



Create a Healthier, Drier Living Environment for your Home



What is an Energy Recovery System (ERS)?

The introduction of aluminum joinery and changing building methods has meant homes are increasingly 'air tight' and moist. This means homes struggle to 'breathe' fresh air. It is important to introduce ventilation to create good air quality. However, introducing ventilation by traditional methods (such as fan forced ventilation systems that introduce cold attic air into the home) compromises our heating and cools the home down in winter.

An Energy Recovery System (ERS) is a home ventilation system, installed into the attic. The ERS extracts

tempered air from the home through a vent, and passes it through the Energy Exchanger unit to temper incoming air from the outside. This air is then FRESH diffused into AIR your home through vents in the COOL STALE

HEAT EXCHANGER TRANSFERS HEAT FROM EXHAUSTED AIR TO TEMPER **INCOMING FRESH AIR**

RECIRCULATE AIR/TRANSFER

(OPTIONAL)

that the warmth collected within the home during winter is not lost WARM STALE to the outside: AIR it is purified and recycled back into the **TEMPERED** PURIFIED home. AIR TO HOME

The efficiency of the ERS is such

The (ERS) also uses a unique Humidistat to sense the relative humidity % (amount of moisture in the air) in the home and adjust the airflow to meet your desired air quality comfort

in the home.

Optional recirculate and summer modes are available.

> **ERS** Humidity Sensor Controller

By tempering the outside air before it enters your home, you minimise the energy

ceiling.

required to heat your home.

Energy usage is reduced as the air

AIR

filtered through your home by the ERS is tempered, as opposed to having to warm cool, attic air, particularly at night.

The ERS ventilation technology replaces stale indoor air with an equal amount of fresh air from the outside, keeping the home pressure neutral. Balanced ventilation is critical to prevent moisture build-up, particularly in

winter when heating your home, as condensation or moisture build up can lead to expensive rot damage and hazardous mould.

Warmer, dryer air is easier to heat, making your home less expensive to heat, at the same time.

How does the HomeTech Energy **Recovery System (ERS) work?**

Inside the Hometech Energy Recovery System (ERS) is a unique, lifetime warranted polypropylene core (Energy Exchanger) which has an 80% efficiency rate of taking the energy from the outgoing air and transferring it to the incoming air; delivering the filtered tempered air to the home via ducting and simple vents.

The Hometech Energy Recovery System also extracts odours from the home and reduces moisture.

Why a HomeTech ERS system is essential in your home?



Install a Hometech Energy Recovery System (ERS) today for a Healthier Home!

What is the difference between a Hometech ERS (Energy Recovery System) and the Positive Pressure Systems that dominate the NZ market?

Question?	Hometech ERS	Positive Pressure System
Which concept has the highest running costs?	Same costs – ERS same cost as running a 100W light bulb 50 - 60w on low speed	Higher if tempering of colder winter air required via inline heater or additional heater in the home
Is the incoming air balanced with the outgoing air?	Yes – incoming air is the same volume as the outgoing air creating balanced airflow and preventing drafts	No – more incoming air than departing air which could create drafts
Is the incoming air tempered?	Yes – tempered by the heat exchange core – inside temperature 22 degrees, zero degrees outside, incoming air 19 degrees – 80% efficiency	No – incoming air needs to be tempered to prevent cooling of home in colder months. Tempering the air is an additional cost, often done via an 'in line' heater within the fan unit.
Can we transfer heat around your home?	Yes – as it utilises the often wasted heated air in your home, tempers the incoming air and delivers tempered air back into the home. Additional optional feature with the damper model of acting as an air transfer system	No – tends to push air around into the walls
What is the warranty on the heat exchange unit?	Life Time Warranty	Not applicable as does not have a heat exchanger
Removes moisture from the air – dehumidifies?	Yes – through the Heat Exchange Core taking moisture to the outside	Νο
How is the system controlled?	The HomeTech ERS monitors the air quality by measuring Relative Humidity % and adjusting airflow to the air quality requirement in the home	Runs continuously or reduces speed when cold air is detected in the incoming air. Some models shut down when the incoming air gets too cold – at a time your home needs ventilation to reduce moisture build up!
Cost?	HomeTech has been able to supply an ERS at similar cost to many Positive Pressure Systems in New Zealand – more functions, sophistication and energy efficiency for your dollar	Many Positive Pressure Systems are expensive when comparing their functionality compared to energy recovery systems and often this is in view of high marketing costs and sales commissions. Positive Pressure systems technology is often dated.
Overseas trends	Overseas, for example, in Canada, the market is all Energy Recovery having been through the Positive Pressure phase. Ventilation is mandatory in many countries around the world, again like Canada.	There is a trend in overseas countries away from Positive Pressure towards Energy Recovery.

Why HomeTech Service and its products?

Hometech has been providing home comfort installed services since 1992. In that time Hometech has installed over 150,000 products to NZ homes. Whether it is skylighting, ventilation or attic stairs, Hometech has a solution to create a healthier home environment. Hometech has one of the longest established installation networks in New Zealand since 1992, and has a proven track record for customer satisfaction and product longevity.

Other products & services in the Hometech range:



Solatube Daylighting Systems



Roof Windows & Skylights



Attic Stairs



Accredited Installation



hometech.co.nz 0800 466 383

Natural lighting | Heating | Ventilation | Storage