

CI/SfB

(57.7)

1st Edition



Domestic Ventilation and the Building Regulations Part F and L

Your Step by Step Guide

- The regulations
- The products
- Sizing
- The future
- Training

Vent-Axia[®]

Part F and L of the Building Regulations from October 2010

We would like to welcome you to what we believe is a great place to start if you want to understand the requirements of the October 2010 revision of the Building Regulations.

Part F and L issued in October 2010 place much greater emphasis on effective design, installation and operation of ventilation systems. The objective is to maximise carbon reduction through correctly specified and designed systems, competent installation minimising losses of the systems, verified performance once installed and correct operation by the home owner.



This document explains how to achieve compliance, looking at the three key areas in detail: Specification and Design, Installation and Commissioning, Operation and Maintenance.

Part F Overview

Part F, means of ventilation is hopefully self explanatory and it is the document in which the performance of different systems is covered. Things like airflow rates, noise, occupiers operation etc are all covered here.

The new edition has a few top level changes which may mean something to you (we will cover them in more detail in each section later on) but as an overview they are as follows:

Ventilation Rates

For the first time the ventilation rate of a given property is calculated dependant on the designed infiltration rate. Basically, how much it leaks when the wind blows (anyone who has lived in a drafty house will understand the importance that this has!). There are now two levels of ventilation based on how much they leak air. This is measured in how much air leaks from the building by it's surface area and the units are m^3h of air per m^2 of building area (m^3h/m^2).

1 For properties leakier than $5m^3h/m^2$ infiltration.



Leaky House

2 For properties tighter than $5m^3h/m^2$ infiltration.



Non Leaky House

Basically, tighter buildings now have an increased ventilation rate.

Installation and Commissioning

There is now some guidance on good installation practice and a commissioning guide set out in a supporting document to Part F know as the Domestic Ventilation Compliance Guide. This has been designed to ensure that ventilation not only delivers the required airflow, but also does it efficiently and quietly. This has been designed to link in with competent persons schemes and training programmes run by the industry. See the back page for more information on our BPEC training course which are designed to teach good installation practices.



Part L Overview

Part L, the document covering fuel and power is where the energy efficiency information on ventilation is covered. Putting is simply the new document has improved the energy efficiency targets for buildings by 25%. This affects ventilation equipment as they are part of the SAP calculation and there are now new Target Emission Rate's (TER's) set to deliver the 25% improvement over the previous regulations. This is now in line with the Code for Sustainable Homes Level three. There is also an opportunity to save energy through ventilation by using SAP Appendix Q. This is a method by which energy efficient ventilation systems can be selected and the energy benefit be added back into the SAP calculation.

What does this mean for ventilation?

Ventilation uses energy in two ways. Firstly, mechanical systems use electricity to power the motors and secondly there is heat loss as air is exhausted from the building which has been heated. This is now dealt with by a minimum energy efficiency level for all ventilation systems being set in a supporting document called The Domestic Building

Services Compliance Guide. There are now for the first time new build and refurbishment minimums in both the amount of electricity a motor can use (minimum specific fan power (SFP)) and a minimum energy efficiency of heat exchangers in systems that can recover the heat.

We recommend that best practice is followed when designing and installing a system, as the product performance is affected by both areas. We can offer support with both elements, please see the back two pages for further information on how we can help.

Ventilation four

There are systems covered in the building regulations and these are as follows:

System 1 - Intermittent fans and background ventilation

System 2 - Passive stack

System 3 - Continuous mechanical extract ventilation (MEV)

System 4 - Continuous mechanical balanced ventilation with heat recovery

(MVHR)

We will be looking at these in more detail under separate sections later in this document.

Summary

There are now four areas for consideration when selecting ventilation.

- Airflow performance
- Minimum energy efficiency limits
- Good installation
- Use by occupiers

Things to Remember



Part F changes - Airflows, background ventilators and noise

The table below shows the airflow rates as described in Part F

| Table 5.1a Extract ventilation rates | | | |
|--------------------------------------|--|---|---|
| Room | Intermittent extract Minimum rate | Continuous extract Minimum high rate | Minimum low rate |
| Kitchen | 30 l/s adjacent to hob or 60 l/s elsewhere | 13 l/s | |
| Utility room | 30 l/s | 8 l/s | Total extract rate should be at least the whole dwelling ventilation rate given in Table 5.1b |
| Bathroom | 15 l/s | 8 l/s | |
| Sanitary accommodation | 6 l/s | | |

| Table 5.1b Whole dwelling ventilation rates | | | | | |
|--|----|----|----|----|----|
| Number of bedrooms in dwelling | | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| Whole dwelling ventilation rate ^{a,b} (l/s) | 13 | 17 | 21 | 25 | 29 |

Notes:

a. In addition, the minimum ventilation rate should be not less than 0.3 l/s per m² of internal floor area. (This includes all floors, e.g. for a two-storey building add the ground and first floor areas).

b. This is based on two occupants in the main bedroom and a single occupant in all other bedrooms. This should be used as the default value. If a greater level of occupancy is expected add 4 l/s per occupant.

There are some considerations dependant on what ventilation system is being used. These are over viewed here but are shown in more detail in the separate sections for each system.

Intermittent Fans and Passive Stack (System 1 and 2)

These have different levels of background vents dependant on the infiltration rate of the building.

MEV (System 3)

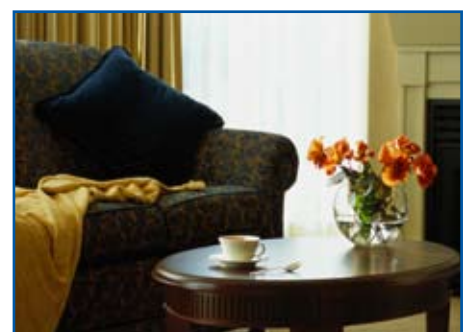
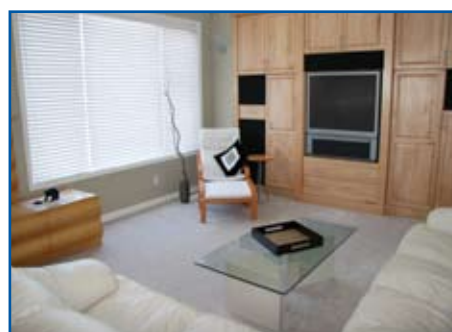
Window vents are not need in leakier buildings.

MVHR (System 4)

The rate of ventilation can be reduced dependant on the leakage of the building. If the building is leakier than 5m³h/m² then the mechanical ventilation rate is reduced.

Noise

For the first time, noise is now covered by the building regulations. As our buildings become more energy efficient and more air tight, the amount of noise entering them from outside is reduced. This has the effect of making them much quieter inside. That means that any noise made inside the house will be more noticeable so Part F now suggests a maximum noise level for any continuous system of 35dB(A).



Part L - Minimum efficiencies of motors and heat exchangers



Energy efficiency

As mentioned earlier, there are now minimum energy efficiency limits for all of the systems covered in the building regulations as well as some minimum heat exchanger efficiencies for heat recovery products. These are as follows:

Specific Fan Power (SFP)

- Intermittent extract fans - specify a minimum of 0.5 W/l/s
- Continuous extract fans - specify a minimum of 0.7 W/l/s
- Continuous supply and extract fans (MVHR) - specify a minimum of 1.5 W/l/s

Heat Exchanger Efficiency

There is now a requirement for any heat exchanger in a residential property to be a minimum of 70% efficient.

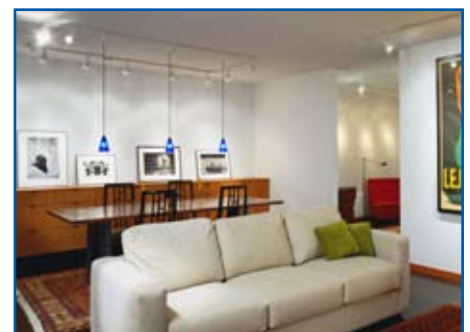
New Build

New Building Regulations favour continuous ventilation as these perform better in SAP, are easier to specify and easier to standardise (no need for trickle vents). This will encourage new build designers to move any new planning applications away from intermittent fans. Vent-Axia have the solution with Centra and Quadra as some of the best performing products on SAP Appendix Q.

Refurbishment

The Lo-Carbon intermittent range is essential to the refurbishment sector complying with the SFP of 0.5W/l/s. Giving benefits of 80% reduction in power consumption, 5 Year Motor Guarantee, the fans are suitable for wall, window, ceiling or ducted applications.

The whole Lo-Carbon residential range of fans meet the requirements of 0.5 W/l/s.



System 1 and 2 - Intermittent Fans & Passive Stack

System 1 - Intermittent Fans and Background Ventilators

Intermittent extract fan airflow rate based on table 5.1a from the previous page.

The design air permeability will determine the equivalent ventilator area as laid out in the below tables.

System 2 Passive Stack Ventilation (PSV)

This system relies on the natural stack effect by which warm air rises and is extracted from the wet rooms through 125mm rigid ducts running to ridge height. Trickle vents are required and can be humidity controlled. Internal rooms require 'assisted' ventilation i.e. by mechanical ventilation.

Background Ventilation

Much larger equivalent areas (up to 50% bigger) are now required for background ventilators when using system 1.

For example a three bed house with a floor area of 100m² a total equivalent area of 65000mm² is required. This may only have 6 windows to fit them in which would mean a free area of 10,833mm in each window. This not only takes up a lot of space in each window frame and looks unsightly, but the window fabricator will charge to fit each one and this example could require three vents on each window.

A - Total equivalent ventilator area ^a (mm²) for a dwelling with any design air permeability.

| Total floor area (m ²) | Number of bedrooms ^b | | | | |
|------------------------------------|---|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| 50 | 35000 | 40000 | 50000 | 60000 | 65000 |
| 51-60 | 35000 | 40000 | 50000 | 60000 | 65000 |
| 61-70 | 45000 | 45000 | 50000 | 60000 | 65000 |
| 71-80 | 50000 | 50000 | 50000 | 60000 | 65000 |
| 81-90 | 55000 | 60000 | 60000 | 60000 | 65000 |
| 91-100 | 65000 | 65000 | 65000 | 65000 | 65000 |
| 100 | Add 7000 mm ² for every additional 10m ² floor area | | | | |

| Key increase mm ² | |
|---|-------|
| Increases from the requirements of ADF 2006 | 5000 |
| | 10000 |
| | 15000 |
| | 20000 |

B - Alternative guidance on total equivalent ventilator area³ (mm²) for a dwelling with a designed air permeability leakier than (>) 5m³/(h.m²) at 50 Pa.

| Total floor area (m ²) | Number of bedrooms ^b | | | | |
|------------------------------------|---|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| 50 | 25000 | 35000 | 45000 | 45000 | 55000 |
| 51-60 | 25000 | 30000 | 40000 | 45000 | 55000 |
| 61-70 | 30000 | 30000 | 30000 | 45000 | 55000 |
| 71-80 | 35000 | 35000 | 35000 | 45000 | 55000 |
| 81-90 | 40000 | 40000 | 40000 | 45000 | 55000 |
| 91-100 | 45000 | 45000 | 45000 | 45000 | 55000 |
| 100 | Add 5000 mm ² for every additional 10m ² floor area | | | | |

Notes:

a. The equivalent area of a background ventilator should be determined at 1 Pa pressure difference, using the appropriate test method given in Table 5.3

b. This is based on two occupants in the main bedroom and a single occupant in all other bedrooms. For a greater level of occupancy, assume a greater number of bedrooms (i.e. assume an extra bedroom per additional person). For more than five bedrooms, add an additional 10000 mm² per bedroom

Part F
Compliant

Part L
Compliant



Part F and L Compliant

The new requirement for minimum specific fan powers means that no intermittent fan can use more than 0.5 W/l/s.

Vent-Axia offer a fully compliant Lo-Carbon intermittent range which meets both Part F and Part L.

Airflow Rates - Intermittent

| Lo-Carbon Range | | | |
|--------------------------------|-----|-------|-------------|
| Product - Intermittent | l/s | Watts | SFP (W/l/s) |
| VA100 (Bathrooms) | 25 | 6.5 | 0.26 |
| VA100 SELV (Bathroom) | 25 | 6.5 | 0.26 |
| Silhouette 100 (Bathroom) | 24 | 6.5 | 0.27 |
| Silhouette 100 SELV (Bathroom) | 26 | 7.5 | 0.29 |
| Minivent | 31 | 6.5 | 0.21 |
| Vent-A-Light | 31 | 6.5 | 0.21 |
| Solo Plus* | VAR | VAR | 0.50 |
| Solo Plus SELV * | VAR | VAR | 0.50 |
| VA150 (Kitchen) | 64 | 11.5 | 0.18 |
| Silhouette 150 (Kitchen) | 67 | 8.2 | 0.12 |

Lo-Carbon Fan Range Features

Lo-Carbon Silhouette



Lo-Carbon Solo Plus



Range Features

- Models: Basic/Timer/Humidity - Installation options.
- Low power consumption - Part L Compliant
- Quiet running
- Back draught shutters included
- Modern aesthetics.
- Ball bearing motors for vertical or horizontal application
- 5 year motor guarantee
- Wall, ceiling, panel and window mounting options available.

* VAR = Variable speed settings and controls so lowest SFP quoted

System 3 MEV and dMEV

System 3 – Continuous Mechanical Extract (MEV)

There are two ways in which to comply with system 3: Centralised (MEV) or Decentralised (dMEV).

MEV incorporates a single unit that extracts stale air to atmosphere from all the wet rooms via ducting.

Decentralised MEV requires continuous running extract fans mounted in all wet rooms in much the same way as a traditional fan is mounted.

As shown on page four, rates as per table 5.1b for the continuous systems are much lower than the intermittent ventilation, and in kitchens particularly the rate falls from 60l/s to 13l/s. This can remove the requirement for noisy fans or cookerhoods completely.

Reduced background Ventilators

An additional benefit is through a reduction in the number of background vents needed. If the design air permeability is $<5\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$, background ventilators are required in habitable rooms at 2500mm^2 only. This is one small vent. If design air permeability is $>5\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$ there is no requirement for background ventilators at all. This gives a really big benefit of not having to fit a large number of unsightly window vents in, as required with intermittent systems.

Energy efficiency

The Domestic Building Services Compliance Guide states a maximum specific fan power of 0.7 W/l/s for MEV systems. These can also be SAP Appendix Q eligible which enables selection during the SAP calculation (there is an eligible product list embedded within the SAP software programmes). This enables the difference between the specific product and the default settings within SAP.

Vent-Axia Lo-Carbon Multivent ranges incorporate energy efficient EC/DC motors providing SFP's down to 0.18W/l/s which is up to 75% savings over the default 0.7 W/l/s in SAP. This low specific fan power (SFP) makes it one of the most efficient MEV products available.

In much the same way, dMEV can be applied and Vent-Axia Lo-Carbon Centra also provides SFP's down to 0.18W/l/s which is up to 75% savings over the default 0.7W/l/s in SAP. This also makes it one of the most efficient dMEV products available

Installation

The new 2010 regulations also require that systems are installed and commissioned correctly. To help, we provide training courses. See the training scheme section at the end of this brochure.



**Part F
Compliant**

**Part L
Compliant**



Lo-Carbon Centra



Range Features

- Part F compliant, meets required airflow rates in table 5.1.
- Part L compliant - SFP is **0.18W/l/s**.
- SAP Appendix Q eligible
- Quietest dMEV available.
- Discreet, tasteful styling.
- Single fan for use in all applications.
- IPX4 rated - IPX7 rated (SELV)
- Lo-Carbon motor offering 90% energy savings and long life.
- 5 year motor guarantee
- Suitable for wall, ceiling, panel and window mounting.

Lo-Carbon Quadra



Range Features

- Single fan for use in toilets, bathrooms, utility rooms and kitchens
- Meets Building Regulations for intermittent or continuous use
- Guaranteed installed performance
- Part F complaint - meets airflow rates in table 5.1
- Part L complaint - SFP 0.38W/l/s
- Suitable for wall, ceiling and panel mounting.
- Filterless technology and maintenance free
- Lo-Carbon motors offering 90% energy savings and long life

Lo-Carbon Multivent MVDC-MS



Range Features

- Reduces your carbon footprint
- SAP Appendix Q Eligible
- Specific fan power down to 0.18 W/l/s
- LS Boost connection
- Integral humidity sensor available
- Ultra quiet - acoustically lined for low noise levels
- Complies with Building Regulations Part F (System 3)

Lo-Carbon Multivent MVDC-MS

SAP Appendix Q Test Results

| Exhaust Terminal Configuration | Total Flow Rate (l/s) | Specific Fan Power (W/l/s) |
|---------------------------------|-----------------------|----------------------------|
| Kitchen + 1 additional wet room | 21.0 | 0.24 |
| Kitchen + 2 additional wet room | 29.0 | 0.18 |
| Kitchen + 3 additional wet room | 37.0 | 0.21 |

System 4 - Mechanical Ventilation with Heat Recovery (MVHR)

System 4 Continuous Mechanical Supply and Extract with Heat Recovery (MVHR)

MVHR is a whole dwelling ventilation system that supplies and extracts air continuously at a low rate (as per table 5.1 b) with the facility to be boosted as required. The unit is normally installed in the loft space or cupboard and rigid ducting supplies fresh filtered air to the habitable rooms and extracts stale polluted air from the 'wet' rooms.

Supply and extract diffusers are fitted to the ceilings and can be adjusted so as to balance the system.

The unit incorporates a polymer heat exchanger that tempers the incoming air before it is delivered to the habitable rooms.

The Domestic Building Services Compliance Guide specifies a maximum specific fan power of 1.5 W/l/s for MVHR systems.

Commissioning

MVHR systems must be commissioned in compliance with Part F with notification to Building Control with a copy provided for the owner/occupier

Lo-Carbon Kinetic E



Lo-Carbon Kinetic E

SAP Appendix Q Performance

| | Specific Fan Power (W/l/s) | Temperature Efficiency % |
|-----|----------------------------|--------------------------|
| K+1 | 0.51 | 91% |
| K+2 | 0.58 | 90% |
| K+3 | 0.71 | 89% |

Features

- Ultra quiet
- Building Regulations Part L and Part F compliant
- SAP Q eligible
- Energy Savings Trust best practice compliant
- Compact
- Light weight
- Independent motor speed adjustment for easy commissioning
- Easy (tool free) filter access
- External condensate connection
- Horizontal spigot option
- Manufactured in the UK
- Switched Live inputs
- Delay on timer
- Left or right hand installation
- Frost protection
- F5 pollen filter option
- 'Filter check' warning



Part F
Compliant

Part L
Compliant



Lo-Carbon Sentinel Kinetic



Additional Sentinel Features

- Programmable summer bypass
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls: Humidistat, Vent-Wise, PIR
- Wired remote control and wireless boost options
- Volt-free inputs
- Adjustable delay-off timer
- BMS connectivity
- Self diagnosis for simplified fault finding
- 0v to 10v proportional control
- Purge setting
- Cooker hood option

Lo-Carbon Sentinel Kinetic Plus



Sentinel Kinetic

SAP Appendix Q Performance

| | Specific Fan Power (W/l/s) | Temperature Efficiency % |
|-----|----------------------------|--------------------------|
| K+1 | 0.72 | 92% |
| K+2 | 0.74 | 91% |
| K+3 | 0.81 | 90% |
| K+4 | 0.93 | 88% |
| K+5 | 1.07 | 87% |

Additional Kinetic Plus Features

- 150mm spigots with 180mm and 200mm options
- Constant volume version
- Up to 111 l/s (400m³/hr) at 150Pa
- Hinged filter for simplified access

Sentinel Kinetic Plus

SAP Appendix Q Performance

| | Specific Fan Power (W/l/s) | Temperature Efficiency % |
|-----|----------------------------|--------------------------|
| K+1 | 0.56 | 92% |
| K+2 | 0.49 | 92% |
| K+3 | 0.52 | 91% |
| K+4 | 0.57 | 90% |
| K+5 | 0.62 | 90% |
| K+6 | 0.70 | 89% |
| K+7 | 0.80 | 89% |



Working Examples - MEV/dMEV

House Specification

Three bedrooms, kitchen/dining room, living room, WC, bathroom, en-suite floor area 85m²

Whole dwelling rate (background, trickle or normal rate) calculate the rate from Part F, table 5.1b:
26l/s based on 'Note a'; 85m² x 0.3l/s = 26l/s

Apartment Specification

One bedroom, kitchen/dining/living room, bathroom floor area 50m²

Whole dwelling rate (background, trickle or normal rate) calculate the rate from Part F, table 5.1b:
15l/s based on 'Note a'; 50m² x 0.3l/s = 15l/s

Continuous Mechanical Extract Ventilation

| MEV/dMEV | Airflow | |
|--------------|---------------|---------------|
| | Normal | Boost |
| Kitchen | 10 | 13 |
| Bathroom | 6 | 8 |
| WC | 4 | 6 |
| En-Suite | 6 | 8 |
| Total | 26 l/s | 35 l/s |

| MEV/dMEV | Airflow | |
|--------------|---------------|---------------|
| | Normal | Boost |
| Kitchen | 9 | 13 |
| Bathroom | 6 | 8 |
| Total | 15 l/s | 21 l/s |

Calculate the extract ventilation rate (boost) from Part F, table 5.1a: kitchen (13l/s) + WC(6l/s) + bathroom (8l/s) + en-suite(8l/s) = 35l/s

Calculate the extract ventilation rate (boost) from Part F, table 5.1a: kitchen (13l/s) + bathroom (8l/s) = 21l/s

Background Ventilators (if needed)

| | |
|----------------|----------------------------|
| Living room | 2500mm ² |
| Kitchen/dining | 2500mm ² |
| Bed 1 | 2500mm ² |
| Bed 2 | 2500mm ² |
| Bed 3 | 2500mm ² |
| Total | 12500mm² |

Background Ventilators (if needed)

| | |
|--------------------|---------------------------|
| Living/dining room | 2500mm ² |
| Bed 1 | 2500mm ² |
| Total | 5000mm² |

Single room heat recovery ventilator (SRHRV) may be used in conjunction with MEV/dMEV systems.

Determine the whole dwelling rate as above (26 l/s).

Calculate the room supply rate for the SRHRV: (Room volume x whole dwelling rate)/(Total volume of all habitable rooms)
e.g. (36m³ x 26 l/s)/(132m³) = 7 l/s.

The new whole dwelling rate for the MEV system is 19 l/s.

The SRHRV rate is 7 l/s.

Working Examples - MVHR



House Specification

Three bedrooms, kitchen/dining room, living room, WC, bathroom, en-suite floor area 85m²

Whole dwelling rate (background, trickle or normal rate) calculate the rate from Part F, table 5.1b:
26l/s based on 'Note a'; 85m² x 0.3l/s = 26l/s

| | Airflow | |
|----------------|---------------|---------------|
| | l/s | l/s |
| Extract | Normal | Boost |
| Kitchen | 10 | 13 |
| Bathroom | 6 | 8 |
| WC | 4 | 6 |
| En-Suite | 6 | 8 |
| Total | 26 l/s | 35 l/s |

Calculate the extract ventilation rate (boost) from Part F, table 5.1a: kitchen (13l/s) + WC (6l/s) + bathroom (8l/s) + en-suite (8l/s) = 35l/s

| | l/s | |
|----------------|---------------|---------------|
| | Normal | Boost |
| Supply | | |
| Living room | 6 | 8 |
| Kitchen/dining | 7 | 9 |
| Bed 1 | 5 | 6 |
| Bed 2 | 4 | 6 |
| Bed 3 | 4 | 6 |
| | 26 l/s | 35 l/s |

For buildings leakier than 5m³/(h.m²), you must subtract natural infiltration from the whole dwelling (normal) rate: calculate the internal volume of the dwelling. Multiply the internal volume by 0.04 l/(s.m³) subtract this volume from the whole dwelling rate.

House Dimensions:

Ground floor

8.5m x 5m x 2.4m (room height)

First Floor

8.5m x 5m x 2.4m (room height)

Total dwelling volume = 204m³

204m³ x 0.04l/(s.m³) = 8.2 l/s infiltration

Whole dwelling rate – Infiltration

26 l/s - 8.2 l/s = 17.8 l/s

Apartment Specification

One bedroom, kitchen/dining/living room, bathroom floor area 50m²

Whole dwelling rate (background, trickle or normal rate) calculate the rate from Part F, table 5.1b:
15l/s based on 'Note a'; 50m² x 0.3l/s = 15l/s

| | Airflow | |
|----------------|---------------|---------------|
| | l/s | l/s |
| Extract | Normal | Boost |
| Kitchen | 9 | 13 |
| Bathroom | 6 | 8 |
| Total | 15 l/s | 21 l/s |

Calculate the extract ventilation rate (boost) from Part F, table 5.1a: kitchen (13l/s) + bathroom (8l/s) = 21l/s

| | l/s | |
|--------------------|---------------|---------------|
| | Normal | Boost |
| Supply | | |
| Living/dining room | 9 | 13 |
| Bed 1 | 6 | 8 |
| | 15 l/s | 21 l/s |

Apartment Dimensions:

Ground floor

10m x 5m x 2.4m (room height)

Total dwelling volume = 120m³

120m³ x 0.04l/(s.m³) = 4.8 l/s infiltration

Whole dwelling rate – Infiltration

15 l/s - 4.8 l/s = 10.2 l/s

Future Direction

Building Regulations – Where are we going?

Things have moved on a bit since 1992 when ventilation was first introduced into the Building Regulations. Here is an overview of the changes including 2006.

2006 – Part F included continuous ventilation for the first time.

Ventilation systems were being installed by skilled persons but the performance data was never tested. Part L changes meant that SAP Q products could be included as part of the dwelling's SAP calculations.

2010 – Design, install and ensure its used correctly.

With dwellings being designed with increased energy efficiency and reduced air permeability, ventilation systems now require specific flow rates and there is more demand for highly efficient heat recovery to help reduce the DER's. Ventilation is now required to be installed correctly with the installation recorded and measured plus there needs to be guidance to the home occupier as to how it operates.

2013 – Ventilation is likely to become a controlled service with notification.

The road map to zero carbon means a 44% reduction in carbon emissions and ventilation systems will be installed by fully qualified

persons and notified in much the same way as gas appliances now.

2016 – Mechanical ventilation with heat recovery the most likely choice. Buildings will require a significant reduction in carbon emissions and zero carbon homes targets are likely to make MVHR the natural choice for energy efficient homes.



Things to Remember



Training Scheme



Domestic Ventilation Systems Installer Training

Become a Qualified Installer with your Ventilation Partner

Vent-Axia is now offering a BPEC course designed to meet the requirements in the Domestic Ventilation Compliance Guide 2010 for the installation, inspection, testing, commissioning and provision of information for Fixed Domestic Systems for both new and existing residential buildings.

The course is recognised by all Competent Persons Schemes within the industry including HVCA and NICEIC.

The course will train you to:

- **Install** Domestic Ventilation Systems in a safe and workmanlike manner.
- **Inspect and test** Domestic Ventilation Systems
- **Commission** and provide information on Domestic Ventilation Systems

To be eligible for this course you must hold or be taking a formal qualification such as N/SVQ level 3, or have a number of years experience in Plumbing, Heating, Electrical Ventilation installation

The course will be run over two days:
The 1st day will be theoretical with candidates working

with the trainer through the BPEC training manual.

The 2nd is taken up with practical exercises including the commissioning of a working MVHR system.

At the end of the course, there is an open book multiple choice assessment that each individual candidate needs to pass.

What does the course fee include?

The course fee includes both days training with lunch, your personal copy of the training manual which will be sent in advance of your starting date and your certification upon successful completion which lasts five years. Hotel accommodation is not included.

What do I need to do to register?

If you meet the requirements above then the registration can be completed on line. Upon registration you will be emailed confirmation and an order number to retain for any future correspondence. The manual will also be sent for you to study before the course starts.

What do I need to bring?

The manual must be bought with you to the training along with two passport photographs which will be needed for your registration.

When and where are the courses run?

The dates are shown on the next page along with the last registration date to ensure you receive the course materials in time to prepare. Course timings are 9.30am to 5.00pm on both days. The course is held at our new BPEC approved training facility at Crawley. The cost of the course is £395.00 including VAT + postage.





By Appointment to H.M. The Queen
Suppliers of Unit Ventilation Equipment
Vent-Axia, Crawley, West Sussex

Vent-Axia®

VENT-AXIA CONTACT NUMBERS

Free technical, installation and sales advice is available

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Sales Fax: 01293 565169

Tech Support Tel: 0844 856 0594

Tech Support Fax: 01293 539209

Industrial

Sales Tel: 0844 856 0591

Sales Fax: 01293 534898

Tech Support Tel: 0844 856 0595

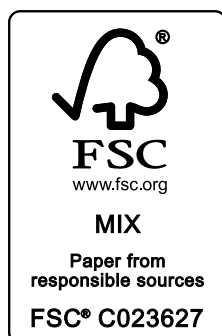
Tech Support Fax: 01293 455197

Web: www.vent-axia.com

Email: sales@vent-axia.com

Supply & Service

All sales made by Vent-Axia Limited are made only upon the terms of the Company's Conditions of Sale, a copy of which may be obtained on request. As part of the policy of continuous product improvement Vent-Axia reserves the right to alter specifications without notice.



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