

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
		Guide 5 – APPROVED DOCUMENT L1B Conservation of fuel and power – Work in existing dwellings.						
	Issued	01/10/10	Rev		Page	1	of	11

From **1st October 2010** there have been changes to the Building Regulations that cover the Conservation of Fuel and Power in buildings. This guide aims to explain how these changes will affect you, when you intend to build a new dwelling house or flat.

Energy performance relating to works and extensions in existing buildings is based on a revised elemental approach in which insulation and efficiency thresholds are set for individual parts of the building envelope and services. There are requirements for standards to be achieved for 'Thermal Elements' (walls, floors and roofs), 'Controlled Fittings' (windows, doors and similar fittings) and 'Controlled Services' (heating, hot water, ventilation systems and lighting). Regulations apply whether as part of an extension, dividing a house into flats, replacing windows, extending a heating system or applying render to a gable wall, or changing a buildings energy status.

Reference should be made to the other guides in this series for the requirements that apply to the following:

- Exemptions from controls / non-notifiable works.
- Repair and/or replacement of 'Thermal Elements'
- Change to a buildings energy status

Summary of Changes:

Changes in Legal Requirements.

1. Exemption from the energy efficiency provisions of extensions consisting of a conservatory or porch has now been amended to grant exemption only where the existing walls, windows, or doors are retained or replaced if removed and where the dwellings heating system is NOT extended into the conservatory or porch,
2. The list of work in Schedule 2B (work that need not be notified to building control) is amended to include the installation of thermal insulation in a roof space or loft space where this is the only work carried out and the work is not carried out to comply with any requirement in the Building Regulations.

Changes in Technical Guidance.

1. Generally guidance is based upon an elemental approach to demonstrate compliance, with additional guidance that provides greater flexibility. The main technical changes comprise a general strengthening of energy efficiency standards that are considered reasonable for work on thermal elements, controlled fittings and controlled services in existing dwellings.
2. Amended guidance is given for historic and traditional buildings which may have an exemption from energy efficiency requirements or where special considerations apply.
3. Amended guidance is given where an extension is a conservatory or porch that is not exempt from the energy efficiency requirements.
4. Renovation of a thermal element guidance is amended
5. Guidance is provided for swimming pool basins (walls and floors) in existing dwellings

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
	Issued	01/10/10	Rev	Page	2	of	11	

The requirements of Building Regulation Part L Conservation of Fuel and Power:

Schedule 1 – Part L Conservation of fuel and power

L1. Reasonable provision shall be made for the conservation of fuel and power in buildings by:

(a) limiting heat gains and losses—

(i) through thermal elements and other parts of the building fabric; and

(ii) from pipes, ducts and vessels used for space heating, space cooling and hot water services;

(b) providing fixed building services which—

(i) are energy efficient;

(ii) have effective controls; and

(iii) are commissioned by testing and adjusting as necessary to ensure they use no more fuel and power than is reasonable in the circumstances; and

(c) providing to the owner sufficient information about the building, the fixed building services and their maintenance requirements so that the building can be operated in such a manner as to use no more fuel and power than is reasonable in the circumstances.

GUIDANCE ON THERMAL ELEMENTS.

Thermal Elements - refers to a wall, floor or roof (but not windows, doors, roof lights or roof windows) that separates the heated or cooled space from the outside. Works relating to thermal elements can arise in building an extension, a material change of use, a material alteration, changing a buildings energy status or when carrying out other renovation works.

The requirements for ‘**Thermal Elements**’ requires efficiency improvements whenever a roof, wall or floor is replaced or renovated (**Refer to Guide 24 – (2) for further guidance**) e.g. replacement of render or tile hanging to a wall will require insulation works to be undertaken at the same time. The AD gives guidance on the U values that should be achieved depending on whether an element is newly constructed, rebuilt, retained, replaced or renovated. **NOTE: consider carefully the potential for condensation problems and the controls necessary to prevent it when upgrading existing construction).**

PROVISION OF THERMAL ELEMENTS.

Newly constructed thermal elements and replacement thermal elements now both have to comply with the following standards.

STANDARDS FOR THERMAL ELEMENTS W/m²k

Element ⁽¹⁾	Standards.
Wall	0.28 W/m².K⁽²⁾
Pitched roof – insulation at ceiling level	0.16 W/m ² .K
Pitched roof – insulation at rafter level	0.18 W/m².K
Flat roof or roof with integral insulation	0.18 W/m².K
Floors ⁽³⁾	0.22 W/m².K⁽⁴⁾
Swimming Pool Basin	0.25 W/m².K

NOTES

1. Roof includes dormers and wall refers to wall parts (cheeks) of dormer windows.
2. Area-weighted values.
3. A lesser provision may be appropriate where meeting a standard would result in a reduction of more than 5% in the internal floor area of the room bounded by the wall.
4. A less provision may be appropriate where meeting such a standard would create significant problems in relation to adjoining floor levels (the ‘U’ value of an extension floor can be calculated using exposed perimeter and floor area of the whole enlarged dwelling).

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.							24
	Issued	01/10/10	Rev		Page	3	of	11	
Guide 5 – Work in existing dwellings.									

Controlled Fittings - (windows, roof lights, roof windows, doors or similar fittings.)

Where windows, roof lights are to be provided they must comply as follows:

Areas of Windows, Roof Lights and Doors.

The following glazing restrictions apply:

1. Not More Than 25% of extension's floor area: **plus**
2. the area of doors / windows which, as result of the extension works, no longer exist or are no longer exposed.

Construction / thermal performances:

Doors / windows / roof lights – must be fully draught proofed and comply as indicated below. In addition to this insulated cavity closer should be installed to the opening perimeter to prevent cold bridging.

Reasonable provisions when working on controlled fittings.

Fitting	Standard
Window, roof window and roof light	WER Band C or better (see comment below) or U-value = 1.6 W/m2.K
Doors with more than 50% of their internal face area glazed.	U-value = 1.8W/m2.K
Other doors	U-value = 1.8W/m2.K

WER (window energy rating) – you will need to provide manufacturers WER declarations to indicate compliance.

U values need to be calculated in accordance with BR443 and are to be based on whole unit i.e. glazing and frame.

Replacement Windows.

Reduced standards for replacement windows have now gone and any replacement window must comply with the same standard as new windows.

Where replacement windows are unable to attain the above u-values due to the need to maintain external appearance of the façade or the buildings character, replacement windows should meet a centre pane u-value of **1.2 W/m2.K** or **single glazing should be supplemented with 'low e' secondary glazing**

Formation of additional window openings to existing dwellings.

If a window is enlarged or a new one is created, then the area of the windows, roof windows, roof lights and doors should not exceed 25% of the dwelling total floor area, unless compensatory measures are included elsewhere in the work.

NOTE – refer to new Part F standards for 'Replacement Windows', 'Opening Lights' and new 'Trickle Ventilation' provisions to windows.

If you intend to use metal windows you must supply U-value calculations and the windows should be thermally broke to prevent condensation problems.

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.							24
	Issued	Guide 5 – Work in existing dwellings.							
		01/10/10	Rev		Page	4	of	11	

Controlled Services. (Heating, Hot water services, Mechanical Ventilation and Air Conditioning systems, Fixed internal and external lighting and Renewable Energy Systems).

Where fixed building services are to be provided or extended – you must ensure that they comply with the Domestic Building Services Compliance Guide. Some typical information is extracted below but you should refer to the actual document for determining full services compliance,

The efficiency claimed for the fixed building service should be based on test data and this should be provided to building control for approval.

Heating and Hot Systems.

Where providing or extending a heating or hot water system or part of the system (including providing an individual heater or fire) you must ensure that:

- (i) Appliance efficiency and heating controls are in accordance with the Domestic Building Services Compliance Guide e.g.
 - Areas of differing heating needs (e.g. separate sleeping and living areas are to have individual temperature zone control by the use of room thermostats or individual radiator valves).
 - Separate timing controls are to be provided for space and hot water heating (except for combination boilers / solid fuel appliances) – controls to allow operation of either space heating or hot water or both when required and must prevent the boiler from operating when no heating is required (Boiler Control Interlock).

and

- (ii) When replacing your primary heating service but not changing the fuel type, the replacement appliance carbon efficiency (as well as complying with the previous item) – must not be significantly any worse than the one being replaced (i.e. within 2%).

Replacements involving fuel switches e.g. gas to oil etc: Multiply boiler efficiency by the ratio of the CO2 emission factor of the fuel used in the service being replaced to that used in the new service.

You must also ensure that system is commissioned with all parts working adequately – Regulation 44 requires that the installer to provide a notice confirming that the fixed building services have been commissioned in accordance with the Domestic Heating Compliance Guide procedures on works completion. **(See Commissioning and Providing Information below).**

See guide note 24 (3) in this series to determine those works that are non-notifiable (minor replacements of such components as pumps, zone valves and programmers etc).

Replacement appliances.

When replacing existing appliances, the new appliance efficiency should not be significantly less than the one being replaced. If the replacement involves a fuel switch, then the relative carbon emissions associated with the new and existing fuels should be considered when assessing the reasonableness of the proposed appliance the ‘Domestic Building Services Compliance guide’ provides guidance on this matter.

If a renewable energy generator such as a wind turbine or photovoltaic array is being replaced, the new system should have an electrical output that is not less than the original installation.

When replacing a heating appliance give consideration to connecting to any existing local heat networks. If the work involves pipe work changes, consideration should be given to providing capped off connection to facilitate subsequent connection to a planned local heat network.

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
	Issued	01/10/10	Rev		Page	5	of	11

Insulation of Pipes, Vessels and Ducts.

- Heating or hot water services pipework, vessels and ducts are to be insulated with insulation labelled as complying with the 'Domestic Building Services Compliance Guide'.
- Heating and hot water circuit's primary circulation pipes to be insulated wherever they pass into unheated spaces.
- Domestic hot water circuits primary circulation pipes are to be insulated throughout their length, subject only to practical constraints imposed by the need to penetrate joists / other structural elements.
- All pipes connected to hot water storage vessels, including vent pipe, to be insulated for at least 1 metre from their connection to the cylinder (or insulated up to the point where they become concealed).
- If secondary circulation is used, all pipes kept hot by that circulation should be insulated.

Replacement systems.

Whenever a boiler or hot water storage vessels are to be replaced on an existing system, any pipes (in the situations above) that are exposed as part of the work or are otherwise accessible are to be insulated with insulation labelled as complying with the 'Domestic Building Services Compliance Guide'.

New Systems.

In new systems pipes should, in the following cases should be insulated with insulation labelled as complying with the 'Domestic Building Services Compliance Guide' (see table below for maximum Heat loss permitted).

- Primary circulation pipes for heating and hot water circuits should be insulated wherever they pass outside the heated living space or through voids, which communicate with and are ventilated from unheated spaces.
- Primary circulation pipes for domestic hot water circuits should be insulated throughout their length, subject only to practical constraints imposed by the need to penetrate joists and other structural elements.
- All pipes connected to hot water storage vessels, including vent pipe, should be insulated for at least 1 metre from their points of connection to the cylinder (or they should be insulated up to the point where they become concealed).
- If secondary circulation is used, all pipes kept hot by that circulation should be insulated.

Typical insulation thickness (thermal conductivity min 0.045)

Pipe dia (mm)	Min Insulation thickness (thermal conductivity min 0.045)
8mm	20mm
15mm	26mm
22mm	29mm
28mm	31mm

Note – extra provisions should be provided against freezing of pipes as heat loss reductions will reduce temperatures in the unheated areas.

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
	Issued	01/10/10	Rev		Page	6	of	11
Guide 5 – Work in existing dwellings.								

Insulation thickness (thermal conductivity min 0.045) – Extreme freezing conditions.

Pipe dia (mm)	Min Insulation thickness (thermal conductivity min 0.045)
15mm	113mm
22mm	28mm
28mm	16mm

Hot water storage vessels.

Hot water storage vessels to have min 35mm factory applied PU foam or equivalent coating.

Mechanical Ventilation Systems (Energy saving provisions).

Mechanical ventilation systems to be of an energy efficient type in compliance with Table below:

Minimum standards for mechanical ventilation systems.

System type	Performance
Specific fan power (SFP) for intermittent extract ventilation systems.	No worse than 0.5 Watts / (litres/sec)
Specific fan power (SFP) for continuous extract ventilation systems.	No worse than 0.7 Watts / (litres/sec)
Specific fan power (SFP) for continuous supply ventilation systems.	No worse than 0.5 Watts / (litres/sec)
Specific fan power (SFP) for continuous supply and extract with heat recovery ventilation systems.	No worse than 1.5 Watts / (litres/sec)
Heat recovery efficiency of balanced mechanical ventilation systems.	70%

Intermittent mechanical extract ventilation systems to be operated by local manual switches or automatic presence sensors, all other systems types to have manual or automatic control of the boost facility.

Mechanical Comfort Cooling (Energy saving provisions).

Where a fixed air and water cooled household air conditioners / cooling systems are to be installed they must have a Energy Efficiency (EER) as follows:

- a) Air-cooled working in cooling mode EER to be greater than 2.4 b) Water-cooled working in cooling mode EER to be greater than 2.5 c) Fixed air-conditioners minimum energy efficiency equal to or better than Class C as defined in the Energy Information (Household Air Conditioners Regs 2005).

Controls must be fitted to prevent simultaneous heating and cooling of the same space within the dwelling and installations to be by an approved installer. Commissioning certificates to be provided to Building Control on works completion.

(Note – before considering fitting these the dwelling should be adjusted to avoid or minimise the need for cooling through the appropriate use of solar control, secure ventilation and thermal mass).

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
	Issued	01/10/10	Rev		Page	7	of	11
Guide 5 – Work in existing dwellings.								

Lighting. (Energy saving provisions)

To any new wiring system or when rewiring an existing lighting system – install energy efficient light fittings as follows:

Fixed Internal Lighting: Install **low energy** light fittings that *only take* lamps having a luminous efficacy greater than 45 lumens per circuit-watt and a total output greater than 400 lamp lumens. Light fittings with supplied power less than 5 circuit-watts are excluded from the overall count of total light fittings below:

Provisions: Not less than **3 per four** of ALL the light fittings in the main dwelling spaces (excluding infrequently accessed storage spaces and cupboards).

NOTES: A light fitting may be dedicated fittings with separate control gear e.g. pin based fluorescent or compact fluorescent lamps; or standard fittings with integrated control gear e.g. bayonet or edison screw base compact fluorescent lamps. Be careful when considering the use of mains frequency fluorescent lighting in garages, as they can cause strobing issues with machine tools and vehicles. ***GLS tungsten lamps with bayonet caps or screw bases or tungsten halogen lamps are not acceptable***

Fixed External Lighting (Excludes flats common areas and other communal access-way lighting):

Provisions:

- (a) EITHER: lamp capacity not to exceed 100 watts per light fitting, fitted with automatic daylight and motion sensors. **OR**
- (b) Lamps with an efficacy greater than 45 lumens per circuit – watt, fitted with automatic daylight sensors and must be switch controlled

Commissioning of Fixed Building Services and Providing Information.

On completion all fixed building services should be properly commissioned - Regulation 44 requires the provision of a notice confirming that commissioning has been carried out in accordance with an approved procedure set out in the Domestic Building Services Compliance Guide by a suitability qualified person, depending upon the type of installation installed e.g. Gas Safe (gas) / Hetas (solid fuel) / Oftec (oil) registered installers.

For commercial installations – commissioning should be in accordance with 'CIBSE Commissioning Code M',

On the works completion:

1. Copy of commissioning notice to be provided to Building Control confirming that compliant systems commissioning has taken place not more than 30 days after the works completion. No completion certificates can be issued if this commissioning notice is not received. ***(Gas Safety certificates must also be provided where gas is utilised)***
2. The building owner must receive sufficient information about the building, the fixed building services and their maintenance requirements to allow the energy saving provisions to be maintained e.g. provide simple set of operating and maintenance instructions relevant to the particular systems installed in a durable format.

The giving of the commissioning notice to Building Control does not apply to jobs carried out under a 'competent person's scheme' (see links to further advice guides below).

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
		Guide 5 – Work in existing dwellings.						
	Issued	01/10/10	Rev		Page	8	of	11

Instructions must show:

1. How to adjust timers / temperature control settings.
2. What routine maintenance is required to maintain operating efficiency throughout the system's service-life.
3. Position and operation, including resetting of all system safety devices / anti scald devices.

Continuity of Insulation and Airtightness.

All gaps between elements must be sealed to reduce unwanted air leakage, e.g. follow robust detail sealing as described below:

- *Ensure wall, floor and roof insulation is continuously linked or overlapped to avoid creation of cold bridges. Watch your detailing where roof / floor structures abutt external walls and ensure all residual gaps / edges are insulated. Continue insulation up the full height of gable walls.*
- *Provide vapour control barriers on the warm side of any insulation – this can include insulated ground floor construction (follow appropriate manufacturer's detailing requirements).*
- *Ensure all lintels are insulated and that walls are not constructed out of differing thermally performing materials.*
- *Use joist hangers to support timbers or seal all junctions of structural timbers/ steel etc where built into an external wall with mastic sealant.*
- *Mastic seal all junctions of doors / windows and walls and under the edges of skirting boards / architraves.*
- *Seal around all services penetrations through the external structure, seal all junctions of walls / ceilings with ducting and close off the tops of all vertical ducts e.g. s.v.p boxings.*
- *It is important that all gaps have the appropriate sealant and or gap fillers provided suitable for the gap size and degree of movement anticipated.*
- *For drylining ensure continuous ribbons of adhesive are provided to fix dry lining at perimeters of external walls, openings, around services e.g. socket outlets etc. **The sealing of dry lining on dabs is very important, as it is a key area of air leakage.***

IMPORTANT NOTE – Ensure adequate precautions are taken to prevent condensation in the replaced or altered construction elements.

Material Change of Use / Retained Thermal Elements and Renovation of Thermal Elements.

Reference should be made to Guide 2 of this series for guidance on these important energy efficiency provisions to existing buildings and changes of use.

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010.						24
		Guide 5 – Work in existing dwellings.						
	Issued	01/10/10	Rev		Page	9	of	11

Exempt Conservatories and Porches.

Conservatory is defined as having N.L.T three quarters of its roof area and N.L.T one half of its external wall area made of translucent material.

There have been some changes to the exemption rules for these types of extension, **they still remain exempt if :**

- They are constructed at ground level and the internal floor area does not exceed 30m²
- Safety Glazing complies with Approved Document N
- Where there are existing doors and windows between the conservatory and dwelling that these are retained or, if removed are replaced by walls, windows and doors that meet the energy efficiency requirements; and
- **This is the big change - Where the heating system is not extended into the conservatory or porch. So if you heat the conservatory or porch the exemption ceases to apply and a building regulation application will be required.**

Where conservatories are not exempt as a result of the above the following will have to be undertaken:

Non- Exempt Conservatories and Porches.

REQUIREMENTS:

- a. There is to be effective thermal separation between the dwelling and conservatory, i.e. walls, doors and windows to be insulated to at least the standard of the existing dwelling, doors and windows to be fully draught sealed.
- b. Provide independent temperature and on/off controls to any heating system (refer to previous controlled services notes for the system compliance requirements).
- c. Glazed elements to comply with the following (however the limitations on total area of windows and doors does not apply i.e. 25% plus rule):

Window, roof window and roof light	WER Band C or better or U-value = 1.6 W/m².K
Doors with more than 50% of their internal face area glazed.	U-value = 1.8W/m².K
Other doors	U-value = 1.8W/m².K

- d. Thermal Elements must comply with the following:

Wall	0.28 W/m².K
Pitched roof – insulation at ceiling level	0.16 W/m².K
Pitched roof – insulation at rafter level	0.18 W/m².K
Flat roof or roof with integral insulation	0.18 W/m².K
Floors	0.22 W/m².K

If a highly glazed extension is not thermally separated from the dwelling – it will be considered to be a conventional extension and must therefore fully comply with the regulations requirements.

IMPORTANT NOTE - Removing and not replacing any or all of the thermal separation between the dwelling and existing exempt extension, or extending the dwelling's heating system into the exempt extension means the exemption ceases. This constitutes a change to the buildings energy use and reasonable provisions would have to be taken as to the building energy efficiency as if it was a conventional extension and make you must make a Building Regulation application.

Swimming Pool Basins.

Where a swimming pool is being provided in a building, the U-value of the basin (walls and floor) should be not worse than **0.25 W/m2.K** as calculated according to BS EN ISO 13370.

Option for Design Flexibility.

When constructing an extension you could use an average U value across the extension's thermal envelope that is the same as if the prescribed U values had been used for each individual element. This means that a better value in the walls can be used to trade off against a worse U value in the roof.

The area weighted U-value of all the elements in the extension is no greater than that of an extension of the same size and shape that complies with the new U-value standards and glazing area restrictions.

Calculation formula –

$\{(U1 \times A1) + (U2 \times A2) + (U3 \times A3) + \dots \text{etc}\}$ divided by $\{A1 + A2 + A3 + \dots \text{etc}\}$

U = U-value of element of the same construction (but no worse than the limits in Table 1 below).

A = internal area of the element.

A further alternative in the case of extensions and new dwellings following a change of use would be to use a Standard Assessment Procedure (SAP) 2009 calculation to show that the whole dwelling (existing plus extension, or newly converted dwelling) would emit no more carbon than if the elemental rules had been followed. This carbon target approach is similar to the approach for new dwellings. Table 3 column (b) minimum standards must however be complied with.

Table 3 – Upgrading retained thermal elements

Element ⁽¹⁾	(a) Threshold value W/m2.K	(b) Improved value W/m2.K
Wall - cavity insulation ⁽²⁾	0.70	0.55
Wall – external or internal insulation ⁽³⁾	0.70	0.30
Floors ^{(4) (5)}	0.70	0.25
Pitched roof – insulation at ceiling level	0.35	0.16
Pitched roof – insulation between rafters ⁽⁶⁾	0.35	0.18
Flat roof or roof with integral insulation ⁽⁷⁾	0.35	0.18

NOTES

1. Roof includes dormers and wall refers to wall parts (cheeks) of dormer windows.
2. This applies only in the case of a wall suitable for the installation of cavity insulation. Where this not the case, it should be treated as 'Wall – external or internal insulation'.
3. A lesser provision may be appropriate where meeting a standard would result in a reduction of more than 5% in the internal floor area of the room bounded by the wall.
4. The extension floor u-value can be calculated using the exposed perimeter and the floor area of the whole enlarged dwelling floor u-value
5. A lesser provision may be appropriate where meeting such standard would create problems in relation to adjoining floor levels.
6. lesser provision may be appropriate where meeting such a standard would create headroom limitation. In such cases, the insulation depth plus any required air gap should be at least the depth of the rafter, and thermal performance of the insulation chosen should be such as to achieve the best practicable u value
7. lesser provision may be appropriate if there are particular problems associated with the load bearing capacity of the frame or the upstand height.

Building Control Guidance Note	Subject	CONSERVATION OF FUEL AND POWER 2010. Guide 5 – Work in existing dwellings.							24
	Issued	01/10/10	Rev		Page	11	of	11	

Historic Buildings / Listed Buildings.

AD L1B will have an impact on renovation and conservation works to historic buildings, as a result special considerations can be applied. Seek conservation officer advice in assessing the works and reference should be made to the English Heritage guidance note on regulations and historic buildings *Building Regulations and Historic Buildings*.

Buildings which are:

1. Listed in accordance with the Planning (Listed Buildings and Conservation Areas) Act 1990;
2. Buildings in 'Conservation Areas' designated in accordance with section 69 of that Act; or
3. Included in the schedule of monuments maintained under section 1 of the Ancient Monuments and Archaeological Areas Act 1979.

Are exempt having to comply with the energy efficiency requirements, ***but only where the works would unacceptably alter the character or appearance of the existing building.***

Historic and traditional building where special consideration may apply:

There are 3 further classes of building where special consideration in making reasonable provision for the conservation of fuel and power may apply:

1. Buildings which are of architectural and historical interest and are referred to as such in the Local Authorities development plan or local development framework;
2. Buildings which are of architectural and historical interest within national parks, areas of outstanding natural beauty, registered battlefields, registered historic parks and gardens, the curtilage of scheduled ancient monuments, and world heritage sites;
3. Buildings of traditional construction with permeable fabric that absorbs and readily allows the evaporation of moisture.

For these types the aim should be to improve energy efficiency as far as is reasonably practicable. The work should not prejudice the character of the host building or increase the risk of long-term deterioration of the building fabric or fittings.

Extensions to these buildings should however comply with the energy efficiency requirements – the only exemption is where there is a need to match the external appearance or character of the host building

Consequential Improvements.

Where a existing building has a '*total useful floor area*' over 1000m² and you intend to carry out any of the following building works:-

- (a) Building an extension.
- (b) the initial provisions of any '*fixed building services*'. (other than renewable energy generator)
- (c) an increase to the installed capacity of any '*fixed building services*'.

The existing building as well as the new one needs bringing into compliance with Part L, unless you can prove that such works to the existing building are not technically, functionally or economically feasible. Such supporting evidence must be prepared by a suitably qualified person and provided on application submission (see further notes below).

Very few dwellings will exceed this and if it is the case you are advised to speak to building control.