

Section 5: Provisions for liquid fuel storage and supply

Performance

5.1 In the Secretary of State's view requirements J6 and J7 will be met if:

- a. oil and LPG fuel storage installations including the pipework connecting them to the *combustion appliances* in the buildings they serve are located and constructed so that they are reasonably protected from fires which may occur in buildings or beyond *boundaries*;
- b. oil storage tanks, their ancillary equipment and the pipework connecting them to *combustion appliances* in buildings used wholly or mainly for private dwellings:
 - i. are reasonably resistant to physical damage and corrosion and are designed and installed so as to minimise the risk of oil escaping during the filling or maintenance of the tank; and
 - ii. incorporate secondary containment when there is a significant risk of pollution; and
 - iii. are labelled with information on how to respond to a leak.

Heating oil storage installations

5.2 Guidance is given in this Approved Document on ways of meeting requirements J6 and J7 when proposing to construct oil storage systems with above-ground or semi-buried tanks of 3500 litres *capacity* or less, used exclusively for heating oil. Heating oils comprise Class C2 oil (kerosene) or Class D oil (gas oil) as specified in BS 2869:1998, liquid biofuel conforming to EN 14213:2003 and blends of mineral oil and liquid biofuel. A way of meeting requirements J6 and J7 for such installations would be to follow the relevant recommendations in BS 5410-1:1997, whilst also adopting the guidance in paragraphs 5.4 to 5.12.

5.3 Requirement J7 does not apply to oil storage systems where the *capacity* of the tank exceeds 3500 litres, or where the tank is fully buried or where the building served is not wholly or mainly used as one or more private dwellings. However, requirement J6 applies to oil storage systems serving buildings of all descriptions, where the capacity of the tank exceeds 90 litres, with no upper *capacity* limit on application, and including cases where the tank is buried. For tanks with capacities in excess of 3500 litres, advice on ways of complying with requirements J6 and any other fire precautions legislation may be sought from the Fire Authority. In England tanks serving buildings which are not wholly or

mainly used as private dwellings are likely to be subject to the Control of Pollution (Oil Storage) (England) Regulations 2001 (see paragraph 5.7).

Protective measures against fire

5.4 A way of achieving compliance with requirement J6 would be to adopt the guidance given in Table 10, which also offers advice on reducing the risk of fuel storage system fires igniting buildings and to make provision against the installation becoming overgrown. This can be achieved with a hard surface beneath the tank such as concrete, or paving slabs at least 42mm thick, extending out at least 300mm beyond the perimeter of the tank (or its external skin if it is of the integrally banded type).

Table 10 Fire protection for oil storage tanks

Location of tank	Protection usually satisfactory
Within a building	Locate tanks in a place of special fire hazard which should be directly ventilated to outside. Without prejudice to the need for compliance with all the requirements in Schedule 1, the need to comply with Part B should particularly be taken into account.
Less than 1800mm from any part of a building	<ul style="list-style-type: none"> a) Make building walls imperforate (1) within 1800mm of tanks with at least 30 minutes fire resistance (2) to internal fire and construct eaves. b) Provide a fire wall (3) between the tank and any part of the building within 1800mm of the tank and construct eaves as in (a) above. The fire wall should extend at least 300mm higher and wider than the affected parts of the tank.
Less than 760mm from a boundary	Provide a fire wall between the tank and the boundary or a boundary wall having at least 30 minutes fire resistance to fire on either side. The fire wall or the boundary wall should extend at least 300mm higher and wider than the top and sides of the tank.
At least 1800mm from the building and at least 760mm from a boundary	No further provisions necessary.

Notes:

1. Excluding small openings such as air bricks etc.
2. Fire resistance in terms of insulation, integrity and stability as determined by testing to the relevant parts of BS 476 or BS EN 1363 or BS EN 1364.
3. Fire walls are imperforate non-combustible walls or screens, such as masonry walls or fire-rated composite panel screens.