

3.4 Fire Valve Positioning

3.4.1 Fire Valves

A fire valve is an essential part of the oil supply system. It should be capable of cutting off the flow of oil outside the building in the event of a fire or overheat situation occurring within the appliance. The valve should be located outside the building before the point where the oil supply line enters the building. It must be activated by a remote sensor located over a pressure jet burner or a vaporising burner oil control valve, but in a position clear of any direct radiation or excessive heat. The temperature of operation required will normally be quoted by the appliance manufacturer. Historically, weight operated valves were sometimes used for this purpose in non-domestic installations. It is always preferable, however, to use a valve with a capillary connection between its sensor and the cut off mechanism. The sole use of fusible head isolating valves is not recommended.

Remote sensing mechanical fire valves are commercially available with standard capillary tube lengths of 1.5m, 3m, 6m, 9m, 12m, 16m, 20m and 25m. Some manufacturers will provide bespoke valves with capillary tube length of up to 35m.

Electronic remote sensing fire valves are also commercially available and, as well as being supplied with standard lengths of sensor cable, they can also be ordered with lengths of up to 25m plus. This extends the flexibility of fitting appliances in a variety of positions within a building whilst retaining correct fire protection.

In the event of interruption of power, electronic remote sensing fire valves generally fail safe and cease the flow of oil to the appliance. On reinstatement of power some designs will automatically reset themselves restoring the flow of oil.

NOTE: **Automatic resetting fire valves must never be installed with continually burning vaporising burners due to risk of explosion if oil is permitted to flow into an extinguished, but hot, burner. Manufacturers advice should be taken if doubt exists as to the specification and correct application of fire valves.**

3.4.2 Standard External Fire Valve Positioning (Diagram 3.21)

For normal and low level appliance installations the fire valve body should be positioned externally before the oil supply line enters the property. The sensor should then go above the burner.

Diagram 3.21

