

## PART F REGULATION CHANGE

### Changes to the Building Regulations and Technical Standards in England, Wales and Scotland

New regulations have now been released for England, Scotland and Wales. It is the intention that the updates ensure adequate ventilation of all types whilst the energy efficiency of housing is improved at the same time. As the saying goes, 'Ventilate when you Insulate'.

This is all part of the Government's proposals for the Future Homes Standard, which provides a pathway for highly efficient buildings that are zero carbon ready, better for the environments and fit for the future. Implementation of a full technical specification is scheduled for 2025. There are also proposals being discussed to mitigate against overheating in residential buildings.

**THE BELOW IS A SUMMARY OF THE MAIN POINTS, PLEASE ENSURE YOU READ THE FULL DOCUMENTS FOR FULL IMPLICATIONS.**



England - Revised Approved Document F publication issued  
December 2021 with effective date 15th June 2022

## WHAT ARE THE CHANGES FOR BACKGROUND VENTILATORS? (E.G. TRICKLE VENTS IN WINDOWS OR DOORS)

**Note:** All sizes shown are minimum sizes.

### 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

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 35,000mm<sup>2</sup>EA to over 65,000mm<sup>2</sup>EA.

#### 2022 Regulation Guidance

##### These are now simpler per room amounts;

- For dwelling with multiple floors:  
Habitable rooms and kitchens: 8000mm<sup>2</sup>EA, Bathrooms: 4000mm<sup>2</sup>EA,  
Sanitary Accommodation/Utility Room: No minimum
- For single storey dwellings (e.g flats):  
Habitable rooms and kitchens: 10000mm<sup>2</sup>EA, Bathrooms: 4000mm<sup>2</sup>EA  
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.

**Note:** 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.

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### New Homes using Continuous mechanical extract ventilation:

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

#### 2010 Regulation Guidance

Trickle vents should provide 2500mm<sup>2</sup>EA in each habitable room.

#### 2022 Regulation Guidance

##### Considerations for when using trickle vents:

- Do not use in wet rooms.
- Provide a minimum equivalent area of 4000mm<sup>2</sup> for each habitable room in the dwelling.
- Provide a minimum total number of ventilators that is the same as the number of bedrooms plus two ventilators (i.e. a one-bedroom dwelling should have three background ventilators, a two-bedroom dwelling should have four background ventilators, etc.).

**Note:** 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

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

#### 2022 Regulation Guidance

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

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

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### Existing Dwelling 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

- Replacement windows should be fitted with trickle vents only if the windows being replaced had vents in them.
- Habitable rooms: 5000mm<sup>2</sup>EA. Kitchen, Utility Room and Bathroom: 2500mm<sup>2</sup>EA.
- Addition of a habitable room to an existing dwelling: 8000mm<sup>2</sup>EA.

#### 2022 Regulation Guidance

- 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: 8000mm<sup>2</sup>EA.
- Addition of a wet room to an existing building: 5000mm<sup>2</sup>EA.
- Addition of a habitable room to an existing dwelling (if existing room has less than 5000mm<sup>2</sup>EA): 10,000mm<sup>2</sup>EA.

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.

### Existing Dwelling using Continuous mechanical extract ventilation:

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

#### 2010 Regulation Guidance

- Replacement windows should be fitted with trickle vents only if the windows being replaced had vents in them.
- Addition of a wet room to an existing building: 2500mm<sup>2</sup>EA.

#### 2022 Regulation Guidance

- 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.
- If the existing dwelling has continuous mechanical extract ventilation fitted then 4000mm<sup>2</sup>EA is required in habitable rooms.

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.

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### Documentation for Homes:

#### 2010 Regulation Guidance

Domestic Ventilation Compliance Guide  
(now obsolete)

#### 2022 Regulation Guidance

##### 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 non technical 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/publications/homeuser-guide-template> for the **Home Energy Guide Template and the Existing Home Ventilation Guide**.

**Note:** 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.