

Viewpoint

Energy conservation in historic and traditional buildings

Building Regulation 21& Approved Documents L1B & L2B

Introduction

The obligation to apply contemporary thermal insulation standards, construction methods and materials on historic buildings frequently results in conflict between the conservation needs of the building and the requirements imposed by modern regulatory and environmental regimes.

The conversion of existing buildings requires a flexible application of the Building Regulations that allows the adoption of a sensitive approach to traditional and historic buildings.

The Building Regulations are based upon the use of functional standards that broadly define what a building must achieve when in use. They do not state how compliance will be achieved relying on terminology that includes reasonable and adequate. A series of Approved Documents support the regulations in achieving the functional and performance objectives by offering practical guidance as to how to meet the requirements.

The Approved Documents are intended to provide guidance for complying with the more common forms of building construction. There is no obligation to adopt any particular solution from an Approved Document if it is considered the relevant requirement can be met in some other way.

Approved Documents Parts L1B and L2B which deal with energy conservation in existing buildings make clear that the characteristics of historic and traditionally constructed buildings warrant some exemptions and special consideration in reaching appropriate solutions.

The AD's are clear on the exemption of certain classes of historic buildings from the need to comply with the energy efficiency requirements of the Regulations. These are listed in Building Regulation 21(3) and comprise buildings which are:

- Listed buildings
- Buildings in conservation areas
- Scheduled ancient monuments

However, where the AD is not so clear is for buildings that are listed in Paragraph 3.8 in both Approved Documents L1B and L2B. These buildings are defined as ones where special consideration should be given in the application of conservation of fuel and power requirements, and are:

Buildings which are of architectural and historical

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interest and referred to as a material consideration in a local authority's development plan or local development framework.

Buildings which are of architectural and historical

interest within national parks, areas of outstanding natural beauty, registered historic parks and gardens, registered battlefields, the curtilages of scheduled ancient monuments and world heritage sites.

Buildings of traditional construction with permeable fabric that both absorbs and readily allows the evaporation of moisture.

The AD in paragraph 3.9 states that any work on these buildings should aim to improve energy efficiency as much as is reasonably practical and that any work should not prejudice the character of the host building or increase the risk of long term deterioration of the building fabric or fittings. We are further advised in 3.10 that reference should be made to English Heritage in determining what appropriate standards are.

In addition we are told in 3.13 the advice of the local authority's conservation officer should be sought when deciding on solutions and insulation standards for any of the buildings mentioned above.

Therefore, there are a number of routes that can be

followed in determining appropriate standards and construction techniques for dealing with these classes of buildings.

However, there is little guidance or assistance in determining what is a building of traditional construction. This lack of a clear definition has led to many differing interpretations being applied by local authorities as to when and how we deal with energy efficiency measures on alterations to these buildings.

To assist in developing a definition of a building of traditional construction reference has been made to Historic Scotland Technical Advice Note GP6 "Conversion of Traditional Buildings" and English Heritage "Energy Efficiency and Historic Buildings - Application of Part L of the Building Regulations to historic and traditionally constructed buildings".

Both documents are consistent in their interpretation and provide strong and reasoned arguments in support of their definition. LABC has reproduced below key sections from each of these papers that are considered to be a reasonable interpretation to adopt when considering the extent of building works required to comply with the Building Regulations.

This advice note does not address construction details or methods of construction as these are best dealt with on an individual basis by the approving authority.

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LABC Viewpoint

LABC is of the view that in the absence of clear guidance in the Building Regulations the following definitions are fair and reasonable whilst dealing sympathetically with historic buildings & buildings of traditional construction.

Historic Building: is a building of architectural or historic interest or significance. The interest or significance may be local or national, and may be a consequence of, for example, the building's age, built form or location. It may result from its connection with a person or persons, or with local or national events or industry; or from a combination of these or other factors. A building does not have to be listed or lie within a conservation area to have interest or significance' but it is likely to be identified in a 'local list' or 'supplementary list' that has been included in a local authority's unitary or local plan (known as the development plan).

In the main they will be good examples of a particular design or style of construction, for example buildings of the Arts and Crafts movement of the late 19th and early 20th centuries, the work of a noted local architect, or a building associated with a local historical figure.

These buildings have no statutory protection unless they are within a conservation area. Nonetheless, if they are to retain their significance it is often essential that original

features and fabric are preserved in any schemes of alteration or extension

Building of traditional construction: This category includes nearly all buildings constructed prior to 1919, as well as a significant proportion of those built before 1945, the majority of which are unlikely to be of cavity construction. Most were designed and built before the development of reliable and cost-effective impermeable membranes or moisture barriers. They rely instead on their ability to allow moisture to evaporate rapidly away, and thus prevent the damaging build-up of damp and resulting physical decay.

It is essential that adaptations made to improve the energy efficiency of these structures should take into account the traditional technology and characteristic behaviour of the building fabric, otherwise very real damage can be caused. Well-meaning attempts to keep moisture out of these buildings using modern methods tend to have the unfortunate effect of preventing vital evaporation of moisture, and so cause or accelerate moisture-related decay to the fabric.

It should be borne in mind that while the majority of historic buildings are 'traditional' in terms of their construction there are many thousands of traditional buildings that are not legally protected.

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Conservation advice can be sought from English Heritage's 'Climate Change and Your Home Website' <http://www.climatechangeandyourhome.org.uk/live> where guidance documents on insulating historic buildings can be found.