

The logo for itho, featuring the word 'itho' in a white, lowercase, sans-serif font inside a blue diamond shape.

HRU ECO 4

System 4

*Continuous Mechanical Supply and Extract
Ventilation with Heat Recovery*

Appendix Q Eligible



Complies fully with System 4 of Part F 2006: Means of Ventilation (England & Wales), the Code for Sustainable Homes, and suitable for level 3 and up to level 6 (Carbon Zero)

With up to 93% efficient heat recovery, the HRU ECO 4 outperforms the alternatives on the market in the field of energy efficient ventilation technology. With models for both house installations and apartment installations, there is a choice of Radio Frequency or hard wired options.

Fitted with quiet, energy saving dc motors, the HRU provides high efficiency heat recovery through its sophisticated counter-flow heat exchanger which is constructed of multi-triangular canals within a hexagon, to provide maximum surface area for heat exchange.

Easily installed into the loft space, and weighing only 25kg, this balanced mechanical central supply and extract system not only recovers a large percentage of heat energy, but negates the requirement

for background ventilators to be installed in the dwelling.

The HRU ECO 4 operates on a state-of-the-art three speed wireless controller, which allows a saving in installation costs, and allows the flexibility to install multiple switches in a single house.

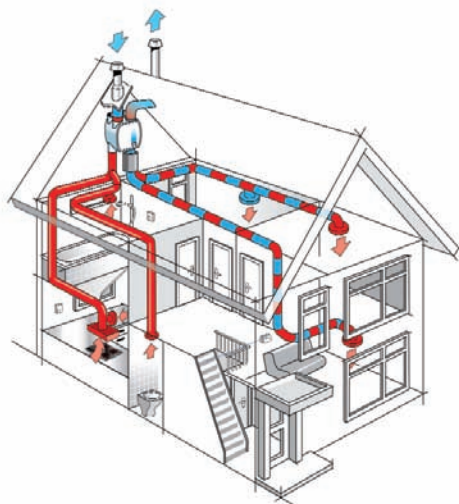
Alternatively, it can be operated using the familiar 3-mode control switch. It has low mode operation for night-time use, central mode for normal daytime use, and a boost mode for higher extraction rates around increased pollutant environments such as cooking and bathing.

The advanced HRU ECO 4 system includes an integrated 100% fully automatic 'summer' bypass valve and frost protection device.



Where

The heat recovery unit HRU ECO 4 is designed to be fitted in newly built houses, ideally positioned in the loft space. The unit



can be re-configured so that the duct connections are opposed to their factory supplied positions, thus allowing the unit to be located in different orientations; although the unit must be fixed with the mounting bracket, to a wall with a mass of no less than 200kg/m².

When

Maintenance of the unit is minimal with filters being cleaned 4-6 times per year and replaced at least annually. The heat exchanger should be cleaned every 6 years. Depending on the level of dust build up, the motor and fan blades should be cleaned periodically. The unit must be accessible to allow maintenance and inspection at all times. The fan used accumulates significantly less dust and must be cleaned once every four to five years of normal use.

- Spare parts can easily be exchanged, preferably without tools:
- Filters can now be accessed without removing the front cover.

- The heat exchanger can also be accessed when the front cover has been removed.
- Motors, fans, power supply and controls can be removed or replaced without disconnecting the ducts.
- Data can be extracted from the unit by connecting a laptop with service software.

Wireless

The heat recovery unit HRU ECO 4 can be controlled by a wireless (RF) 3 speed control unit with timer. Two of these switch units are included within the fan packaging when purchasing the RF version, and additional RF switches are available.

Wireless (RF) 3 Speed Control Unit with Timer.

The heat recovery unit is provided with one wireless (radio frequency) remote control switch. The receiver for the control signal is fitted into the fan during factory production. The switch, which has a self-adhesive backing, should be located in one of the wet rooms; most likely the kitchen and bathroom, and can switch the unit between speed position one, two and three. Additional transmitters are available to allow the fan to be controlled from more rooms; the utility room, en-suites etc. The last used switch is the master.

Advantages of Wireless Control:

- No drilling, fixings or electrical wiring is necessary.
- Control from every room is possible.
- Additional switches can be added at any time.
- A better indoor climate, by optimal control.

Installing RF Control Unit

To install the RF control switch unit in the kitchen, just adhere the control unit onto a tile with the supplied double-sided adhesive tape. Alternatively, the control unit can be fixed with a screw. Each unit is supplied with an installation and user manual.

- Do not place the RF control switch on a metal surface.

Additional RF Control Switch Information:

- Transmission range 100m in free air.
- Transmission indoors is possible through a maximum of 2 concrete floors.
- Pointing of transmitter towards the fan is not necessary.
- No external antenna.
- Frequency 868 MHz, no licence required.

Timer Function

A timer function is also included on the RF control switch. This timer can be used to switch the ventilation to the highest speed for a period of time. The advantage is that after the run-on period of the timer, the fan will revert back to its original speed.

Pressing the timer button once will switch the fan to high speed for 10 minutes. Pressing the timer button a second time will switch the unit to high speed for 20 minutes and a third press of the button will switch the unit to high speed for 30 minutes. The timer function can be overridden at any time by pressing either of the three speed buttons.

