Certification – do

Most residential construction activity is now concentrated on domestic house extensions which are likely to continue for the foreseeable future. However, is the construction quality and professional certification of these extensions sailing under the radar? Are we as an industry creating a construction quality time bomb for the future? **Tim Murnane** investigates

the right thing

With large scale building projects, the process of design, construction and certification is well understood. Recent high profile cases where the merit of the certification process has come into focus raises some questions about this process. There is certainly a case to be made for more statutory inspections to take place but the main point is that for large buildings there is a system in place that, if properly adhered to, will produce a building product of high quality and this is achieved through professional certification of compliance by architects, engineers and contractors.

But is this the case with domestic house extensions? It seems not unfortunately. At the outset it is worth considering that there is a huge amount of money being spent currently by people who want and need more space in their home. Preliminary estimates suggest the annual spend on domestic house extensions could easily be in excess of €250 million per annum – a huge amount of money by any standard. The majority of the extensions are in urban centres where the value of houses has plummeted in the property crash. Hence, the home owners need more space and want it provided at the lowest price possible. In most cases, the clients do not understand the importance of proper design and professional input to ensure the work is done properly. At its simplest the client will think they need a builder to do the work and don't need anyone else. And indeed from a planning and statutory perspective they are technically correct – provided the size of the extension is within the limits set out for "Exempted Development", ie provided the extension is less than 40m2 and some further criteria is met.

When advising clients of why they need to employ a structural engineer for their house extension, I ask them – "Would you go to a butcher if you had a broken leg? After yourself and your family your most important asset is your family home – you need to protect it'. It soon becomes clear to them that there's little difference between letting an unqualified butcher fix their leg than allowing unqualified people make fundamental alterations to their home. I am generally appointed on the project at that stage!

So what are the consequences of not employing qualified people? To be fair, a lot of domestic house builders are talented conscientious people and want to do a good job. However, they are builders and not architects or engineers and there are limits to the knowledge of even the best builders, which require professional input to ensure the extension is carried out properly. For example, from a structural engineering perspective, removing a rear wall of a house at ground floor level typically requires a steel beam to be designed to support the floor above, rear wall and probably the roof. The correct sizing of this beam is a matter for a structural engineer as the consequences of getting it wrong are very serious and possibly costly for the client who is trying to save money as much as possible. For a builder to say the beam size he uses is based on another job he has done is not acceptable considering no two houses are the same. The sizing of the beam is a matter for a properly qualified chartered structural engineer. The consequences of getting it wrong might be the collapse of the house or severe cracking rendering the house unfit for purpose. The commercial impact of such an event on the value of the house would be severe. Similar important points apply to the architectural design of a house extension. Indeed, I would strongly argue that all house extensions should have both an architect and a structural engineer appointed. An engineer is not generally qualified to do space planning within a house as an architect is. Equally, an architect is not qualified to size structural elements such as beams and both their Professional Indemnity Insurance policies will have limitations in this regard. Therefore, it is important a client understands this and employs both professions. A further crucial reason why the home owner should appoint such professionals is to future-proof the value of the property. Should the owner wish to sell their house in the future, the purchaser's solicitor will require evidence by way of professional certification that the design and construction work was signed off properly. The absence of one or both of these certificates could lead to a sale falling through and the value of the house diminishing significantly. Would you purchase an altered house without professional certification if a similar one was for sale down the road which did?

I believe the government should act now to avoid devaluing the domestic housing stock even further. This can be done quite easily:

- All house alteration exemptions from planning permission should be removed and planning permission should be required for all alteration works to a house
- All grants of planning permission should have standard planning conditions applied which require the works to be professionally certified on completion by a suitably qualified architect and a suitably qualified chartered engineer. Additionally, all house builders should be required to provide certification that the construction is in compliance with the Building Regulations. As part of the planning compliance process all these certificates should then be submitted to the local authority on completion of the works.

These two very simple requirements would go a long way to ensure the quality of our national housing stock is not irreparably damaged by the current craze to extend houses at the cheapest possible prices.

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