custom Grilles

It was important to the homeowners that wall space and the minimalist interior design wasn't interrupted with high wall heat pumps and that the chosen system couldn't be heard. Unobtrusive ducted and ceiling concealed air conditioning provided the ideal solution.

However, with the increase in areas to heat in winter and most importantly cool in the hot Bay of Plenty summers, independent zone control was also needed so living and sleeping areas can enjoy their own tailored temperatures. The decision to include 3 different split ducted or ceiling concealed systems ensured that the owners could enjoy this independent zone temperature control. For the lounge, kitchen, dining and guest bedroom a PEAD125 Ducted system was chosen combined with Lossnay Fresh Air Heat Recovery ventilation. For the children's bedrooms and main hallway a smaller PEAD71 ducted system operates and then a slimline SEZ-KD50 concealed ceiling unit maintains temperatures in the master bedroom.

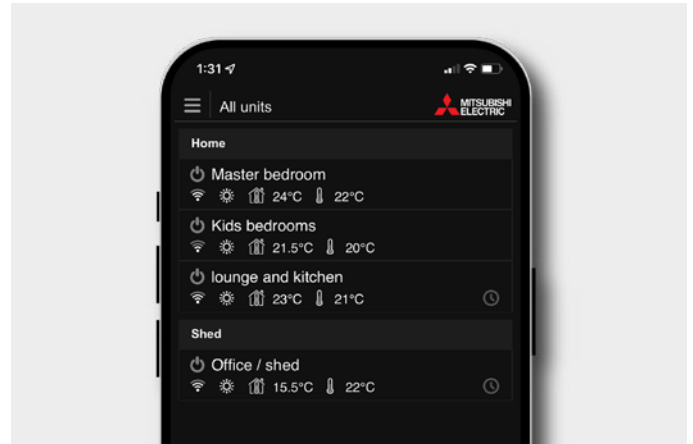
Felt but not seen, these ducted heat pumps are hidden within the ceiling space with custom grilles designed by and only available from the installer, Bay of Plenty Heat Pumps. The stylish grilles marry with the linear lines throughout the home and match the white walls and ceilings to ensure the neutrality of the home's interior is maintained.

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Centralised Control from their Smartphone with Mitsubishi Electric Wi-Fi Control

By installing Mitsubishi Electric Wi-Fi Control, all 3 different split systems units can be controlled through the one app on their smartphones or tablet. This offers centralised control no matter where they are; in another room, away from home or looking to preheat the home office before settling into work for the day.

The homeowners will usually keep the whole house at 22 degrees during the day in winter but when the children go to bed the bedrooms can be set at a comfortable 18 degrees, keeping everyone happy and healthy.



A Healthier More Efficient Home with Mitsubishi Electric Ventilation Options

Not only was the transformation intended to completely refresh the look and feel of their home, it needed to be brought to modern efficiency standards too. The whole building had new joinery installed with double glazing. Every wall including all internal walls have sound proofing insulation and the ceiling features premium 350mm wool insulation. However, Bay of Plenty Heat pumps advised that with such an air tight home, mechanical ventilation is key to managing moisture build up.

As the owners had already decided on a Mitsubishi Electric Ducted System for their main living areas, it made sense to combine VL220 Lossnay Ventilation to enjoy the benefits of fresh filtered air and energy savings through heat recovery.

In the two bathrooms, low noise Mitsubishi Electric In-line Ducted Fans were installed using the same custom grilles used in the other areas of the home, expelling air to keep the bathrooms dry and comfortable.



The Hidden Gem: Ecodan Heated Outdoor Swimming Pool

When the owners decided to incorporate a swimming pool into their back yard, they knew it needed to be heated to be able to use beyond the summer months. But heating a pool throughout the seasons meant they needed a water heating system that could be as energy efficient as possible, an Ecodan Hot Water Heat Pump was the perfect match, using advanced heat pump technology to quickly and efficiently heat their pool water.

In order to trap in the heat generated and make use of decking when not in use, the owners installed a mechanical deck cover. When it's time to swim, they simply press a button so the cover slides overtop another deck to reveal the hidden pool



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underneath – not only taking away the hassle of pool covers but successfully retaining the heat generated from the Ecodan unit.

When setting up the system, their pool installer was impressed by the power of the Ecodan system to heat the pool up a further degree or 2, every 1.5 hours whereas alternative systems can take 4 days to reach 32 degrees, something the Ecodan achieved in 24 hours.

This luxury pool area is reminiscent of a tropical oasis, with the surrounding greenery and steam rising from the pool. Kept at 34 degrees all year round, the family swims 4-5 days a week, even during winter!



PUHZ-SW120



Outdoor Units Kept Out of Sight

The outdoor units to the ducted heat pump systems and SEZ-KD50 ceiling concealed system are tidily tucked away underneath the deck. While challenging for the installer to place prior to the deck being built and the slope of the terrain, the aesthetics of the build are now maintained and the family does not hear or see the unit's operating.

The Ecodan Hot Water Heat Pump that heats the pool is hidden away in pool side foliage. With an external heat exchanger the system allows for flexible installation, the owner installed the heat exchanger inside the pool shed in the garden with the outdoor unit nearby.



The Results

Accommodating friends and families for gatherings was a high priority for these social homeowners and now that they have a home to match their lifestyle, while being comfortable at the same time, they couldn't be happier.

As explained by the owner, not living in a "fridge" means getting up in the morning is much easier and that these low profile air conditioning units mean the house is always kept at their desired temperature - without even realising they're there.



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Full Equipment Breakdown

Air Conditioning and Ventilation

1x PEAD71 Ducted Heat Pump
1x SEZ-KD50 Ceiling Concealed Heat Pump
1x PEAD125 Ducted Heat Pump combined with VL220
Lossnay Heat Recovery Ventilation
2x V-18ZMW-E Ducted In-line Ventilation Fan

Controllers

4x Wi-Fi Control Interface
2x PAR-CT01MAA Wall Controller
1x PAR-4QMAA Wall Controller

Swimming Pool Heating

1x PUHZ-SW120VHA Ecodan Hot Water Heat Pump

Contractor:

BOP HEAT
PUMPS