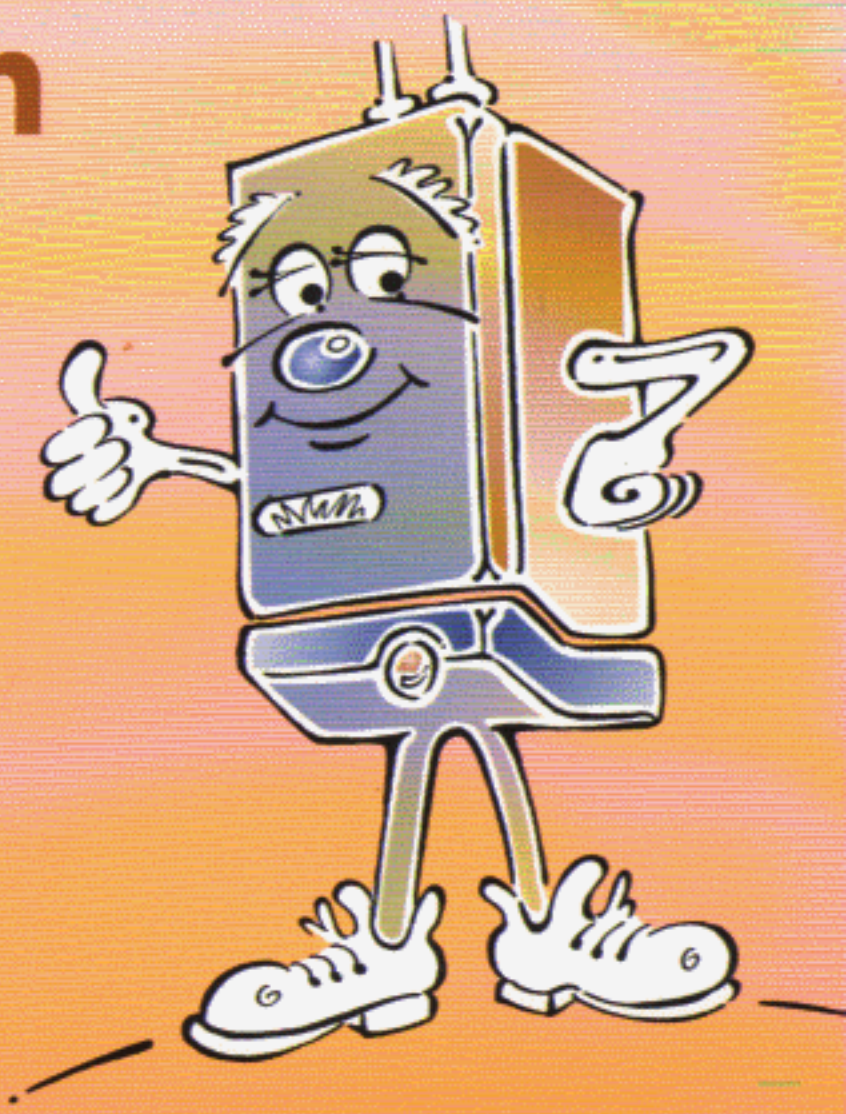
How to choose an efficient boiler



There is now a boiler database showing the efficiency of gas and oil domestic boilers sold in the UK. It can be seen on the Internet at **www.boilers.org.uk** Both current and obsolete boilers are included, and it is kept up to date with a new issue every month.

The database was developed on behalf of the Government to help SAP assessors. SAP is the *Government's Standard Assessment Procedure for Energy Rating of Dwellings*[1]. But purchasers of boilers and central heating systems can also use the database to compare efficiencies of new and old boilers, and will find *CHeSS*[2] helpful as well.

The SEDBUK *(Seasonal Efficiency of Domestic Boilers in the UK)*[3] is the average annual in-use efficiency applicable to a particular boiler. It should not be confused with other figures for efficiency that are sometimes quoted in product literature. Boiler manufacturers send details of their products to the database manager, who checks that efficiency test results have been independently certified by an approved testing organisation and then calculates SEDBUK figures for entry in the database. For obsolete boilers, where certified test results are not available, a generic efficiency for the type of boiler is quoted instead of SEDBUK.

For simplicity SEDBUK efficiency values are divided into bands and assigned to boilers on an 'A' to 'G' scale. The band is shown in the database and may be used on product literature and labels, though there is no legal requirement to do so. The scheme is temporary, as it will be withdrawn when a European directive on boiler energy labelling is introduced.

NOTES

(1) ***The Standard Assessment Procedure (SAP).*** SAP is the UK Government's standard methodology for home energy rating. The Building Regulations require a SAP assessment to be carried out for all new dwellings. Local authorities and housing associations also use SAP ratings to estimate the energy efficiency performance of their housing. A leaflet is available from BRECSU.

(2) ***Central Heating System Specifications (CHeSS).*** Recommendations on good practice, and best practice, for the energy efficiency of domestic wet central heating systems are given in *GIL 59 – Central Heating System Specifications (CHeSS)*, first published in February 2001 and available from BRECSU. It explains to purchasers and suppliers how the efficiency-critical components should be specified.

(3) ***Seasonal Efficiency of Domestic Boilers in the UK (SEDBUK).*** The method was developed under the Government's Energy Efficiency Best Practice programme with the co-operation of boiler manufacturers, and provides a basis for fair comparison of different models. SEDBUK is the average annual efficiency achieved in typical domestic conditions, making reasonable assumptions about pattern of usage, climate, control, and other influences. It is calculated from the results of standard laboratory tests together with other important factors such as boiler type, ignition arrangement, internal store size, and fuel used. For estimating annual fuel costs SEDBUK is a better guide than laboratory test results alone. It can be applied to most gas and oil domestic boilers for which data is available from tests conducted to the relevant European standards.

EFFICIENCY BANDS

Band	SEDBUK range
A	Above 90%
B	86%-90%
C	82%-86%
D	78%-82%
E	74%-78%
F	70%-74%
G	Below 70%

BEST PRACTICE PROGRAMME
HOUSING ENERGY EFFICIENCY

BRECSU Enquiries Bureau, BRE
Garston, Watford WD25 9XX
Tel 01923 664258. Fax 01923 664787
E-mail brecsuenq@bre.co.uk