

# The full story of new Part L Regs

A revised version of Part L of the building regulations came into force in October of last year. The new Part L will have implications for all sectors of the construction industry, with engineers, designers and manufacturers in the plumbing and heating industry no exception



The key approach for the new Part L is to achieve a 25% improvement in energy efficiency across all buildings compared to Part L 2006. This is a significant step to achieve the target that government set out in its Building a Greener Future – Policy Statement (July 2007) that new homes will be net zero carbon from 2016.

Buildings account for 45% of UK carbon emissions and are therefore critical to the government's strategy in meeting the various internationally agreed targets that the UK is signed up to for the coming years and decades, including an obligation to reduce emissions by 80% by 2050.

The new Part L improvements will mean that all new homes will meet the energy requirements of Code for Sustainable Homes Level 3, with further improvements scheduled for 2013 and 2016.

Improvements in the efficiency of dwellings will also go some way to reducing fuel poverty, and in particular poverty in off-gas areas, where householders are forced into more expensive fuel sources.

Limits in design flexibility for building services have been tightened across all

buildings, with detailed information provided in revised and

the equivalent figure for detached houses still being around 35%.

newbuild and replacement cylinders.

The standards for replacement vented cylinders are raised by 20%, but for any cylinder whether vented or mains pressure to be fitted in a newbuild property, the figure is around 28%.

In practice this will have little effect on unvented cylinders as these products have had at least this level of insulation performance for some time, however most vented cylinders will need more insulation.

to the higher levels for newbuild have the Part L sticker with a blue surround, while those suitable only for replacement in an existing building show Part L1B with a green surround.

## UPDATED SAP MODEL

Building performance and efficiency will be calculated by a new version of SAP (Standard Assessment Procedure) and also by SBEM (Simplified Building Energy Model) that acts as the National Calculation Model for the Energy Performance of Buildings Directive.

A more accurate prediction of building performance is expected as SAP 2009 uses monthly weather data based on the average record from 1987 to 2006, whereas SAP has hitherto used annualised weather data from 1960 to 1979. The recent rise in the installation of heat pumps is reflected in SAP.

Heat pump performance based on test data is used in the calculations, similar to the SEDBUK data for boilers, encouraging heat pump manufacturers to improve the performance levels of their products. SAP will also allow easier calculation for buildings with multiple fuel sources, which are typically found where renewable energy is used.



Part L marks a significant step to achieving the target set out by the government in its Building a Greener Future – Policy Statement



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expanded Building Services Compliance Guides for both domestic and non-domestic buildings.

## IMPLICATIONS FOR HOT WATER

As the insulation levels of buildings has steadily increased in recent years, so the heating load has consequently reduced, leading in many cases to requirements for smaller boilers.

The energy requirement for hot water generation however has not decreased, meaning that in small properties, over 50% of the total energy usage for a property is now for hot water, with

This swing in the relative importance of hot water generation has led to Part L demanding new specification standards for water heaters.

Part L demands that insulation levels for all hot water cylinders must be dramatically improved over the old BS1566 standard for copper cylinders.

For the first time, a distinction is being drawn between the standards expected for

## CYLINDER LABELLING

Many plumbers' merchant chains and indeed manufacturers hold significant stocks of vented hot water cylinders, resulting in the risk of companies being left with substantial numbers of effectively worthless cylinders if they could not be legally sold. As a result, the Hot Water Association has agreed with government that a period of grace will be given until 31 March to allow these stocks to be sold and installed.

To assist merchants and installers in their choice of products, member manufacturers of HWA have agreed to label their cylinders accordingly to display the suitability of a product to particular buildings.

Cylinders that conform