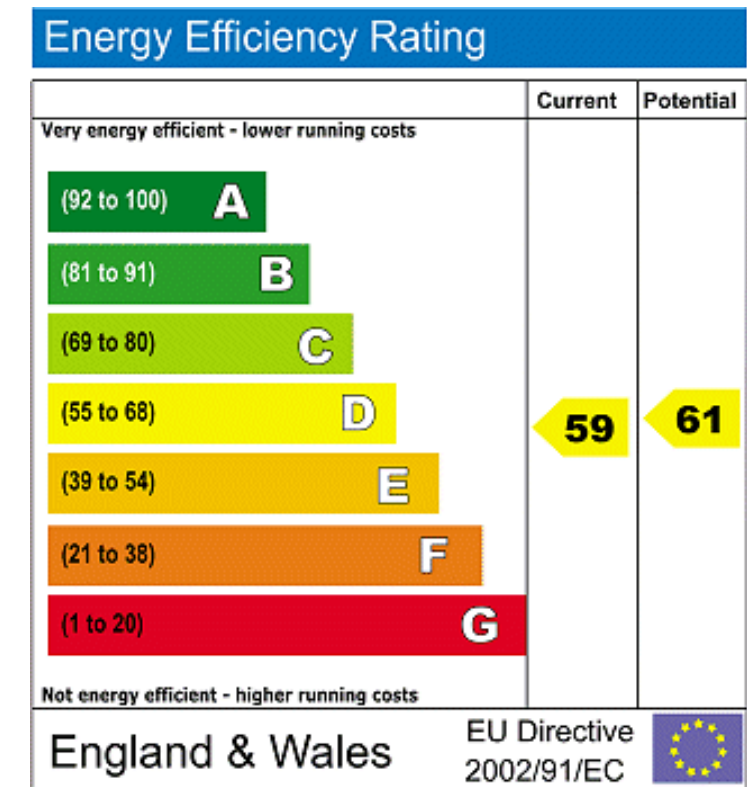




Understanding SAP ratings

Standard Assessment Procedure (SAP) Ratings

- SAP ratings show the energy performance of a property on a scale of 1 to 100, with A to G categories within this scale.
- The rating is a calculated based on energy cost per m² and is linked to theoretical running costs. A-rated properties (those with a higher SAP rating) have better energy efficiency and lower running costs than G rated properties (with a SAP score closer to zero).
- There are very few A-rated properties in England and Wales. Nationally the average SAP rating is 53; most homes are either D or E banded properties, highlighting the need to improve the national housing stock.



Estimating household energy demand

- Standard Assessment Procedure calculations are made based on the size, shape and physical characteristics of a house (including insulation levels) to calculate the rate of heat loss through walls, roofs, windows, doors and floors.
- Information about a house's heating system is also used. A calculation is made for the amount of fuel required to heat a house to 21°C in the living space and 18°C in the rest of the house for 9 hours during weekdays and for 16 hours at the weekend.
- Fuel consumption is measured in kilowatt hours (kWh), which is the amount of energy consumed by using 1 kW of energy for an hour. Other calculations are used to determine the hot water and lighting requirements of a dwelling.
- The cost of fuel and carbon emissions for the dwelling are then estimated and a SAP rating is calculated.
- As various assumptions are made (for example, the occupancy of the house), energy consumption will vary. As a general rule, the majority of households tend to consume less energy in reality than the SAP calculation.