

PAS 2035 Ventilation requirements for insulation measures

The energy efficiency industry has recently seen a change in compliance and regulations for all installers wishing to undertake energy efficiency measures under Government and Utility funded grant schemes. This change from 1st July 2021 from PAS2030/2017 to PAS2035/2019 has seen the introduction of a Retrofit Assessment and the subsequent "Condition and Ventilation Strategy Survey".

The reason for this change, is to ensure that no home is left with damp or condensation as a result of restricted ventilation. It is often the case that water vapour is created by everyday living and activities in the home such as breathing, perspiring, washing and drying of clothes, bathing, cooking, and burning fuels. When normal avenues of ventilation are restricted via the cavity walls or through the loft hatch, this can lead to a condensation build up on the walls and/or ceiling.

In order to prevent this, and assuming these are not already present, working satisfactorily or have the correct extraction rate; new extractor fans may need to be installed into any wet room, such as Kitchens, Bathrooms/Shower rooms. This provides a great opportunity for us to help you ensure that your property remains dry and well ventilated, and to give you the tools to maintain good indoor air quality all year round.

These extractor fans will either be fitted in place of existing units (if they are not sufficient) or if new, to the ceiling or through the walls by a fully qualified electrician. The final decision as to the exact location of each vent will be made on the day by the electrician. As part of the installation the electrician will remediate and make good where necessary.

If required, they will install a circuit breaker (mini-RCD) or bonding, as part of the minor electrical works. This is essential in order to prevent any failure and ensure that the work is done to the latest guidelines and regulations. The crucial part is that the fans need to be able to extract 60 Litres per second in Kitchens and 15 Litres per second in Bathrooms/Shower rooms.

Regarding other habitable rooms, such as Living/Dining rooms and Bedrooms, it is also important that there is sufficient ventilation within these rooms. From the ventilation survey, this may identify the need for further background ventilation, this can be by way of trickle vents in windows, or a room vent located in an external wall allowing a minimum of 5000mm² of free air.

In some instances, there may also be the need for an additional undercut to be made to the bottom of the internal door to a room, to allow air flow whilst doors are closed. This will need to achieve an air flow of 7600mm² "around a 10mm gap on a standard 760mm wide door".

All additional ventilation requirements that have been stated within your retrofit design, which has been completed by a qualified Retrofit Coordinator, following the initial assessments, will need to be put in place prior to or alongside the installation of the insulation measure(s). In most cases, additional funding will be able to help with the costs.

We will discuss these ventilation requirements with you after our initial surveys and before the work gets booked for installation.

Frequently asked questions

1. Why do I have to have additional ventilation when I already have some and open my windows?

To try and ensure that all properties are properly ventilated without the need for householders to act, research has been carried out for several years to agree a standard methodology, to ensure that sufficient ventilation is built in and people are left with a dry and healthy living environment

2. Will my current extractor fans be sufficient?

These will be tested and checked for the extraction rate and their current effectiveness, if they meet the requirement then they can be included as part of the ventilation strategy.

3. If I have a cooker hood in the kitchen will this sufficient for this room?

It depends, as many cooker hoods only deal with odours and have little or no effectiveness as extractors, this would need to be checked but usually an extractor fan would be required too.

4. If I had a very powerful extractor in the bathroom already, would this not help ventilate the rest of the upstairs rooms?

No, every wet/habitable room would need ventilation to be assessed on its own merits.

5. If I refuse the ventilation, can I still have the insulation done?

You can, but not under any funding scheme that is Utility company (ECO – Energy Company Obligation) or Government funded, and these make up the majority of all funded initiatives.



Extractor fan



Window trickle vents



4" Room vents

Further Information on Domestic Ventilation can be found on the Web-link below:

www.gov.uk/government/publications/ventilation-approved-document-f