



# **WCME100**

## Energy-Saving Extract Unit



User Manual



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# Introduction

Interior comfort and energy efficiency are becoming increasingly important considerations in building.

More and more equipment is being developed to control the climate within the home while meeting these requirements. One such device is the Titon WCME100.

A Titon WCME100 has been installed in your home. In this User Manual you will find information

about the necessity of good ventilation and how your Titon WCME100 works. Additionally, we explain how to operate and maintain the unit.

**It is important that you read this User Manual thoroughly before using this ventilation system in your home.**

Construction methods in the past resulted in many places in the home where air could “leak” through, for example, through gaps between the walls and floor and between the walls and roof. Moreover, windows and doors did not seal completely when closed.

A fairly large volume of air could move into and out of the home through all these openings. If a light wind was blowing, the entire

volume of air in the home was ventilated two to four times per hour. This meant that a lot of energy was lost in heating that air, but the ventilation was excellent.

It is a misconception to believe that a modern building is ventilated sufficiently when the ventilation system in the home is turned off. In an airtight building, ventilation is absolutely essential to prevent damp, the growth of mould and

health problems for the occupants. “Improper use” of the ventilation system by the occupant, in combination with the high level of insulation of modern buildings, allows humidity and dampness to build up.



Humidity levels within the home can become so high that health, damp and mould problems can arise. A family of four can produce between 14 and 20 litres of water vapour per day through breathing, sleeping, cooking, washing, using the dishwasher, bathing, watering plants, etc.

Also, products within the home, such as textiles, carpets, parquet floors, newspapers and household

chemicals contain harmful substances (volatile organic compounds) that can have negative effects on health. This is why excessive water vapour and odours must be removed from the home for the safety of the occupants.

# How the system works

This ventilation system is installed to run continuously, even when the house is unoccupied. The performance of the system is linked directly to the layout and size of your home.

A 'Boost' setting may be available in certain properties and localised switches will enable you to utilise this when required.

Very little energy is used when the system is in operation, due to the use of a direct current (DC) motor.

DO NOT switch the unit off, as this may increase indoor pollutant levels and damp, therefore the risk of mould growth. This in turn could damage the fabric of the building.

The system can only function well if you use it sensibly and maintain it properly.

The extractor unit ventilates the home through extract diffusers fitted in the kitchen, bathroom and WC. These are connected to the central extractor fan by extract ducting. To ensure there is a good distribution of fresh air, air is extracted from those rooms through the extractor diffusers, while fresh air from outside enters the home through openings (such as window slot vents or grilles) in the living rooms and bedrooms.

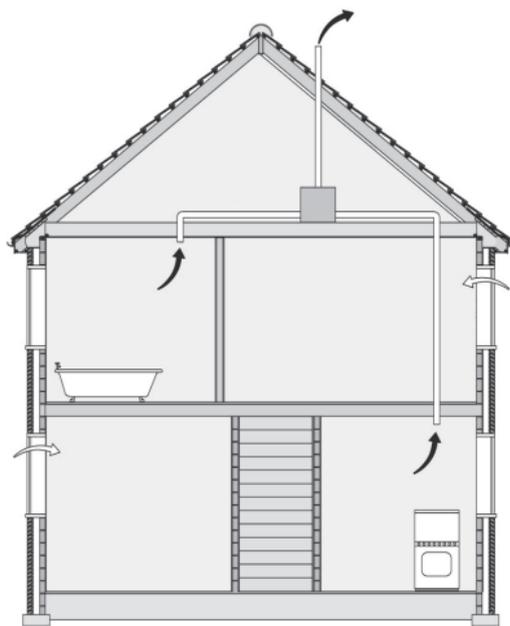


Diagram showing how the system works

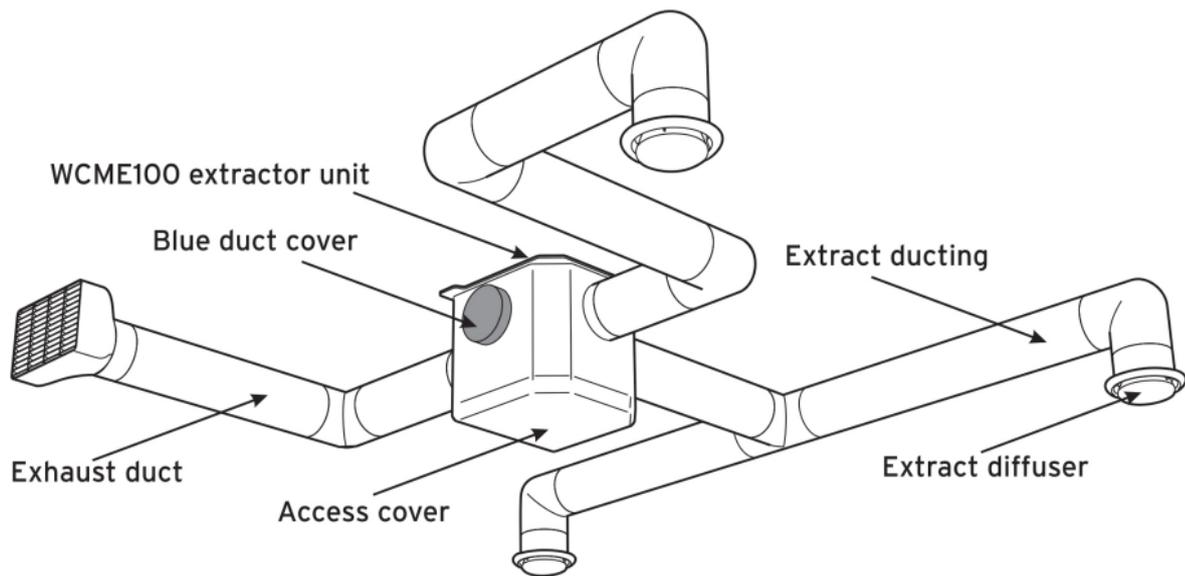
# System components

The Titon WCME100 ventilation system in your home consists of the following parts:

- WCME100 extractor unit.
- Extract ducting.
- Exhaust duct.
- Extract diffusers.

(See diagram over page).

# System components diagram



# Maintenance and cleaning

Technical maintenance of the Titon WCME100 is not necessary. However, the unit will need to be cleaned once every three to four years depending on the accumulation of dust. You can check yourself whether the extractor unit is seriously dirty, but it must be cleaned by a qualified technician.

The Titon WCME100 contains rotating mechanical parts. These

parts remain in motion after the unit is electrically isolated (remove fuse to ensure unit cannot be accidentally switched back on again). Wait at least 60 seconds after isolating the unit before opening.

To see if the extractor unit is dirty, follow these steps:

1. Electrically isolate the unit. (Remove fuse to ensure unit cannot be accidentally switched back on again).
2. Remove one or more of the blue duct covers so that you can see the fan.
3. Inspect the fan for dust and dirt.

A little dust makes hardly any difference to the fan's performance. If the layer of dust and dirt is more than 1mm thick on the inside of the blades, the fan should be cleaned by a qualified technician.

Depending on the outcome of the inspection, the fan should be cleaned and/or made ready for use.

- Replace the blue duct covers to close the inlets.
- Reconnect the unit to the electricity supply.

The extract diffusers in your home should be cleaned regularly. However, if the vents are exchanged or set differently during cleaning, the ventilation volumes extracted will no longer be correct and the ventilation system will not provide optimum performance.

This can result in your bathroom remaining damp too long, your WC becoming very cold, or your kitchen smelling stale. Therefore the extract diffusers must be placed back in their original position and settings. Either do not turn the diffuser during cleaning or mark the position before removal.

Be careful of protruding parts of ductwork as they can be sharp.

# Instructions for the Installer/Technician

The unit can be mounted on the wall or ceiling using the mounting brackets provided.

The unit has five air connections. The nozzle on the unit (1) is the outlet connection for air extracted and blown outside. The other four connections (2) are for the removal of the air from the home.

The blue duct covers on the unit close off the unused air inlets to

prevent leakage of air and ensure that maximum capacity is used.

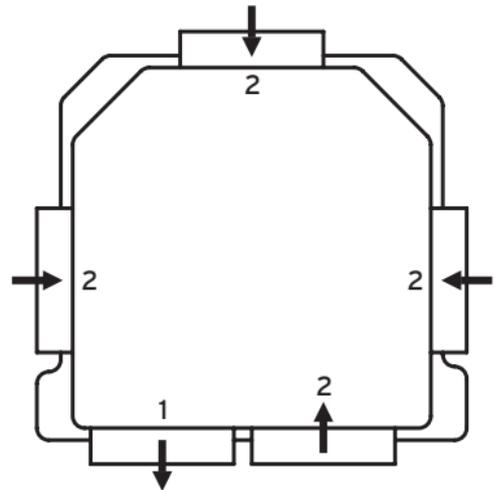
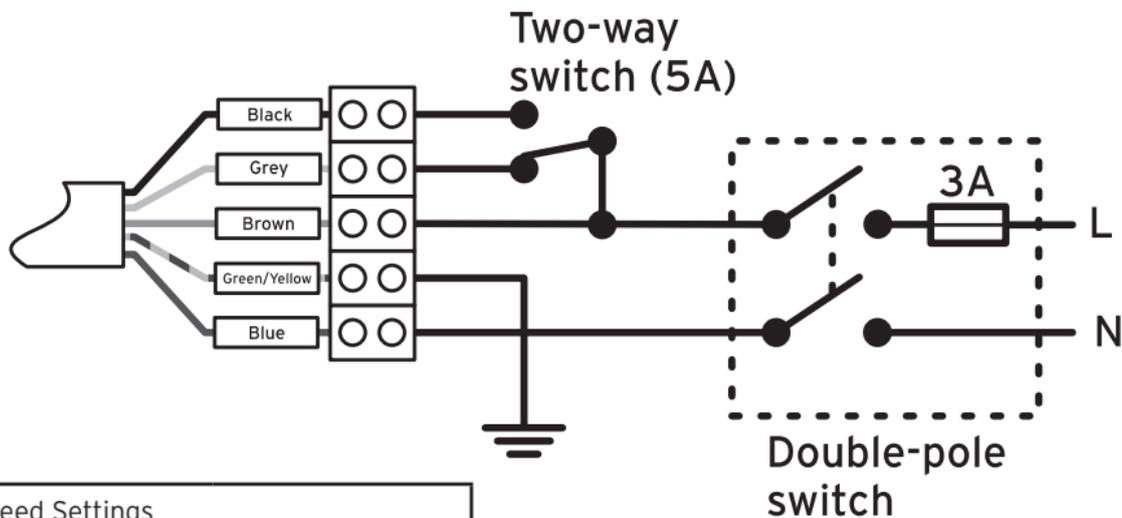


Diagram showing air flow direction

# Wiring diagram

Please refer to specific wiring instructions for 'RF' option.



Speed Settings	
Black wire	Boost
Grey wire	Continuous

# Setting up the system

Connect all ducting to the unit and cover any inlets which are not in use.

Using the Continuous (low speed) setting, ensure the extract diffusers located in the kitchen, bathroom and W.C. perform to the levels specified by local building legislation.

This may mean checking the extract diffusers several times as

when one diffuser is adjusted it will affect the other diffusers' extract rate.

If the required rates are not obtained through the extract diffusers, the unit may require adjustment.

# Adjusting the unit

If the unit is not giving the correct flow rates, it may be adjusted to suit the requirements as follows:

1. Electrically isolate the unit (remove fuse to ensure unit cannot be accidentally switched back on again).
2. Remove the cover by levering the tabs at the back of the unit with a bladed screwdriver.



Diagram showing removal of cover



Location of potentiometers

level potentiometer, see diagram. All adjustments must be made within the first hour of operation. After this time, the unit will need to be switched off for 2 minutes and turned back on before making further adjustments.

3. Adjust the low level potentiometer ('Laagstand') until the required flow rates are obtained. **DO NOT** adjust the high

# Maintenance/Serviceing the system

Before making any modifications to the system electrically isolate the unit (remove fuse to ensure unit cannot be accidentally switched back on again). The front access cover of the unit must only be removed by a suitably qualified technician/electrician.

The Titon WCME100 is modular and has several different components. This makes the system more reliable technically and simpler

to service. The unit is made of polypropylene (a type of plastic). This material has a long life and can be cleaned with a damp cloth.

The ventilation unit should be inspected periodically for dust and dirt. Before doing this, you must make sure that the unit is electrically isolated (remove fuse to ensure unit cannot be accidentally switched back on again).

The housing of the Titon WCME100 is constructed to allow easy replacement of the parts, which makes maintenance and cleaning very simple. The Titon WCME100 contains parts that may carry electrical current. For this reason, you should consult a qualified technician if you think the unit is faulty. Repairs should always be carried out by a qualified technician/electrician.

The Titon WCME100 contains rotating mechanical parts. These parts remain in motion after the unit is electrically isolated. Wait at least 60 seconds after unplugging the unit before opening.

To permit maintenance, the unit's front cover can be removed with a screwdriver. Insert the screwdriver horizontally in the space provided on the top left and press open the cover. You can then remove the cover by hand.



Diagram showing removal of cover

## **IMPORTANT: READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION.**

DO NOT install this product in areas where the following may be present or occur:

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient exhaust temperatures higher than 40°C or less than -5°C.

- Relative humidity above 90%.
- Possible obstructions which would hinder the access or removal of the unit.
- Sudden ductwork bends or transformations close to the unit.

DO NOT remove the front access cover of the unit without electrically isolating the unit (remove fuse to ensure unit cannot be accidentally switched back on again).

## SAFETY AND GUIDANCE NOTES

- All wiring must be in accordance with the current I.E.E. Regulations or the appropriate standards of your country and **MUST** be installed by a suitably qualified technician/electrician.
- The unit should be provided with a local double pole isolator switch.
- The fuse rating should be 3A.
- Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label on the unit.
- The unit should only be used in conjunction with the appropriate Titon products.
- When the unit is used to remove air from a room containing a fuel burning appliance, consult Part J of the Building Regulations (England & Wales).

Titon gives a three-year warranty on the Titon WCME100 ventilation unit starting from the date of installation. The installer/technician must record the date of installation into the panel on the reverse of this User Manual. The warranty covers the delivery of a replacement service module by Titon (basic printed circuit board and the motor/fan assembly).

It does not cover:

- Reimbursement of costs incurred by third parties.
- Faults or damage that are, in our opinion, the result of improper usage, handling, carelessness or accidents.
- Faults or damage caused by handling or repairs by third parties without our permission.
- Faults or damage that are the result of irregular and/or inexpert maintenance.

Before returning defective parts, the technician must call Titon. The technician will be given a return number.

The defective part must be sent together with the return number to:

Titon, International House, Peartree Road,  
Stanway, Colchester, Essex CO3 0JL

Tel: +44 (0) 1206 713800

Fax: +44 (0) 1206 543126

Email: [enquiries@titon.co.uk](mailto:enquiries@titon.co.uk)

Web: [www.titon.com](http://www.titon.com)

Installed by:



Date of installation: .....



**MARKETING DIVISION**

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