this factsheet applies to Scotland

OFTEC INFORMATION SHEET

Changes to the Scottish Building Standards (Domestic) Technical Handbook

Important changes have been made to the Scottish Building Standards (Domestic) Technical Handbook, which take effect from 1st May 2007. The Technical Handbook details the mandatory requirements of the building regulations together with practical guidance on achieving compliance.

New systems in new dwellings

The proposed building should be designed following the guidance contained within this and other advisory documents which contain design limitations, including maximum U values, limitations on air leakage and infiltration, appliances efficiency etc.

Using reference values given in tables in the guidance a notional rate of CO_2 emissions is calculated (utilising a notional dwelling of the same shape and size as the proposed dwelling) which is the Target CO_2 Emission Rate (TER) (units = kg/m^2 floor area). The TER is the target of CO_2 emissions which should not be exceeded by the completed building to achieve compliance.

The building services are then designed with this in mind. As part of the design process the proposed building design specification is submitted for SAP 2005 calculations to ascertain the Dwelling CO_2 Emission Rate (DER). For building regulations approval the guidance is that the designer should show evidence that the calculated DER does not exceed the notional TER.

As a result of this, those installing domestic heating systems will need to be advised by the property designer of any design limitation such as appliance type, minimum SEDBUK or alternative efficiency required to achieve compliance for the particular property/design.

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Minimum provision for new systems in new and existing dwellings

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

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

For oil fired range cooker boilers installed on or after 1st May 2007:

- All oil fired range cooker boilers shall have an efficiency of greater than 75% (as declared on www.rangeefficiency.org.uk).

Appliance minimum SEDBUK efficiencies on new build properties form part of the CO_2 emissions calculation process which is integral to standard 6.1, 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.

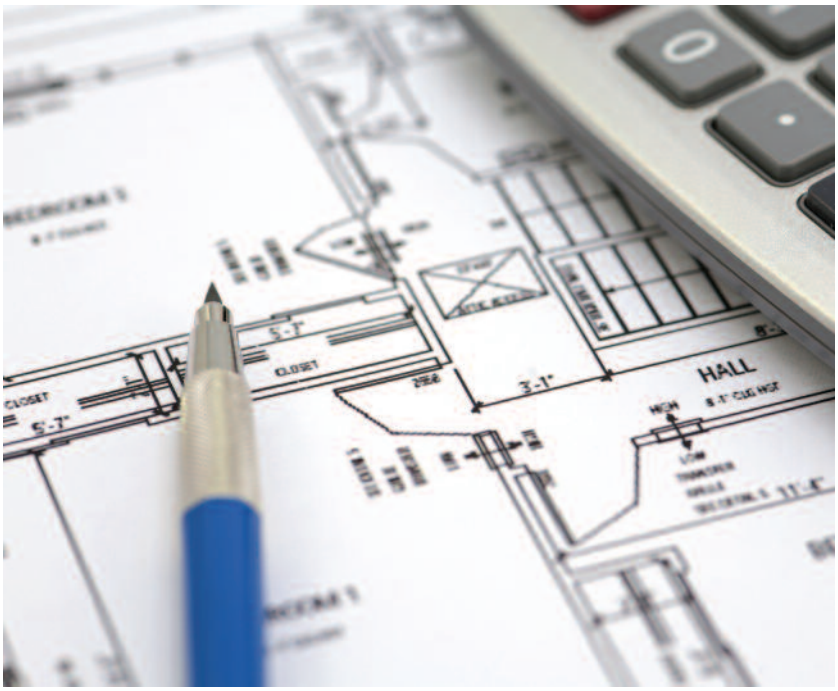
Systems for space and domestic hot water should have

- Primary circuits of the fully pumped type with full boiler controls, interlock and zones.
- An automatic bypass valve as required by the boiler manufacturer.
- Vented hot water cylinders complying with the heat loss and heat exchanger requirements of BS 1566 Part 1 : 2000.
- Un-vented hot water storage systems complying with BS 7206 or be the subject of approval by a notified body.
- All appliances, systems and associated equipment fully commissioned in accordance with manufacturer's instructions.
- Occupiers of the building to be provided with written information regarding operation and maintenance of building services.

Any variation from the given technical specification by the heating technician will require approval from the designer as the DER would have to be recalculated to check that it (the new DER from the amended specification) still does not exceed the TER. If it is found that the DER exceeds the TER then the design specification of the property will need revision to reduce the DER to the same or below that of the TER.

It is therefore vitally important that there is good two-way communication between the building designer and the heating/hot water designer/specifier/installer.

If any changes to the specification have been necessary and applied during construction, upon completion of build an amendment to the building warrant may be required and the DER may have to be recalculated to satisfy the verifier (Local Authority Building Standards Surveyor) that even though changes in design have taken place the TER has still not been exceeded.



Replacement systems in existing dwellings

The proposed service or fitting to be replaced or installed in an existing dwelling, such as a central heating boiler, is required to meet minimum SEDBUK (or equivalent) efficiency levels as stated for new systems including full boiler interlock with separate time/temperature control for each zone.

Where it is impractical or uneconomical to install a condensing boiler the property may be assessed for exemption using an OFTEC CD/30 Form. Where the outcome of an assessment formally exempts the property from having a condensing boiler installed and the replacement boiler is a regular boiler, it must have a minimum SEDBUK efficiency of 85%. If the replacement boiler is a combination boiler, it must have a minimum SEDBUK efficiency of 82%.

In addition, existing systems with semi-gravity circulation should be converted to fully pumped systems.

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Building warrant scheme

A Building Warrant is required in Scotland for all building work which the regulations apply, except certain minor works as listed in Schedule 5 of Regulation 3. A Building Warrant is the legal permission that allows building work, conversion or demolition of a building to be carried out. It must be applied for from the verifier (Local Authority Building Standards Department) for certain types of oil fired installation, commissioning and electrical work.

If a Building Warrant is not applied for when it is required, the person carrying out the work is guilty of an offence under the Building (Scotland) Act 2003. Where works for which a building warrant has been issued do not comply with the Building Standards the relevant person (normally the owner) could be served with a Building Warrant Enforcement Notice.

Where a building warrant is required

The following works will require a Building Warrant when carried out within a house with 3 or more storeys or a flat:

- The installation of a new or replacement oil fired appliance with an output greater than 45kW.
- The installation or alteration to a chimney or flue pipe (excluding any work associated with installing a flue liner).
- The construction of a hearth not affecting the floor or wall structure.
- The installation of an oil storage tank (with a capacity greater than 90 litres) including pipework connecting the tank to the combustion appliance.
- The installation of a new unvented hot water cylinder (more than 15L capacity).
- Any electrical installation or circuit where the voltage exceeds 50AC, 120DC.

For non-residential buildings with public access (this includes assembly and entertainment buildings) with a storey or creating a storey not more than 7.5m high or any other non-domestic buildings a Building Warrant will be required for the same works as domestic buildings (above).

NOTE

There may be some circumstances when an aspect of work is being performed that generally does not require a Building Warrant, but will require a Building Warrant if that aspect of work is being performed as a part of other building works e.g. a full restoration project. Further information regarding Building Warrants should be obtained from your Scottish Local Authority.

This information has been complied in consultation with the Scottish Building Standards. For further information on the range of Scottish Building Standards, contact the SBS at www.sbsa.gov.uk or on 01506 600400.