

OFTEC TECHNICAL BOOK THREE REGIONAL REQUIREMENTS

ENGLAND

The Building Regulations England and Wales

The Department for Communities and Local Government are responsible for the England and Wales Building Regulations.

Building Regulations are designed to ensure the health and safety of people in and around buildings by providing functional requirements for building design and construction, as well as promoting energy efficiency. The Building Regulations England and Wales are compiled from various Approved Documents (known as Parts). The list below shows the different Approved Documents available:

- Part A Structure
- Part B Fire Safety
- Part C Site Preparation and Resistance to Moisture
- Part D Toxic Substances
- Part E Resistance to Passage of Sound
- Part F Ventilation
- Part G Hygiene
- Part H Drainage and Waste Disposal
- Part J Combustion Appliances and Fuel Storage Systems
- Part K Protection from Falling, Collision and Impact.
- Part L Conservation of Fuel and Power
- Part M Access to and use of Buildings
- Part N Glazing – Safety in Relation to Impact, Opening and Cleaning
- Part P Electrical Safety

Approved Documents can be downloaded from www.communities.gov.uk

Statutory Instruments

Statutory Instruments are the power to make law, which may be delegated by Parliament to Ministers and other persons. Statutory Instruments are the form in which delegated legislation is usually published.

The Statutory Instruments below are those that relate to oil fired equipment installation.

- | | |
|-----------------|---|
| SI 1991 No 324 | The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 |
| SI 2001 No 2954 | The Control of Pollution (Oil Storage) (England) Regulations 2001 |
| SI 2000 No 2531 | The Building Regulations 2000 <ul style="list-style-type: none">• Regulation 4 Requirements relating to Building Work• Regulation 7 Materials and Workman ship |
| SI 2002 No 440 | The Building Regulations (Amendment) 2002 |
| SI 2004 No 1808 | The Building Regulations (Amendment No 2) 2004 |
| SI 2004 No 3210 | The Building Regulations (Amendment No 3) 2004 |
| SI 2005 No 894 | Hazardous Waste (England and Wales) Regulations 2005 |
| SI 2006 No 658 | The Building and Approved Inspectors (Amendment) Regulations 2006). |

Statutory Instruments can be downloaded from www.opsi.gov.uk.

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Competent Persons

The Building Act 1984 requires a person carrying out certain types of building works to work under a Building Notice or Building Regulations approval from Local Authority Building Control. On 1st April 2002 an amendment to Regulation 12 of the Building Regulations came into force. OFTEC Registered installation, commissioning and servicing and tank installation Technicians are empowered to self certificate their own works. This exempts them from the need to give such notice when carrying out new installation work, replacement works or making a major change to the system in areas covered by their class of OFTEC Registration.

Work Notification

Changes to the Building Regulations mean that since April 1st 2005, Local Authority Building Control (via OFTEC see OFTEC Procedures) must be notified of any oil firing storage, installation and commissioning works undertaken and self-certificated by OFTEC Registered Technicians. Furthermore, householders must receive a certificate of any works undertaken in their home, and that they comply with the Building Regulations in force on the date the works were completed.

Minimum Provision for New Systems in New and Existing Dwellings

For oil fired boilers installed on or after 1st April 2007:

- All oil fired boilers shall have SEDBUK efficiency of not less than 86% and be of the condensing type.

For range cooker boilers:

- All oil fired range cooker boilers should have an efficiency greater than 75%*

* As declared on www.rangeefficiency.org.uk

Appliance minimum SEDBUK efficiencies on new build properties form part of the SAP calculation process, it is therefore important that the appliance efficiency utilised (as specified by the builder, developer, architect or consultant) is matched to this requirement. No variation to this should take place without prior consultation and agreement of the specifier.

Systems for space and domestic hot water are required to have:

- Primary circuits of the fully pumped type with full boiler controls, interlock and zones.
- An automatic bypass valve as required by the appliance manufacturer's installation instructions.
- Vented hot water cylinders complying with the heat loss and heat exchanger requirements of BS 1566.
- Un-vented hot water storage systems complying with BS 7206 or be certified by the British Board of Agrément or equivalent approval.
- Been thoroughly cleaned and flushed using an appropriate inhibitor.
- Water treatment provided in hard water areas.



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- All appliances, systems and associated equipment fully commissioned in accordance with manufacturer's instructions.

Minimum Provision for Replacement Systems in Existing Dwellings

For oil fired boiler replacements not involving a fuel or energy switch:

- As defined above, and
- The SEDBUK efficiency should not be worse than 2 percent lower than the SEDBUK efficiency of the appliance being replaced.

NOTE: If the efficiency of the system or appliance is not known, efficiency values can be taken from table 4a or 4b of SAP 2005.

For appliance replacements involving a fuel or energy switch (e.g the replacement of an LPG boiler with an oil boiler):

- The seasonal efficiency (SEDBUK) of the proposed appliance should not be less than that as defined above.
 - The proposed appliance's equivalent seasonal efficiency must be greater than the existing appliance's seasonal efficiency (SEDBUK) minus maximum 2 percentage points maximum allowance*.
- * For further information and guidance when replacing other fuelled appliances with oil fired appliances see OFTEC publication "A Guide to Replacement Appliance Efficiencies" to be advised.

When replacing appliances the existing system should be (where not already) upgraded to:

- Primary circuits of the fully pumped type with full boiler controls, interlock and zones.
- An automatic bypass valve as required by the appliance manufacturer's installation instructions.
- Been thoroughly cleaned and flushed using an appropriate inhibitor.
- Water treatment provided in hard water areas.
- All appliances, systems and associated equipment fully commissioned in accordance with manufacturer's instructions.

When replacing hot water storage systems they should be (where not already) upgraded to:

- Vented hot water cylinders complying with the heat loss and heat exchanger requirements of BS 1566.
- Un-vented hot water storage systems complying with BS 7206 or be certified by the British Board of Agrément or equivalent approval.

Means of Ventilation

Where combustion and/or ventilation air supplies are to be provided for appliances in properties built or refurbished to Approved Document L1A 2006 air leakage rates, it is strongly recommended that the first 5kW of appliance rated output is no longer omitted (for adventitious air) in the calculation process.

Example 1

Property built pre ADL1A 2006.

Appliance rated output = 17kW
Less 5kW allowance = 12kW
Combustion air supply = 12kW x 550mm²

Example 2

Property built post ADL1A 2006.

Appliance rated output = 17kW
Combustion air supply = 17kW x 550mm²

Conventionally open flued appliances with a rated output of below 5kW should have a minimum combustion air supply of at least 100cm² free area (or equal "equivalent area").

Conventionally open flued appliances which have either an integral stabiliser (or draught break) or where the primary flue has an integral stabiliser (or draught break) should have an additional 550mm² free area (or equal "equivalent area") per kW of appliance maximum output rating added to the combustion air allowance. N.B. This additional allowance would not be required when an appliance is installed in a compartment with compliant compartment ventilation.

A full flue interference test must be carried out at commissioning. If flue interference is identified the appliance must not be used, a warning sticker affixed until such times as permanent remedial works have been carried out and have been proven to prevent flue interference so that the appliance can be left operating in a safe manner.

Oil Storage Tank Installation

- All new non-domestic oil storage tanks that are above 200 litres are required to have secondary containment (bundling).
- Any existing non-domestic oil storage tanks that are above 200 litres are required to have been provided with secondary containment (bundling) retrospectively by 1st September 2005 (excluding Wales).
- Any existing domestic oil storage tanks that are above 3500 litres are required to have been provided with secondary containment (bundling) retrospectively by 1st September 2005 (excluding Wales).
- All new oil storage tanks containing agricultural fuel oil that are above 1500 litres are required to be provided with secondary containment (bundling) and should not be installed within 10 meters of controlled water.



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Underground Pipework

Underground pipework serving an installation covered by the Control of Pollution (Oil Storage) (England) Regulations 2001 must be protected from physical damage and should also incorporate a leak detecting facility. If this is not achievable then the pipes must be pressure tested before they are first used and then again once every 10 years and recorded if there are no joints and once every five years if there are joints. All joints in underground pipework must be accessible for inspection and maintenance.

Electrical Works (Approved Document P (Part P))

The Building Regulations require that all electrical works are carried out to BS 7671. In addition to this, certain electrical activities are deemed to be controlled services and should only be carried out by either a Competent Person (as defined in SI 2006 No 652) and notified via the Competent Person Scheme to which they belong. (OFT 103 qualified technicians can notify electrical works carried out as an adjunct to their oil installation and maintenance works via OFTEC).

Tables A1 and A2 have been produced by OFTEC as a guide to qualifications, notification and report forms for Registered Technicians. The tables identify common electrical work types which may be encountered whilst carrying out oil works.

Table A1

Registration Qualification and Notification Requirements

(Oil/Electrical Maintenance Work)

| Description of Electrical Work (carried out as an adjunct to oil maintenance work). | Applicable OFTEC Registration | England & Wales Part P - Defined Location of Electrical Works. | E & W Part P - Notifiable? | OFTEC Report Form |
|---|--|--|----------------------------|-------------------|
| Reposition a fused spur, socket outlet, Programmer, Room Thermostat, etc which is part of an existing electrical circuit | OFT103 | Kitchen or defined special location | YES | CD/20 |
| Reposition a fused spur, socket outlet, Programmer, Room Thermostat, etc which is part of an existing electrical circuit | OFT103 | Other location | NO | CD/20 |
| Replace existing heating electrical control component (e.g. Circulating pump, Room Thermostat, Cylinder Thermostat, Programmer, etc.) in same position. | OFT101 OFT102 OFT105e OFT600a | Any location | NO | *CD/11 |
| Replace appliance electrical components (e.g. Boiler Thermostat, Burner Components, Boiler System Controls, etc.) in same position. | OFT101 OFT102 OFT105e OFT600a | Any location | NO | *CD/11 |

*OFT 101 and 102 ONLY



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Table A2

Registration Qualification and Notification Requirements

(Oil/Electrical Installation Work)

| Description of Electrical Installation Work (carried out as an adjunct to oil installation work). | Applicable OFTEC Registration | England & Wales Part P - Defined Location of Electrical Works. | E & W Part P - Notifiable ? | OFTEC Report Form |
|--|-------------------------------|--|-----------------------------|-------------------|
| Provide a new electrical circuit & outlet from a consumer unit for an oil installation | OFT103 | Any location | YES | CD/21 |
| Extend an existing electrical circuit to provide a new outlet for an oil installation | OFT103 | Kitchen or defined special location | YES | CD/20 |
| Extend an existing electrical circuit to provide a new outlet for an oil installation | OFT103 | Other location | NO | CD/20 |
| Provide main and/or supplementary Equipotential Bonding to an oil installation. | OFT103 | Kitchen or defined special location | YES | CD/21 |
| Provide main and/or supplementary Equipotential Bonding to an oil installation. | OFT103 | Other location | NO | CD/21 |
| Provide Fused Spur or Socket Outlet to an existing electrical circuit | OFT103 | Kitchen or defined special location | YES | CD/20 |
| Provide Fused Spur or Socket Outlet to an existing electrical circuit | OFT103 | Other location | NO | CD/20 |
| Wire Central Heating Controls (Programmer, Room Thermostat, Cylinder Thermostat, Motorised Valves, etc.) from an electrical outlet | OFT103 | From a Kitchen defined, special location or other location | YES | CD/20 |
| Reposition a fused spur, socket outlet, Programmer, Room Thermostat, etc., which is part of an existing electrical circuit | OFT103 | Kitchen or defined special location | YES | CD/20 |
| Reposition a fused spur, socket outlet, Programmer, Room Thermostat, etc., which is part of an existing electrical circuit | OFT103 | Other location | NO | CD/20 |

OFTEC Technical Book 6 contains examples of the correct application and types of report forms required. These should be completed to show electrical compliance, not only with Approved Document P of the Building Regulation, but to BS 7671 (Defined Scoped) requirements.

Contact Details

To report a pollution incident contact the Incident hotline

0800 80 70 60

Environment Agency

www.environment-agency.gov.uk

The Department for Communities and Local Government

www.communities.gov.uk

