



AIRSENSE™

THE NEXT GENERATION  
OF HOME VENTILATION



NEW FOR 2022





# Our mission at HRV

At HRV, our mission is to make all kiwi homes healthier.

We all want healthy families, healthy communities and to stay healthy ourselves. And since we all spend so much time inside – and we did even before Covid limited our horizons – making your home as healthy as it can be is vital.

We've built HRV on that mission, and today we offer a product range that makes it easier for anyone to create the healthiest possible place to live.

As New Zealanders, breathing clean air is a big part of who we are. At HRV we believe that's something worth protecting!

So wherever you live, in a classic villa or a modern townhouse, in the semi-tropical far North or amidst the climatic extremes of the Mackenzie Basin, we're here to help. Every HRV expert lives in the community they serve, so has long experience in what home ventilation solution will work best for you and your family.



## Why HRV is a name you can trust

More than 500,000 New Zealanders are living in a home with one or more of our products. We didn't achieve that level of success without first earning New Zealand families' trust.

HRV has been in business for almost 20 years. In that time we've grown to a company that serves every community in New Zealand. All built around those honest, one-to-one kitchen table conversations we had with our customers from day one. We're thrilled that New Zealanders have voted HRV as New Zealand's most trusted home ventilation brand in the 2022 Reader's Digest Trusted Brands Survey.



HRV is now owned by Vector. Vector is an innovative New Zealand energy company which runs a portfolio of businesses delivering energy and communication services to more than one million homes and commercial customers across Australasia and the Pacific.

HRV offers home ventilation solutions that address many of the biggest home health issues New Zealanders face. From our affordable, entry level AirSense™ Lite with aerodynamic fan housing and WoolCare™ filter, right through to AirSense™ Balanced that manages both air outflow and inflow, we've got you covered!



# Healthy homes by the numbers

At HRV, we say everyone should love the feeling of coming home. But there's more to what we do than just a feeling! Here's some of the science that sits behind what we do.



## DOWN WITH DAMP!

Dampness and mould growth can exacerbate asthma and increase the risk of asthma onset<sup>i</sup>. Indoor dampness and mould is also associated with an increased risk of respiratory tract infections and bronchitis<sup>ii</sup>.



## VENTILATE AND BREATHE EASY.

Ventilation helps remove or dilute indoor airborne pollutants coming from indoor sources. This reduces the level of contaminants and improves indoor air quality (IAQ)<sup>iii</sup>.



## NEW ZEALAND'S DAMPNESS EPIDEMIC.

More than one in five New Zealand homes are damp some or all of the time, and for renters, dampness is more than twice as common than for those who own their home or hold it in a family trust, according to Stats NZ<sup>iv</sup>.

### SOURCE:

- i. Braubach M, Jacobs DE, Ormandy D (Eds.). 2011. Environmental burden of disease associated with inadequate housing: A method guide to the quantification of health effects of selected housing risks in the WHO European Region. Copenhagen, Denmark: WHO Regional Office for Europe. Available online: <http://www.euro.who.int/en/health-topics/environment-and-health/Housing-and-health/publications/2011/environmental-burden-of-disease-associated-with-inadequate-housing.-a-method-guide-to-the-quantification-of-health-effects-of-selected-housing-risks-in-the-who-european-region>
- ii. Fisk W, Eliseeva E, Mendell M. 2010. Association of residential dampness and mold with respiratory tract infections and bronchitis: a meta-analysis. Environmental Health, 9(1): 72. doi: 10.1186/1476-069X-9-72
- iii. [https://www.epa.gov/indoor-air-quality-iaq/improving-indoor-air-quality#:~:text=Ventilation%20and%20shading%20can%20help,indoor%20air%20quality%20\(IAQ\).](https://www.epa.gov/indoor-air-quality-iaq/improving-indoor-air-quality#:~:text=Ventilation%20and%20shading%20can%20help,indoor%20air%20quality%20(IAQ).) Source: EPA United States Environmental Protection Agency



## TOO COOL (AND DAMP) FOR COMFORT.

Half of New Zealanders surveyed who own or rent their home have moved house in the past five years. More than one in five (21%) said that warmth, damp or mould was the main reasons for doing so<sup>v</sup>.



## 10X MORE EFFECTIVE.

In modern homes built to current standards, mechanical ventilation is 10 times more effective than built-in passive ventilation at supplying fresh air to the whole house<sup>vi</sup>.



## 3RD LEADING CAUSE OF DEATH.

Respiratory disease affects 700,000 people in New Zealand and is the third leading cause of death<sup>vii</sup>.



## OUR ASTHMA EPIDEMIC.

Asthma affects 1 in 8 adults and 1 in 7 children in New Zealand<sup>vii</sup>.



iv. <https://www.stats.govt.nz/news/one-in-five-homes-damp> 29 October 2019. Source: Statistics NZ October 2019

v. Source: The HRV State of the Home Survey was conducted by Camorra Research Limited from 4-21 June 2021. A nationally representative sample of 1,006 respondents was surveyed (based on age, gender, and region). The margin of error on this sample is ±3.2% at a 95% confidence interval level.

vi. BRANZ Study Report | SR341 [2015]: The Role of Ventilation in Managing Moisture Inside New Zealand Homes

vii. <https://www.asthmafoundation.org.nz/research/key-statistics> 'The impact of respiratory disease in New Zealand: 2020 update'



“PRIORITISING YOUR HEALTH IS A MUST”  
- HEAR WHAT SOME OF OUR CUSTOMERS  
HAVE TO SAY ABOUT HRV HOME VENTILATION

“We had HRV put in and we are so happy with it. During the colder months our house felt so much drier and warmer, and now we have a newborn baby we need the house to be warm and also the air cleaner. We wish we had done it years ago. We found dealing with HRV was great because they were very professional. Would definitely recommend HRV.”

The Nowell Family

“Since having HRV installed, we’ve noticed a great difference in ventilation around the house. It is so lovely to know that we are breathing in fresh air, especially as we are working from home a lot now. My partner and I both struggle with allergies and have noticed having HRV has made a significant difference for us.

We no longer have mould on our bathroom windows, and all our windows in the house are consistently dry. We know that by having HRV in our home, it has also added resale value as we can honestly say our home is warm and dry.”

The van Eeden Family

“Best long-term investment so far! Especially since we’re in the midst of a pandemic, prioritising your health is a must. We have peace of mind that we have a good, working ventilation system in place and we can entertain guests without opening doors and windows. It made a real difference against condensation, as no more crying windows during the winter months. Kudos to the whole HRV team and highly recommended!”

The Bergonia Family



AIRSENSE™

VENTILATION REINVENTED

**If you’ve been considering home ventilation, there’s never been a better time! The HRV engineering team and our partners have been developing a revolution in home ventilation: HRV AirSense™.**

HRV AirSense™ builds on almost two decades of proven ventilation technology and gives it a 21st-century upgrade. From our affordable HRV AirSense™ Lite and right through the range, we’ve never offered a more capable, advanced way for you and your family to love the feeling of coming home.





## HRV HOME VENTILATION EXPLAINED

HRV home ventilation works by replacing the stale, damp air in your home with drier, filtered air from your roof space or from an outside vent. It's a simple idea, but one that delivers powerful results.

### REDUCED MOISTURE LEVELS:

Everyday activities like cooking, showering, laundry and even breathing create moisture that lingers in your home. That means mould and mildew are more likely, condensation appears on windows and certain health conditions can be made worse. HRV home ventilation forces damp air out and replaces it with drier air, 24/7!

### BREATHE FILTERED AIR, NOT NASTIES:

When your home has HRV home ventilation, the air coming in is filtered before it reaches your living areas. An HRV home ventilation system filters pollen, dust, mould spores and other allergens. This is great news if you have an allergy sufferer in the family!

### A HOME THAT'S EASIER TO HEAT:

Damp air takes more energy to heat than dry air<sup>1</sup>. So reducing moisture levels with HRV home ventilation means you'll need less energy to stay warm, whether that's electricity, gas or even firewood.

### A SAFER, QUIETER HOME:

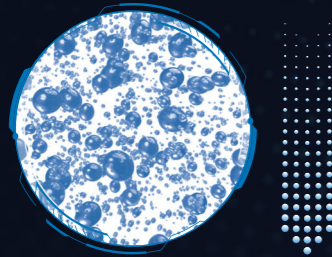
Opening all your doors and windows will certainly help with ventilation, but that's not always a great idea. Open windows can let in street noise, pollution and cold air, and you don't want to leave doors and windows open when you're out! With HRV home ventilation your home is being ventilated 24/7, even when all the doors and windows are closed.



THE SCIENCE BEHIND  
**AIRSENSE™**

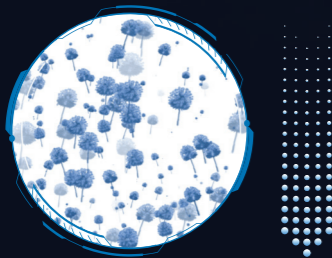
HRV AirSense™ is a New Zealand home ventilation system that's scientifically proven to reduce moisture<sup>2</sup>, and helps prevent mould.

We worked closely with researchers at Auckland's Unitec to test HRV AirSense™ home ventilation in real-world conditions. The results speak for themselves.



**LESS MOISTURE:**

In a study of 15 homes over 12 weeks, most homes with HRV home ventilation showed reductions in humidity.



**PREVENT MOULD:**

In the same real-world study, homes with HRV home ventilation were observed (by homeowners) to help prevent mould.

**MORE EFFECTIVE:**

The University of Canterbury Engineering Department showed that HRV AirSense™ moves 10% more fresh air than our previous range<sup>4</sup>.

**IMPROVED INDOOR AIR QUALITY:**

In the Unitec real-world study, levels of particulate matter (things like dust, pollen and mould spores) and carbon dioxide all dropped when HRV home ventilation was installed.

Now that AirSense™ home ventilation is on the market, we'll be building on these studies and working with our research partners to learn more about how it can help New Zealanders create the healthier homes that every family deserves.

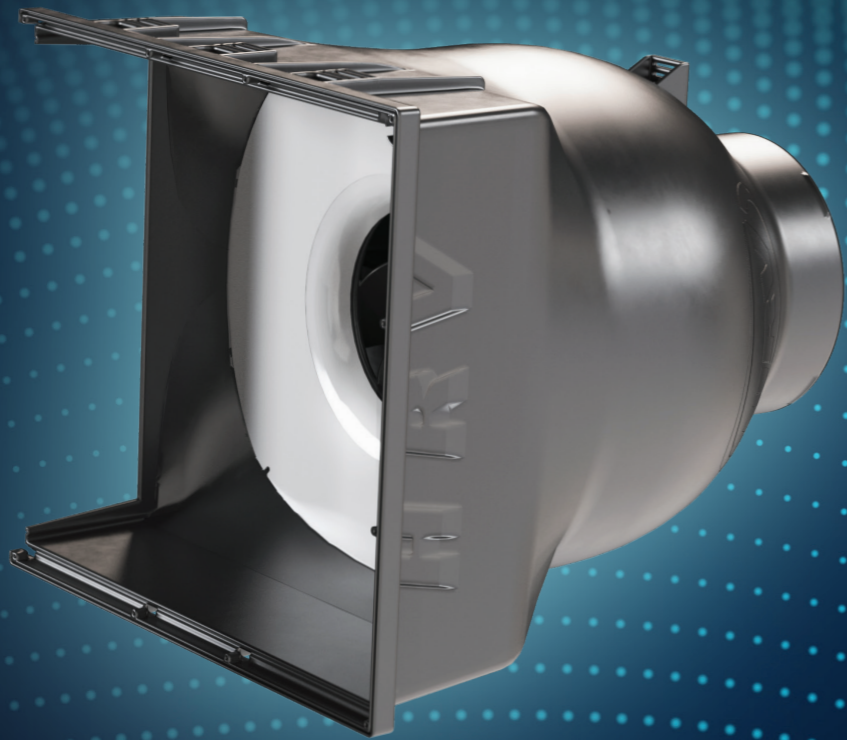




INSIDE

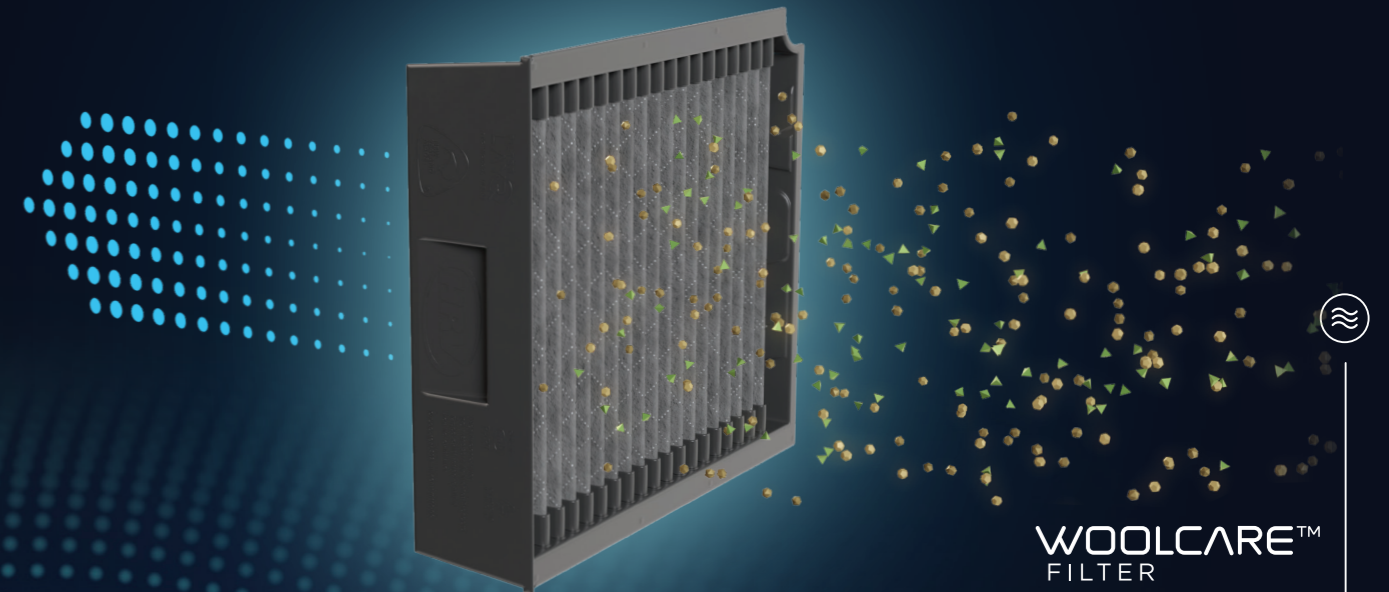
# AIRSENSE™

## LEADING-EDGE TECHNOLOGY FOR HOME COMFORT AND HEALTH



### AIRSENSE™ FAN ENCLOSURE

We've completely redesigned the heart of our system to maximise airflow and efficiency. An advanced German-made fan and aerodynamically designed housing ensure smooth, efficient airflow.



WOOLCARE™  
FILTER

### AIRSENSE™ WOOLCARE™ FILTRATION

Recycled New Zealand wool forms the first layer of our completely redesigned filter. Followed with a New Zealand-made FilterLayr™ nanofibre medium to effectively filter out particles as small as 0.3 microns<sup>4</sup>. The deep-pleated design means increased effective surface area and greater filtration efficiency.



### AIRSENSE™ SMART TOUCH CONTROLLER AND APP

We've gone widescreen! AirSense™ gives you greater control and more information than ever, so all models other than AirSense™ Lite include a 5" wide-format touchscreen controller. Download the HRV AirSense™ app and you'll have full control from your mobile phone or tablet too.





**CIRCULAR DIRECTIONAL**

Suited for HRV and designed to direct air over the ceiling for ultimate air distribution.



**EGG GRATE**

Suited for bathroom and laundry extraction.



**DOWN JET**

Ideally suited to direct airflow with temperature downwards, also has the ability to regulate airflow with the built-in airflow adjusters. (Not available with AirSense™ Lite.)



**LOUVRE GRILL**

Suitable for external venting.



**AIRSENSE™ DUCTING AND OUTLETS**

Efficiency counts! That's why we've redesigned the way HRV home ventilation delivers drier, filtered air to your living areas. A high capacity, wide-diameter central duct carries air from the central fan unit, then individual ducts deliver it to your rooms. In your ceiling, a new range of outlet vents let you select the perfect airflow and aesthetic.

**THE AIRSENSE™ RANGE**

Your HRV-certified home ventilation expert will work with you to recommend a custom-made AirSense™ system that's perfect for your home, your family and your budget.

Every HRV AirSense™ home ventilation system is custom-fitted based on the size and layout of your home and your choice of outlet and other component locations. Our competitive pricing is individual to each installation and will be provided to you after your free home assessment.

	HRV Lite™	HRV Essential™	HRV Essential+™	HRV Balanced™
Aerodynamic fan housing	✓	✓	✓	✓
German-made EC fan		✓	✓	✓
WoolCare™ filter	✓	✓	✓	✓
Air quality monitoring		✓	✓	✓
Standard LCD controller	✓			
Smart Touch controller		✓	✓	✓
Smartphone app		✓	✓	✓
Wi-fi connectivity		✓	✓	✓
Air Transfer Kit option	✓	✓	✓	✓
Summer Kit			✓	✓
Heat Exchanger				✓
<b>System type</b>	Positive pressure	Positive pressure	Positive pressure	Balanced pressure



# THE AIRSENSE™ RANGE

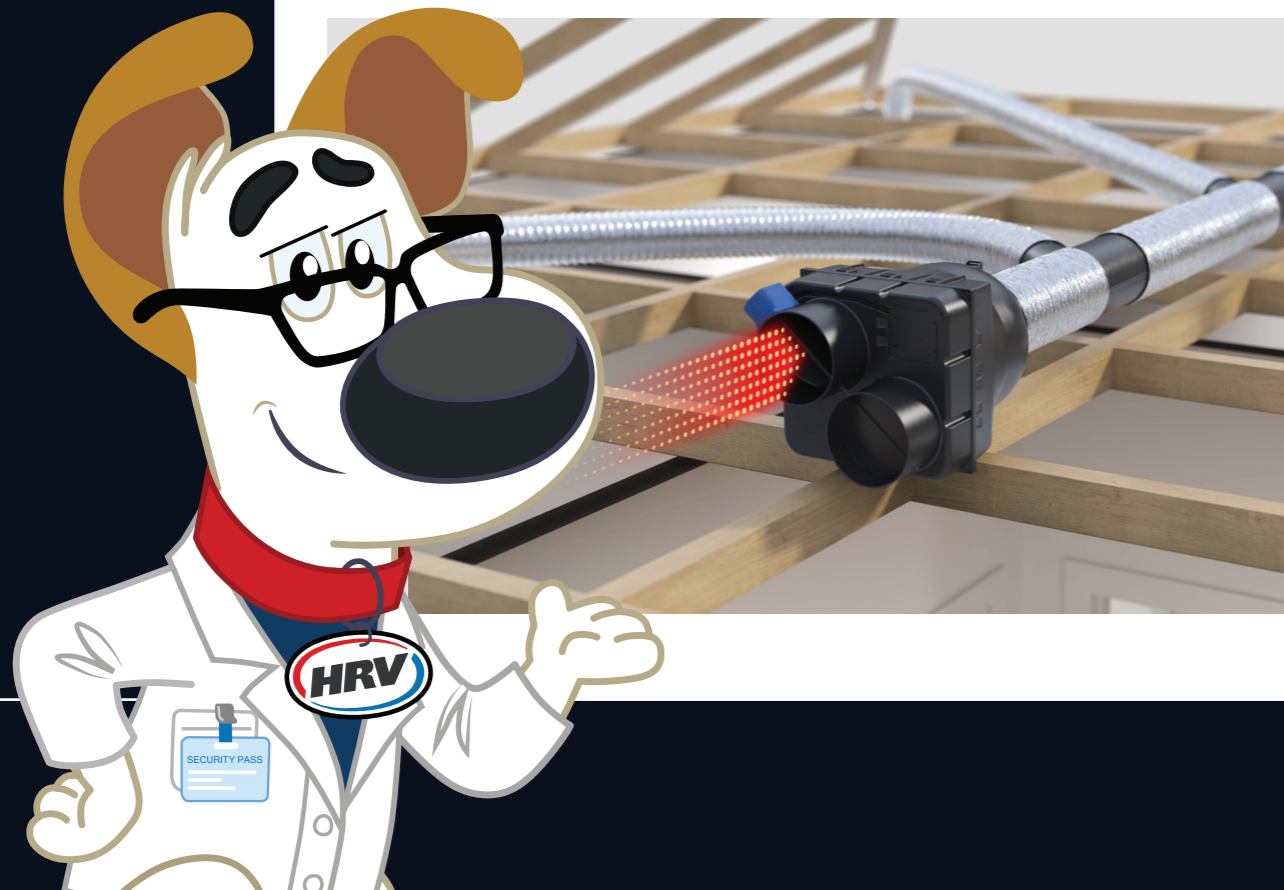
## AirSense™ Lite



The affordable, capable way into the HRV AirSense™ range. AirSense™ Lite features the same advanced fan box and WoolCare™ filter cartridge as the rest of the AirSense™ range, connected to a wall-mounted control and display unit. Lite price doesn't mean you'll compromise on performance though: every AirSense™ model delivers the same, scientifically proven effectiveness in reducing moisture<sup>2</sup>, and helps prevent mould.

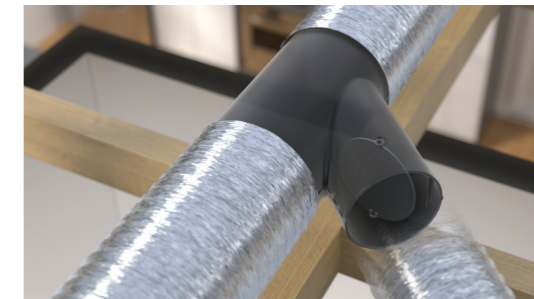


Standard LCD controller



## AirSense™ Essential

For full visibility and greater control of your HRV home ventilation system, step up to HRV AirSense™ Essential. Your Essential system adds a wide-screen Smart Touch control panel, showing a wide range of air quality information including humidity, volatile organic compounds (VOCs) and CO<sub>2</sub>. AirSense™ Essential also allows complete system control and visibility via the AirSense™ app.



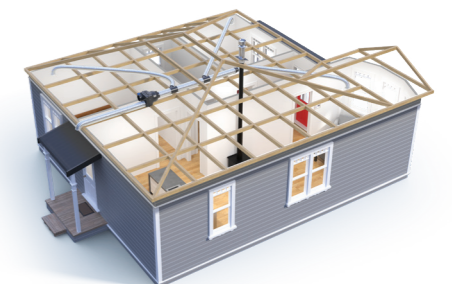
Flow controller for system fine tuning



Smart Touch controller and Smartphone app

## AirSense™ Essential+

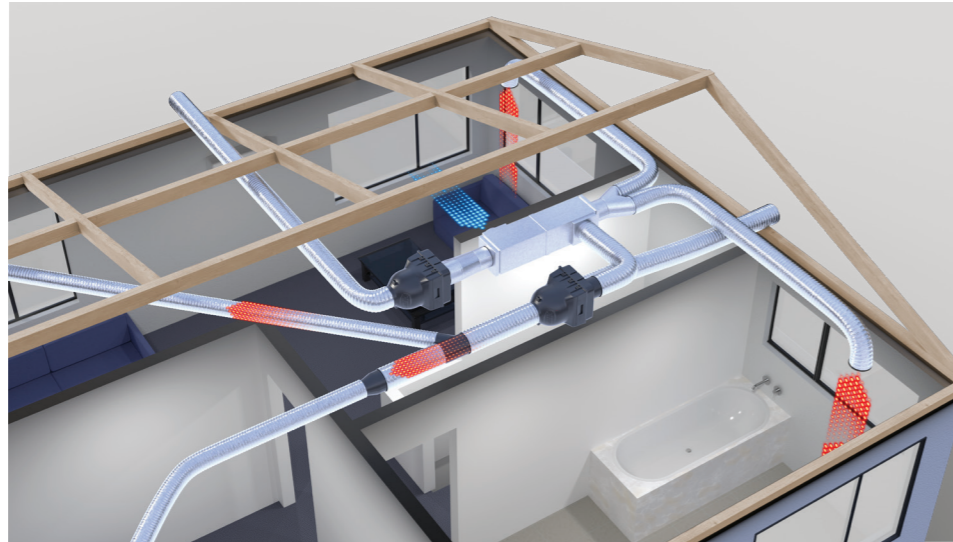
Want to make every room the coolest room in the house? AirSense™ Essential+ shines in summer, bringing cooler air from an outside wall on the southern side of your home and adding it to the ventilation mix. Just set the desired temperature on your Smart Touch panel or app and let AirSense™ Essential+ take care of the rest.



Summer Kit draws fresher, cooler air inside

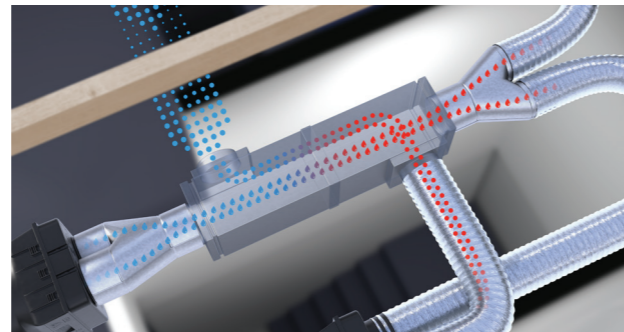


## AirSense™ Balanced



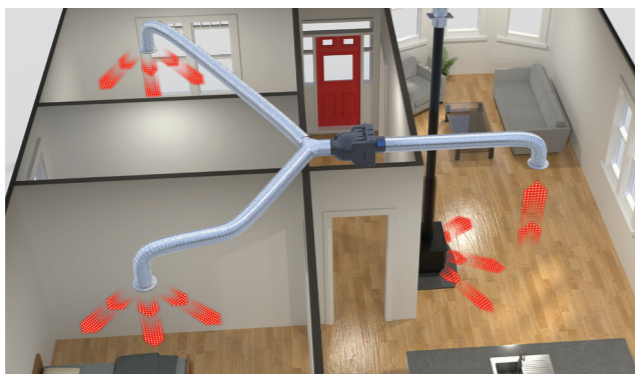
Heat recovery efficiency

Modern homes with their tightly fitting doors and windows can be a challenge for home ventilation systems – that stale, damp air just can't escape! AirSense™ Balanced solves that problem, so any homeowner can now enjoy living with HRV home ventilation. AirSense™ Balanced also features a heat exchanger, capturing up to 85% of the heat energy from outgoing air. So you pump out the damp, stale air, not the heat!



Heat exchanger

## Air Transfer Kit option



The HRV Air Transfer Kit is an optional accessory to the HRV AirSense™ range. It uses a centrifugal fan to evenly distribute warmer or colder air to all other rooms of the house.

# TECHNICAL SPECS

AirSense™ model:	Lite	Essential / Essential+ / Balanced
Fan motor type:	AC centrifugal	EC centrifugal
Spigot diameter:	200mm	200mm
Power supply:	230V	230V
Input power per fan (avg RRP):	88W	85W
Current (A) per fan:	0.39A	0.7A
Power rating - maximum load:	88W	85W
Fan - maximum RPM	2,100	2,580
Operating temp:	-25 to 60 °C	-25 to 60 °C
Max airflow per fan @ 0 Pa:	885 m³/hr	970 m³/hr
Max airflow per fan @ 150 Pa:	780 m³/hr	840 m³/hr
Max static pressure per fan:	390 Pa	460 Pa
Fan housing dimensions (mm) L x H x D:	430 x 700 x 400	430 x 700 x 400
Fan housing weight:	2.5kg	2.5kg
Balanced heat exchange core efficiency	-	85%



FILTRATION REINVENTED:  
THE PURE GENIUS INSIDE

# AIRSENSE™

Reducing moisture levels in your home's living area is just one way HRV AirSense™ home ventilation can transform your family's environment.

But what if it could also filter the air they breathe, before it enters your home?

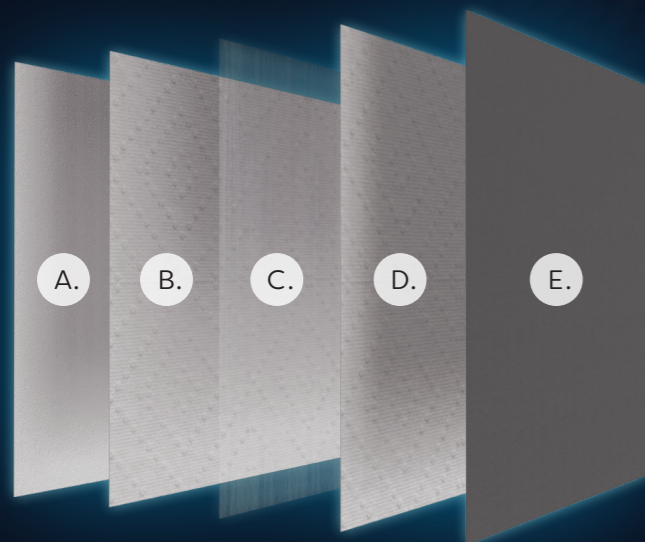
That's exactly what the advanced WoolCare™ filter at the heart of your HRV AirSense™ home ventilation system does. An AirSense™ home ventilation system filters dust, pollen, mould spores and other common allergens from the air you breathe.

Your WoolCare™ filter cartridge is a completely new design that's only available with HRV AirSense™. Its pleated base layer is made from recycled New Zealand wool, and is

designed to maximise effective surface area and filtration effectiveness.

HRV AirSense™ ventilation systems feature nanofibre filtration technology, FilterLayr™, that helps to improve your home's indoor air quality by filtering ultrafine particles, including common airborne asthma and allergy triggers from the incoming vented air, meeting both ePM1 and MERV 15 ratings according to ISO 16890:2016 and ANSI/ASHRAE – 52.2-2017 standards respectively<sup>5</sup>.

Your WoolCare™ filter cartridge cares for the environment as well as your family. In addition to being made from recycled wool and recycled plastic, the cartridge is designed so as much of its plastic portion as possible can be recycled when it's returned to HRV as part of your system service and filter replacement.



5 LAYERS OF FILTRATION  
FOR HIGHER EFFICIENCY

- A. Recycled New Zealand wool base layer
- B. Pre-filter
- C. New Zealand-made FilterLayr™ antimicrobial nanofibre
- D. Polypropylene
- E. Carbon filter

**WOOLCARE™**  
FILTER



MĀNUKA OIL-INFUSED  
FILTERLAYR™ TO ADD AN  
EXTRA LAYER OF PROTECTION

Kiwis are familiar with the healing and antibacterial properties of the mānuka tree. Not only does mānuka honey taste great, it's good for you too. How about taking the benefits of the mānuka tree a step further? At HRV we have worked closely with our partner NanoLayr to develop this next generation functional FilterLayr media. The first line of defence that we use in our WoolCare™ filters is a strong physical barrier: recycled wool to filter any small particles, followed by tightly overlapping electrospun nanofibres that trap<sup>5</sup> and eliminate<sup>4</sup> harmful particles from outside air. The next line of defence is the naturally occurring antimicrobial agent: mānuka oil<sup>6</sup>. By binding the nanofibres with this bioactive oil, FilterLayr™ can help protect against infectious pathogens, including bacteria, viruses, and fungi<sup>5,6</sup>, giving you extra peace of mind.



HOW TO GET HRV

# AIRSENSE™

Every AirSense™ home ventilation system is custom-designed for the home it's going into.

So the first step is to get in touch with us to arrange a free home assessment. After meeting with you, your HRV expert will recommend a system that's right for your home and your family, and provide a no obligation free quote.

Once you give us the go-ahead we can talk installation dates and ways to pay, including easy finance options and even the option of paying up to \$1500 towards your ventilation using Airpoints Dollars™!



For more information, including full terms and conditions, visit [hrv.co.nz/finance](http://hrv.co.nz/finance) (credit and lending criteria, and fees apply) and [hrv.co.nz/airpoints](http://hrv.co.nz/airpoints).



AirSense, HRV Lite, HRV Essential, HRV Essential+, HRV Balanced and WoolCare are trademarks of Cristal Air International Limited trading as HRV.

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For information about HRV's privacy practices, including how we collect, use and disclose your information, please read the HRV Privacy Statement, which covers all our products and services, and all our interactions with you. This statement is available at [hrv.co.nz/privacy-policy](http://hrv.co.nz/privacy-policy).

Images of actual HRV customers have not been used in this brochure.

1. Moisture in the home – Consumer NZ <https://www.consumer.org.nz/articles/moisture-in-the-home>
2. Based on a scientific study of 15 New Zealand homes conducted by Unitec Institute of Technology (Auckland) on behalf of HRV during winter and spring 2021. Results may vary depending on design and geographic location of a home
3. Excludes AirSense™ Lite model. University of Canterbury, Acoustics Research Group Report, Performance Comparison HRV Gen-3 and Gen-4 air transfer ventilation units, Brian Donohue, no. 482, issue 1.0, 9 Dec 2021
4. NanoLayr, Technical Data Sheet FilterLayr™ Pure, page 3, Bacteria/Virus Activity
5. NanoLayr, Technical Data Sheet FilterLayr™ Pure, page 2, Filtration Activity
6. Mānuka Oil – A Review of Antimicrobial and Other Medicinal Properties: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7694078/>





AT HRV  
WE WANT  
EVERY KIWI  
FAMILY TO  
LOVE THE  
FEELING OF  
COMING  
HOME.

YOUR IN-HOME EXPERT

NAME

PHONE



Love the feeling  
of coming home

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HRV.CO.NZ

0800 478 123