

HOMEOWNER MANUAL FOR VENTILATION

NATURAL VENTILATION (INTERMITTENT EXTRACTOR FANS)



AIRFLOW 

Bellway

WELCOME

Your home has been fitted with an Airflow mechanical ventilation product.

For over 65 years, Airflow has been forging a path of industry leading innovation in the design and manufacture of ventilation systems and air measuring instruments.

Airflow is committed to providing quality, reliable products for you and your family. Not happy with just maintaining the status quo, Airflow has developed market leading products for your home such as the Adroit and Entro Mechanical Ventilation with Heat Recovery (MVHR) range, iCON, iCONsmart, Loovent and QuietAir intermittent fans and iCONstant constant trickle fans.

Your Airflow solution will deliver many years of high-quality performance and service for you and your home.

NOTE FOR THE INSTALLER:

The information in this document is partly drawn from the latest Building Regulations & Government Guidance that was updated on the 15th June 2022; Specifically Part F, Part L and the new Part O. Part F Volume 1 stipulates the regulations for ventilation rates in dwellings, both extraction and background supply.

These were updated on the 15th June 2022 for England (Wales and Scotland had different dates). Ventilation is a controlled service and should be notified to the local authority (check Part F for specifics).

The new Part F recognises three ventilation types; Intermittent fans, continuous running fans (central & de-central) and mechanical ventilation with heat recovery.

The installer is responsible for ensuring that the following extraction rates in litres per second are met and documented on the enclosed form: Cloakrooms (no window) 6l/s, En-suites and Bathrooms 15l/s, Utility room 30l/s and Kitchens 60l/s where there is not an extractor hood over the hob that does 30l/s.

See BSRIA BG 46 2022 for devices that measure air volumes or visit [airflow.com](https://www.airflow.com) and search Mensura.

For the latest version of the Building Regulations Part F, Part L and Part O, including the Welsh and Scottish versions visit [airflow.com](https://www.airflow.com) and check out the Knowledge Centre.

WHAT IS THE HOMEOWNER VENTILATION GUIDE?

This homeowner ventilation guide is provided so as to comply with the Government Guidance which now requires the homeowner to be informed about the ventilation system in their home.

You should ensure the commissioning form has been filled in at the back of this booklet.

This homeowner ventilation guide is intended to help you better understand the ventilation system installed within your home. This is in addition to the original manufacturers' operating and maintenance instructions, which should have been provided to you separately.

You can view the instructions for your ventilation product on the Airflow website.

Some homeowners may choose to carry out simple but important routine maintenance tasks for themselves, such as cleaning dust and debris from air inlets and outlets, and changing air filters (in line with manufacturer's instructions where fitted). These simple actions will help to ensure energy use is kept to a minimum and systems are operating effectively with the flow rates of your extractor fans.

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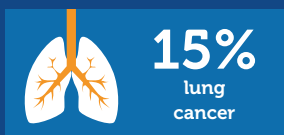
UK citizens spend approximately **90% of their time indoors**,¹ with **16 hours a day** on average spent at home.²

This means that individual risk of exposure to indoor air pollutants is many times that of outdoor air pollution and this is exacerbated by the fact that indoor air can be many times more polluted than outdoor air.³



Poor IAQ has been linked to **allergy and asthma, lung cancer, COPD, cardiovascular disease, dementia** and, more recently, **severe COVID-19 symptoms and greater risk of death** have been associated with poor air quality.^{4,5,6}

Ongoing research is looking at the impact of poor ventilation rates on disease transmission⁷ whilst new research is being undertaken on the impact of poor IAQ on mental health, following research in schools which indicates that cognitive function is impaired where air quality is poor.⁸



Poor IAQ is reported to have an annual cost to the UK of **over 204,000** healthy life years, with:

45% of those lost to cardiovascular diseases,

23% to asthma and allergy, and

15% to lung cancer⁹

and, according to the Royal College of Physicians, indoor air pollutants cause thousands of deaths per year in the UK, with associated healthcare costs in the order of **"tens of millions of pounds"**.¹⁰

YOUR HOME

Ventilation within your home has been provided using Natural Ventilation (previously referred to as system 1). This incorporates local intermittent extractor fans which could be iCON or QuietAir and background ventilators, mainly in the form of trickle vents in all window frames.

The intermittent extract fans are located in all wet rooms within your home e.g. toilet, en-suite, bathroom, utility and kitchen. You will not necessarily have a separate extractor fan in the kitchen if you have an extracting cooker hood over the hob. An extractor fan is only required in the kitchen where the cooker hood over the hob re-circulates instead of extracting, refer to page 8.

The type of intermittent extract fans fitted within your home may be iCON or QuietAir. For more information scan the QR CODE below or visit airflow.com and type iCON or QuietAir in the search.

Your home has been designed and built to be more energy efficient than previous homes; it will use less energy and as a result emit lower quantities of greenhouse gas emissions (including carbon dioxide) than existing homes.

In addition to being well-insulated and less draughty, your home is more air-tight and therefore an effective ventilation system is important to ensure the health and well-being of you, your family and the fabric of your home. By creating the healthiest home to live in; it will allow for pollutants and excess moisture to be removed, as well as keeping the air circulating around your home to help reduce the risk of overheating in hotter months.



HOW DO I CONTROL MY EXTRACTOR FANS?

The way in which the extractor fan is controlled in your home will depend on the model and its functionality.

It may work off an existing light switch or its own switch. It could also work by way of humidity activation (a rise in moisture) or by a motion sensor or a combination of all of these.

NATURAL VENTILATION SOLUTION IN YOUR HOME



iCON®

INTERMITTENT EXTRACTOR FANS

The iCON fan is an efficient, stylish and unique ventilation solution for the modern home. The iris shutter design makes switching on and off almost silent and helps reduce external noise ingress.



iCON® 15

iCON 15 can be fitted within any toilets, en-suite, shower rooms and bathrooms. It is stylish and unobtrusive and can be installed in the wall or ceiling.



iCON® 30

iCON 30 fitted in larger bathrooms and utility rooms or where long duct runs exist. Efficient, powerful and may be surface mounted or recessed into wall or ceiling.



iCON® 60

iCON 60 within kitchens and larger rooms is highly efficient, may be recessed or surface mounted into the wall or ceiling.

Your iCON's functionality will be determined by which module has been installed in your fan.

It could be one of the following:

Timer Module: your fan will continue to run for between 1 and 30 minutes and is adjustable.

Humidity Timer Module: your fan will detect the humidity within the room, set between 40-90%RH and begin to run until the humidity level is lowered. The run on timer function is between 1-30 minutes and has a pull cord to activate the timer.

More detailed instructions on module functionality is available on the Airflow website.



COVERS

To complement the décor of your home, we also offer the flexibility to upgrade the standard white cover to Sandstone, Silver, Chrome, Anthracite, Ultimate Grey, Turquoise or Navy Blue (Chrome suitable for iCON 15 & 15S only). This is perfect if you are looking for a fan that blends seamlessly into the surroundings, adding colour and co-ordination to any toilet, en-suite, bathroom, utility room or kitchen at a surprisingly low cost.

The covers are easy to fit with a simple twist and click. Clean the cover by gently wiping over with a damp cloth.



NATURAL VENTILATION SOLUTION IN YOUR HOME



QuietAir

INTERMITTENT EXTRACTOR FANS

QuietAir has 2 speeds available dependent on how it has been installed. To access the 2 speeds a 3 position control switch will be needed. All other functionality can be set up by setting the dip switches as outlined in the instruction manual.



QUIETAIR QT100

The QuietAir 100 fitted within toilets, en-suite and bathrooms. Performs well on both speeds.



QUIETAIR QT120

The QuietAir 120 fitted within toilets, larger wet rooms, utility room and kitchen. To provide quiet extraction levels that exceed the requirements of the latest Building Regulations.



QUIETAIR QT150

The QuietAir 150 fitted within kitchens and larger rooms whilst still achieving a low noise level for its size of only 35dB(A). Variable speed control is available for quick and easy adjustment of the flow rate.

Your QuietAir functionality will be determined by which model has been installed.

It could be one of the following:

QuietAir Timer: your fan will continue to run on at the installed setting; either 6, 10, 15, or 21 minutes.

QuietAir Humidity Timer : your fan will detect the humidity within the room, set between 65-90% RH and begin to run until the humidity level is lowered. The run on timer function at the installed setting, either 6, 10, 15 or 21 minutes.



More info



A FAN FOR EVERY ROOM

The QuietAir can be utilised in all wet rooms making it the perfect choice if aesthetics are of importance to you. The sleek and discrete design of the QuietAir means that it fits with all styles of decor.

INTELLIGENT HUMIDITY

Airflow's intelligent humidity sensor offers the additional feature of being able to recognise a rapid increase in humidity and activates the extractor fan before the pre-set values are reached, so that preventative ventilation commences.

Should this occur, the fan switches off when the humidity level is within 10% of the set point.

The benefits are that energy consumption is kept to a minimum and noise levels are reduced whilst ensuring optimum ventilation without the need for user intervention.

MY NATURAL VENTILATION SYSTEM

A Natural Ventilation system is installed within your home. This means ventilation is provided through local intermittent extractor fans, background ventilators and openable windows.

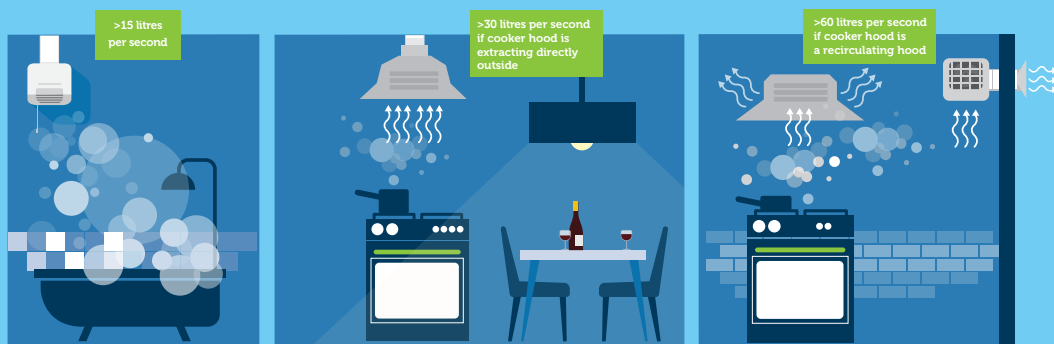
LOCAL EXTRACTOR FANS

Local intermittent extractor fans could be located within toilets, en-suites, bathrooms, utility rooms and kitchens (when the kitchen has a recirculating cooker hood or no cooker hood).

The fans are powered by electricity and will often activate via the light switch or may have their own separate switch. Depending on the functionality of

your fan, it may stay on for a timed period after being switched off or may have additional controls such as activation by humidity.

Once activated the fans operate by drawing fresh air in from the background ventilators and provide ventilation air flows by extracting moisture, odours, and other indoor pollutants.



BACKGROUND VENTILATORS

Background ventilation is usually provided by trickle vents in the window frames or air vents in walls. These background ventilators, in addition to the properties natural leakage, provide the air flows required to help maintain good indoor air quality.

Trickle vents within window frames should remain open to provide ventilation. They can be closed to

limit cold draughts at certain times, or within rooms you are not using and heating, but remember to open them again at other times. Permanently closing trickle vents could over time contribute to your home becoming unhealthy and damp and the build up of volatile organic compounds. Your extractor fans will not work effectively if there is no or limited background air ingress to the dwelling.

TIPS TO KEEP AIR FLOWING FREELY



All the ventilation inlets and outlets should be checked regularly to ensure they are not blocked with dust or other debris. They should be maintained by a professional installer according to the manufacturer's instructions.



Openings in trickle vents and air vents should be cleaned inside and outside the home, at least once per year, to ensure air can flow freely through them.



You may have noticed gaps underneath the doors in your home which allow air to flow between rooms and to your extractor fans. Ensure these gaps do not get blocked as this will prevent the air from travelling.

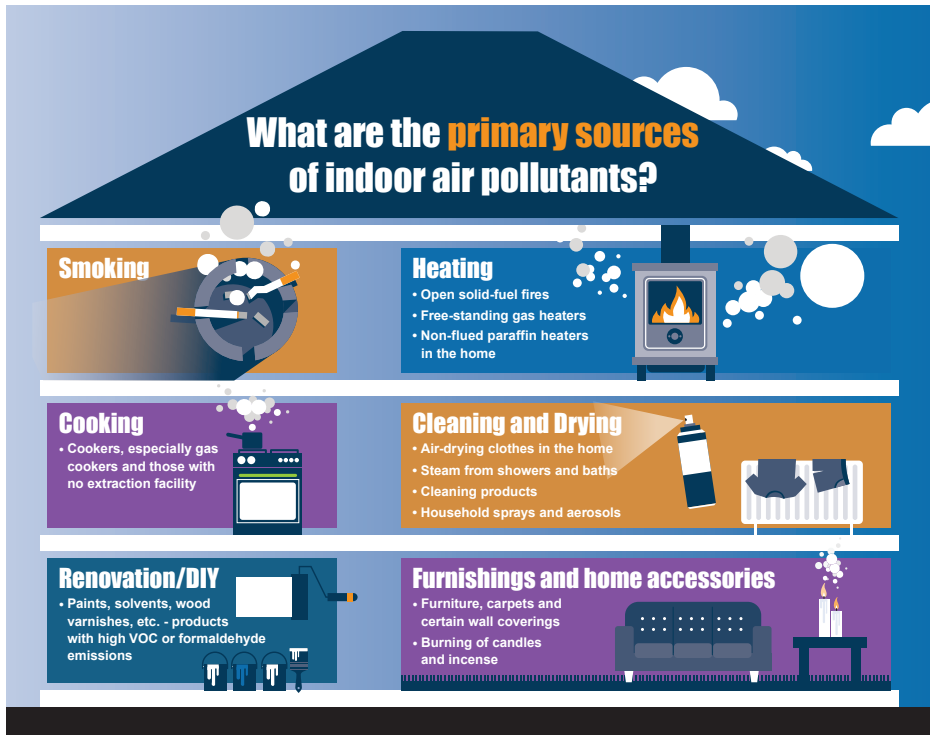


If you have an extractor hood or re-circulating hood the filter should be changed or cleaned regularly according to the manufacturer's instructions. After long-term use, grease and other deposits from cooking block filters causing poor performance and increased energy use. Routine cleaning of them will help keep the hood extractor operating efficiently.



Opening windows will provide additional ventilation when needed for purge ventilation. Where windows cannot be opened, there should be other mechanical means to carry out purge ventilation.

WHY WE NEED TO VENTILATE



Poor Indoor Air Quality (IAQ) is linked to health issues ranging from shortness of breath and fatigue to aggravating existing respiratory issues such as asthma, lung cancer, COPD, cardiovascular disease, dementia. A greater risk of death has also been associated with poor air quality.

Indoor air can be up to 50% more polluted than outdoor air and can contain over 900 different chemicals. Indoor air pollutants are responsible for the loss of

99,000 European lives as reported by the World Health Organisation.

Poor levels of ventilation along with excess moisture in the indoor air can contribute to mould growth, so it is important to use the ventilation system within your home to keep your home 'fresh' and to remove moisture at source, particularly from bathrooms, toilets, utility rooms and kitchens.

IMPROVE YOUR INDOOR AIR QUALITY

Behaviour	Risk	Remedy
Shower curtains 	Shower curtains can become mouldy	Make sure you clean or change your shower curtain regularly and avoid those made of vinyl as the material harbours moisture, promoting mould growth
Flooring 	Carpets can harbour dirt, dust mites, pet hair, fungus and other particles	Consider switching to wooden flooring, which is easier to keep clean, or vacuum regularly with a vacuum that has high quality filtration
Deodorant 	Aerosols can be bad for your indoor air quality, as they release particles into the air	Consider using roll-ons instead of aerosols which release far fewer pollutants into the air
Shoes 	Wearing shoes inside can bring pollen, dirt, soil and other particles into your home	Take your shoes off at the door, so as to stop particles being spread around
Paint 	Drying paint can give off high levels of Volatile Organic Compounds (VOC)	Ensure that while paint is drying, your home is very well ventilated and avoid occupying the rooms whilst paint is drying
Cleaning products 	Some personal and household products can contain toxins or chemicals which release toxins when they react in the air	Switching to eco-friendly products can help to reduce exposure, as often these do not have toxins inside them and are therefore better for your indoor air quality

IMPROVE YOUR INDOOR AIR QUALITY

Behaviour	Risk	Remedy
Mattresses 	Mattresses can harbour house dust mites	Avoid using second-hand mattresses, make sure you use barriers such as mattress and pillow covers or protectors and ensure you frequently wash bedding
Drying clothes 	Moisture from drying clothes can contribute to the development of black mould	Where possible, always dry your clothes outside or if you have to, dry them in a room with good ventilation, and keep the door shut.
Cooking 	Cooking on the hob can often release significant amounts of moisture into your kitchen	Cover pans with lids to ensure that as little moisture is released into the air as possible and be sure to use your extractor fan while cooking.



Poor indoor air quality (IAQ), or indoor air pollution, **is linked to a range of health conditions and is responsible for a significant loss of healthy life years, loss of life and disease burden.**

VENTILATE TO STAY COOL IN HOT WEATHER

NHS England cautions that prolonged periods of extremely hot weather pose serious health risks. The following measures will help to keep your home cool. For guidance about this from the NHS scan the QR code.



LIMITING HEAT FROM THE SUN

Limiting heat from the sun entering your home through glazed windows will help to keep your home cool.

If there are blinds, shutters, sun covers or awnings fitted on the outside of your home, these should be used throughout the day to protect against too much heat from the sun entering your home.

Indoor blinds or curtains can also be used, although they are not quite as effective at preventing heat from the sun entering your home.

Whether inside or outside, shading should not block window openings from allowing ventilation air to flow through your home.



LIMITING HEAT FROM ELECTRICAL APPLIANCES

Electrical appliances and devices generate heat while they are in use, and this can increase indoor temperatures. If possible and where safe to do so:

Turn them off at the wall socket when they are not needed, as even standby mode creates a small amount of heat.

Turn off electric lighting in spaces where it is not needed. Even Modern energy efficient lighting generates some heat while in use, and this can increase indoor temperatures.



INCREASE AIR FLOWS

Increase the ventilation air flows within your home and allow air to flow freely. If possible and where safe to do so:

Open all external doors and windows.

Open internal doors (except fire doors), including overnight and when your home is empty.



OPEN WINDOWS AT NIGHT

Increase the ventilation air flows at night-time. If possible and where safe to do so:

Leave any windows open overnight to allow ventilation and cooler night-time air to cool down your home and its contents.



YOUR VENTILATION SYSTEM

Use the extractor fans within your home to increase air flows.

Trickle vents are small openable purpose provided openings fitted within the window frames in your home. All trickle vents should be opened and left open throughout the hot weather period, including overnight and when your home is empty.

The following measures may be helpful when the outdoor air is cooler than the air indoors, often in the late evening and overnight, but also when a building is already overheating:



ALLOW STORED HEAT TO ESCAPE

If safe and secure to do so, external doors, windows and other ventilation openings should be opened during the cool early morning to allow stored heat to escape from your home and its contents.

Openings on different walls allow cross-flow ventilation. Openings at different heights increase ventilation air flows, including openings on different storeys.

If sash windows are fitted, open these so there is an opening gap both at the top and bottom of each opening (or other window designs that allow this).



YOUR VENTILATION SYSTEM

Local individual extract fans in bathrooms, toilets, utilities and kitchens are not normally intended to run continuously, but these can also be used during hot weather to boost ventilation air flows.

The following measures may be helpful when the outdoor air is warmer than the air indoors.



REDUCE AIR FLOWS

Windows and other ventilation openings like trickle vents should not be completely closed, rather instead their openings should be reduced to allow lower background ventilation air flows.



CLOSE EXTERNAL DOORS

External doors should be closed, but internal doors (except fire doors) should be left open. This should help to keep rooms reasonably cool while still allowing adequate ventilation air flows for good indoor air quality.

Sufficient removal of moisture, odours and other indoor pollutants are needed for good indoor air quality.



Helpful Tip

You can check the indoor and outdoor air temperatures using an ordinary thermometer, with the sensing bulb positioned in the free air, preferably away from hot or cold surfaces, and shaded from direct sunlight - It takes a few minutes for thermometers to show the correct reading. (This approach will not work for 'infrared thermometers' though, which generally measure temperatures of surfaces, not air temperatures.)

COMPLETION CHECKLIST & COMMISSIONING SHEET

Residential ventilation, from a toilet extract fan to mechanical ventilation with heat recovery system must be commissioned in accordance with an approved procedure.

The following is a copy of the documents in Appendix C of Part F Volume 1 of the Building Regulations. It must be completed as evidence that the system has been correctly installed, inspected & commissioned by the system installer to demonstrate compliance and left with the homeowner.

This installation and commissioning checklist is divided into three parts, as follows

Part 1 contains the particulars of the system, installation address and installer's details.

Part 2a functions as an installation checklist.

Part 2b is a visual inspection, or pre-commissioning, checklist.

Part 3 is for recording air flow measurements from fans.

CHECKING DESIGN AIR FLOW RATES AGAINST MEASURED AIR FLOW RATES.

Measured air flow rates for all fans should be recorded on **Part 3: Commissioning details**, as part of the commissioning procedures given in Section 4 of Approved Document F: Volume 1: Dwellings. Commissioning details, as part of the commissioning procedures given in **Section 4** of this approved document.

The measured values should be compared with their respective design values to determine the following:

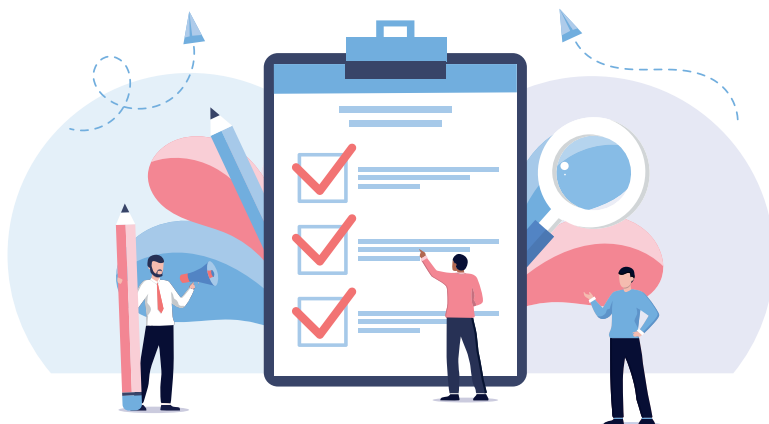
- a) If the measured rate for each fan is equal to or greater than the design value, then the system meets the design standard.
- b) If any measured value is lower than the design value, an adjustment should be made to correct the system. All air flows should then be remeasured. If necessary, further adjustments should be made until all air flows match their design values.

DEMONSTRATING COMPLIANCE

All three parts of the installation and commissioning checklist should be completed. The relevant sections of **Parts 2 and 3 should be signed** by a person who is both competent to install the system and responsible for installing and commissioning the system.

The three-part form should be completed for each installation address. A copy should be submitted to the building control body as evidence that the system has been correctly installed, inspected and commissioned.

REGISTER YOUR PRODUCTS
FOR WARRANTY
WITH THE QR CODE HERE



COMPLETION CHECKLIST & COMMISSIONING SHEET

Part 1 – System details and declarations

The installer responsible for the ventilation system installation, should complete this section and include details of the commissioning engineer.

1.1 Installation address details			
Dwelling name/number			
Street			
Town			
County			
Postcode			
Total Floor Area m ²			
1.2 System details			
System classification*	Natural Ventilation		
Manufacturer			
Fan Reference (Room)	Model Number	Serial Number	Location
1.			
2.			
3.			
4.			
5.			
6.			
7.			
1.3 Installation engineer's details			
Engineer's name			
Company			
Address line 1			
Address line 2			
Postcode			
Company Telephone number			
Company Email Address			
1.4 Commissioning engineer's details (if different to 1.3)			
Engineer's name			
Company			
Address line 1			
Address line 2			
Postcode			
Company Telephone number			
Company Email Address			

*NOTE: If a system has been installed that is not defined in Approved Document F, further installation checks and commissioning procedures may be required. Seek guidance from the manufacturer for such systems. Approved Document F can be downloaded from Gov.uk <https://www.gov.uk/government/publications/ventilation-approved-document-f>

Part 2a – Installation details

The installer responsible for the ventilation system installation, should complete this section before commissioning is carried out.

2a.1 Installation Checklist	Tick as appropriate	
Has the system been installed in accordance with manufacturer's requirements?	Yes	No
Have paragraphs 1.12 to 1.83 in Approved Document F, Volume 1 been followed (if relevant)?	Yes	No
If there are any deviations from paragraphs 1.12 to 1.83, give details here		
Description of installed controls (e.g. timer, central control, humidistat, occupancy sensor, thermal bypass, if applicable, etc.)		
Location of manual/ override controls		
2a.2 Installation engineer's declaration		
Engineer's signature		
Registration number (if applicable)		
Date of inspection		

NOTE: All references to tables and paragraphs are to Approved Document F, Volume 1: Dwellings.
Approved Document F can be downloaded from Gov.uk <https://www.gov.uk/government/publications/ventilation-approved-document-f>

Part 2b – Inspection of installation

The commissioning engineer responsible for commissioning of the ventilation system, should complete this section before completing part 3. The Commissioning engineer, should complete/check their contact details on Part 1

2b.1 Visual inspections		
What is the total installed equivalent area of background ventilators in the dwelling?		mm ²
Does the total installed equivalent ventilator area meet the standards detailed in Table 1.7 or paragraph 1.57, as appropriate?	Yes	No
Have all background ventilators been left in the open position?	Yes	No
Have the correct number and location of extract fans/terminals been installed to satisfy the standards in Table 1.1 or Table 1.2, as appropriate?	Yes	No
Is the installation complete, with no obvious defects?	Yes	No
Do all internal doors have enough undercut to allow air transfer between rooms as detailed in paragraph 1.25 (i.e. 10mm above the floor finish or 20mm above the floor surface)?	Yes	No
Has all protection/packaging been removed (including from background ventilators), so that the system is fully functional?	Yes	No
Are systems clean internally and externally?	Yes	No
Has the entire system been installed to allow access for routine maintenance and to repair/replace components?	Yes	No
2b.2 Not Applicable to Natural Ventilation Systems		
2b.3 Other inspections		
At initial start-up, was there any abnormal sound or vibration, or unusual smell?	Yes	No
During continuous operation, was there any excessive noise?	Yes	No
2b.4 Ventilation in Existing Dwellings (checks are in addition to 2b.1 and 2b.3)		
Are fans and background ventilators in the same room at least 0.5m apart?	Yes	No
Are there working intermittent extract fans in all wet rooms?	Yes	No
Does the location of fans satisfy the standards in paragraph 1.20?	Yes	No
Do all automatic controls have a manual override?	Yes	No
Does each room have a system for purge ventilation (e.g. windows)?	Yes	No
Do the purge ventilation openings in the rooms satisfy the minimum opening area standards in Table 1.4?	Yes	No

NOTE: All references to tables and paragraphs are to Approved Document F, Volume 1: Dwellings.
Approved Document F can be downloaded from Gov.uk <https://www.gov.uk/government/publications/ventilation-approved-document-f>

Part 3 – Commissioning details

The commissioning engineer responsible for commissioning of the ventilation system, should complete this section after completing part 2b. This section should only be completed after any issues identified in Part 2b have been rectified by the installer. If it proves to be impossible to commission the system to meet the design standards, then all issues must be rectified by the installer before the declaration in 3.5 is signed.

3.1 Commissioning equipment				
Schedule of air flow measurement equipment used				
Model No	Serial No	Date of UKAS Calibration (Must be within the last 12 Months)		
1.				
2.				
3.				
3.2a Air flow measurements. Must meet the MINIMUM extract Ventilation Rate. Refer to Table 1.1				
Room	Minimum Extract Rate			
Kitchen (cooker hood extracting to the outside)	30 l/s			
Kitchen (no cooker hood or cooker hood does not extract to the outside)	60 l/s			
Utility room	30 l/s			
Bathroom	15 l/s			
Sanitary accommodation	6 l/s			
Designated drying area (Scotland)	15 l/s			
Refer to 1.48: If a wet room has no external walls, the intermittent extract fan should extract at four air changes per hour to meet the purge ventilation standards in paragraphs 1.26 to 1.31				
Fan reference (from section 1.2 above)	Measured extract rate (l/s)	Design extract rate (l/s) Refer to Table 1.1		
1.				
2.				
3.				
4.				
5.				
6.				
7.				
For cooker hoods extracting to outside, only the highest speed setting needs to be recorded				
3.2b Commissioning Power Tests*				
Fan reference (from section 1.2 above)	Total Extract air flow rate	Total Electrical Power**	Specific Fan Power***	SAP Design Q SFP
1.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
2.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
3.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
4.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
5.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
6.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
7.	(l/s)	(l/s)	(w/l/s)	(w/l/s)
*In compliance with Approved Document L: Conservation of Fuel and Power - Volume 1, paragraph 6.54 and 6.55, Ventilation systems should be designed so they can be commissioned to suitable ventilation rates so that spaces are not significantly overventilated. The Specific fan power should not exceed the stated 0.5 w/l/s.				
** Total electrical power, supplied from fused connection unit to fan box, i.e. including all controls, needs to be measured when the system has been commissioned and the fans are running.				
***Electrical Power divided by the extract air flow rate.				

3.4 Not Applicable to Natural Ventilation Systems

Engineer's signature

Registration number (if applicable)

Date of commissioning

NOTE: All references to tables and paragraphs are to Approved Document F, Volume 1: Dwellings.

Approved Document F can be downloaded from Gov.uk <https://www.gov.uk/government/publications/ventilation-approved-document-f>

Approved Document L can be downloaded from Gov.uk <https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l>

The completed copy of the commissioning sheet should be submitted to the building control body within 5 days for new dwellings, or within 30 days in all other cases, as evidence that the system has been correctly installed, inspected and commissioned.

This Homeowner Manual with the completed commissioning sheet should be given to the building owner, along with the manufacturers operating and maintenance instructions for the ventilation system.

[illegible]

The air in your home comes from outside and once inside it circulates around the dwelling. Your ventilation system needs to be cleaned on a regular basis to ensure that the different parts work together to allow fresh air to flow through your home to ventilate effectively.

Document below the fans from table 1.2

Room Name	Month/Year	Month/Year	Month/Year	Month/Year	Month/Year	Month/Year	Month/Year
1.							
2.							
3.							
4.							
5.							
6.							
7.							

Trickle vents

Ensure that trickle vents within window frames, are working and clear on the outside of the property and inside. If there is no ventilation moist air will build up in the property affecting the fabric of the building.

References:

- | | |
|--|---|
| 1. European Commission, Joint Research Centre – Institute for Health and Consumer Protection, (2003) Report No. 23. Ventilation, Good Indoor Air Quality and Rational Use of Energy. | increase the risk of dying from the coronavirus (COVID-19)? Available at: https://www.ons.gov.uk/economy/environmentalaccounts/articles/doesexposuretoairpollutionincreasethechanceofdyingfromthecoronaviruscovid19/2020-08-13 . [Accessed 14 August 2020] |
| 2. BEAMA – My Health My Home. (2015). Indoor Air Quality Survey. YouGov. The survey was conducted from a representative sample of 2000 UK adults. | 7. HEMAC Network. (2017). Influence of ventilation design on the prevalence of anti-microbial bacteria in homes. Available at: https://hemacnetwork.com/amrproject/ . [Accessed 1 May 2018]. |
| 3. U.S. Environmental Protection Agency. (1987). The total exposure assessment methodology (TEAM) study: Summary | 8. Bakó-Biró, Zs., et al. (2012). Ventilation rates in schools and pupils' performance. <i>Building and Environment</i> 48: 215–223. |
| 4. UK Chief Medical Officer. (2018) Annual Report of the Chief Medical Officer 2017: Health Impacts of All Pollution – what do we know?. | 9. National Institute for Health and Welfare. (2013) Efficient reduction of indoor exposures. Health benefits from optimizing ventilation, filtration and indoor source controls |
| 5. Yegambaram Manivannan, et al. (2015). Role of Environmental Contaminants in the Etiology of Alzheimer's Disease: A Review. <i>Current Alzheimer Research</i> . Feb; 12(2): 116–146. | 10. Royal College of Physicians. (2016) Every breath we take: the lifelong impact of air pollution. Report of a working party. |
| 6. Office for National Statistics. (2020). Does exposure to air pollution | |



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