

HEATBASE FACTSHEET 13

Remote Sensing Fire valves

Even though the chance of an oil boiler catching fire is very remote, there is always a chance it could happen. It is a legal requirement that all oil appliances fitted after 1st April 2002 must have a remote sensing fire valve. Installations prior to 2002 cannot have this requirement forced upon them; but some house insurances may be void if an installation does not meet current requirements. The sensor for the fire valve is positioned inside the boiler casing, but sometimes in the room near to the appliance. The body of the fire valve should be positioned outside the building where the oil line enters, or in some cases inside immediately where the oil line enters. The sensor and valve body are joined together by a thin copper capillary wire. External boilers should have the fire valve body positioned at least 1 meter away from the appliance.

They are designed to shut off the flow of oil in the event of a fire, and dependant on the valve this could be when the ambient temperature around the sensor rises to between 65 and 95 degrees C.

If the pressure drops on a sealed system, or an open flued boiler suffers a down draft or back pressure, then the ambient temperature will rise within the boiler casing and can shut off the fire valve. Also in sub-zero conditions fire valves may trip, or any condensation within them may freeze and block the fuel flow.

There are two basic designs to a fire valve, one with a plunger to pull to re-arm the fire valve, and the other with a button to push. The button can be made of brass, be a gun metal grey colour or made of black plastic. If when pulling the plunger, or pushing the button, it goes back to the previous failed position; then it is broken.

In icy conditions you may need to thaw the fire valve and oil line with hot water before attempting to re-arm the valve.

On occasions, fire valves have been jammed open to allow them to be used; this usually happens in the winter when access to properties is difficult; if there is no stock available within a couple of days and the householder has no other forms of heat. Although this practice is frowned upon, desperate measures sometimes lead to desperate actions. If this happens it should only ever be as a short term method, the boiler should also be used as little as possible and not left in operation if the house is unattended. A replacement fire valve should be installed at the earliest opportunity.