

The logo for itho, featuring the word "itho" in white lowercase letters on a blue diamond-shaped background.

## CVE ECO 2

System 3

Continuous Mechanical Extract Ventilation  
Appendix Q Eligible



Complies fully with System 3 of Part F 2006: Means of Ventilation (England and Wales) and BRE Digest 398 (Scotland)

With its low energy dc motor and innovative cone-shaped impellers, backward curved to produce more efficient propulsion of air, the CVE ECO 2 from Itho is leading the way in the innovation of energy efficient ventilation technology.

Available in four models, The CVE ECO 2 continuous mechanical central extract fan provides quiet, uninterrupted extract ventilation from the dwelling via all of the wet rooms, creating a permanent air path through the property from the “dry” habitable rooms to the “wet” non-habitable rooms.

Provided with two wireless (radio frequency) remote control switches, the CVE ECO 2 RF version as a radio frequency controlled unit, complete with a remote wireless control

switch and boost speed timer function. Control can be expanded to other rooms with optional additional RF switches.

Alternatively, the CVE ECO 2 can be hard wired 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 to deal with increased pollutant environments such as cooking and bathing.

Hidden away in a loft or cupboard the unit is ultra quiet.



### Future proof

With the Government actively encouraging energy saving and a target for all new homes to be “carbon zero” by 2016, the CVE Eco 2 has been designed “future proof”.

The “Code for Sustainable Homes” which came into force in March 2007, details six levels of CO<sub>2</sub> emission improvement over 2006 Building Regulations requirements.

To achieve level 3 and above of carbon emissions, the air leakage of the dwelling must be improved so significantly that continuous ventilation becomes the only appropriate method. In addition, it must be demonstrated that the ventilation system itself must be energy efficient.

### Where

The CVE ECO 2 has been developed for individually adjustable mechanised extraction systems in the home.

### Applications include:

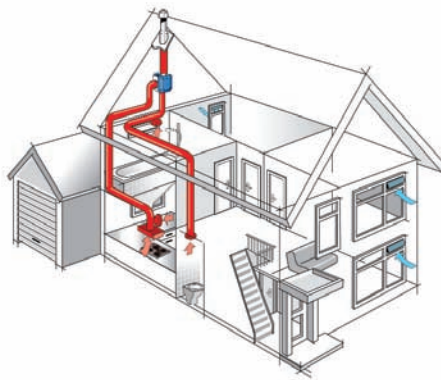
- For use in newly built family homes
- For use in newly built apartment blocks (high-rise buildings)
- Improving of existing individually adjustable mechanised ventilation systems
- Replacing of existing extractor units or ventilator boxes

The CVE ECO 2 RF is especially suitable for homes where the low energy costs are important.

### How

The CVE ECO 2 can be used in various types of homes, both in new buildings as well as renovation projects. The unit can be installed at different places in the home, for example, in a loft space, store room or cupboard.

The extractor unit can be installed in any orientation using the built-in mounting locations - against a wall, on the ceiling and also on sloping surface. We recommend installing the unit against a



wall with a density of at least 200 kg/m<sup>2</sup>.

The user manual is included within the unit packaging. Before installing the product, it is important that these instructions be read carefully.

### When

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.

### Why

#### Energy efficient units with DC Motors

A central ventilation unit that uses over 83% less energy than “conventional” MEV models is available right now: the CVE ECO 2 from Itho, based on an energy efficient DC (direct current) motor.

#### Minimum energy consumption

Whether you look at things from the perspective of the consumer, the government or the environment, saving energy is in everyone’s interest. Especially when it concerns an important, constantly operating device that consumes electricity, such as a ventilation system. This is why the CVE ECO 2 has been introduced to the UK. Itho engineers have done their utmost to perfect this technology and have also reduced the purchase costs to the level of a “standard” MEV. A booklet containing important information to enable the user to operate the central mechanical

ventilation system to its maximum potential is supplied along with every ventilation unit.

### Maximum service life

A number of innovative techniques have been applied in the development of the CVE ECO 2. A single circuit board has been developed for both the regulating and operating electronics. This means a reduction in the cost price, compared to using separate circuit boards. The simple and well-structured manner in which it is constructed, with less components means improved reliability. Add to these advantages the fact that a DC motor does not need to work as ‘hard’ as a traditional AC motor and you will understand why a CVE Eco fan is synonymous with a longer service life.

The fan used in the product is an important innovation. The cone-shaped backward curved blades move the air more efficiently, collect less dirt and lead to extra energy savings, while noise levels are reduced even further. This design also requires significantly less maintenance, and this also translates into additional cost savings.

### How much saving?

The extraction unit CVE ECO 2 enables you to make savings that can amount to 280 kWh on a yearly basis. This saving is comparable to the annual consumption of a refrigerator with a freezer compartment. It is even higher than the annual average power consumption of a washing machine.

However, you not only save money by opting for DC, you also make an important contribution to the environment because the CVE ECO 2 reduces the total CO<sub>2</sub> emissions by around 260 kg a year. The generation of electricity is responsible for CO<sub>2</sub> emissions, which are harmful to our environment. The less electricity used the less electricity the power plants need to generate and the less CO<sub>2</sub> is emitted. Another reason to opt for the CVE ECO 2.

