## NZ's home ventilation specialists





SMARTVENT HOME VENTILATION SYSTEMS

www.smartvent.co.nz



## Why Ventilate?

### Firstly a few words on why we ventilate homes in NZ.

It is important to keep your home adequately ventilated to maintain air quality and remove moisture for a healthy indoor environment. Improved insulation & double glazing is designed to make your home easier to heat, however this improved air tightness means good ventilation is often not achieved.

With NZ's temperate climate, a lack of ventilation can cause damp and cold in the fabric of the home itself - exposing occupants to unhealthy air conditions.

## The average NZ household produces around 100 litres per week\* of moisture in the home from everyday activities such as cooking, showers and breathing.

That's normal and can be managed by having the right balance of insulation, heating and ventilation. If this moisture is not reduced it can be damaging to your home and have adverse effects on the health of your family.

Condensation, moisture and mould are all too common in NZ homes. About 30% of our homes suffer from problems associated with moisture internally which is one of the reasons we have one of the highest rates of asthma and other respiratory illnesses in the world.

\*source - EECA (Energy Efficiency & Conservation Authority)





## Different ways to Ventilate?

**Passive Ventilation** is achieved by simply opening windows or doors to allow ventilation of the home. While this has some beneficial effects, there are obviously significant limitations such as sufficient air movement throughout the home, weather conditions, home security and the quality of air entering the home ie, pollens, traffic fumes etc.

**Extraction Ventilation** uses fans to extract air from living spaces to the outside of the home eg, a ducted bathroom exhaust fan to get rid of moisture. This type of ventilation is crucial and should be a priority for good ventilation. For helpful information on efficient extraction/ventilation please visit the Manrose website: www.manrose.co.nz

**Home Ventilation Systems** will complement extraction ventilation by further reducing moisture in the home. Introducing fresher, drier air from outside or from the roof space into the home has a number of benefits including reducing condensation and removing dust, pollens and mould spores. Home ventilation technology can also include heat recovery or combine with ducted heat pumps for the ultimate solution in home ventilation and heating.



All SmartVent systems can be easily upgraded as your family grows, with smart and affordable additional features.



## Why SmartVent?

### **Breathe Fresh**

Given we can spend over 60% of our time within our homes it makes sense that we should be breathing the cleanest of air while we are there. SmartVent introduces filtered air into your living and sleeping areas continuously.

### Warm and Dry

Don't put up with crying windows and damp walls. SmartVent reduces surface condensation - the main cause of mould growth.

### **Keep the Heat**

SmartVent specialises in ventilation systems to keep the heat in your home, re-using heat you have already paid for, reducing space heating costs and helping to dry out and balance your home environment.

### Ask a Sparky

SmartVent systems are recommended and installed by qualified electrical contractors across the country. 8 out of 10 electricians recommend SmartVent (Mobius Research - May 2010).

## SmartVent Positive System



Fresh air can be drawn into the home from two sources - directly outside or from the warmer, drier part of your roof space.

Better passive heating and summer cooling options



Better performing fan and filter to remove pollutants and improve air quality

## SmartVent POSITIVE

### **Reduce Condensation**

SmartVent Positive Pressure ventilation systems draw fresher, drier air into your home from either the roof cavity or outside.

This air is then passed through a high efficiency filter and introduced into your home. This introduced air forces out the moist, stale air that causes condensation, mould and mildew.



SmartVent ventilation systems are easily upgradeable - your system can grow if you add rooms or increase your family.

Add on heat transfer and extra rooms when it suits you

A warmer, drier, healthier home is all yours to enjoy - things are much better in a SmartVent home.

Remove condensation and moisture for a healthy home

## **SmartVent** POSITIVE

## Our superior, medical grade F7 filter traps up to 90% of pollens, dust and allergens.

SmartVent draws fresher, drier air into your home and the stale, damp air is forced outside. This process is known as positive pressure ventilation and is very effective at circulating air throughout your home. SmartVent draws air from the roof cavity or from outside and filters it before gently distributing it around your home. Our superior, medical grade F7 filter traps up to 90% of pollens, dust and allergens.

This filtered air is then distributed into each room via unique acoustic insulated ducting, which reduces fan and airflow noise. Moist air is forced out around windows and doors, making your home drier, which makes it is easier to heat.

Simply enter your preferred temperature range and your system will automatically operate to provide a healthy home environment.

## Features



### **Superior fans**

An advanced European designed centrifugal fan for optimum airflow ventilation in the home and costs as little as 1c per hour\* to run.

\*Based on a 22c per kW/hr electricity cost and subject to consumer settings and fan speed selected.



### Whisper quiet

The unique acoustic insulated ducting used in all SmartVent Positive systems ensures 'whisper quiet' air transfer and better air temperature retention.



### **Superior filtration**

The high quality F7 filter captures 80 - 90% of 0.4 micron particles including dust, pollens, allergens and mould spores.



#### Low profile diffusers

Stylish flat diffusers, inset in your ceiling for an unobtrusive look, are fully adjustable for balanced airflow into each room.

## Smart Stylish Control

The smartest component of the system is the stylish SmartVent controller. Choose a colour touch screen or an LCD display digital controller. The easy to use, fully automated controllers work to maintain your comfort. All you need to do is enter your preferred temperature levels and SmartVent will do the rest.



MARTVERT Paralian III Ar Saata Ar

Digital controller

Colour touch screen controller

## **Optional Extras**

**Heat Transfer** - The heat transfer upgrade makes better use of your heating in winter. In this mode excess heat from the heat source room is transferred to other rooms in your home.

**Summer Feature** - A summer feature is highly recommended for superior ventilation during the hot summer months. Hot, muggy evenings will no longer keep you awake as cooler fresher air is continuously distributed around your home.

Extension Kit - A SmartVent extension kit gives you the flexibility to add additional outlet/s to your SmartVent system.

Note: that by adding additional outlet/s to your system you will be dividing the available air amongst more rooms, ie: delivering less air to each room.

## SmartVent Synergy System



Fresh air can be drawn into the home from two sources - directly outside or from the warmer, drier part of your roof space.

True heat recovery ventilation and summer cooling option



More options and better features, installed by experts

## SmartVent SYNERGY

### **Reduce Condensation and Keep the Heat**

SmartVent Synergy is a True Heat Recovery system capable of extracting stale, moistureladen air from inside your home and bringing in fresher, drier air simultaneously.

Synergy is a completely balanced system, that recovers and re-uses up to 90% of the heat from the warm air extracted from within your home. An extremely energy efficient way to re-use heat you have already paid for.





An advanced heat recovery core that reuses the heat you have already paid for. The heat from the extracted air is used to warm the incoming air.

90% of the heat is recovered into your home



SmartVent Synergy ventilation systems are easily upgradeable - your system can grow if you add rooms or increase your family.

Add on heat boost and extra rooms when it suits you



Your heat source now works more efficiently as incoming air is already pre-warmed from the heat within your home.

The home is continuously ventilated with minimal heat loss

#### **Diagram Key**

Fresh air is supplied from the outside



Moist, stale air is extracted from inside the home

Moist, stale air is expelled out of the home



## SmartVent SYNERGY

## Re-use up to 90% of the heat from the warm air extracted from within your home.

SmartVent Synergy is very different from most other home ventilation systems. It is a completely balanced home ventilation system, that extracts stale, damp air from inside your home and brings in fresher, drier air simultaneously and, best of all, Synergy is an extremely energy efficient true heat recovery system that re-uses heat you have already paid for. Synergy is specifically designed to recover the wasted heat produced from everyday activities It achieves this by using the warmth from the extracted air to warm the incoming air.

The heart of Synergy is the heat exchange core where the two airflows pass-by each other but never actually meet, and up to 90% of the heat from the extracted air is recovered.

Synergy makes the most of your existing heat source to recover the heat you've already paid for, while continuously ventilating your home. Open fires, gas fires\*, wood burners, heat pumps and most other heating appliances are all suitable for use with Synergy.

Heat pumps are one of the most common heat sources used in New Zealand. Nearly all heat pumps only re-circulate the existing moist air in a home, but do not bring in fresh dry air. This results in a build-up of moisture in the home. For this reason the combination of a heat pump and Synergy is a very effective total home heating and ventilation system. Synergy can also re-use cold air from air conditioners for a cool recovery solution in hot summer months.

\*Where gas appliances are used for the main heat source, please refer to the gas appliance installation company for advice

## Features



### Heat exchange core

Unlike paper cores, Synergy's polymer core is better suited to New Zealand's climatic conditions. With no moisture transfer between incoming and outgoing air, humidity in the home is reduced. Synergy cores are tested at 90% efficiency to European Standard EN308.



### Whisper quiet

The unique acoustic insulated ducting used in all SmartVent Synergy systems ensures 'whisper quiet' air transfer and better air temperature retention.



### **Superior filtration**

The high quality F7 filter will capture 80 - 90% of 0.4 micron particles including dust, pollens, allergens and mould spores.



#### Low profile diffusers

Stylish flat diffusers, inset in your ceiling for an unobtrusive look, are fully adjustable for balanced airflow into each room.

## Smart Stylish Control

### Take control of your living environment like never before.

Positioned in your heated room (usually the lounge) the colour touch screen controller is included with every SmartVent Synergy and offers state-of-the-art technology with real time readings for total system control at your fingertips.



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\*Energy saving features and reporting available on SYNERGY 405PLUS model only. (Not Synergy 190 and 250).

## **Optional Extras**

**Second source** - The second source feature can cleverly select the most effective fresh air source, either from the roof space or outside.

**Core by-pass** - The core by-pass feature diverts fresh filtered air around the heat exchange process. This is useful in summer when the outside temperature is lower than the inside and you do not want to warm the incoming air.

**Tempering heater** - By using a tempering heater you can further increase the warmth to take the chill off cold incoming air in winter.

**Heat boost** - The heat boost feature allows you to make even better use of your existing heating in winter. This feature is only effective in certain applications.

## SmartVent INTEGRA

SmartVent Integra integrates any ducted heat pump with SmartVent Synergy to achieve healthy home ventilation with up to 90% heat recovery combined with energy efficient heating. This is the ultimate home ventilation and heating solution. **The Ultimate Ventilation and Heating solution**.

Integra not only recovers heat from inside your home (as with Synergy) it also delivers the pre-tempered air to a ducted heat pump which then HEATS the air to your desired temperature. The system ensures fresh, filtered air is delivered into your home, whether the heat pump is working or not.

Synergy makes the most of your existing ducted heat pump to recover the heat you've already paid for, while continuously ventilating your home. Nearly all ducted heat pumps only re-circulate the existing moist, contaminated air in a home, but do not bring in fresh dry air. This results in a build-up of moisture in the home.

For this reason the combination of a ducted heat pump and Integra is a very effective total home heating and ventilation system. Integra can also re-use cold air from air conditioners for a cool recovery solution in hot summer months.

SmartVent Integra is the ultimate in True Heat Recovery ventilation with the advantage of being connected to a ducted heat pump for energy efficient heating.



# **24/7 Ventilation** whether the Heat Pump is Active or Inactive

## Features



## **Energy efficient heating**

The Integra system is connected to a ducted heat pump providing energy efficient heating throughout your home. (Ducted heat pump needs to be purchased separately. It is not supplied as part of the Integra system.)



### Whisper quiet

The unique acoustic insulated ducting used in all SmartVent Synergy systems ensures 'whisper quiet' air transfer and better air temperature retention.



### Heat exchange core

Unlike paper cores, our polymer core is better suited to New Zealand's climatic conditions. With no moisture transfer between incoming and outgoing air, humidity is reduced. These cores are tested at 90% efficiency to European Standard EN308.



### **Superior filtration**

The high quality F7 filter will capture 80 - 90% of 0.4 micron particles including dust, pollens, allergens and mould spores.

## SmartVent Integra System







## HeatTrans System



An optional summer intake can be added to draw fresh air into the home in the summer months. **Better passive heating and** 

summer cooling options

There's a Heat Trans system to suit your home - single level or multi story.

More options and better systems, installed by experts

## **Heat**Trans

### Is your Lounge Hot but your Bedrooms Not!

HeatTrans systems utilise your excess heat by transferring it from your lounge, and distributing it to other rooms in your home. This enables you to 'take the chill off' your bedrooms and create a warm comfortable environment for your family. Heat Trans systems include acoustic insulated ducting to achieve maximum heat transfer with minimum noise.

Heat Trans is available as both a standalone system and as an upgrade to your SmartVent Positive System.





Excess heat from the heat source can be as high as 35°C and can rise to ceiling level where it is trapped.

Use excess heat to warm other rooms in the home

An advanced fan and acoustic insulated ducting, transfers warm air around the home.

Better performing fan and ducting for a quieter system



Combine HeatTrans with your SmartVent Positive Pressure system and enjoy the best of heat transfer and ventilation.

Remove condensation and moisture for a healthy home



HeatTrans over the years has been synonymous with "the house with the blue roof", but as the brand grows we have decided to develop our HeatTrans imagery in-line with SmartVent. The new imagery allows us to develop a HeatTrans animation to easily explain the concept, view it online shortly.





## Effectively transfer the excess heat from one room to other rooms in the home.

Heat Trans systems use excess heat to warm other areas of the home by transferring it from one room to multiple rooms. Heat Trans has been in the market for over 28 years and is the brand of choice for electrical contractors. The Heat Trans system has been upgraded in line with consumer response and uses whisper quiet acoustic insulated ducting with digital controllers.

Typical home heating concentrates on warming the lounge, which means you are often 'Hot' in one room while the rest of the house is unbearably cold. Heat Trans overcomes this issue by effectively transferring the excess heat from this room to other rooms in the home.

## Features



### **Superior fans**

High quality multi-speed fans for optimum airflow ventilation in the home that cost as little as a light bulb (between 38W and 120W) to run. These high quality fans have been specifically selected to ensure correct airflow and pressure levels are achieved.



### Whisper quiet

The unique acoustic insulated ducting reduces air transfer noise to a 'whisper quiet' level. Better temperature retention is achieved, ensuring optimal heat transfer of excess warm air.



Easily adjustable to allow balancing of the airflow into each room. Simply twist the centre section of the diffuser to allow more or less air into each room. Or simply close any diffuser when the room is not in use.

## **Ultimate Control**

The Ultecon digital thermostat controller measures and displays the temperature of your lounge and lets you preset your preferred room temperature. When your lounge temperature exceeds your preferred room temperature the system will automatically start to transfer the excess heat to other rooms in your home.

The 2 and 3 room systems also offer fan speed control, which allows you to set your preferred fan speed giving you ultimate control over the volume of heated air being transferred.



One Room

Two/Three Room

## **Optional Extras**

**Summer feature** Introduce fresher cooler air into your home in summer with the Summer-Vent Extension Kit, to enable year round use of your system.

With the inlet grille installed under your soffit, fresher cooler air is filtered using a high efficiency F7 filter and is distributed throughout your home via your Heat Trans outlets. The system is controlled via a standard wall switch\* which operates the motorised damper to start drawing air from outside.

Note: When the summer feature is working the lounge/heat source room inlet is switched off via the damper and will not receive the cooled air directly from outside, however due to air pressure, natural re-circulation of air occurs throughout the home.

\* wall switch is not included in the kit.

**Extension kit** The Pro-Series One Outlet Extension Kit is designed to extend your standard three room Heat Trans system so you can distribute warm air to an extra room within your home. The extension kit gives you the flexibility to add additional outlet/s to your HeatTrans system. By adding additional outlet/s to your system you are simply dividing the available heated air amongst more rooms.

### All Heat Trans systems can be extended as follows:

1 Room System - 6 metres supplied: can be extended to 12 metres.

2 Room System - 12 metres supplied: any one duct length can be extended up to 18 metres from inlet to outlet.

3 Room System - 15 metres supplied: any one duct length can be extended up to 21 metres from inlet to outlet.





## SmartVent Service Crew

SmartVent Home Ventilation specialists offer everything you require to create a healthy, comfortable and energy efficient home.

### **In-Home consultation**

A qualified SmartVent consultant will visit you to assess your ventilation needs and specify a SmartVent system designed to create a healthy, comfortable and energy efficient home for you and your family. Consultation is provided free of charge and without obligation.

### Building or renovating your home

Send in your house plan and a ventilation system can be customised to suit your home. The experienced SmartVent team will recommend the system layout with optimum performance for your home.

### **Comprehensive range**

SmartVent has a wide range of ventilation systems and options available for your home. All SmartVent systems have been designed specifically for New Zealand's climate and conditions.

### Installation

SmartVent installers are fully qualified electricians. These friendly knowledgeable SmartVent specialists will install your system to the highest standards, assuring a quality installation and complete satisfaction.



## SmartVent Testimonials

"The best thing we've spent money on this year! The service from your installer was excellent too."

### Jackie & Steve, Waihi.

"We decided to investigate the possible installation of a home ventilation system and checked out several different brands. All of the systems we looked at appeared to work on a similar principle and we decided that SmartVent represented good value for money, and offered all the features we were looking for."

### David & Lyn Michell, Tuakau.

"I've been installing SmartVent systems for 7 years and have never had a problem with them. SmartVent has great features for the consumer and it's great value for money."

### Mark Tombleson, Nails and Sparks, Auckland.

"Before we installed a SmartVent system, we used to get really bad condensation in the wintertime and even sometimes during summer. But since we installed the system a couple of years ago, we haven't had any condensation at all."

### Robert & Ines, Auckland.

"Why did we wait so long to install home ventilation? We can't believe the difference it made to the heavy condensation and mouldy curtains we put up with for the last 12 months. Thank you SmartVent."

### W & T Samuels, Hamilton.

## SmartVent Partners

SmartVent is proud to be recommended by the **Certified Builders Association of New Zealand**, which promotes a commitment to excellence within the building industry.

SmartVent is proud to be a member of the **CCCA (Climate Control Companies Association).** The purpose of the organisation is to promote high standards of business competence and industry conduct for companies engaged in climate controlled environments.



## Securimax the designers and distributors of SmartVent Home Ventilation systems have over 28 years experience in the ventilation industry.

Securimax strive to stay at the forefront of research and development in energy efficient ventilation technology and take pride in being the clear market leaders in domestic ventilation in New Zealand.

A well designed and installed home ventilation system is very important as it supplies fresher, drier air to improve air quality and drier air is easier to heat, saving you money.

## "much better thanks"

( what we love to hear about your home )



NZ's Home Ventilation Specialists







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