

The OFTEC

home guide to...



Domestic Oil Supply Pipes



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This Home Guide applies to pipe work systems supplying kerosene to oil fired equipment under 45kW output serving single family dwellings.

For information on non-domestic oil supply, please refer to the OFTEC Information Sheet entitled "Non-Domestic Oil Supply Systems".

Oil Supply Systems

There are two types of oil feed systems; gravity and sub-gravity. Gravity feed systems are typically used with bottom outlet oil storage tank installations and/or where a tank has to be raised off the ground.

Sub-gravity systems are used for top outlet tanks installations which require mechanical suction to raise the fuel out of the tank.

The oil feed pipes for these supply systems must be correctly sized. 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.

Oil Supply Pipe Materials

Oil feed pipes are commonly run in plastic coated soft copper tubing which can be easily manipulated. If steel pipes are used they must be protected from corrosion. Plastic pipe systems are also available, but their use is restricted to below ground installation only.

Fittings and joint materials must be suitable for the type of pipe and fuel being used.

External/Exposed Pipes

In order to prevent air locks, external gravity piping should run in a continuous rise following the direction of flow. Pipes must be supported by purpose made clips and attached to permanent structures such as a wall. A garden shed or wooden boundary fence is not classed as a permanent structure because it will deteriorate with age, and any movement may damage the pipes.

Buried Oil Supply Pipes

Directly buried oil supply pipes should be suitably protected against the risk of accidental damage. Recommended installation is as follows:

- A trench should be excavated to a depth of 450mm;
- 40mm of compacted sand is laid on the bottom of the trench, the oil pipe positioned, and a further 40mm of compacted sand is laid above the pipe;
- Builder's grade polyethylene is laid above the sand; and
- The trench is then backfilled, positioning an oil warning marker tape 150mm below the finished ground level.

Oil feed pipes should be buried at least 300mm clear of other underground services such as water and electricity.

Joints in buried pipe work should be avoided if at all possible. If joints have to be made, a permanent means of access for inspection of the joint must be provided.

Pipes Running Through Buildings

Where an oil pipe passes through the wall of a building it must be run within a sleeve, such as a larger/outer pipe. Oil feed pipes should not be run underground directly into the interior of a building. Instead the pipe should rise externally to allow a remote acting fire valve to be fitted before it enters the building.

Fire Valves

A fire valve is an essential safety feature of an oil installation which will stop the supply of oil in the event of a fire. The valve must be located outside the building before the point where the oil supply pipe enters the building, and must be activated by a remote sensor.

Existing internal oil feed pipes that are not accessible outside of the building and do not have a fire valve, can have one added at the first point where the pipe appears internally. This cannot be done on a new installation, but can improve safety for an existing installation.

Fire valves are also required for external boilers. Your OFTEC Registered Technician will be able to advise on correct positioning.



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Annual Inspection (Safety and Maintenance)

Oil feed pipes must be inspected regularly, and pressure testing may be necessary, especially for pipes underground. Records should be kept by installer and occupier on the following:

- Pipe Route
- Material used
- Size of pipe and sleeving if any
- Buried depth if applicable

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



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