Ventilation

Good ventilation is essential in a kitchen, not only to extract heat, steam and fumes from cooking, but to satisfy the Building Regulations as set out below.

Building Regulations

An extractor fan or cooker hood is a mandatory requirement:

TYPE OF KITCHEN	BACKGROND VENTILATION	MECHANICAL VENTILATION
kitchens with opening windows (no minimum size)	4000 mm^2	30 litres/second adjacent to hob* **OR** 60 litres/second elsewhere **OR** passive stack ventilation (PSV) to BRE information paper 13/94 **OR** with appropriate third party certification such as a BBA certificate
kitchens without natural light	air inlet such as 10 mm gap under door	extract fan as above with 15 minute over-run with fan operated by light switch

*When incorporated within a cooker hood **OR** when located near the ceiling within 300 mm of the centreline of the hob and under humidistat control.

Where there is an open flue within the same room as an extract or fan, difficulties can occur – such as the fan drawing noxious flue gases into the room. If the following conditions can be met, the need for an extractor fan may be dispensed with:

Where there is a *solid fuel* open-flued appliance that is the primary source of heating, cooking or water heating

OR

Where the appliance is burning *other fuels*, it is required that: the appliance has a flue with a free area at least 125 mm diameter

AND

the appliance has combustion and dilution air inlets which are permanently open when not in use so that the ventilation path is unrestricted (i.e. no dampers).

With flued *gas* appliances which are located in a kitchen where a fan is desired – it has been found that an extract rate of not more than 20 litres/second will be unlikely to cause spillage of gases, although it will be necessary to carry out a spillage test in accordance with BS 54440: part 1, clause 4.3.2.3.

Advice on the construction of *oil-fired* appliances is contained in Technical Information Note T1/112 from OFTEC
(Oil firing technical association for the petroleum Industry).

Where kitchens are combined with a *habitable* room such as in a kitchen/dining room, the provisions for ventilation need not be duplicated provided the greatest provision for rapid, background and mechanical ventilation is made.

A habitable room must have an opening window of at least 1/20th of the floor area **AND**
background ventilation of at least 8000 mm^2.
Note that for the purposes of ventilation in the Building Regulations a kitchen is not considered a habitable room.

Source: *Approved document F, the Building Regulations 1995*