

OFTEC TECHNICALBOOK THREE REGIONAL REQUIREMENTS

NORTHERN IRELAND

The Building Regulations (Northern Ireland) 2000

The Office Estates and Building Standards Division is responsible for the Building Regulations (Northern Ireland).

Building Regulations are designed to ensure the health and safety of people in and around buildings providing functional requirements for building design and construction, as well as promoting energy efficiency.

The Building Regulations (Northern Ireland) are compiled from various Technical Booklets. The list below shows the different Technical Booklets available:

Technical Booklet C	Site Preparation and Resistance to Moisture
Technical Booklet D	Structure
Technical Booklet E	Fire Safety
Technical Booklet F1	Conservation of Fuel and Power (Domestic)
Technical Booklet F2	Conservation of Fuel and Power (Non-domestic)
Technical Booklet G	Sound
Technical Booklet G1	Sound (Conversions)
Technical Booklet H	Stairs, Ramps, Guarding and Protection from Impact
Technical Booklet K	Ventilation
Technical Booklet L	Heat Producing Appliances
Technical Booklet N	Drainage
Technical Booklet P	Unvented Hot Water Storage Systems
Technical Booklet R	Access Facilities for Disabled People
Technical Booklet V	Glazing

Technical Booklets can be downloaded from www.dfpni.gov.uk

Statutory Rules

Statutory Rules 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 Rules below relate to oil fired equipment installation.

SR 2003 No 319	The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations Northern Ireland
SR 2005 No 300	Hazardous Waste Regulations (Northern Ireland) 2005
SR 2006 No 335	The Building (Amendment) Regulations (Northern Ireland) 2006

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

Work Notification

Changes to the Building Regulations mean that from 30th November 2006, Local Authority Building Control must be notified of any oil firing storage, installation and commissioning works (including replacement works) undertaken. Local Authority Building Control should be contacted before commencement of works for either a Building Notice or full building regulations approval.



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Minimum Provision for New Systems in New and Existing Dwellings

For oil fired boilers installed before April 2007:

- Minimum SEDBUK efficiency 86%

OR

- Minimum SEDBUK efficiency of 82% may be installed provided that compensating provisions are included in the SAP/design and installation.

For oil fired boilers installed on or after April 2007:

- The boiler shall have a SEDBUK efficiency of not less than 86%.

For combination boilers and range cooker boilers (as per the Department of Communities and Local Government for England and Wales, Domestic Heating Compliance Guide):

- Combination boilers Minimum SEDBUK efficiency 82%
- Range Cooker boilers Minimum efficiency * >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.
- All appliances, systems and associated equipment fully commissioned in accordance with manufacturer's instructions.

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Minimum Provision for Replacement Systems in Existing Dwellings

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

For oil fired boilers installed before April 2007:

- Minimum SEDBUK efficiency 85%

For oil fired boilers installed on or after April 2007:

- The boiler should be of the condensing type and have a SEDBUK efficiency of not less than 86%.

For combination boilers and range cooker boilers:

- Combination boilers Minimum SEDBUK efficiency 82%
- Range Cooker boilers Minimum efficiency * >75%

* As declared on www.rangeefficiency.org.uk

- 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 (England and Wales)"

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.



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- 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 Technical Booklet F1 (November) 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 TBF1 (November) 2006.

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

Example 2

Property built post TBF1 (November) 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

- Regulation L7 requirements for environmental protection can be met by completing OFTEC form TI/133D. Where secondary containment is required a prefabricated integrally banded oil storage tank should always be installed.

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- For non-domestic oil storage tanks a new regulation (The Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2006) is due to be introduced. It is proposed that:
 - Non-domestic oil storage tanks that are above 200 litres will be required to have secondary containment.
 - Any domestic oil storage tanks that are above 3500 litres will be required to have secondary containment.

The implementation of these proposed regulations will be advised once they are published. It is recommended that the guidance contained in section 4.4 of this book is followed until these regulations are enacted.

- All new oil storage tanks containing agricultural fuel oil that are above 1250 litres are required to be provided with secondary containment (bundling).

Domestic oil storage tank installations under 3500L are required to be a minimum of 750mm away from a boundary, if this cannot be achieved a firewall as described in section 2.5 of this book should be provided.

Electrical Works

It is recommended that all electrical works are carried out to BS 7671.

Contact Details

To report a pollution incident contact the Water Pollution Hotline	0800 80 70 60
The Department of Finance and Personnel	www.dfpni.gov.uk
Environmental and Heritage Services	www.ehsni.gov.uk

