

Project Showcase:

OmniCore Multi Room Comfort in the Akatarawa Valley



WELLINGTON



Nestled within the foothills of the Tararua Ranges in Wellington, a recently completed 3 bedroom home enjoys energy-efficient comfort all year round thanks to four AP Series Heat Pumps connected to just one OmniCore outdoor unit.

EQUIPMENT BREAKDOWN

- OmniCore Outdoor Unit
- AP High Walls

The Goal

A Wellington young professional, Lucie, sought to install a cost-effective whole home heating solution that would keep her new build cosy and warm during the cold Upper Hutt winters.

The Challenge

The ideal solution would not only fit into her budget, but also allow her to reduce wasting energy or gas supply on the two guest bedrooms that remain empty for the majority of the year.

Furthermore, added benefits such as cooling in the summer, ease of operation, retaining exterior building aesthetics and reduction of draughts were drivers behind what solution would work best for her home.

With building plans featuring a modern low pitch and skillion-style roof, it became clear that any in-ceiling concealed solution would not be possible, as there is a limited roof cavity for units, ducts and pipework.





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Evaluating the Options

Central Heating

A centralised system would heat all rooms even when the spare bedrooms are not in use, wasting energy. The roof truss of the build meant there was limited ceiling cavity for an in-ceiling ducted system and when looking into below ceiling central heating systems such as underfloor or radiators, she quickly discovered this would fall outside of her budget.

Wood Burner or Gas Fireplace

While a viable option, a fireplace would also not allow for independent temperature control in the different rooms or offer the option of cooling in the summer. Furthermore, this would require floor space in the open plan living, dining and kitchen that the owner was reluctant to allocate towards the heating source. When comparing options, a wood burner had more manual labour involved and would require yearly purchasing and storage of wood. As a result, a fireplace as the solution was discounted.

Heat Pumps

The owner expressed concern about the aesthetics of having multiple outdoor units cluttering the exterior with a split system in each room. However, with double glazed windows and full insulation, the additional benefit of cooling in summer made this an attractive option.







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The Mitsubishi Electric Solution – OmniCore Multi Room Heat Pump System

With the help of her builder at Houseworx, the homeowner discovered Mitsubishi Electric OmniCore. A multi room heat pump system that would offer her whole home heating or cooling through separate indoor high walls in each room, all connected to just one OmniCore outdoor unit.

By choosing an OmniCore Multi Room Heat Pump System, the exterior of the house is not cluttered with 4 outdoor units for each of the 4 indoor high walls selected, as only one OmniCore Classic outdoor unit is installed on the private side of the house.











AP High Walls in Each Room – Offers Independent Room Temperature Control*1

In the open plan living, kitchen and dining area, a Classic AP Series sits subtly above the doorway. Lucie finds it only takes 10 minutes in the morning for the unit to heat the space, and she is grateful she doesn't have to chop, store and carry wood to have the cosy environment – especially on the weekdays she works from home.



In the master bedroom and two spare rooms, smaller AP Mini units were installed. As a result, only occupied rooms are turned on to heat or cool, ensuring Lucie isn't paying for more energy than is required. When guests stay they have the option to tailor their heating or cooling to the temperature they desire ensuring a more comfortable night's sleep.

AP Mini's Compact Design Perfect for Bedrooms

At only 760mm wide and 250mm high, the AP Mini is New Zealand's smallest high wall" – the perfect unit for each of the home's three bedrooms.



And by selecting Night Mode, the homeowner and her guests staying in spare rooms can stay comfortably cool or toasty warm during the night without disruption. As the brightness of the indicator light can be lowered and any beeping sounds disabled.

While the homeowner was initially concerned about direct airflow by choosing a high wall heat pump system, the easy control of the units airflow through the hand held remote ensures personalised comfort;

"I like the ability to change the angle and power of the air. As initially I was worried about direct air movement as I don't generally enjoy this feeling. However, it is not a problem at all because I can change the strength of the blowing mechanism."

^{*1} Note: Units only operate simultaneously in the same mode i.e. all in Heating Mode. *2 Indoor unit total volume size of 0.034m3



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The Results

The homeowner Lucie, now enjoys a whole home heating system that also offers the option to cool in summer. With the ability to control which rooms are heated or cooled, in the most energy efficient way possible, Lucie is pleased with the results;

"...I love the system and use it all the time. I am very particular with the temperature I like to be at and this system works very well.

The system is fantastic, it works better than I had thought and it is unobtrusive in the house, while providing a warm and cosy space in each room."

The builder from Houseworx agrees that the OmniCore Multi Room Solution ticked all the boxes for this project, having met the needs of his client while fitting into existing building plans;

"Due to the fact that we had minimal space in the truss/roof cavity for a ducted unit, the Mitsubishi Electric OmniCore system was our only option. It was a relatively simple install with no issues. I think that it has worked out well and will be very functional unit [for the homeowner]" – Steve, Houseworx (builder).





Full Equipment Breakdown

1x MXZ-5F100VG OmniCore Outdoor Unit 1x MSZ-AP60 Classic High Wall 1x MSZ-AP20 Mini High Wall 2x MSZ-AP15 Mini High Wall

Builder:

Installer:

HouseWorx.

