

# The Government's Standard Assessment Procedure for Energy Rating of Dwellings 2009 edition



Heating *at work.*

This procedure is the approved Energy Rating methodology approved by DETR in support of the Building Regulations relevant to dwellings. SAP for boilers is covered by the SEDBUK scheme, with varying bands of efficiency based on the procedure – see table overleaf.

The boiler efficiencies at both full and 30% part load have been verified and published by Certigaz (French Notified Body).

| BOILER MODEL                         | SAP 2009 Annual Efficiency |       |
|--------------------------------------|----------------------------|-------|
|                                      | Nat Gas                    | LPG   |
| Stratton mk2 S2-40 Wall Hung Boiler  | 89.0%                      | 90.0% |
| Stratton mk2 S2-60 Wall Hung Boiler  | 89.2%                      | 90.2% |
| Stratton mk2 S2-70 Wall Hung Boiler  | 88.8%                      | 89.8% |
| Stratton mk2 S2-80 Wall Hung Boiler  | 88.8%                      | 89.8% |
| Stratton mk2 S2-100 Wall Hung Boiler | 89.1%                      | 90.1% |
| Stratton mk2 S2-120 Wall Hung Boiler | 89.1%                      | 90.1% |

The boiler efficiency data is used to generate the energy rating of the dwelling resulting in the Building Energy Certificate in accordance with the Energy Performance in Buildings Directive.

Signed  
*Trevor Struck*  
Product Manager, Hamworthy Heating Ltd.

# The Government's Standard Assessment Procedure for Energy Rating of Dwellings 2009 edition



Heating *at work.*

## SCOPE OF THE SAP PROCEDURE

The procedure is applicable to self-contained dwellings (of any size and any age).

For flats, it applies to the individual flat and does not include common areas such as access corridors.

*Note: Common areas of blocks of flats such as heated access corridors, and other buildings (even though used for residential purposes, e.g. nursing homes) are assessed using procedures for non-domestic buildings.*

Where part of an accommodation unit is used for commercial purposes (e.g. as an office or shop), this part should be included as part of the dwelling if the commercial part could revert to domestic use on a change of occupancy. That would be applicable where:

- there is direct access between the commercial part and the remainder of the accommodation, and
- all is contained within the same thermal envelope, and
- the living accommodation occupies a substantial proportion of the whole accommodation unit.

Where a self-contained dwelling is part of a substantially larger building, where the remainder of the building would not be expected to revert to domestic use, the dwelling is assessed by SAP and the remainder by procedures for non-domestic buildings.

SAP is a methodology for calculating energy use and the associated running costs and CO2 emissions. It does not set any standards or limitations on data.

For SAP calculations dwellings have a standard occupancy and usage pattern, which are typical values of quantities that in practice vary substantially between dwellings of similar size and type. The occupancy assumed for SAP calculations is not suitable for design purposes, for example of hot water systems.

| SEDBUK RANGE  | BAND |
|---------------|------|
| 90% and above | A    |
| 86% - 90%     | B    |
| 82% - 86%     | C    |
| 78% - 82%     | D    |
| 74% - 78%     | E    |
| 70% - 74%     | F    |
| Below 70%     | G    |