



Department for
Communities and
Local Government

To:

The Chief Executive

Unitary, Metropolitan, District and London Borough Councils in England
County and County Borough Councils in Wales

The Town Clerk, City of London

The Clerk, Council of the Isles of Scilly

The Sub-Treasurer, Inner Temple

The Under Treasurer, Middle Temple

The Head of Building Control

Unitary Metropolitan, District and London Borough Councils in England
County and County Borough Councils in Wales

City of London

Council of the Isles of Scilly

Approved Inspectors

cc: The Chief Executive:

County Councils in England

National Park Authorities in England & Wales

The Chief Fire Officer: Fire and Rescue Authorities in England & Wales

3 December 2013

Dear Sir/Madam

New and amended Approved Documents and new Building Services Compliance Guides to support the energy efficiency requirements of the Building Regulations.

I am writing to inform you of the publication today of the following guidance documents:

New Approved Document L1A: Conservation of fuel and power in new dwellings (2013)

New Approved Document L2A: Conservation of fuel and power in new buildings other than dwellings (2013)

Amendments to Approved Documents L1B: Conservation of fuel and power in existing dwellings (2010) and Approved Documents L2B: Conservation of fuel and power in existing buildings other than dwellings (2010)

New Domestic Building Services Compliance Guide (2013)

New Non-Domestic Building Services Compliance Guide (2013)

Scope

This Circular Letter applies to local authorities in England carrying out building control functions. It also applies to local authorities in Wales carrying out building control functions in respect of excepted energy buildings or in respect of any functions they carry out in respect of Crown buildings or the buildings of statutory undertakers as set out in regulation 34 of the Building Regulations 2010 as amended.

Publications

The Department has also published Circular 04/2013 to accompany the publication of the guidance. The Circular also contains the formal notice of approval of the new and amended Approved Documents. This Circular is available at:

<https://www.gov.uk/government/publications/new-approved-documents-and-new-compliance-guides-supporting-part-l-circular-0413>.

The 2013 versions of the Domestic and Non Domestic Building Services Compliance Guides support the 2013 edition of Approved Documents L1A and L2A and the 2010 editions of Approved Documents L1B and L2B (as amended in 2013).

A consolidated version of Approved Documents L1B (2010) and L2B (2010) including all amendments to date is scheduled to be published prior to 6 April 2014.

The Approved Documents and Building Services Compliance Guides are available on the Planning Portal (www.planningportal.gov.uk). Paper copies can be ordered at www.ribabookshops.com.

Transitional provisions

The new guidance documents come into effect on 6 April 2014, subject to transitional provisions which are explained in Circular 04/2013.

Commencement of work

In the Department's opinion the commencement of work would usually be marked by work such as:

- excavation for strip or trench foundations or for pad footings;
- digging out and preparation of ground for raft foundations;
- vibrofloatation (stone columns) piling, boring for piles or pile driving;
- drainage work specific to the building(s) concerned.

We consider that the following sorts of work would not be likely to constitute the commencement of work:

- removal of vegetation
- demolition of any previous buildings on the site;
- removal of top soil;
- removal or treatment of contaminated soil;
- excavation of trial holes;
- dynamic compaction;
- general site servicing works (e.g. roadways)

In some cases applications will be in respect of a number of buildings on a site, for example a number of houses. In such cases it is the commencement of work on the first of the buildings within the application which determines whether all the building work can take advantage of the transitional provisions, not each individual building.

Further guidance on the energy efficiency requirements

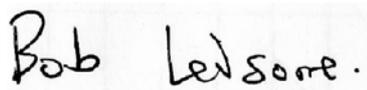
The Annex to this letter provides further explanation and guidance for building control bodies on the changes to the energy efficiency requirements of the Building Regulations.

Enquiries

All enquiries on this Circular Letter should be addressed to:

E-mail: enquiries.br@communities.gsi.gov.uk.

Yours faithfully

A handwritten signature in black ink that reads "Bob Ledsome." The signature is written in a cursive style and is positioned above the printed name.

R J Ledsome

Deputy Director

Building Regulations and Standards Division

Annex A: Changes to the energy efficiency requirements

Introduction

- A.1 The energy efficiency requirements of the Building Regulations are set out in regulations 23, 25A, 25B, 26, 26A, 28, 29 and 40 and Part L of Schedule 1.
- A.2 The effect of the 2013 changes is to strengthen the energy performance standards for new buildings and when specified building services work is carried out in existing non-domestic buildings. There are no changes to the energy efficiency standards for extensions and replacement windows to existing buildings.

New Homes

- A.3 The Part L 2013 energy performance standards have been strengthened to deliver a 6% carbon dioxide (CO₂) saving across the new homes build mix relative to Part L 2010. Some dwellings will need to be improved by more than this, whilst for others there will be relatively small change from Part L 2010.
- A.4 The approach to setting the Target CO₂ Emission Rate (TER) has been changed to provide a more consistent construction across different home types. The target is still derived from a notional dwelling of the same size and shape as the actual dwelling being constructed. However, the notional dwelling is now based upon an up to date set of fabric and fixed building service specifications rather than a historical specification and common improvement factor.
- A.5 The notional dwelling is based upon gas heating and there is some relaxation in the TER for other fuels (the 'fuel factor'). This is to provide partial (but not total) relief for those who have to use more carbon intensive fuels than gas. This relaxation for other fuel types remains broadly at Part L 2010 levels and the fuel factors can be seen at Table 1 in Approved Document L1A.
- A.6 The main change in Part L 2013 is the emphasis on high standards of fabric performance and the introduction of a new Target for Fabric Energy Efficiency (TFEE) rate in addition to the TER. As for the TER, the TFEE rate is generated by the same notional dwelling however the fabric target is relaxed by around 15% to provide a degree of design flexibility. To provide further flexibility there is also provision to carry out a "block" average TER and/or TFEE rate for buildings containing multiple dwellings but this averaging cannot be carried out across separate multiple buildings on the same site.
- A.7 For new homes the TER and TFEE rate are calculated using SAP 2012 which can be seen at www.bre.co.uk/sap2012. A summary of the Part L 2013 notional dwelling is published at Table 4 in Approved Document L1A and the full detail is set out in SAP 2012 Appendix R. The up to date notional dwelling provides a good starting place for designers and if the actual dwelling is constructed entirely to the same specifications it will meet the TER and better the TFEE rate. It is stressed that the notional dwelling is not prescriptive and that developers are free to vary the specification, provided that the TER and TFEE rate is achieved or bettered.

- A.8 As for the CO₂ emission rate (TER/DER) calculation (Regulation 27), there is now a requirement (Regulation 27A) on the person carrying out the work to submit a fabric energy efficiency rate (TFEE/DFEE) calculation before work starts together with a list of specifications to which the dwelling will be constructed. Also the guidance supporting requirements (Regulation 25A) for the feasibility of high-efficiency alternative systems to be taken into account before construction commences is now consolidated into Approved Document L1A. The CO₂ emission rate and fabric energy efficiency rate calculations are required to be submitted again not later than 5 days after completion to show that the dwelling as constructed meets the TER and TFEE rate.
- A.9 To guard against poor performance of individual elements, limiting fabric values are retained at Table 2 in Approved Document L1A and limiting building services efficiencies in the Domestic Building Services Compliance Guide. Note that just constructing to these “backstops” would not on its own achieve the TER and TFEE rate.
- A.10 The section of Approved Document L1A about limiting the effect of heat gains in summer has been updated. The guidance for limiting solar gains is retained and the guidance to limit unwanted heat gains from primary circulation pipes within communal spaces is given greater prominence.
- A.11 For party walls, a reference to further guidance on effective edge sealing and fully filling separating cavity walls has been added. www.buildingcontrolalliance.org/
- A.12 The Part L 2010 proposal to introduce accredited construction details schemes and associated confidence margins where an accredited scheme is not used is not being implemented at this time. The guidance on thermal bridges has been updated and there are now four main options for builders to consider:
- a. Adopt Approved Design Details and use the calculated linear thermal transmittance values directly in the CO₂ emission rate and fabric energy efficiency rate calculations;
 - b. Use construction joint details calculated by a person with suitable expertise and experience who has followed the guidance set out in BR497. Again the calculated linear thermal transmittance values directly in the CO₂ emission rate and fabric energy efficiency rate calculations can be used;
 - c. Use the default linear thermal transmittance values in SAP 2012 Appendix K;
 - d. Use a conservative y-value rather than calculate linear thermal transmittance values for each construction joint.

The options a, b and c above are not mutually exclusive and the builder could use some Approved Design Details and some calculated bespoke details. Where Approved Design Details or calculated details have been used for some but not all joint details, then the default values in SAP 2012 Appendix K should be used for the other joint details.

- A.13 The notional dwelling specification at SAP 2012 Appendix R includes a set of specified linear transmittance values. Although the notional dwelling specification is not prescriptive, when linear transmittance values that are poorer than those in the notional dwelling are used this will need to be compensated for by improved standards elsewhere in the dwelling design. When default linear transmittance values from SAP 2012 Appendix K are used for the majority of construction joints, or when the conservative y-value option is adopted, the builder would need to significantly improve upon the notional dwelling values elsewhere in the design to meet the TER and TFE rate.
- A.14 For pressure testing, a reference to a list of registered testers for air tightness testing is now included in Approved Document L1A.
- A.15 Guidance to show ways of complying with the requirements for the person carrying the building work to provide information about the use of fuel and power to the owner (Regulation 40) is updated.

New Non Domestic Buildings

- A.16 The Part L 2013 energy performance standards have been strengthened to deliver a 9% CO₂ saving over Part L 2010 standards. As for homes, this is an “aggregate” improvement calculated across the new build mix, and will require greater improvements over 2010 standards for some buildings than others. In keeping with the Part L 2013 emphasis on fabric performance, the standards are generally achievable through fabric and efficient fixed building services in most building types.
- A.17 As for new homes, the Target CO₂ Emission Rate (TER) is derived from a notional building of the same size and shape as the actual building being constructed. For new non-domestic buildings, the move to a target based upon an up to date set of fabric specifications without improvement factor, was first introduced in Part L 2010. The change this time is to strengthen these fabric and services specifications in the notional buildings to achieve the 9% improvement.
- A.18 To make the target more equitable for different building types, a wider set of notional buildings is introduced in Part L 2013. The side-lit category (i.e. buildings with windows on the vertical facades) has been split into two separate notional buildings: side-lit buildings with heating only (e.g. a naturally ventilated office) and side-lit buildings with both heating and cooling (e.g. an air conditioned office or retail space). This is in addition to the continued use of separate notional buildings for top-lit buildings (buildings with roof-lights e.g. warehouses) and un-lit buildings (e.g. theatres, cinemas etc.). Furthermore, the air permeability for the notional buildings is now differentiated by the size of the building. The servicing and heating fuel type in each space of the notional building is the same as in the equivalent zone in the actual building.

- A.19 For new non-domestic buildings, the TER is calculated using the 2013 version of the Simplified Building Energy Model (SBEM) which can be downloaded at www.ncm.bre.co.uk or other approved software tools. A summary of the Part L 2013 notional buildings is published at Table 5 in Approved Document L2A with the full detail set out in the 2013 National Calculation Modelling (NCM) Modelling Guide. The up to date notional building provides a good starting place for designers and if the actual building is constructed entirely to the same specifications it will meet the TER. It is again stressed that the notional building is not prescriptive and that developers are free to vary the specification, provided that the TER is achieved or bettered.
- A.20 The TER multiplying factors for Modular and Portable Buildings at Table 2 in Approved Document L2A have been updated.
- A.21 Unlike homes, there is no additional target for fabric energy efficiency however to guard against poor performance of individual elements, limiting fabric values are retained at Table 3 in Approved Document L1A and limiting building services efficiencies in the Non Domestic Building Services Compliance Guide. Note that just constructing to these “backstops” would not on its own achieve the TER.
- A.22 For pressure testing, a reference to a list of registered testers for air tightness testing is now included in Approved Document L2A.

Existing Buildings

- A.23 In Part L 2013, there is a strengthening of energy efficiency standards for specified non-domestic building services (i.e. when replacing chillers, fan coil units and lighting) and the introduction of an alternative route of compliance for lighting installations, the Lighting Energy Numerical Indicator (LENI). This is set out in the 2013 edition of the Non Domestic Building Services Compliance Guide.
- A.24 There is no strengthening in Part L 2013 of the energy efficiency standards for extensions or replacement windows and doors to existing homes or existing non-domestic buildings.
- A.24 The department has however published amendments to Approved Document L1B and Approved Document L2B (2010 editions). These amendments make reference to updated British and European Standards and third party guidance. These include new references to third party guidance on Window Energy Ratings and the introduction of Door Set Energy Ratings as an alternative route of compliance and on establishing U-values based on the developed area of the roof-lights.
- A.25 These amendments are in addition to and to be read in conjunction with those made to Approved Document L1B and Approved Document L2B earlier in 2013 to take account of the requirements for major renovation in the recast European Energy Performance of Buildings Directive and the introduction of a new Approved Document 7 providing guidance on materials and workmanship.