



Award winning quality homes

Home User's Guide to Household Ventilation

What is the typical ventilation provision in a UK home built after 2010?

In the majority of homes the ventilation provision will typically comprise of:

[1] rapid mechanical extraction via local wall or ceiling mounted extract fans located in rooms where high levels of moisture or odours may occur such as kitchens, bathrooms and toilets from activities like washing and cooking.

[2] natural purge ventilation via opening windows in most rooms in the house to rapidly remove fumes and heat as well as odours and moisture generated from activities such as painting, doing the laundry and during hot weather.

[3] background trickle ventilators fitted within window frames, usually at the top. These provide a 'background' level of natural ventilation when opened whilst not compromising the security of the dwelling or creating too much energy loss or draughts.

Who decides on the level and type of ventilation provision?

The government decides on the minimum acceptable provisions through the publication and enforcement of The Building Regulations. Approved Document F is the part of The Building Regulations that deals with the provision of ventilation within buildings.

How do I use my ventilation systems?

Generally opening windows can be used whenever it is safe and secure to do so (ie when the home is occupied) and when the home's heating system is not in use (to avoid wasting energy). During periods when the weather is very cold or windy it may be more appropriate to rely in the window trickle ventilators for general background ventilation which will minimise energy use and discomfort from cold draughts. Mechanical extract fans should be used to remove excessive odours and moisture from the kitchen, bathrooms and toilets at source, and are normally operated via a manual switch or opening the cooker hood in kitchens, and via the lighting circuit or humidity sensors in bathrooms and toilets. Bathroom and toilet extract fans will often have a run-off timer which will keep the fan extracting air for a set period after the fan has been 'switched off'. This is to ensure any residual moisture or odours have been effectively removed from the space.

How do I know if I'm using my ventilation systems correctly?

Ultimately it's down to the occupier to use the ventilation systems provided to suit the particular situations that arise. The usage patterns and activities in each house will vary throughout the day, and between one day and the next, as will the use of the heating systems and the external weather. Houses are much better insulated and far more airtight today than in the past, which means that incidents of mould due to high frequencies of condensation are less likely. However, mould can also occur where levels of ventilation are poor so it is more important now than ever to use the ventilation systems provided to keep the house 'fresh' and to remove moisture at source using the opening windows and extract fans provided. 'Musty' smells and mould growth are often signs of poor levels of ventilation, which is often down to low levels of use rather than a lack of adequate ventilation provision. As a rough guide, if the air in the house feels fresh and you are not experiencing mould growth on walls then you are using the ventilation systems correctly for your particular house and living patterns. However, if you are experiencing some mould growth or stale smells try increasing the level of background ventilation by opening more trickle ventilators and ensuring the moisture being generated is being removed rapidly at source by opening windows and/or use of the extract fans provided in kitchens, bathrooms and toilets.