



Fulfilling the Planning Condition for Improving Energy Efficiency in an Extended Dwelling

Purpose

The Uttlesford District Council Supplementary Planning Document – Home Extensions, adopted November 2005, requires simple, cost-effective energy efficiency measures to be carried out on an extended dwelling, where possible and practical. The purpose of this guidance is to outline the process of meeting this condition, the measures that may be required, and to provide information on the likely costs, potential savings and where to get further help.

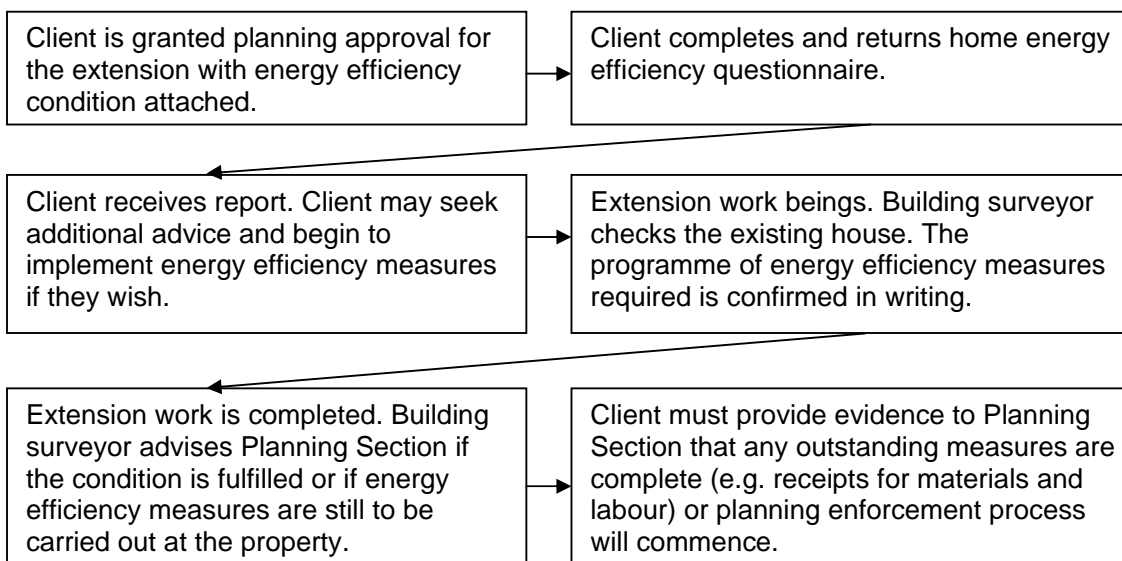
Process

As this is a general guidance, we advise you to also get a customised report for the dwelling in question by completing a home energy efficiency questionnaire (form reference: HEEQ1) for the property. The questionnaire is included with the planning approval letter. If for any reason it is not, it can be requested from the Planning Section or downloaded from the Council website. Complete the form to the best of your ability and return it to the Council's Building Surveying Section. The report will be sent to you by post.

The measures that will be required will be in line with the recommendations of the home energy efficiency report. However, the exact programme of measures you need to carry out will be confirmed in writing once work on the extension has been commenced, following a physical check of the property by the building surveyor (**Please arrange access to the property so the building inspector can do this check**).

The required energy efficiency measures need to be implemented before completion of the extension work, although this can be negotiated with the building inspector if there are extenuating circumstances. You can implement measures recommended in the home energy efficiency report before the extension work commences if you wish.

Process flow chart



Requirements

Measure	Required for
Cavity wall insulation	Any dwelling that has empty cavity walls, subject to a check for suitability from an accredited installer and approval by local authority building control.
Loft insulation (250 mm)	Any dwelling with an accessible loft and less than 100mm depth existing insulation. (see note on storage)
Floor insulation	Dwellings with uninsulated suspended timber floors only, where easily accessible from underneath (e.g. basements)
Replacement condensing boiler (A-rated)	Any dwelling with a 'wet' central heating system with a non-condensing gas or oil boiler more than 15 years old.
Heating controls upgrade	Any dwelling with central heating that lacks a programmable timer, room thermostat or thermostatic radiator valves.
Hot water insulation package	Any dwelling that has an uninsulated hot water tank or a tank has an existing insulating jacket that is in poor repair as judged by a building surveyor.
Draught-stripping	Any dwelling that has excessive air leakage as judged by a building surveyor.
Energy efficient lighting	Any dwelling that has less than four energy saving lamps fitted in commonly used areas.

Full description of the measures can be found in EST Best Practice document CE101 – Domestic Energy Efficiency Primer (details on how to obtain this document given below).

Further information and advice

UDC Planning Section

Form HEEQ1 can be downloaded from www.uttlesford.gov.uk/planning or requested by calling 01799 510 467.

UDC Building Surveying can provide assistance to clients requiring help interpreting their home energy report. They will provide advice onsite once building work has commenced. For general enquiries on energy efficiency, call Jake Roos, Energy Efficiency Surveyor, 01799 510 511 or John Farnell, Senior Building Surveyor, 01799 510 538.

The Essex Energy Efficiency Advice Centre (EEEAC) is funded by the government to provide free impartial advice about home energy efficiency. Call 0800 512 012.

The Energy Saving Trust is a national agency promoting energy efficiency in the domestic sector. For information on home energy efficiency measures including grants, visit their website: www.est.org.uk/myhome.

The Energy Saving Trust also provides technical guidance on energy efficiency for builders and architects through their 'Best Practice in Housing' programme. Best Practice technical documents can be downloaded or ordered free from their website or from their helpline. www.est.org.uk/housingbuildings/publications, 0845 120 7799.

Recommended Best Practice in Housing technical guidance documents:

- CE101 - Domestic Energy Efficiency Primer
- CE120 - Energy Efficient Loft Extensions
- CE121 - Energy Efficient Garage Conversions
- CE122 – Energy Efficient Domestic Extensions

ENERGY SAVING TRUST - ENERGY EFFICIENCY COSTS AND PAYBACKS

All savings assume gas central heating

Detached House or Bungalow	Saving (£/yr)			Typical Installed Cost (£)	Payback (yrs)			Typical DIY Cost (£)	Payback (yrs)			CO2 Saving (kgCO2/yr)
	£210	-	£250		£300	Less than 2 years			-	-	-	
Cavity Wall Insulation	£210	-	£250	£300	Less than 2 years				-	-	-	1,720
Loft Insulation (new installation)	£210	-	£250	£250	Less than 1 year			£330	Around 2 years			1,704
Loft Insulation (top up)	£60	-	£70	£260	Around 4 years			£250	Around 4 years			486
Floor Insulation	£60	-	£70	-	-	-	-	£120	Around 2 years			469
Replacement Condensing Boiler	£130	-	£160	-	-	-	-	-	-	-	-	1,076
Hot Water Tank Insulation	Approx £20			-	-	-	-	£10	Around 6 months			150
Full Heating Control Package	£70	-	£90	£200	2	-	3	-	-	-	-	1,088
Draught-stripping	Approx £20			75	Around 4 years			£45	Around 2 years			160
Lighting (4 x lamps)	£15	-	£20	up to £15	Less than 1 year			up to £15	Less than 1 year			98

Semi-detached or End-of-Terrace	Saving (£/yr)			Typical Installed Cost (£)	Payback (yrs)			Typical DIY Cost (£)	Payback (yrs)			CO2 Saving (kgCO2/yr)
	£130	-	£160 <th>£260</th> <th colspan="3">Less than 2 years</th> <th>-</th> <th>-</th> <th>-</th>		£260	Less than 2 years			-	-	-	
Cavity Wall Insulation	£130	-	£160	£260	Less than 2 years				-	-	-	1,061
Loft Insulation (new installation)	£180	-	£220	£230	Around 1 year			£290	Less than 2 Years			1,474
Loft Insulation (top up)	£50	-	£60	£240	4	-	5	£215	Around 4 years			412
Floor Insulation	£40	-	£50	-	-	-	-	£100	Around 2 years			340
Replacement Condensing Boiler	£100	-	£120	-	-	-	-	-	-	-	-	810
Hot Water Tank Insulation	Approx £20			-	-	-	-	£10	Around 6 Months			150
Full Heating Control Package	£60	-	£70	£200	Around 3 years			-	-	-	-	844
Draught-stripping	Approx £20			£75	Around 4 years			£45	Around 2 years			144
Lighting (4 x lamps)	£15	-	£20	up to £15	Less than 1 year			up to £15	Less than 1 year			98

The figures in this table are only an indication of costs; actual quotations could be higher or lower.

All savings assume gas central heating

Mid-Terraced	Saving (£/yr)			Typical Installed Cost (£)	Payback (yrs)			Typical DIY Cost (£)	Payback (yrs)			CO2 Saving (kgCO2/yr)
	£70	-	£80		3	-	4		-	-	-	
Cavity Wall Insulation	£70	-	£80	£250	3	-	4		-	-	-	558
Loft Insulation (new installation)	£150	-	£190	£230	1	-	2	£255	Less than 2 years			1,276
Loft Insulation (top up)	£40	-	£50	£240	5	-	6	£190	4	-	5	331
Floor Insulation	Approx £20				-	-	-	£95	Less than 5 years			200
Replacement Condensing Boiler	£70	-	£80	-	-	-	-	-	-	-	-	559
Hot Water Tank Insulation	Approx £20				-	-	-	£10	Around 6 months			150
Full Heating Control Package	£50	-	£60	£200	Around 3 years				-	-	-	647
Draught-stripping	£15	-	£20	£75	4	-	5	£45	2	-	3	15
Lighting (4 x lamps)	£15	-	£20	up to £15	Less than 1 year			Up to £15	Less than 1 year			98

Flats	Saving (£/yr)			Typical Installed Cost (£)	Payback (yrs)			Typical DIY Cost (£)	Payback (yrs)			CO2 Saving (kgCO2/yr)
	£40	-	£50		5	-	6		-	-	-	
Cavity Wall Insulation	£40	-	£50	£230	5	-	6		-	-	-	367
Loft Insulation (new installation)	£250	-	£310	£220	Less than 1 year			£200	Less than 1 year			2,071
Loft Insulation (top up)	£70	-	£80	£240	Around 3 years			£145	Around 2 years			541
Floor Insulation	Approx £30			-	-	-	-	£70	Around 2 years			228
Replacement Condensing Boiler	£50	-	£60	-	-	-	-	-	-	-	-	436
Hot Water Tank Insulation	Approx £20				-	-	-	£10	Around 6 months			150
Full Heating Control Package	£40	-	£50	£200	4	-	5	-	-	-	-	501
Draught-stripping	Around £10			£75	Around 8 years			£45	Around 5 years			84
Lighting (4 x lamps)	£15	-	£20	up to £15	Less than 1 year			up to £15	Less than 1 year			98

The figures in this table are only an indication of costs; actual quotations could be higher or lower.

Notes on Costs and Paybacks (from Energy Saving Trust)

- The costs and savings figures will vary according to the size of the house, its location, the measure (if appropriate), fuel, heating system and the materials used.
- Energy savings are estimated from a range of standard house types with gas heating and a standard occupancy. Actual savings depend on individual circumstances. Remember that some of the benefit may be taken in improved comfort.
- DIY costs are for these measures where an average level of DIY skill is required. If in doubt about any aspect of the installation skills required consult an appropriately qualified person. The installed costs per measure for insulation measures is intended to be representative of the typical cost to the householder in a subsidised scheme e.g. Energy Efficiency Commitment (EEC).
- Heating control costs assume the additional costs for installation when an installer is at the premises working on the heating system.
- Lighting savings assume a mixture of wattages replaced and hours of use.
- DIY Cost of Floor insulation assumes the material cost of the insulation required only.
- Savings given for condensing boilers assume that the installation of a condensing boiler is mandatory and hence no additional cost against a minimum standard building regulations compliant boiler.

Note on lofts used for storage

Where lofts that require additional insulation are used for storage, either the storage area must be limited to a maximum of 20% of the loft area and the rest insulated to 250mm, or an arrangement must be used that allows safe storage without objects resting on and compressing the insulation material.

Disputes

The measures described under 'Requirements' are required in the circumstances described, where possible, practical and cost-effective, as judged by a building surveyor. 'Cost effective' is defined as having a simple payback of seven years or less at current domestic energy prices. The total expenditure limit on energy efficiency measures to fulfil the condition will also be constrained to approximately 10% of the cost of the extension project costs. If you feel any measure that is insisted upon by a UDC building surveyor is inappropriate or not cost-effective in your circumstances, you may appeal to the Head of UDC Building Surveying in the first instance. All appeals must be made in writing. We will seek to resolve appeals within ten working days.

If you are unwilling to undertake any works in compliance with the condition, you will need to appeal against the condition to the Planning Inspectorate. The process for planning appeals is set out in the guidance notes attached to the decision notice. The Inspectorate's website is www.planning-inspectorate.gov.uk/

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