

 <p><b>Application Form:</b> <b>Top Building Control Ltd</b></p>	<p>ToP Building Control Ltd. Post: 20 Ashdown Close, Loughborough, Leicestershire, LE11 4TQ. Tom Randerson, Office: 01949 21151 or Mobile <b>07803 519708</b>. Paul Clothier, Office: 01509 236272 or Mobile: <b>07894 869395</b>.</p>	<p>Building Regulations 2010</p>
		<p><i>Office use only</i> <b>Project Reference:</b> <b>Quote Ref:</b> <b>Project Manager:</b></p>

**This form is to be used for Energy Assessments only (SAP/EPC).**  
New dwellings or dwellings created from a change of use only.

**ON COMPLETION OF THIS PDF FORM; PRINT TO PDF, THEN SAVE, IF YOU SAVE ONLY AS A PDF FORM, IT SAVES A BLANK COPY!**

Site Address	Unit No/Name		Phone No:
	No/Street		
	Town/Location		Postcode:
	County		
Name & Address of Client	Name		Phone No:
	No/Street		
	Town/Location		
	County		Postcode:
Email address of Client			
Name & Address of Agent	Name		
	No/Street		
	Town/Location		
	County		Postcode:
Telephone Number of Agent			
Email address of Agent			
In whose name should invoices be addressed and sent	Applicant at site address:		Invoice contact:
	Applicant at Applicant address above:		
	Agent:		Phone No:
Any additional comments			

**Statement:**

This notice is given in relation to the work as described and is accompanied by the appropriate fee or by submitting this form, I consent to be invoiced.

I agree to ToP Building Control Ltd to pp my signature (required unless signed or electronic signature inserted).

Yes

No

<b>Name:</b>	
<b>Signature:</b>	
<b>Date:</b>	

Since SAP calculations are based upon a desktop exercise, and not a site survey, it is critical that the correct information is submitted. The following is a minimum suggested list of the information sources and data items required.

Information required to do a SAP/EPC (Don't panic, we are happy to offer advice on these details if you are unsure).

1. Site address and postcode;
2. Site plan to include orientation of the dwelling(s);
3. Plans of each storey, to a recognised scale or fully dimensioned;
4. Elevations drawings for each elevation to a recognised scale or fully dimensioned;
5. Sectional drawings of the dwelling to a recognised scale or fully dimensioned;
6. A written specification which must include the following:
  - a) Details of the principal heating and hot water system to include make and model of boiler, details of heating emitters, hot water cylinder size (if applicable) and the system controls;
  - b) Details of any secondary heating system present;
  - c) Details of ventilation systems;
  - d) Details of the internal and external lighting;
  - e) Details of the construction of all different floors to the property to include type and thicknesses of insulation and any other building products used;
  - f) Details of the construction of all different external walls to the property to include type and thicknesses of insulation and other building products used;
  - g) Details of the construction of all different roofs to the property to include type and thicknesses of insulation and other building products used;
  - h) Details of thermal bridge details proposed;
  - i) Details of the doors and windows to include sizes, type of frame, type of glazing, thickness of glazing, and any low-e films. If a lower than the standard Building Regulations U value is specified, a manufacturer certificate such as BFRC rating is required;  
<http://www.bfrc.org/Consumer/search.aspx> online search facility for doors and windows with BFRC ratings;
  - j) Details of any renewable technologies utilised such as ground source heat pumps, solar water heating, waste water heat recovery or photovoltaic.

SAP 2012 uses the following as a minimum specification to get a pass, any reduction in an area will require to be compensated elsewhere in the design.

SAP 2012 Table R1 : Reference values for England and for Wales	
Element or System	Value
Climate data	UK Average
Size and Shape	Same as actual dwelling
Opening areas (windows, roof windows and doors)	<p>Same as actual dwelling up to a maximum for total area of openings of 25% of total floor area.</p> <p>If the total area of openings in the actual dwelling exceeds 25% of the total floor area, reduce to 25% as follows:</p> <p>1) Include all opaque and semi-glazed doors with the same areas as the actual dwelling (excluding any doors not in exposed elements, e.g. entrance door to a flat from a heated corridor).</p> <p>2) Reduce area of all windows and roof windows by a factor equal to [25% of total floor area less area of doors included in 1)] divided by [total area of windows and roof windows in actual dwelling].</p>
External walls including semi exposed walls	$U = 0.18 \text{ W/m}^2\text{K}$
Party walls	$U = 0$
Floors	$U = 0.13 \text{ W/m}^2\text{K}$
Roofs	$U = 0.13 \text{ W/m}^2\text{K}$
Opaque doors (<30% glazed area)	$U = 1.0 \text{ W/m}^2\text{K}$
Semi-glazed doors (30%-60% glazed area)	$U = 1.2 \text{ W/m}^2\text{K}$
Windows and glazed doors with >60% glazed area	<p><math>U = 1.4 \text{ W/m}^2\text{K}</math></p> <p>Frame factor = 0.7</p> <p>Solar energy transmittance = 0.63</p> <p>Light transmittance = 0.80</p> <p>Orientation same as actual dwelling</p> <p>Over-shading same as for DER calculation (average if actual dwelling has very little or average over-shading; same as actual dwelling if greater over-shading)</p>
Roof windows	<p><math>U = 1.4 \text{ W/m}^2\text{K}</math> (Adjustment factor of +0.3 <math>\text{W/m}^2\text{K}</math> applied to roof window as described below Table 6e; resultant <math>U</math> value = 1.7 <math>\text{W/m}^2\text{K}</math>)</p> <p>Over-shading factor 1.0</p> <p>Other parameters as for windows</p>
Curtain wall	<p>Curtain walling to be treated as standard glazing and opaque wall with the same areas as the actual dwelling. When the total opening area exceeds 25% of floor area the glazed area to be reduced to 25% as for opening areas above.</p> <p><math>U</math>-value of opaque wall = 0.18 <math>\text{W/m}^2\text{K}</math></p> <p><math>U</math>-value of glazing = 1.5 <math>\text{W/m}^2\text{K}</math> (which includes an allowance of 0.1 for thermal bridging within the curtain wall)</p>
Thermal mass	Medium (250 $\text{kJ/m}^2\text{K}$ )
Living area	Same as actual dwelling
Number of sheltered sides	Same as actual dwelling
Allowance for thermal bridging	<p>1) If the thermal bridging in the actual dwelling has been specified by using the default <math>y</math>-value of 0.15 <math>\text{W/m}^2\text{K}</math>, the thermal bridging is defined by <math>y = 0.05 \text{ W/m}^2\text{K}</math>.</p> <p>2) Otherwise the thermal bridging allowance is calculated using the lengths of junctions in the actual dwelling and the <math>\psi</math> values in Table R2.</p> <p>3) Note. Where the area of openings in the actual dwelling is &gt; 25% of the total floor area the lengths of junctions in the notional dwelling remain the same as the lengths in the actual dwelling, even though window area is reduced as described for 'Opening areas' above.</p>

Ventilation system	Natural ventilation with intermittent extract fans
Air permeability	5 m <sup>3</sup> /h·m <sup>2</sup> at 50 Pa
Chimneys	None
Open flues	None
Extract fans / passive vents	2 extract fans for total floor area up to 70 m <sup>2</sup> , 3 for total floor area > 70 m <sup>2</sup> and up to 100 m <sup>2</sup> , 4 for total floor area > 100 m <sup>2</sup>
Main heating fuel (space and water)	Mains gas
Heating system	Boiler and radiators Central heating pump 2013 or later, in heated space Design flow temperature > 45°C
Boiler	If gas or oil combi boiler in actual dwelling, instantaneous combi boiler; otherwise regular boiler Efficiency, SEDBUK(2009) = 89.5% Room-sealed, fan-assisted flue Modulating burner control No hot water test for combi boiler
Heating system controls	1) For a single storey dwelling in which the living area is greater than 70% of total floor area, programmer and room thermostat; 2) For any other dwelling, time and temperature zone control. And in all cases: Boiler interlock Weather compensation providing +3% boiler efficiency adjustment
Hot water system	Heated by boiler (regular or combi as above) Separate time control for space and water heating
Hot water cylinder	If cylinder specified in actual dwelling: Volume of cylinder in actual dwelling If combi boiler: No cylinder Otherwise: 150 litres If cylinder, declared loss factor = 0.85 x (0.2 + 0.051 V <sup>2/3</sup> ) kWh/day, where V is the volume of the cylinder in litres
Primary water heating losses	Fully insulated primary pipework Cylinder temperature controlled by thermostat Cylinder in heated space
Water use limited to 125 litres per person per day	Yes
Secondary space heating	None
Low energy light fittings	100% of fixed outlets
Air conditioning	None

**ON COMPLETION OF THIS PDF FORM; PRINT TO PDF, THEN SAVE, IF YOU SAVE ONLY AS A PDF FORM, IT SAVES A BLANK COPY!**