

# “Part L changes will put focus even more firmly on fabric first”

Actis Insulation gives its view on the Part L changes

Revisions to Part L, which come into force in April, put the emphasis on reducing carbon emissions firmly at the feet of the fabric of a building. No longer will contractors be able to beef up their thermal efficiency merely by installing renewable technologies. The introduction of the Target Fabric Energy Efficiency (TFEE) rate expressed in kWh/m<sup>2</sup>/yr, alongside the existing CO<sub>2</sub> emission rate strengthens U-Value requirements for domestic new builds.

While specifiers are given a 15% flexibility on how to balance the efficiency of the building fabric and building services – two elements which are crucial for the SAP rating – the newly introduced FEE, which limits the U-Values of thermal elements, ensures that an efficient envelope provides the backbone to a thermally efficient house which can then be powered by renewable heating systems and energy efficient appliances.

Changes to Part L are aimed at ensuring an overall 6% carbon reduction across the build mix compared with current regulations – a further step towards the long term aim of zero carbon homes. A key clause in the directive requires insulation to be continuous and thermal bridging to be avoided as much as possible: “Insulation should be reasonably continuous over the whole building envelope. The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements such as those around the window and door openings. Reduction in thermal

performance can occur where the air barrier and the insulation layer are not contiguous and the cavity between them is subject to air movement.” Addressing this issue of thermal bridging is key to increasing the efficiency of the envelope. And it is here that contractors may find salvation in the form of the Actis Hybrid range of dual tested products, designed specifically to address the DECC-recognised performance gap.

The range includes a new insulation material, Hybris, a vapour control layer with built-in thermal performance, HControl Hybrid, and an insulating breather membrane, Boost'R Hybrid. As Actis technical manager and former architect Thomas Wiedmer explained: “When properly installed, the risk of thermal bridging is reduced. To help, there are step by step installation guidelines and videos on the website and our technical team is also able to offer support. HControl Hybrid works not only as an air and moisture barrier, but also as a good thermal insulation and can be installed in a continuous application. This is unlike other insulation types which do not have the physical flexibility to do this and also need to be used with a separate air and moisture barrier. HControl Hybrid can be fitted to the inside of the structure and provides a continuous air barrier, reducing thermal bridging. Together with Boost'R Hybrid and Hybris, Actis offers a complete solution for a better performing building envelope putting fabric first.”

*A free online simulator: <http://hybrid.insulation-ACTIS.com>, enables users to estimate the U-Value of an Actis Hybrid project in seconds*



Actis technical manager Thomas Wiedmer says the Hybrid range helps address the FEE standard which comes into force with the Part L changes in April

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Vapour Control Layer HControl Hybrid and insulation Hybris helped this builder achieve a U-value of 0.14 in both the walls and roof