PVC-U and Aluminium Systems

What you need to know about Part F

Universal

Part F Compliant

The new Part F of Building Regulations: Ventilation – **what you need to know**

Q What is Part F?

A Part F is a building regulation that concerns construction projects that are new, or result in the change of use of a dwelling or all other buildings in England. It sets the standards for the ventilation of new and existing buildings.

Q Why is Part F changing?

A Part F has been in place since 2010, but over the years key issues have been identified and concerns voiced over the failure of homes to comply. In 2020, guidance from Public Health England on selected volatile organic compounds (VOCs) indoors and World Health Organisation (WHO) recommendations for indoor pollutant levels have meant Part F, as it stands, is out of date.

Part F is also very closely linked with Part L (conservation of fuel and power) as both are being improved to meet the Governments Future Homes Standard. One way of improving energy efficiency is to reduce the heat loss through air permeability, this means building more air tight homes. However, an increased air tightness leads to reduced ventilation and therefore Part F has been updated to ensure that sufficient levels of ventilation are still provided.

Q When does the new Part F come into force?

A The new Part F comes into force on 15th June 2022 in England. All installations (except exemptions below) after this date will need to comply. Changes to Building Regulations in Scotland, Wales, & Northern Ireland, and dates for compliance, are yet to be confirmed.

Q Where does the new Part F apply?

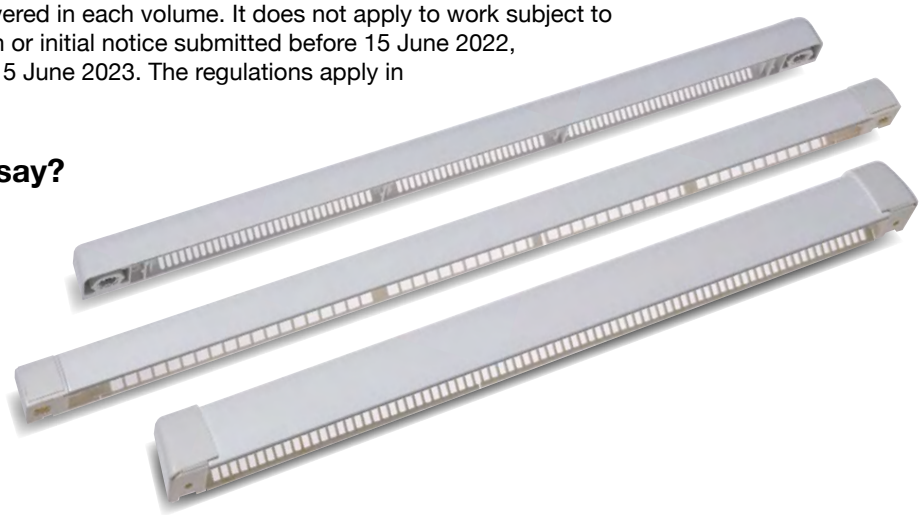
A There are 2 parts to the new Part F. Each one covers a different type of building:

- ADF Volume 1: Dwellings
- ADF Volume 2: Buildings other than dwellings

Both new build & replacement are covered in each volume. It does not apply to work subject to a building notice, full plans application or initial notice submitted before 15 June 2022, as long as work starts on site before 15 June 2023. The regulations apply in England only.

Q What does the new Part F say?

A On the following page is a summary of the main points. Note: All sizes shown are minimum.



New Homes - using Natural ventilation with background ventilators and intermittent extract fans guidance suitable only for less air tight dwellings):

(Formerly System 1 – Background ventilators and intermittent extract fans)

2010 Regulation Guidance	2022 Regulation Guidance
Ventilation amounts, and therefore number of trickle vents required, vary according to a number of criteria including room type, occupancy levels based on bedroom types, floor area of property. These can range from 35,000mm²EA to over 65,000mm²EA.	These are now simpler per room amounts; • **For dwelling with multiple floors:** - Habitable rooms and kitchens: 8000mm²EA - Bathrooms: 4000mm²EA - Sanitary Accommodation/Utility Room: No minimum • **For single storey dwellings (e.g flats):** - Habitable rooms and kitchens: 10000mm²EA - Bathrooms: 4000mm²EA - Sanitary Accommodation/Utility Room: No minimum *There are some sub-rules:* • Seek expert advice should the dwelling have a single exposed façade, or at least 70% of its openings on same façade, or the kitchen has no windows or façade for vents. • If kitchen and living room not separate, at least 3 vents of same EA as for habitable rooms should be provided in that space. • Total number of vents in habitable rooms and kitchen should be at least 5, or 4 if one bedroom property. • If a bathroom has no window or external façade through which a ventilator can be installed, the minimum equivalent area specified should be added to the ventilator sizes specified in other rooms.

Notes: The guidance for natural ventilation is only suitable for less airtight dwellings. For the design, sizing and positioning of ventilators to provide effective ventilation using natural ventilation for highly-airtight dwellings expert advice should be sought

New Homes using Continuous mechanical extract ventilation:

(Formerly System 3 – Continuous mechanical extract and (MEV))

2010 Regulation Guidance	2022 Regulation Guidance
Trickle vents should provide 2500mm²EA in each habitable room.	Trickle vents should provide 4000mm²EA in each habitable room.

Notes: The guidance for mechanical extract ventilation is suitable for highly-airtight dwellings only. For the design, sizing and positioning of ventilators to provide effective ventilation using mechanical extract for less airtight dwellings expert advice should be sought.

New Homes using Mechanical ventilation with heat recovery:

(Formerly System 4 – Continuous mechanical supply and extract with heat recovery (MVHR))

2010 Regulation Guidance	2022 Regulation Guidance
No change, trickle ventilators are not required because these are balanced ventilation systems in more energy efficient house designs.	No change, trickle ventilators are not required because these are balanced ventilation systems in more energy efficient house designs.

Notes: The guidance for mechanical supply and extract ventilation is suitable for any level of airtightness.

Existing Homes:

2010 Regulation Guidance	2022 Regulation Guidance
• Replacement windows should be fitted with trickle vents only if the windows being replaced had vents in them. • Habitable rooms: 5000mm²EA. Kitchen, Utility Room and Bathroom: 2500mm²EA. • Addition of a wet room to an existing building: 2500mm²EA. • Addition of a habitable room to an existing dwelling: 8000mm²EA.	• Replacement windows should be fitted with trickle vents regardless of whether the windows being replaced had vents in them or not, if no background ventilation alternative is being installed. • Habitable rooms and kitchens: 8000mm²EA. Bathrooms (with or without a toilet): 4000mm²EA. • Addition of a wet room to an existing building: 5000mm²EA. • Addition of a habitable room to an existing dwelling (if existing room has less than 5000mm²EA): 10,000mm²EA. • If the existing dwelling has continuous mechanical extract ventilation fitted then 4000mm²EA is required in habitable rooms. If its **not technically feasible** to adopt the minimum equivalent areas set out in paragraph 3.15, the background ventilators should have equivalent areas **as close to the minimum value as is feasible**. In all cases there is now an Installation & Commissioning Checklist that needs to be completed and handed over by the installer, this includes background ventilation sign off. This Checklist appears in the Approved Document 'Part' F, as opposed to the separate DVCG (Domestic Ventilation Compliance Guide) which has been made obsolete.

Documentation for Homes:

2010 Regulation Guidance	2022 Regulation Guidance
Domestic Ventilation Compliance Guide (now obsolete)	**Home User Guide for new dwellings (4.18 & 4.19)** • A Home User Guide should be provided for a new dwelling as described in Section 9 of Approved Document L, Volume 1: Dwellings. It should contain a section on 'Ventilation'that provides non-technical advice on the ventilation systems provided within the new dwelling. • The Home User Guide is in addition to the operating and maintenance instructions. It is intended to be a nontechnical overview for the occupiers, and should include some basic details on the operation and maintenance of the system. The operating and maintenance instructions provide further details as required. **Additional information for work in existing dwellings (4.20)** • When new ventilation is installed in an existing dwelling, information about it should be provided to the building owner in accordance with paragraphs 4.13 to 4.17. Go to - https://www.gov.uk/government/collections/approved-documents for the Home Energy Guide Template and the Existing Home Ventilation Guide.

Notes: Information about overheating and the conservation of fuel and power are required under different regulations and guidance is given in Approved Documents O (Overheating) and L (Conservation of fuel and power). Where the system provides more than one function, the owner should be informed of each separate function.

	Operating and maintenance instructions (4.13, 4.14 & 4.15) • Sufficient information about the ventilation system and its maintenance requirements must be given to the building owner to allow the system to be operated effectively. This should include both design flow rates and maintenance requirements. The information should be provided in a clear manner, for a non-technical audience. • A copy of the completed commissioning sheet in Appendix C should be given to the owner of the new dwellings. For existing dwellings Appendix D checklist may be used. • The operation and maintenance information should contain specific instructions for the end user on how and when to use the ventilation system, including information on the intended uses for the available fan settings. Information should also be provided to suggest when, and how, the system components should be cleaned and maintained.

Q How do Epwin Window Systems products comply?

A We will have a range of compliant ventilators available prior to 15th June 2022.

Q How do I know I comply?

A All ventilators are marked with their EA rating. This can be checked against the above guidance.

Q Is there anything else we need to know?

A Epwin Window Systems has been leading the way in the industry for nearly 50 years. It's why all our products are ready for the introduction of the new Part F on 15 June 2022. It's also why they will be ready for any future regulations too.

Issue 2 - information contained in this document is correct at 20/4/22

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