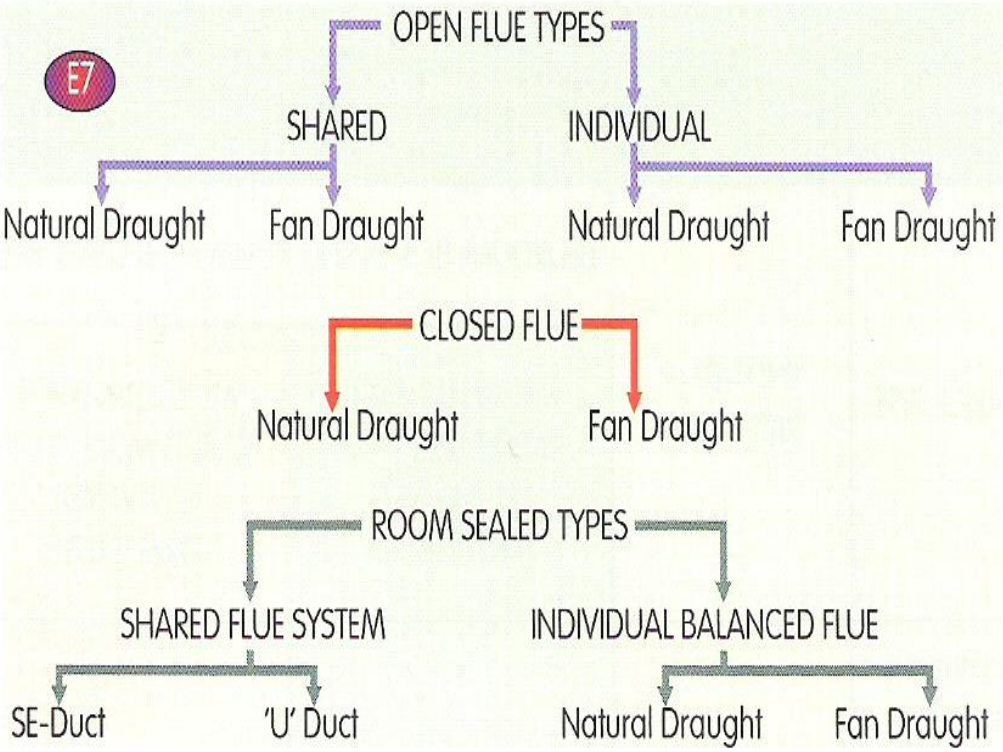
FLUE CATEGORIES

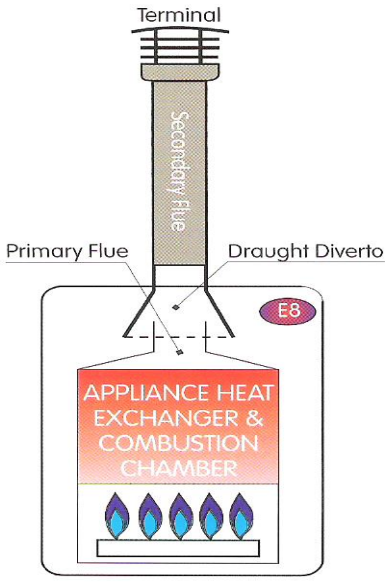


Open flue

This type of flue is open to the room. Combustion air is taken from the room and the products of combustion are discharged through a purpose made flue pipe or chimney to the atmosphere.

Current regulations prohibit the installation of open flue appliances in bathrooms and shower rooms.

Open flue appliances are only permitted in bedrooms and bed sitting rooms where their input does not exceed 12.7KW NET (14 KW GROSS). All open flue appliances, in sleeping areas, must incorporate an Atmospheric Sensing Device (ASD).



A Natural Draught open flue consists of four major components

Open Flue natural draught

The primary flue is normally the combustion chamber of the appliance, which in natural draught versions creates the thermal energy to move the products of combustion upwards, when the burner is alight.

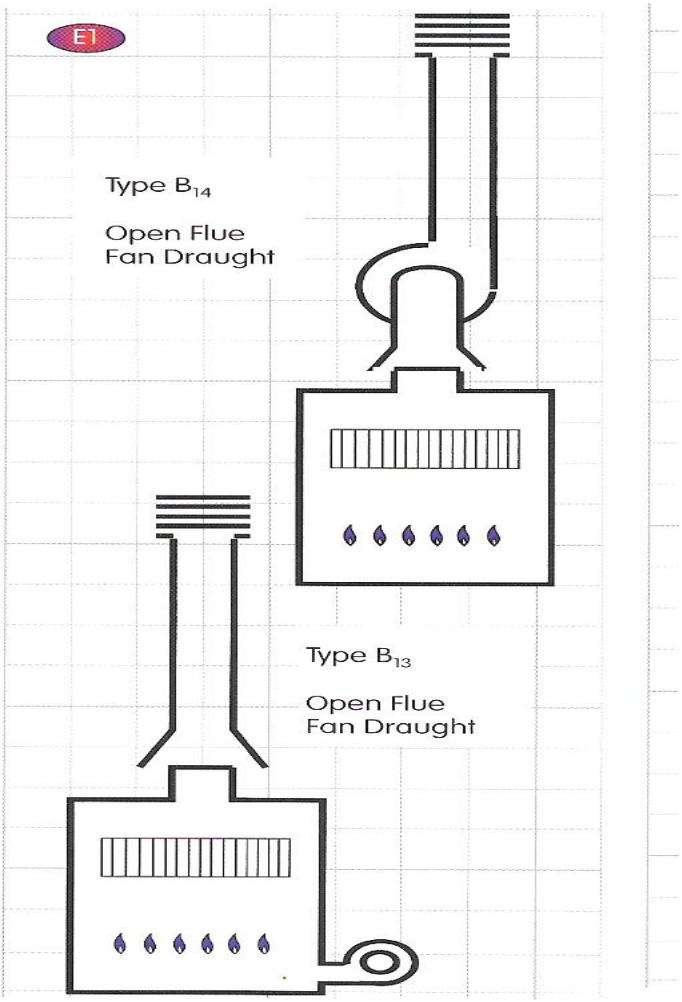
The primary flue is connected to the draught diverter, this commonly being an integral component within the appliance case.

The draught diverter prevents down draught affecting the combustion process, it also helps to break the pull of the secondary flue and assists in diluting the products of combustion.

The draught diverter is connected to the secondary flue. This secondary flue pipe conveys the products of combustion to the outside atmosphere. To assist in the process of removing the products of combustion the flue must rise vertically for a minimum of 600mm measured from the top of the draught diverter to the first bend on the secondary flue.

Open Flue Fanned Draught

This system incorporates a primary flue, draught diverter, secondary flue and terminal, but the motive force of the flue system is created by the fan. Because the flue system is reliant on the fan to clear the products of combustion, the current gas regulations require fan flue systems to incorporate a fan sensing device to prevent the appliance burner lighting should the fan fail.



GAS SAFETY (INSTALLATION & USE) REGULATIONS 1998 PART 'E', Regulation 30 PROHIBITED AREAS FOR OPEN FLUE & FLUELESS APPLIANCES			
APPLIANCE TYPE	SHOWER or BATHROOM	BEDROOM, BED-SITTING ROOM or SLEEPING AREA	
		MAXIMUM INPUT RATING LESS THAN 12.7kW NET (14kW GROSS)	MAXIMUM INPUT RATING MORE THAN 12.7kW NET (14kW GROSS)
Instantaneous Water Heater	NOT PERMITTED	Only permitted, if input does not exceed 12.7kW NET (14kW GROSS) APPLIANCE MUST BE FITTED WITH AN ATMOSPHERIC SENSING DEVICE	NOT PERMITTED
Storage Water Heater			
Central Heating Boiler			
Warm Air Unit			
Radiant/Radiant Convector Gas Fire			
Decorative Gas Fire			
Inset Live Fuel Effect Gas Fire			

Flue Size

The flue size is determined from:-

- **Appliance heat input**
- **Height of flue**
- **Resistance to flow caused by bends.**
- **The total length of any horizontal runs.**

The flue size should be no smaller than the flue outlet of the appliance, or in the case of a gas fire have a cross-sectional area of at least 12000mm^2 if the flue is round.

16500mm^2 if the flue is rectangular and has a minimum dimension of 90mm