

non-domestic oil feed pipes

This easy guide applies to oil feed pipes supplying kerosene and gas oil to oil fired equipment in commercial buildings such as village halls, churches and schools. It also applies to domestic installations with oil storage tanks over 3,500 litres.

For guidance on all other domestic installations, please see the OFTEC Easy Guide to Domestic Oil Feed Pipes.

There can be lots of variety in oil feed systems. Pipes must be chosen carefully to ensure the correct pressure and flow rates to deliver correctly filtered oil at all times. An incorrectly sized pipe will result in the system operating inefficiently. Your OFTEC Registered Technician will work out the correct size of pipe for your system.

Types of Oil Feed System

There are three types of oil feed system; gravity, sub-gravity and pumped. A gravity feed system is one where the oil will flow directly from storage to the oil burners. The tank must therefore be above the burner so oil can flow.

In some cases it isn't possible or practical to create a gravity feed, for example where the tank is lower than the appliance burner. In this case a sub-gravity oil feed system could be installed using mechanical suction to raise the fuel out of the tank via a de-aerator.

Suction lines should be as short as possible with a minimum number of bends to reduce friction losses. Ideally joints in steel suction pipes should be welded (where future disassembly is not required) to prevent air ingress or leakage problems.

A pumped (ringmain) system pumps oil around oil feed pipes. This is usually used in installations where a large building contains numerous appliances in different locations within the building. A gauge should also be fitted near the pump so vacuum and pressure conditions can be checked regularly.

Roof-top systems with appliances at the top of the building can be supplied by an oil storage tank at roof top level or directly from ground level storage. For roof-top systems it is necessary under emergency conditions to dump the oil contained in the tank and pipe work back to ground level storage.

Your OFTEC Registered Technician will be able to advise on which system is right for you.





Fire Valves

Fire valves are an essential part of the fuel supply system which automatically cut off the oil feed in the event of a fire or an appliance overheating.

Oil Spills

If an oil spill occurs you should notify your regional Environmental Authority, whose details can be found in local pages.

Annual Inspection

Visible oil feed pipes should be inspected annually. Regional requirements mean some systems should be pressure tested every 5 years where there are joints in the system or every 10 years where there are no joints. In environmentally sensitive areas an alternative is to have a 'pipe within a pipe' system incorporating a leak detection and alarm system.

Finding an OFTEC Registered Technician

The OFTEC website enables you to locate your nearest Registered Technicians by postcode. OFTEC Registered Technicians are appropriately qualified, and can advise on energy efficiency.

A list of local Registered Technicians can also be found 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



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