

Trickle Ventilators

A Guide to background ventilation in replacement windows to comply with English Building Regulations 2022



Why does my home need ventilation?

In recent years we have seen an improved airtightness of buildings, as part of the drive to provide thermal comfort and reduce energy consumption in line with Government targets. As dwellings are made more airtight, internal pollutant sources and mould growth caused by condensation can have greater impact on indoor air quality. Occupants may experience adverse health effects unless ventilation is effective.

Ventilation is necessary to provide a healthy and comfortable internal environment for the building occupants. The main purpose of ventilation is to remove pollutants and excess moisture from the indoor air, and replace it with 'Fresh' outside air.

The three main types of ventilation



Sometimes referred to as rapid ventilation, assists with the removal of occasional pollutants such as smoke and smells from cooking or fumes from painting and decorating.

Purge ventilation can also assist in reducing the overheating of a building during warm summer periods. An openable window can provide purge ventilation.

'Extraction'



Ventilation within rooms which are regularly exposed to pollutants or excess water vapour i.e. Kitchens or Bathrooms can be assisted by the use of permanent or intermittent extraction. Extraction limits the spread of fumes and pollutants throughout the building.



A small ventilation opening designed to provide controllable whole dwelling ventilation.

The most common form of background ventilation will be via trickle vents installed in windows and doors. The trickle vents will provide a whole building ventilation provision.

Background ventilation should be positioned 1.7m above floor level, to avoid noticeable draughts, trickle vents are ideal for meeting this requirement.

Various devices can be used to open and close vents to suit the activities of the inhabitants of the room/building.

Do my replacement windows need to have background ventilators fitted?

In a word, **yes!**

The **Building Regulations** in England require 'that there shall be adequate means for ventilation provided for people in the building.'

If the outgoing window had trickle vents, the replacement window should also have them. (to at least the same level of performance) The new vents should offer at least the same capacity (measured in equivalent area) as the outgoing vents. Where it is not possible to ascertain the capacity of the outgoing vents; the following applies: -

- Habitable rooms and kitchen should have a minimum of 8000mm² EA*.
- Bathrooms should have a minimum of 4000mm² EA*.

If the outgoing window had no trickle vents the rates above should also be followed resulting in more widespread use of trickle vents within your home.

**Equivalent Area (EA) is the industry accepted method of determining the performance of a ventilator.*

Are there no exceptions?

If the home has mechanical ventilation with heat recovery, then background ventilation in the windows is not required.

If the home has mechanical ventilation with no heat recovery, then the requirement for habitable rooms can be reduced to 4000mm²

If the property is a listed building or within a conservation area you should consult with the Local Authority Building Control.

Ventilation and Window Security

Two stage locking handles are not allowable under Building Regulations to provide background ventilation. To the opportunist burglar, an open window can provide an easy point of entry. Windows that are fitted with 'two stage locking' handles (sometimes referred to as night vent position) can be vulnerable.

Controllable trickle vents can provide the inhabitants / home owner with the ability to have a consistent supply of ventilation even when the window is locked in a closed position.

Further details regarding window security can be obtained from your local crime prevention officer.

Additional Information

- a) Background ventilators should be at least 1700mm above floor level, to reduce cold draughts, but still be easy for the occupant to reach.
- b) All rooms with external walls should have background ventilators. If a habitable room has no external walls then consult with your window supplier
- c) If the dwelling has more than one exposed façade, the area of background ventilators on each façade should be similar, to allow cross-ventilation.
- d) If an exposed façade is close to an area of sustained and loud noise (e.g. a main road), then a noise attenuating background ventilator should be fitted.
- e) If fans and background ventilators are fitted in the same room, they should be at least 500mm apart.

NOTE: Background ventilators are intended to normally be left open.

A GGF Member window fabricator or window installer will be able to advise you on the most suitable type of trickle vent for your property in order to comply.



Glass and Glazing Federation