

BUILDING REGULATIONS GUIDANCE NOTE NHBC BUILDING CONTROL

PART F 2010 - VENTILATION

The new Approved Document has recently been published and this guidance note explains what has changed and the implications for house builders.

It becomes effective from 1 October 2010, and will apply to works from this date, unless work has already started on site, or a formal application is submitted prior to this date, with the requirement that works start on site before 1 October 2011.

INTRODUCTION

Part F 2010 includes significant revisions to align with the changes made in Part L, ensuring minimum energy efficiency levels for all ventilation systems.

The use of trickle ventilation looks set to become more difficult, with additional guidance published for dwellings with design stage air permeability tighter than $5.0\text{m}^3/(\text{h.m}^2)$, meaning approximately 50% more background ventilation is required for dwellings with intermittent or passive stack ventilation systems.

This could prompt designers and builders to move towards continuous ventilation systems, which are better performing in SAP 2009, as well as simpler to standardise. Continuous ventilation systems do not require trickle vents either, which could be a significant advantage.

REGULATIONS CHANGES

A new requirement to Part F means that where possible, fixed mechanical ventilation systems require testing and commissioning. In addition for both intermittent and continuous mechanical ventilation installations, air flow should be measured. This would include cooker hoods for kitchens and extract fans to bathrooms.

Details of this data must then be sent to the Building Control Body within five days of completion, adding another procedure to follow at the completion stage.

It is also a requirement to hand over sufficient information to the building owner in relation to the systems installed in a new dwelling.

MAIN CHANGES

As mentioned above the most significant change is to dwellings with air permeability of less than $5.0\text{m}^3/(\text{h.m}^2)$.

By choosing a continuous mechanical extract system, Part F 2010 now removes the need for background ventilation in dwellings designed with air permeability rates above $5.0\text{m}^3/(\text{h.m}^2)$. There are also benefits in SAP 2009 for continuous systems, which may lead designers to adopt whole house mechanical extract ventilation systems, possibly including heat recovery as well, which would maximise the SAP benefits.

If using passive stack ventilation, internal pipes should now be sized at 125mm diameter serving all spaces, an increase from the Part F 2006 requirements.

Published alongside the new regulations is the Domestic Building Services Compliance Guide, in which a new requirement for specific fan power of less than 0.5 watt/sec applies for intermittent extract fans.