

What compliance means for you

Mark Foster, chief executive of HWA member Gledhill Building Products, explains some key points that installers need to know about Part L



The new edition of Building Regulation Part L came into effect on 1 October, 2010, and has had significant implications when it comes to deciding which hot water cylinder is suitable for which job.

Part L Building Regulations are an important tool that will help the UK to achieve the government's ambition of making all new homes zero carbon by 2016 under the Code for Sustainable Homes initiative.

The October changes will collectively deliver a 25% reduction in carbon dioxide (CO₂) emissions for each new property compared to the previous Part L requirements.

The regulation is not limited to newbuild dwellings – Part L1A covers new homes and Part L1B sets the standards for work carried out in existing homes.

This means that as well as creating new homes with significantly lower CO₂ emissions, any refit, refurbishment and renovation work now carried out will enhance the energy efficiency of the building in question.

Although Part L covers all aspects of fuel and power, this article explains only the elements that relate to hot water storage.

The Domestic Building

Services Compliance Guide 2010 Edition provides technical details of how to ensure compliance with all components of Part L.

SELECTING A CYLINDER

With most hot water systems still relying on traditional fossil fuels for their energy, the standing heat loss of a cylinder is a key determinant in how efficient the entire system is.

A fossil-fuel based system will inevitably be CO₂ intensive but by storing the heat energy produced for longer, it can reduce the system's overall environmental impact, keeping CO₂ emissions to a minimum.

The standing heat loss of a cylinder is a measure of how

effectively it can store

regulations, manufacturers are now required to detail the standing heat loss of each cylinder on the product's label, in line with the measurement techniques specified by BS1566 (vented cylinders) and BS EN 12897 (unvented cylinders).

The minimum requirements for a vented cylinder depends upon whether it is being fitted as part of a newbuild project or being used as a replacement in an existing home.

For replacements in existing homes the requirement is slightly less than that for newbuild projects.

This is in recognition of the often restrictive size of existing UK airing cupboards, so it would be difficult to fit a cylinder with the same storage capacity as the



Gledhill Building Products' Torrent Solar cylinder

vented cylinders is still very significant and requires a performance that is the equivalent of 'double-lagging'.

The regulations assume that newbuild projects will have factored an increased cylinder diameter in at the planning stage, so additional space will make it possible to achieve a lower standing heat loss.

When it comes to unvented cylinders and thermal stores, the new acceptable levels of standing heat loss will be the same for newbuild and replacement heating systems.

BETTER INSULATION

Since 1 October, manufacturers have had to label each cylinder with its standing heat loss as well as other data, and all cylinders supplied by

manufacturers after this date must be Part L 2010 compliant.

To allow the merchant trade to clear their existing stocks of cylinders it is permissible for them to be sold and installed up to April 2011, but any new cylinders supplied from manufacturers must comply.

To make it straightforward for the trade to identify which products are Part L 2010 compliant for which application, the Hot Water Association (HWA), which comprises leading companies in the UK hot water storage industry, has introduced a new and instantly-recognisable labelling scheme for cylinders.

This clearly identifies whether each product is a newbuild and replacement cylinder, or a replacement cylinder.

HVP 202



HWA's new labelling scheme for compliant cylinders



energy, and is a function of the quality and amount of insulation applied. It is the industry's focus on improving this aspect of hot water storage that has led to some of the key Part L changes.

Under the new Part L

previous unit with significantly greater levels of insulation, as adding insulation inevitably increases the size of the cylinder.

However, the step up in insulation levels for