

The OFTEC

home guide to...



Flues, Chimneys and Ventilation



①②③ home guide to... Flues, Chimneys and Ventilation

This Home Guide applies to flues, chimneys and ventilation required for any domestic oil fired appliance, including boilers, cookers and stoves used in the home.

Flues and Chimneys

A flue is a circular or rectangular pipe from which flue (waste) gases pass from an appliance to the external atmosphere.

A chimney is a construction which contains a flue. Masonry chimneys should always be lined with a flexible flue liner, as specified by the appliance manufacturers and be fitted with a cowl to prevent rain ingress. Liners should be replaced whenever a new appliance is fitted.

There are two different types of flue system available – open, and room sealed balanced.

Open flues can be of the “conventional” type where flue gases are expelled through a lined chimney and air for combustion is provided within the room in which the boiler is located. Open flues can also be of a “low level discharge” type, typically found on external boilers, where the flue gases exit the flue at low

level and air for combustion is supplied into the boiler casing through a louvered vent.

Room sealed balanced flues draw air for combustion directly from outside. Balanced flues are beneficial in that there is no need for separate combustion air supply, such as a chimney. With a choice of low level, high level, left, right and vertical discharge, they also increase siting flexibility.

Your OFTEC Registered Technician can advise on the best flue system for the boiler and site conditions.



Air Supply

In order for fuel to burn, oxygen is needed. Therefore, it is essential to provide a dedicated air supply for combustion for appliances which are of the open flue type. The size of openings required is dependant on the appliance location, output and where the air supply is to be taken from. Both open and room sealed balanced flue appliances will require additional air supply for cooling purposes where they are located within a cupboard.

Open flue appliances should not be installed in a bedroom, bathroom or garage. Appliances which are of the room sealed balanced flue type should be used in these locations.

Restrictions apply to extract fans where they are located within the same room as an open flue appliance. Your OFTEC Registered Technician can advise on the air supply requirements needed to ensure safe working operation of your appliance.

Safety

Every type of flue and chimney should comply with European and National Legislation with regard to materials, design, and flue termination point.

Flue terminations should be positioned where flue gases will disperse quickly, will not re- enter the property via windows, doors, etc and will not cause nuisance to property owners or neighbours. Termination below a balcony, carport or any other area where flue gases might stagnate should also be avoided.

Extra care needs to be taken when selecting a suitable position for a condensing boiler flue termination. When operating at their most efficient, condensing boilers can emit a 'plume' of water vapour from the flue terminal. White in colour, this vapour is harmless, but should be considered when siting the boiler. Further information on condensing boilers can be found in OFTEC's Home Guide entitled "Domestic Oil Fired Appliances and Systems".

Where a flue terminal is located less than two metres from ground level or where it could be accessed by people, it must be protected with a terminal guard.

Your OFTEC Registered Technician will be able to advise on the most suitable flue system to ensure compliance and reliable operation.



The OFTEC

①②③ home guide to...

Flues, Chimneys and Ventilation



Annual Inspection

All oil appliance installations should be serviced at least annually to ensure safety and correct operation. This work should include the checking flues and ventilation openings to ensure that they are in good condition and not obstructed.

Finding an OFTEC Registered Technician

The OFTEC website enables you to locate your nearest Registered Technicians. OFTEC Registered Technicians are appropriately qualified and insured to work in your home. They can also advise on energy efficiency.

You can also find a list of local Registered Technicians under the OFTEC logo in the 'Heating Engineers' section of your local pages.

For further information on oil heating and cooking, please see www.oftec.org



OFTEC

Foxwood House, Dobbs Lane, Kesgrave, Ipswich IP5 2QQ

Tel: 0845 65 85 080 | Fax: 0845 65 85 181 | Email: enquiries@oftec.org

www.oftec.org

