

# DESIGNERS GUIDE TO SAP 2012



[WWW.S-W-E-A.CO.UK](http://WWW.S-W-E-A.CO.UK)  
STUART-WOODWARD-ENERGY-ASSESSOR  
INFO@S-W-E-A.CO.UK 07775618238



## ABOUT S-W-E-A.CO.UK

S-W-E-A (Stuart Woodward Energy Assessor) provides detailed SAP Calculations to a range of clients throughout the South West Region.



Working with S-W-E-A will ensure you are dealing with an experienced construction professional who is also an Architectural Technologist.

## THE SAP CALCULATION PROCESS

With the building industry getting more complicated every year, S-W-E-A will always endeavour to unburden our clients of the issues surrounding Approved Document Part L.

This process is complete in 3 simple steps.



### STEP 1

Email your drawings to [info@s-w-e-a.co.uk](mailto:info@s-w-e-a.co.uk). A quote will be prepared for you to approve. Once payment is made, we will start the calculation process.



### STEP 2

Your project will be entered into the latest approved SAP Calculation software. If your project requires additional measures to pass, we will confirm these with you before finalising the calculation.



### STEP 3

Once the project is complete, you will be emailed a pdf copy for you to distribute as required.



## HOW TO GET A BETTER RESULT?

The SAP calculation methodology takes your proposed design and runs it against a notional building with certain Government approved characteristics, such as; U-values, heating system, pressure test level and even the amount of glazing.

All these details are document in Appendix R of the SAP methodology which is listed below.

So when designing a new dwelling you need use the below details as a minimum in order to pass the calculation.

## APPENDIX R OVERVIEW

Opening Areas	25% of the floor area
Walls	0.18W/m <sup>2</sup> k
Party Walls	0.00W/m <sup>2</sup> k
Floors	0.13W/m <sup>2</sup> k
Roofs	0.13W/m <sup>2</sup> k
Windows	1.4W/m <sup>2</sup> k
Thermal Mass	Medium (250 kj/m <sup>2</sup> k)
Thermal Bridging	0.05 W/m <sup>2</sup> k*
Ventilation	Natural with intermittent extract fans
Air permeability	5.00m <sup>3</sup> /m <sup>2</sup> /hr @50 pa
Heating system	Boiler & radiators
Boiler	89.5% (SEDBUK 2009) efficiency
Main Heating Controls	Time and temperature zone control, Boiler interlock, weather compensation +3% boiler efficiency adjustment.
Secondary Heating	None
Low Energy Lighting	100%
Air Conditioning	None.

\* The default thermal bridging in SAP is 0.15 W/m<sup>2</sup>K, so to achieve 0.05W/m<sup>2</sup>k as used on the notional building you will need to adopt Accredited Construction details or lower the U-values even more than above to achieve a pass rating.

For more clarification please do not hesitate to contact to the office [info@s-w-e-a.co.uk](mailto:info@s-w-e-a.co.uk)



## SAP RATING SERVICES



### NEW BUILD SAPS

S-W-E-A reviews your design and completes a calculation to the latest SAP software. We always think of the costs involved with building, and will consider this when calculating.



### EXTENSION SAPS

S-W-E-A provides a comprehensive report which will ensure a pass for your proposed extension without any issues from Building Control.



### ON CONSTRUCTION EPC'S

S-W-E-A produces On Construction EPC's for new builds and refurbishment projects throughout the UK.



### ENERGY STATEMENTS

S-W-E-A provides detailed Energy Statements which will aid you in Planning and Building Regulations.

**EMAIL NOW FOR A QUOTE**

INFO@S-W-E-A.CO.UK



**a** 31 Rufus Way, Portland, Dorset, DT5 1EE

**t** 07775618238

**e** [info@s-w-e-a.co.uk](mailto:info@s-w-e-a.co.uk)

**w** [www.s-w-e-a.co.uk](http://www.s-w-e-a.co.uk)