

Let a building 'breathe'.

Ventilate with clean, fresh air without compromising heating.

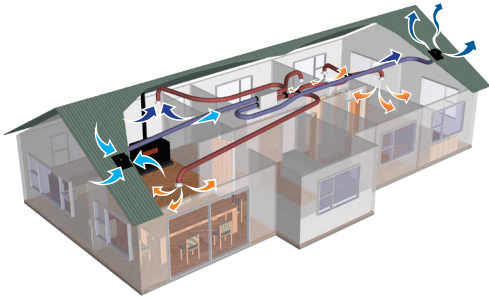


ERS

energy recovery system

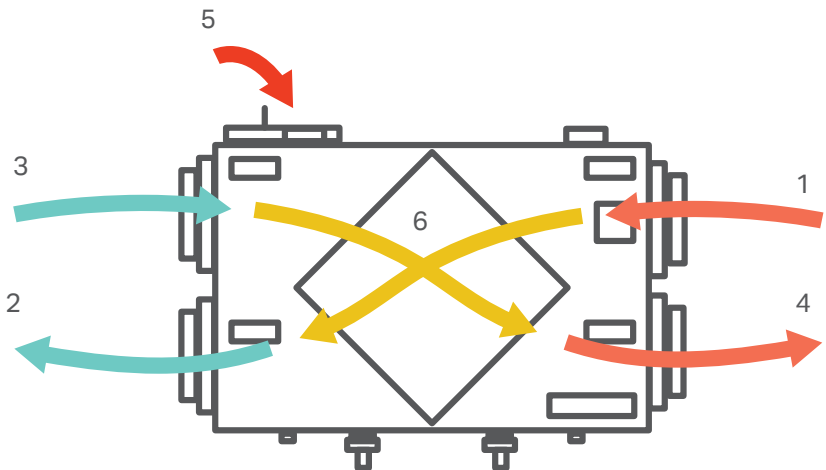
Acting as an Energy Recovery System, once installed in the attic, the Homotech ERS provides a continuous circulation of fresh, healthy air and being energy efficient maximises any wasted heat in a building, while the balanced ventilation minimises dampness and condensation.

- The ERS is designed to detect the level of humidity in the building, by way of a humidity sensor in the keypad.
- Exhausts damp, foul air and odours from the building, improving the air quality.
- Ventilates with tempered air creating a drier environment making buildings easier to heat.
- The Homotech balanced ventilation system leads to a healthier environment by working to expel indoor humidity that can promote the build-up of mould and mildew.
- Drier air is easier to heat than moist air, the energy demand to run the ERS is equivalent to a 100w lightbulb.
- Recovers 80% of energy from outgoing air to incoming fresh air – maximising any wasted heat from the building
- Efficient, durable, polypropylene heat exchanger core with a lifetime warranty



How it Works

- Powerful, centrifugal blowers bring fresh air into a building while an equal amount of stale, humid air is exhausted to the outside.
- Stale, humid air (1) flows through the cross-flow heat core and transfers the heat to the incoming fresh air
- Incoming fresh air (3) is filtered before flowing through the heat recovery core. (6)
- Stale air exhausted to the outside. (2)
- Tempered fresh air is distributed to each room of the house through an independent ductwork system (4).
- Damper Switch (5):
The optional damper switch (available on ERS170) can be installed to achieve one of two solutions:
 1. To act as a Heat Transfer unit in cooler months
 2. For summer bypass to bring cooler air into the home.



1. Warm stale air
2. Cool stale air
3. Fresh air
4. Tempered fresh air to home

5. Damper Switch (optional)
6. Heat exchanger transfers heat from exhausted air to temper incoming fresh air.

Homotech's Energy Recovery System complies with New Zealand Building Code compliances as follows:

NZBC E2/AS1	External Moisture
NZBZ G4/AS1	Ventilation
NZBC G9/VM1	Electricity
ASNZS 60335.2.80	Household and similar electrical appliances - Safety - Electricity (safety) regulations 2010

Flashings - Roof penetrations

To NZBC E2/AS1, 8.4.17 Roof Penetrations. Formable grade flashings, material to match selected roofing, to the same standards as the profiled sheets, notched where across profile, in accordance with Homotech™ recommended details.

Exterior penetrations

To NZBC E2/AS1 as consistent with project requirements & in accordance with HomeTech™ recommended details

Manufacturer / supplier warranty:

5 years: For ERS unit internal components
Lifetime warranty: for ERS heat recovery core

Installation warranty:

5 years: For installation



Keypad

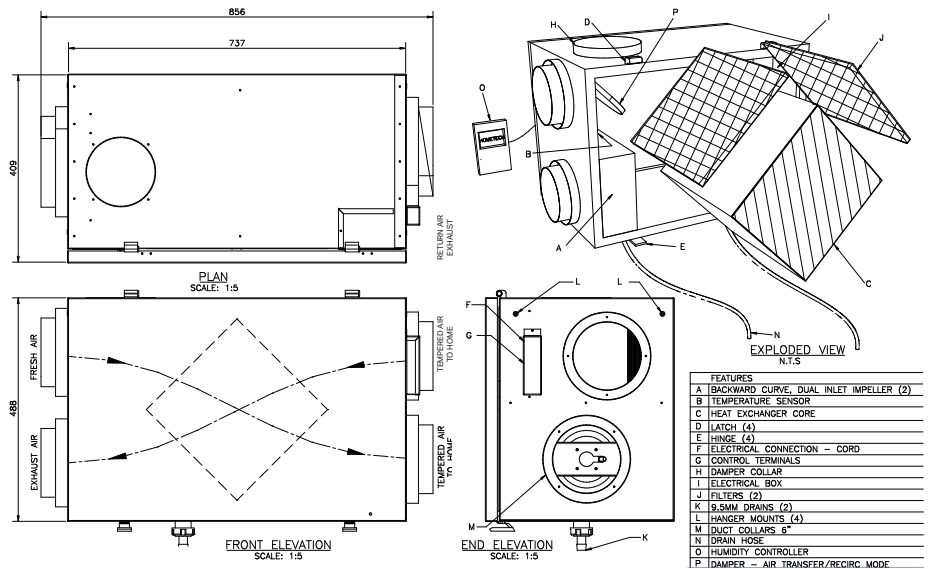
Set the humidity with fingertip control

Specifications for ERS150, ERS170 & ERS170D units

All Homotech ERS Units, factory tested, comply with AS/NZS 60335.2.80.

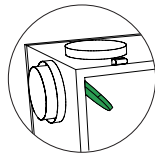
Unit comprised of the following:

- Aluminum cabinet with hinged access panel one side and white enamel paint finish
- Cabinet fully insulated with 25mm thick polyurethane rigid foam.
- Two directional polypropylene heat recovery core.
- 2 x Fans
- 4 x 152mm diameter duct collars
- High and low-speed adjustment /



ERS150

Suitable for homes up to 230sq metres.



ERS150:

Air flow:

335mm wide	Supply Air	59 l/s
760mm long	Exhaust Air	71 l/s
480mm high		

Ducting size: 150mm | Unit weight: 13.6kg

ERS170

Suitable for homes up to 300sq metres.

This model can also have a damper switch option (ERS170D).

ERS170:

ERS170D

Air flow:

410mm wide	410mm wide	Supply Air	84 l/s
860mm long	860mm long	Exhaust Air	85 l/s
500mm high	520mm high		

Ducting size: 150mm | Unit weight: 19kg

ERS150 Ventilation Performance

EXT. Static Pressure	Net supply Air flow	Gross air flow	
		Supply	Exhaust
in Pa	m ³ /h	m ³ /h	m ³ /h
25	207	207	255
50	178	180	217
75	158	160	195
100	144	146	177
125	132	134	150
150	112	109	134
175	92	92	124
200	66	68	104

ERS150 Energy Performance

Supply Temp.	Net Air Flow	Sensible Recovery	Apparent Sensible
°c	m ³ /h	Efficiency	Effectiveness
0	109	71	80
0	163	64	73
0	197	63	70
-25	102	64	82

220-240V-50 Hz, 110w electrical power input

ERS170 Ventilation Performance

Ext. Static Pressure	Net supply Air flow	Gross air flow	
		Supply	Exhaust
in Pa	m ³ /h	m ³ /h	m ³ /h
25	267	272	279
50	255	257	260
75	231	236	240
100	214	229	219
125	197	200	204
150	178	182	189
175	160	160	170

ERS170 Energy performance

Supply Temp.	Net Air flow	Sensible Recovery	Apparent Sensible
°c	m ³ /h	Efficiency	Effectiveness
0	105	65	73
0	146	63	70
0	195	61	68
-25	107	59	78

220-240V-50 Hz, 110w electrical power input