

## SAP Extensions Calculations

To enable us to complete your SAP Extension Calculation please email us:

- 1) A completed SAP Extensions Checklist
- 2) Existing building floor plans to scale, with the usage of each room clearly labelled
- 3) Existing elevations with photographs where possible
- 4) Proposed building floor plans and elevations, with the usage of each room clearly labelled
- 5) Site plan, or information regarding the orientation of the building
- 6) Please show any renewable energy sources being used

For us to be able to produce the most accurate calculations for your project, please fill in all areas of this checklist. If further information can be located from the plans, make a note of the file name, or page number for easy reference. If existing plans are not available, we will need to contact you to ask extra questions regarding the existing building

## Project Details:

Address for which the SAP is required:

Post code:

Planned date of build completion:

No of extensions:

No of loft conversions:

What is the estimated age of the original building?  Insulation figures will be based on this answer

Who should we contact if there are any queries about the SAP Calculation?

Name:  Telephone:

Email:

Who should we send the reports to? (We only send reports via email unless specified otherwise)

Name:

Email:

Address:

Post code:

Please note: for the purposes of speed and energy efficiency, we send your reports to you by email. If you would like a hard copy too, we're happy to do this for you and only charge a small admin and postage fee of £6 + VAT per report

## Payment Details:

Do you hold an account with us?

Do you require our: Standard Service  (10-14 days) Fast Track Service  (48 hours)

Cheque enclosed:  Name on cheque:

BACS transaction:  BACS reference:

BACS date and amount:  £

(HSBC sort code: 40-44-66. Energist UK account: 80008338)

Debit Card:  Please contact Customer Support on 08458 386 387 for payment

Credit Card:  Please contact Customer Support (credit card payments are subject to a 2.5% surcharge)

QUESTIONS 1 TO 4 REFER TO THE EXISTING BUILDING ONLY

## 1. Existing Glazing and Rooflights: (please tick one box from each row)

Enter the U-value of the units, including frames.  
If glazing specification is mixed, please specify.

	Glazing		Glazing		Rooflights
	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>

Glass:	SINGLE	<input type="checkbox"/>	DOUBLE	<input type="checkbox"/>	TRIPLE	<input type="checkbox"/>
Frame:	PVCu	<input type="checkbox"/>	TIMBER	<input type="checkbox"/>	METAL	<input type="checkbox"/>
Low-E Coating:	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	THERMAL BREAK	<input type="text"/> mm
Double glazed air gap:	6mm	<input type="checkbox"/>	12mm	<input type="checkbox"/>	16mm	<input type="checkbox"/>
Double glazed gas type:	AIR	<input type="checkbox"/>	ARGON	<input type="checkbox"/>	KRYPTON	<input type="checkbox"/>

Is existing glazing being upgraded? Yes  No  If yes, please provide details.

If any existing windows or external doors are being removed or are becoming internal due to the extension works, please specify the area of the openings affected.  m<sup>2</sup>

Please specify other areas that are being upgraded.

## 2. Existing Heating: (please give details of all applicable existing heating)

Emitters: RADIATORS  UNDERFLOOR (Screed)  UNDERFLOOR (Timber)

Controls: COMPENSATOR or OPTIMIZER  PROGRAMMER  RADIATOR VALVES

ROOM STAT

ZONE CONTROL SYSTEM  (required on properties with a floor area greater than 150m<sup>2</sup>)

Please select ONE of the following three options as the main heat source:

Boiler  Make:  Model:  SEDBUK efficiency  %

Fuel: MAINS GAS  BOTTLED GAS  OIL  LPG  ELECTRIC  BIOMASS

Heat Pump  Make:  Model:

Source: Ground to water  Air to water  Water to water  Air to air

Fuel: Electric  Mains Gas

Electric  PANEL HEATERS

STORAGE HEATERS (Economy 7)

This heating system will also be used in the new extension YES  NO

This heating system is being replaced (see Q11) YES  NO

This heating system will remain in the existing building only YES  NO

## 3. Existing Hot Water System:

Provided by main heating system? Yes  No  Provided by secondary heating system? Yes  No

Provided by a community system? Yes  No

If a storage tank is present: Capacity  litres Insulation thickness  mm

Fuel: MAINS GAS  BOTTLED GAS  OIL  LPG  ELECTRIC  BIOMASS

## 4. Existing Lighting:

Please do NOT include unheated rooms such as garages, attics or conservatories

What is the total number of low energy light fittings in the property?

What is the total number of standard light fittings in the property?

**QUESTIONS 5 TO 12 PAGE REFER TO THE NEW BUILDING ONLY**

Each area of your construction requires a U-value. If your Architect has already calculated these, please write them in the boxes below. If you need us to calculate them for you, we will be happy to do this for you for just £18 + VAT per U-value calculation.

## 5. Proposed Floor Constructions: (please provide U-values for floors)

	U-value		Location
ground floor	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
floors above a garage	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
floors above a commercial unit (such as an office or takeaway)	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
floors above an unheated basement	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>

## 6. Proposed Wall Constructions: (please provide U-values for walls)

	U-value		Location
external walls	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
adjoining a garage	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
adjoining a commercial unit (such as an office or takeaway)	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
adjoining unheated corridors or stairways (in a block of flats)	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
adjoining underground (a basement or supporting wall)	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>

## 7. Proposed Roof Constructions: (please provide U-values for roofs)

	U-value		Location
main roof	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
a balcony on top of a lower floor	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>
ceiling of basement (if not under the main house)	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>

## 8. Proposed Glazing and Rooflights: (please tick one box from each row)

Enter the U-value of the units, including frames.  
If glazing specification is mixed, please specify.

	Glazing		Glazing		Rooflights	
	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>	W/m <sup>2</sup> K	<input type="text"/>	W/m <sup>2</sup> K
Glass:	SINGLE <input type="checkbox"/>		DOUBLE <input type="checkbox"/>		TRIPLE <input type="checkbox"/>	
Frame:	PVCu <input type="checkbox"/>		TIMBER <input type="checkbox"/>		METAL <input type="checkbox"/>	
Low-E Coating:	YES <input type="checkbox"/>		NO <input type="checkbox"/>		THERMAL BREAK <input type="text"/> mm	
Double glazed air gap:	6mm <input type="checkbox"/>		12mm <input type="checkbox"/>		16mm <input type="checkbox"/>	
Double glazed gas type:	AIR <input type="checkbox"/>		ARGON <input type="checkbox"/>		KRYPTON <input type="checkbox"/>	

## 9. Proposed External Doors: (please tick all that are applicable)

Enter the U-value of the units, including frames.  W/m<sup>2</sup>K

You DO NOT need to include patio doors here, if these are included in the glazing section.

Are external doors: SOLID  PARTIALLY GLAZED; how much is glazed (%)   
 Material: TIMBER  UPVC  METAL  THERMAL BREAK  mm

## 10. Proposed Lighting:

Part L1A states that a quarter of all internal light fittings must be low-energy exclusive, OR there must be one low energy light fitting per every 25m<sup>2</sup> of useful floorspace, whichever is the greater. Do not include lighting details for unheated areas, such as garages, conservatories and attics in your answers.

What is the total number of low energy light fittings in the new building?

What is the total number of standard light fittings in the new building?

## 11. Proposed Heating System: (please tick all that are applicable)

Emitters: RADIATORS  UNDERFLOOR (Screed)  UNDERFLOOR (Timber)   
 Controls: COMPENSATOR or OPTIMIZER  PROGRAMMER  THERMOSTATIC RADIATOR VALVES   
 ROOM STAT   
 ZONE CONTROL SYSTEM  (required on properties with a floor area greater than 150m<sup>2</sup>)

Please select ONE of the following three options as the main heat source:

Boiler  Make:  Model:  SEDBUK efficiency  %  
 Fuel: MAINS GAS  BOTTLED GAS  OIL  LPG  ELECTRIC  BIOMASS   
 Heat Pump  Make:  Model:   
 Source: Ground to water  Air to water  Water to Water  Air to air   
 Fuel: Electric  Mains Gas   
 Electric  PANEL HEATERS   
 STORAGE HEATERS (Economy 7)

## 12. Proposed Hot Water System:

Provided by main heating system? Yes  No  Provided by secondary heating system? Yes  No

Provided by a community system? Yes  No

If a storage tank is present: Capacity  litres Insulation thickness  mm

Fuel: MAINS GAS  BOTTLED GAS  OIL  LPG  ELECTRIC  BIOMASS

## 13. Proposed Renewables:

- Solar Panels:** Area of panels:  m<sup>2</sup> Degree Pitch  ° Orientation   
 Is the hot water cylinder connected to the heating  Separate storage cylinder  litres  
 If known please provide the collector efficiency  % and the heat loss efficiency  %
- Photovoltaic:** Installed Peak Power  kWp Orientation
- Micro Turbines:** Total Number:  Diameter  cm Distance from hub to ground  m
- Offsite:** Please provide separate details of the total kW/h/yr produced, and how many properties share the system

QUESTIONS 14 AND 15 REFER TO THE ENTIRE HOUSE (NEW AND EXISTING)

## 14. Fireplaces: (please tick one box from each row)

If none is present, SAP will assume portable electric heaters are to be used. (If being upgraded, please provide separate details of the old system.)

- Is the fireplace being : Retained  Removed  Upgraded  Installed
- Type: HETAS Approved open fire in grate  HETAS approved closed log burner   
 Open fire in grate  Closed burner
- Fuel: MAINS GAS  BOTTLED GAS  OIL  LPG  ELECTRIC   
 WOOD LOGS  SOLID FUEL

## 15. Ventilation:

- Total number of extraction fans  Is there MVHR? YES  NO
- OR

If you are installing a whole house mechanical ventilation system, we shall require the following information:

- Manufacturer:  Product Name:
- Is there heat Recovery YES  NO
- Will the ducting be: RIGID  FLEXI
- What is the Specific Fan Power  W//s What is the Heat Exchange Efficiency  %

Completed by:  Date:

- Please ensure this form is completed as accurately as possible as any changes may incur additional costs.
  - Please email your completed checklist and any accompanying drawings (floor plans, elevations etc) to [checklist@energistuk.co.uk](mailto:checklist@energistuk.co.uk)
- Energist UK, Energist House, Kemble Enterprise Park, Kemble, Gloucestershire GL7 6BQ.
- You can be confident that your Project is in safe hands with Energist.

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