



## PART L, AND BEYOND...

In Our Experience: what's possible & effective

The government's intentions with Part L are clearly to promote energy efficiency but their requirements for dwellings are fairly lax. It is clear that many architects and clients would prefer to exceed the Part L minimums if they could do so without incurring considerable extra cost and/or aesthetic compromises. Interestingly, the easiest way to do this is often overlooked: the application of discreet yet intelligent lighting and heating controls.

With heat & light comprising 60-70% of household energy consumption and control directly affecting half of this consumption, a rapid return on investment can be shown simply by enabling clients to interact with their systems more simply and regularly.

Some Fundamentals:

- Ensuring that the fabric of a building is energy efficient is ideal, but in many cases historic considerations preclude this. Insulation, glazing and green sources of heating are all well-understood, providing cheaper heat & preventing heat dissipation, but how about not heating areas that simply don't need it? With intelligent heating controls, it is cheap and easy to zone a house on a room-by-room basis and heat only those rooms that are required for any given pattern of occupancy. We work with systems from Heatmiser and Honeywell right through to the big building management systems players like Trend.
- Most heating control systems as recommended by M&E firms tend to have grown out of the commercial environment, with confusing user-interfaces often requiring training to use. Today, customers who are used to iPads and modern computer operating systems expect better and more intuitive user-interface design and ubiquity of interaction. This can only be provided effectively by companies who are used to delivering modern, high-tech and customer-facing electronic systems and who are familiar with wiring schematics and planning to ensure the right data pathways exist to produce reliable systems.
- Lighting control systems are better understood for their aesthetic uses (scene setting etc) but the simple fact is that a light dimmed to 50% by Lutron (for instance) uses half the energy of a rotary wall dimmer. When a kitchen has 16 halogen 50w lamps burning for 8 hours a day, this can add up to a significant saving.
- New lighting technologies that are inherently more energy efficient (LED, compact fluorescent etc) require more sophisticated dimming to get the best out of them. This compounds the advantages of using lighting control.
- The advantages of heating & lighting control are often available even with piece-meal renovations and retrofits. Although stricter controls will be mandated in Part L in the next few years they should already be playing a central role in any project.

Things to bear in mind when evaluating this technology

- Giving a home-owner the tools to alter their heating to suit their needs produces a 100% guaranteed energy saving
- Modern, ecological heating such as ground & air source operate at lower temperatures & are slower to react so control is all the more vital
- This is also true of slow-reacting under-floor systems
- Energy prices are rising and will continue to do so but even at today's rates the technologies produce a 15%+ per annum return on investment
- The fundamental 'intelligence' of these controls make life more efficient & productive
- Key to successful implementation is to involve a specialist firm in the earliest stages