

# Project Showcase:

## The Vertical Lossnay helps a young family breathe easy



### CHRISTCHURCH



In a quiet residential suburb located southwest of Christchurch, an air tight new build struggles with window condensation and the effects of mould on furnishings and its family's health. To solve the issue of moisture-related mould and mildew, the homeowners installed a Vertical Lossnay Heat Recovery Ventilation system and have noticed a significant improvement in their home's air quality this winter.

### EQUIPMENT BREAKDOWN

- VL-250 Vertical Heat Recovery Ventilation Unit

## The Goal

Built in 2018 to modern building regulations, this brick three bedroom home is insulated to the healthy home standards and features double glazed windows. However, when undergoing the building process, ventilation was never mentioned with only basic extraction fans installed in the bathrooms.

Because the home is so air tight, like most new homes in New Zealand, it doesn't breathe. This has led to moisture build-up on the window frames and mould growing on the window frames and curtains. The option of leaving doors or windows open to allow more fresh air to enter was not always a viable solution from an outdoor noise or security perspective for the young family, and in the cooler months they didn't want to lose valuable warmth by introducing draughts.



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Tired of always having to clean away mould and wipe morning condensation off the windows, the homeowners wondered what the mould in their home was doing to their family's health and wellbeing. As a result, they began looking at balanced pressure mechanical ventilation systems in the market that would efficiently circulate fresh, filtered air throughout the home through all seasons.

### The Challenge

When evaluating options they quickly discovered that the access hatch to the ceiling was too small for many in-ceiling ventilation units and that the amount of timber joins in the roof cavity only left room for ducting – it was clear they needed a ventilation solution that could be installed outside the roof space.



### The Vertical Lossnay Solution – easy installation in the laundry

Designed for flexibility and convenience, the Vertical Lossnay was the ideal choice for the homeowners as it could be installed underneath the ceiling instead of in the roof space. As a result, the owners were able to place the unit above the freezer in their laundry room.

One VL-250 Vertical Heat Recovery Ventilation unit was selected to service the home using four outlets – fresh air could now be introduced into all three bedrooms and the open plan living, dining and kitchen area without the need for opening windows.

Not only did this solve the challenge of limited roof space, this allows use of the inbuilt controller and easy filter access for maintenance.

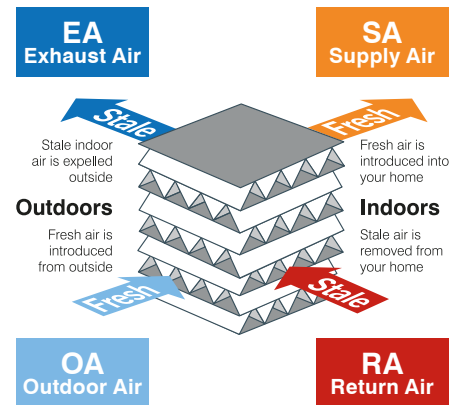


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### Fresh Filtered Air Throughout the Seasons

By installing the Lossnay Heat Recovery Ventilation system, the owners now enjoy a well-ventilated home without the need to open windows. This improves the safety of the home, helps to minimise outdoor noise and keeps out winter weather - important with two pre-school aged children.

As the Lossnay system introduces fresh filtered air from outside and expels stale air, their indoor air quality is immediately improved as high levels of CO<sub>2</sub>, odours and other pollutants are removed from the home.



### Impressive Heat Recovery for More Efficient Home Heating

Rather than going to waste, Lossnay's unique Heat Recovery Technology collects up to 86% of the heat energy in outgoing air which is then used to pre-warm or cool the fresh air vented in. In doing so, moisture build up is minimised while healthy humidity levels are maintained and managed in the most energy efficient way possible.

As the incoming air is not cold and moisture is reduced, the house is also much easier to heat, meaning their heat pump also works more efficiently.



### The Result – A home that is drier, healthier and easier to heat!

Once installed, the homeowners cleaned their window frames of all the mould and since that day, the Lossnay unit has maintained optimum humidity levels to prevent any mould growth. Not only has the home's moisture issue been solved, the drier home is much easier to heat and benefits from Lossnay's heat recovery efficiencies.

The owners couldn't be happier and cannot wait to see their potential power savings at the end of the season, "It's super quiet, with easy to clean filters and even though it has only been a few weeks, we have had a noticeable improvement to our home."



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### Vertical Lossnay Key Features

- ✓ Control moisture and condensation build-up
- ✓ Fresh filtered air not attic air
- ✓ Super energy efficient help save on power bills
- ✓ Retains heat to pre-warm incoming air
- ✓ Designed for flexibility and convenience
- ✓ Automatic Summer Bypass
- ✓ Easy to use control

### Equipment Breakdown

#### Lossnay Vertical Heat Recovery Ventilation

1 x VL-250 Vertical Heat Recovery Ventilation Unit