

What You Need to Know about Building Regulations

You may have heard that the recent amendment to the Building Control (Amendment) regulations allows people building a single dwelling to opt out of the need for certification or inspection by a construction professional. However if you are considering this route you need to think about what you are getting into.

The current building regulations for energy efficiency – Technical Guidance Document Part L – are very onerous. In the space of five years, from 2006 to 2011, building regulations made a massive leap that requires a completely different approach to construction. New Irish houses, if built properly to comply with current regulations, would be amongst the best in Europe, but there's the rub...

Your builder used to be able to simply go down the builders' provider and ask how much insulation he needed in order to comply. Not anymore! It's a lot more complicated now, but for good reason. Even if you use the minimum insulation values for walls, floors, roof and windows as set out in the new building regulations (TGD Part L 2011), there is no guarantee the home will comply. For example you may have to increase the thickness of insulation still further if you have more windows than the regulations assume.

To prove compliance, builders and designers now have to use the software called DEAP (Dwelling Energy Assessment Procedure) which is used to generate BERs. This assesses whether you have the right mix of orientation, insulation, thermal bridge free construction, airtightness and heat recovery from ventilation to minimise overall heat loss. They also need to know about heating system efficiency, controls and renewable energy systems.

Put it simply, don't think you can hand over a basic set of planning permission drawings to a builder and expect to get a compliant home. Unless your builder is a dab hand at using specialist software, or has engaged in extensive retraining, your chances are next to ZERO.

Your builder will need a drawing for every junction of your home. He can forget about using any of the details he

might have used five or ten years ago for window cills, lintels, foundations or eaves. Now all these junctions need to be carefully considered, designed and assessed to eliminate thermal bridging and, most importantly, condensation risk. The more insulation, the more care is needed to prevent moisture gravitating to weak points in your insulation. If your builder can do all that, he's a keeper!

Realistically, if you want a home that is compliant with building regulations you need the following:

- An upskilled professional: architect, engineer or surveyor who can calculate U-values; specify the insulation, heating and ventilations systems and prove compliance in the DEAP software
- Details of every wall, floor, roof and foundation junction in your home carefully assessed for airtightness, thermal bridging and condensation risk
- A builder who has upskilled in quality, energy-efficient construction and who knows how to implement these details on site
- An independent architect or other construction professional who can come on site at all the key stages of construction to check that all of these tiny details are built exactly in compliance with the drawings

Whilst you may save some money by skipping these steps you will probably lose far more on the resale

value of your home and pay for it many times over in energy bills, not to mention putting your family's health at risk.

You can **DOWNLOAD** this document from the Department of Environment's website to have an idea of what is required to comply with building regulations for energy efficiency.

