

Building Regulations Part L 2010



What is happening to Part L?

Building Regulations Approved Document Part L is being updated. The document sets minimum standards for energy efficiency of buildings in terms of carbon dioxide emissions. The last major update was in 2006. The proposed documents for 2010 are out for consultation now.



'Building Regulations Approved Document Part L affects both residential and non residential buildings'

What are the headlines?

The changes are not as fundamental as the introduction of Part L 2006 but will be significant for new-build projects it is proposed that carbon emission targets will be reduced by a further 25% from the 2006 regulations which is equivalent to a 44% reduction in carbon emissions from a 2002 building regulations compliant development. The regulations are intended to be introduced in October 2010. These changes will potentially affect schemes that currently have planning permission. If the approach to implementation follows the pattern of the 2006 revision, schemes with planning under the current regulations will need to be on site by October 2010.

How would this affect the design of new residential buildings?

The proposed residential energy efficiency improvement is the same as that required to achieve a Code for Sustainable Homes Level 3 building. We know from experience that this is generally achievable either through good passive solar design or through an element of passive design with the application of

renewable energy systems. Setting out residential developments with consideration for passive solar design is likely to be the most cost effective way of complying with the updated regulations. A generally high level of fabric specification and building services will be required.

What about new non-residential buildings?

The proposed improvement target for non-domestic buildings is slightly more complicated. What is referred to as an 'aggregated approach' has been taken to achieve a 25% reduction in CO₂ emissions across the non-domestic building sector. The principal is to target emissions savings where they are most cost effective. The argument being that there are more opportunities and hence it is more cost effective to reduce energy use in a warehouse with roof-lights than in a supermarket. Target emissions rates will therefore be set by building sector. This seems to be driven to some extent by the suitability of the building to be day-lit; for example the proposed improvement factor for a deep-plan air-conditioned office is 19% whilst for a shallow floor plate office it is 33%.

How will the changes affect the construction of non-domestic buildings?

Achieving a CO₂ emission reduction of around 25% will not be straightforward for a non-domestic building. The building models tested for the regulations assume limited glazing areas (typically 20-40% for offices). With limited glazing areas good daylighting design will be important. There may also be a change to the building services systems installed with a greater reliance on chilled beam systems for cooling and possibly an increased uptake of LED lighting systems if the technology can deliver. Additionally there is a new requirement proposed to limit the risk of solar overheating in non-domestic buildings. Solar gain would be limited to the equivalent gain through a 40% glazed east facing façade with good quality glazing. One way of achieving this on a building with more glazing might be to use external shading systems.

What are the likely cost implications?

The Regulatory Impact Assessment which accompanies the consultation gives estimated increased capital costs prepared by Davis Langdon. The figures range from less than 1% increase in cost for most domestic buildings up to 6.1% increase for retail. The figures are only presented for a few example buildings and should be treated with caution. These figures do not take into account, for example that a city residential development might require more than 14% glazing to be marketable and the CO₂ emissions would potentially have to be offset by expensive renewable energy systems.

What about existing buildings?

The process for demonstrating compliance for existing buildings remains approximately the same with the standards required for the building fabric and services installations tightened. The guidance has been improved on the definition of works that must comply and a clearer division of responsibility for fit-out works is proposed.

What changes are proposed to the compliance process?

The proposals introduce a new requirement to submit energy information to Building Control during the design phase. This would comprise of design stage compliance calculations, a detailed commissioning strategy, building specifications and thermal bridging details. The timing of this would be such that the Building Control Body would be able to monitor works on site to ensure that the proposed energy efficiency measures are installed. It is also proposed that self certification will be allowed by "competent persons" in a similar manner to the scheme in place for Energy Performance Certificates (EPC).

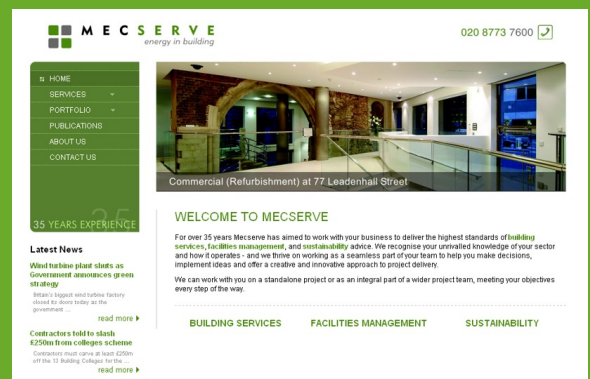
Where can I find out more?

The consultation is on-going until the 17th of September 2009; the documents are available from the link below:

<http://www.communities.gov.uk/publications/planningandbuilding/partl2010consultation>

What can Mecserve do to help?

Mecserve can offer a range of services, whether you require informal advice or detailed analysis against the new criteria. This may be especially useful to you if you have a scheme with planning permission or want to understand the potential impacts of Part L 2010 on a development that is still on the drawing board. Contact us now for impartial, professional advice.



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