Oil Tank FAQ's

What Should I Know Before Buying a Heating Oil Tank?

Before purchasing an oil tank, it is worth consulting **OFTEC** (The Oil Firing Technical Association) for relevant information surrounding the storage of heating oil.

Not all heating oil tanks are the same. To start with, some are made from steel, some from plastic, some are thicker than others, some are manufactured with just one tank wall and other have two.... the list goes on.

Firstly, you need to decide whether you want a steel tank or a **plastic tank**. Plastic tanks are manufactured because they are not susceptible to the same levels of corrosion as steel tanks. They are also often lighter, easier to transport and simpler to install, not to mention being a much more economic option to purchase.

Oil tanks are made from a medium density polyethylene (MDPE). Materials and components used in the manufacture of Oil Tanks are resistant to the potentially damaging effects of the liquids they are designed to contain. MDPE displays excellent chemical and impact resistance qualities. All Oil Tanks are manufactured only from premium grade, virgin materials.

You also need to consider whether you wish to purchase a single skin oil tank or a 'bunded' oil tank. Single skin oil tanks are made using just one tank wall, i.e. the tank skin. Bunded oil tanks consist of a 'tank within a tank' design, which means that your oil and the surrounding environment are protected in the unfortunate event of the inner tank splitting. Single skin tanks are a more environmental hazardous purchase option, as no protection against tank splits and oil spills are offered.

Should your oil tank split and should an oil spill subsequently occur, the clean-up costs in such an event can reach as much as £50,000 and may not be covered by your home insurance policy.

What Types of Fuel Can Be Stored in a Heating Oil Tank?

Oil Tanks are suitable only for the storage of:

- Kerosene (C1/C2)
- Agricultural Fuel Oil (A2)
- Diesel (D)
- Home Heating Oil
- BioDiesel blends manufactured in accordance with the requirements of British Standard BS EN14214 / Irish Standard IS EN14214. EN590 allows for B7 within Diesel Fuel i.e. a bio-element not exceeding 7% concentration

All oil tanks must be installed in accordance with supplied instructions, the requirements of **OFTEC** Technical Instruction Book 3 and prevailing statutory requirements.

What is a Bunded Tank?

A **bunded oil tank** simply consists of a tank within a tank. The fuel is stored in the inner tank and the outer tank acts as a failsafe so that in the event of a spillage, excess fuel will collect in the outer tank - thus averting a pollution incident.

Bunded Oil Tanks have been proven to significantly reduce the risk of pollution at oil storage installations. They are a requirement at commercial, industrial, institutional and commercial premises; all installations in the Channel Islands; and, at most domestic installations in the United Kingdom and Republic of Ireland.

Single skin tanks on the other hand, consist of only one shell or skin. This means that in the event of a tank split, valuabe heating oil will be lost and the surrounding environment will be polluted by the heating oil contained within it.

Will I need a bunded Tank?

Building Regulations for England and Wales requires all domestic oil storage tanks exceeding 2500 litres capacity must be bunded. For England and Scotland for tanks under 2500 litres a site pollution risk assessment would establish if bunding is required in Wales All tanks must be bunded, requirement will be defined by proximity to controlled water. It is always good practice to have a bunded tank

What is controlled water?

Controlled Waters would be: Rivers, streams, lakes, canals, coastal waters, estuaries and groundwater. For an oil tank pollution risk assessment, any ditches, Soakaway, septic tanks and gullies which could pollute groundwater or reach controlled waters would be included along with Environment agency special protection zones.

What is the Difference Between a Top Outlet Tank and a Bottom Outlet Tank?

Top outlet bunded oil tanks are quite simply oil tanks which have the outlet to the burner placed at the top, rather than the bottom of the tank. Oil is then drawn out, as opposed to being gravity fed through the outlet at the bottom. Most Bunded Oil Tank models can be provided as either top outlet (ITT) or bottom outlet (ITE) tanks.

Top outlet tanks are suitable for use with most pressure jet burners - we recommend to install a Tiger Loop de-aerator, to eliminate the need for a return line to the tank. Pressure jet burners are fitted to most oil boilers sold today in the British Isles.

Top Outlet Bunded Oil Tanks are **not** compatible with vapourising (or wick) burners, fitted to some oil fired stoves. At such installations, a bottom outlet bunded oil tank should be fitted or else an oil lift device should be incorporated within the oil supply line.

If you are in any doubt as to the compatibility of top outlet or bottom outlet bunded tanks, consult the appliance manufacturer or **OFTEC.**

How Close to a Boundary Can I Place My Oil Tank?

If the tank is less than 3500 litres in capacity, it should not be placed within 760mm of a combustible boundary e.g. a fence.

This distance assumes that there are no flu outlets or buildings between the tank and the boundary. Where these clearances cannot be achieved, the protection measures noted in British Standard BS 5410: Part 1: 1997 must be provided, by means of a 30 minutes fire-resistant wall - which extends at least 300mm above and beyond the ends of the tank.

For tanks with a capacity greater than 3500 litres of for fire barrier construction requirements, please contact **OFTEC** for advice.

How Close to a Flu Outlet Can I Place My Oil Tank?

Oil Tanks with a capacity of less than 3,500 litres should not be placed within 1.8 metres of a flu outlet.

Where these clearances cannot be achieved, the protection measures noted in British Standard BS 5410: Part 1: 1997 must be provided by means of a 30 minutes fire-resistant wall which extends at least 300mm above and beyond the ends of the tank.

For oil tanks with a capacity over 3,500 litres or advice on constructing a fire resistant barrier, please contact **OFTEC**.

How Close to a Building Can I Place My Oil Tank?

Oil Tanks with a capacity not greater 3,500 litres should not be fitted any closer than 1.8 metres to non-fire rated (30 mins. minimum) walls or eaves.
Where these clearances cannot be achieved, the protection measures noted in British Standard BS 5410: Part 1: 1997 must be provided by means of a 30 minutes fire-resistant wall which extends at least 300mm above and beyond the ends of the tank. It will be necessary to protect exposed eaves forming part of a roof within 1.8 metres of the top of an oil storage tank to provide a 30 minute resistance to fire. Cladding can be applied to the eaves in order to prevent fire spreading to the roof.
If the tank capacity is greater than 3500 litres or you require further advice, please contact **OFTEC**.

Where Can I Put My Oil Tank?

Your oil tank should be located 1.8metres from the nearest dwelling and 760mm from a boundary (e.g. wall or fence). If this is not possible, then a 30 minute firewall is required, which must extend 300mm above and beyond both ends of the tank. Your Local Authority Building Control can provide further advice.

What base should my oil tank have?

A base should be: concrete of at least 100mm thickness, paving stones of at least 42mm thickness or stonework of at least 42mm thickness (all laid on a hardcore base to give an imperforate base). The overall size of the base should be larger than the oil storage tank and any integral oil storage tank bund, so that when the oil storage tank is installed, the base has a clear projection of a minimum of 300mm around all sides of the oil storage tank. ITE tanks are designed to maximize storage and minimize the base required.

Why do I need 300mm extra base around the tank?

This is to provide fire protection, it will prevent the tank from becoming overgrown and will help protect against fire spreading across the ground to the tank from another source in the event of a fire.

Can I hide or screen my tank?

Screening of domestic oil storage tanks is allowed. Access will be required for maintenance and filling and this needs to be considered when erecting and screening. British Standard 5410: Part 1: 1997 requires that a minimum of 600 mm separation be provided between a tank and screening. If the screening forms part of the property boundary a 760 mm separation should be provided unless a fire barrier is erected.

Can a domestic oil storage tank be installed underground?

Yes, most manufacturers supply a range of underground tanks, and can advise of the installation of these.

How Should I Maintain My Oil Tank?

Oil tanks should be maintained yearly, by an OFTEC certified tank installer. You can ask your tank installer to provide a tank check as part of your boiler service.

Do Oil Tanks Have an OFCERT License?

Most **bunded oil tanks** each have an OFCERT license, meaning they have gone through rigorous testing processes by industry body and leader OFTEC in order to gain approval for use.

Can a domestic oil storage tank be installed inside a building?

Yes it can, British Standard 5410: Part 1: 1997 does allow a domestic oil storage tank up to 3500 litres capacity to be installed within a building so long as the tank is provided with secondary containment, such as an integrally bunded ITE oil storage tank, the tanks must contained within a 60 minute fire resistant chamber and placed at the lowest possible level. The chamber should only contain tank and be ventilated to outside. This type of installation will often have a remote fill pipe.

What is a remote fill pipe?

Remote fill pipes are used when oil storage tanks sited in more than 30m from a road typically, or where access is difficult to the tank. For domestic installations this would normally be a 50mm steel pipe connected to the tank and piped to an accessible position. The pipe will have a screw cap at the fill point, a gate valve, a non-return valve and be supported. With an increased risk of spillage during filling process, the tank should have secondary containment, such as an integrally bunded ITE oil storage tank with overfill prevention device.

Can I Install My Oil Tank Myself?

Oil tanks should always be installed by a trained technician, preferably an **OFTEC** approved tank installer. Most manufacturers can recommend a tank installer for you, as part of its '**Tankmark**' scheme. Tankmark is a network of approved tank installers.

As a minimum, all plastic oil tanks should be installed on a flat, level, fire resistant surface, capable of supporting the weight of the tank when fully laden. Where concrete slabs are used, they should be at least 50mm thick.

The base should extend at least 300mm beyond the widest points of the oil tank and fully support the base of the oil tank in its entirety. Piers are **not** suitable for this purpose and will cause irreparable damage to the oil tank, resulting in premature failure and catastrophic product loss.

Detailed oil tank base requirements can be found within **OFTEC** Technical Instruction Book 3.

What Kind of Oil Gauges/Monitors Can I Get With a Tank?

There are three types of gauges within the tank pack:

Apollo Standard Tank Pack (Standard)
Includes an Apollo standard oil tank contents gauge which comprises of a tank mounted transmitter unit and plug in receiver unit, along with a bottom outlet kit.
The tank transmitter constantly checks the level in the tank and transmits this to a plug in receiver unit which displays the level on the easy to read LCD screen.

Apollo Visual Tank Pack (Option)
Includes an Apollo Visual oil tank contents gauge which comprises of a tank mounted transmitter unit and plug in receiver unit, along with a bottom outlet kit.
Apollo Visual as well as reporting the fuel level to a plug in receiver also has a built in LCD display on the transmitter incorporating an on tank level.

Apollo Smart Tank Pack (Option)
Includes an Apollo Smart oil tank contents gauge which comprises of a tank mounted transmitter unit and plug in receiver unit, along with a bottom outlet kit.
Apollo Smart Receiver Unit benefits from a mains power supply, and simply plugs into a standard socket, allowing you to monitor oil heating usage from almost any room in your home or office.

Can Tanks be Damaged by Sunlight?

Most Oil Tanks are manufactured from a material which incorporates UV inhibitors. These prevent ultra-violet rays from permeating the structure of the tank, thus preventing fuel degradation.

How Secure are Oil Tanks?

Oil tanks are the most secure tanks on the market. All Bunded oil tanks are lockable at both the fill and inspection points.

Water in my Oil Tank - What Should I Do?

Water will form in any oil storage tank. It is perfectly normal and occurs as a result of the tank warming up during the day and then cooling at night. In single skin oil tanks it will collect in the base of the tank; in bunded oil tanks it may additionally collect between the inner and outer tanks.

All oil tanks should be inspected annually for the presence of water found to be present either inside the oil tank or in the case of bunded oil tanks, between the inner and outer tank. Failure to remove any condensate may result in fuel contamination and irreparable product damage.

Condensate can be removed by most oil tank installers, technicians and most fuel distributors.

What is the Maximum Temperature of Liquids Which Can be Stored in Oil Tanks?

55 degrees Celsius is the maximum temperature for liquids stored in oil tanks.

My Oil Tank Has Split - What Do I Do?

If you have noticed a split or a point of leakage on your oil tank, you must act quickly as an oil spill can severely damage the surrounding environment and can lead to expensive clean-up costs. You can also contact **OFTEC** for advice in such situations.

What Warranty would my new Tanks have?

Some ITE bunded tanks carry a standard 5 year warranty, this is automatically extended to **10 years** when fitted by a Tankmark Installer, or other OFTEC approved installer and registered.