



## Entry into buildings

Where an oil pipe passes through the wall of a building it must be run within a sleeve, such as a larger plastic pipe. Oil supply 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 or an overheat situation occurring at the appliance. The valve must be located outside the building, before the point of entry, and must be activated by a remote sensor. Existing 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 is not permitted on a new pipe installation, but can improve the safety of an existing installation. Fire valves are also required for externally located boilers.

Your OFTEC registered technician will be able to offer advice on the correct selection and positioning of fire valves.

## Annual inspection

Oil supply pipes must be inspected regularly for general condition and this is often done as part of a routine boiler service. Any damage, deterioration or leaks from joints should be repaired at the earliest opportunity. For underground pipes, pressure testing is likely to be required.

## Finding an OFTEC registered technician

The OFTEC website enables you to locate your nearest registered technicians by postcode entry. OFTEC registered technicians are appropriately qualified and insured to work in your home. They can also advise on energy efficiency.

For further information, please see [www.oftec.org](http://www.oftec.org)

## About OFTEC

OFTEC plays a leading role in raising standards within the heating industries of the UK and Republic of Ireland. Our trade association represents the interests of oil storage; appliance and supply equipment manufacturers and we develop course and assessment material for training providers. We also operate a UKAS accredited competent person registration scheme for over 8,000 technicians involved in the installation and maintenance of oil, solid fuel, and renewable heating equipment and Part P electrical work. Our online shop, OFTEC Direct, supplies a range of technical books, equipment and clothing products for heating technicians.



**OFTEC**

Tel: 01473 626 298 (UK) or 01 864 5771 (Republic of Ireland)

Email: [enquiries@oftec.org](mailto:enquiries@oftec.org) | [www.oftec.org](http://www.oftec.org)

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# Home guide to domestic oil supply pipes



[www.oftec.org](http://www.oftec.org)



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## Domestic oil supply pipes

Oil supply pipes are a vital part of any oil heating system and it is important that they are installed and maintained correctly to ensure system reliability and safety. Correct installation also helps to avoid the risk of leaks, which can cause pollution and are costly to clean up. This guide applies to pipes that carry fuel to oil fired appliances of up to 45kW output which are located in properties used primarily for domestic purposes.

## Oil feed pipes

Domestic oil supply pipes are usually made of plastic-coated soft copper tubing that can be easily manipulated. Steel pipes are not commonly used for domestic installations, but steel pipes can offer additional protection from damage or vandalism. If steel pipes are used, they should not be galvanised and must be painted and maintained to minimise corrosion. Plastic pipe systems are also available but must only be used below ground. Fittings and jointing materials must be suitable for the type of pipe and fuel being used.

## Oil supply systems

There are two types of oil supply systems; gravity and sub-gravity.

Gravity supply systems are arranged so that the pressure of the oil in the tank pushes the oil along the pipe to feed the burner at the appliance. A typical gravity supply would consist of a bottom outlet oil storage tank positioned above the height of the burner. The tank is often elevated to the required height by a platform on top of brick piers.

Sub-gravity systems rely on a mechanical device such as an oil de-aerator or lifter to assist the oil in reaching the burner. For satisfactory performance, it is critical that oil supply pipes used with sub-gravity systems are correctly sized.

Your OFTEC registered technician will be able to suggest the most appropriate oil supply system for your particular needs.

## External/exposed pipes

For best performance, oil supply pipework should take the most direct route between the oil tank and burner, while avoiding high and low points in the pipework, the creation of trip hazards, or anything likely to damage the pipe and joints.



New build properties are required to meet regional environmental requirements to control and reduce carbon emissions

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 pipe and fittings.

## Buried oil supply pipes

Directly buried oil supply pipes should be protected against the risk of accidental damage caused by digging. The recommended installation method 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 line warning marker tape 150mm below the finished ground level.

Oil supply pipes should be buried at least 300mm clear of other underground services such as water and electricity. Joints in buried pipework should be avoided if at all possible. If joints have to be made, a permanent means of access for inspection of the joints must be provided.

