

The OFTEC easy guide to...

domestic oil storage

This easy guide applies to oil storage tanks up to 3,500 litre capacity supplying single family dwellings.

All about tanks

Modern oil storage tanks come in all shapes and sizes, and can be made from steel or plastic. Both single skin and bunded tanks are available.

When choosing a tank, it's important to make sure it meets minimum quality standards such as the OFCERT scheme. A comprehensive list of tank manufacturers can be found in equipment directory on the OFTEC website at www.oftec.org

Complying with regulations

Oil storage tank installations in the Republic of Ireland must meet the requirements of approved document J of the building regulations (2006).

Safe oil storage

It's very unlikely that a fire could be started by a domestic oil storage tank and it's contents. However, it needs to be protected from a fire that originates nearby.

An oil storage tank may be sited next to a building providing the walls are fire rated, without any openings – including air bricks. In addition, tanks should be sited:

- 1.8m away from non fire rated eaves of a building
 - 1.8m away from a non fire rated building or structure (eg garden sheds) which have openings such as doors or windows
 - 1.8m away from appliance flue terminals
 - 760 mm away from a non fire rated boundary such as a wooden boundary fence.
- If it's impossible to comply with these requirements, then a fire rated barrier of at least 30 minutes should be provided, extending 300mm higher and wider than both ends of the tank.

Protecting the Environment

To minimise the risk of pollution from an oil spill, some installations must have a secondary containment (a bund). A bund can be a catchpit beneath the tank, without a drain, constructed of non-combustible materials and capable of holding the contents of the tank plus an additional 10%. There are also integrally bunded plastic tanks available, which are effectively a tank within a tank.

All oil storage tanks over 2500 litres supplying a domestic dwelling should be bunded. Tanks under 2500 litres should be bunded if the tank:

- Is located within 10m of inland freshwaters or coastal waters; or
- Is located where spillage could run into an open drain or to a loose fitting manhole cover; or
- Is located within 50m of sources of potable water such as wells, bore holes or springs; or





- Is located where oil spilled from the installation could reach the waters listed above by running across hard ground; or
- Is located where tank vent pipe outlets cannot be seen from the intended filling point.

Any oil storage installation should carry a label in a prominent position giving advice on what to do if an oil spill occurs, together with the telephone number of the Environment Agency's Emergency Hotline.

Back to bases

Proper support is vital for your tank, which will be very heavy once it's full of oil. Steel tanks need to be supported off the ground by purpose built brick piers. Depending on the type of installation, plastic tanks can sit at ground level, but must be supported adequately by a proper, level base. An uneven base can cause considerable stress on the tank, leading to damage and increasing the risk of oil spillage.

Internal domestic oil storage

In some situations, the oil storage tank can be sited inside a building such as a garage or outhouse. For those installations, the tank must be self contained within a 60 minute rated fire chamber, with a self closing door that opens outwards, and is openable from the inside without the use of a key. In addition, the tank should be bunded.