

THE MMC INTERVIEW

STEEL RESOLVE

Editor of MMC, Bruce Meechan, interviews Graham Raven of the Steel Homes Group.

Graham Raven

Q1. *Many people in the construction industry still view steel framing for residential development as something of a niche market; how mature would you actually say the sector is?*

The market for steel homes has grown rapidly in recent years, driven partly by the need for increased numbers of homes and partly by an acknowledgement that modern methods of construction can deliver high quality, sustainable and cost effective housing. It is therefore incorrect to describe steel framed homes as a niche market. It is quite difficult to establish the exact numbers of key players outside the Steel Homes Group as the market is growing, new companies are emerging.

The Steel Homes Group (SHG) represents 13 companies that specialise in steel supply chain and manufacturing steel housing systems, accounting for roughly 75 per cent of the market. In 2004 the capacity in terms of units/year was in the region of 26,500 homes, which represents a significant growth from 2003 and highlights the increasingly important contribution that steel homes are playing in the UK market. Given the continued support of the Government for an innovative approach to resolving the housing shortage, and the sustainability benefits that steel framed homes can bring, it is evident that the sector will continue to grow in importance and capacity in coming years. The new Part L regulations may give steel framed homes a particular boost because, by using modern construction methods and materials, the targets for reduced CO2 emissions can be met without great difficulty, whereas alternative systems may face greater challenges.



Q2. *Is lightweight steel framing mainly being used for module and pod manufacture, or do stick build and panel systems account for a big share of the market?*

Lightweight steel framing represents 55 per cent of light steel used in residential construction and modular construction represents 45 per cent. There is almost no stick build in residential construction.

The rise in steel prices has not affected the viability of steel framed homes.

Q3. *Does steel framing feature in many of the solutions being progressed under the ODPM's £60K house initiative?*

The ODPM's £60k homes competition represents a massive opportunity for steel framed housing. The ability to deliver reliable, sustainable and cost effective homes meant that steel framing was likely to feature heavily in the chosen schemes. In fact, the first four schemes selected: Barratts (two schemes); George Wimpey; and the Sixtyk Consortium all feature framing from SHG members within their proposals.

What is evident from the 60k exercise is that if we are to deliver the number of houses required, at an affordable price and in a sustainable manner then modern methods of construction must be embraced. Other industries, such as the automotive sector utilise new techniques to develop their products and deliver benefits to the consumer. It is high time that the construction industry did the same.

Q4. *Has the recent surge in the price of the material affected the viability of steel systems as a solution to the housing crisis?*

No, the rise in steel prices has not affected the viability of steel framed homes. Steel represents a very small part of the overall cost of a house and the cost benefits of reduced build time and waste help compensate for any rise in prices. All manufacturers have managed to remain competitive.

One of the major challenges facing the construction industry in coming years will be the seemingly ever more acute skills shortage. This looks set to push up the price of labour still further in the coming years. The National Audit Office report demonstrates savings between 25% to 60% in the construction period whether panels or modular constructions were involved. The reduction in build time and streamlined site operation associated with modern methods of construction, means that steel homes are likely to become increasingly competitive.



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Q5. *Can steel compete with timber in terms of its sustainability credentials?*

Steel framing can more than hold its own in sustainability terms. Steel is the most recycled material in the world. Therefore, many of the components that go into building new steel homes will already be recycled. Once a building is redundant the steel involved can then be recycled or reused far more easily than many other materials.

Because of the manufacturing technique used to produce frame members to exact length, the level of waste generated by construction of a steel home is also very low when compared to other systems. Steel framing utilises off-site construction, which helps to ensure that on-site damage and wastage is minimised. The consistent, predictable nature of steel homes also means that procurement can be a far more precise science. Not only does this reduction in wastage represent a massive sustainability benefit, but it also helps to reduce costs.

The components that are used to produce modern steel framed homes are extremely sustainable. The latest insulation techniques used in warm frame construction produce low U-values and high standards of air tightness. External indicators support this view, as demonstrated by the BRE green guide to specification awarding steel stud walls with a grade A.

Steel framed housing schemes regularly obtain excellent rating under EcoHomes classification. While other building techniques may struggle to cope with Part L regulations for CO2 reduction and air-tightness, the Steel Homes group have urged the Government to go further and introduce a 25% reduction in CO2 rather than the planned 20% target.

Construction can be made more sustainable by reducing waste and increasing recycling, while the homes being built can be made kinder to the environment by being more air tight, having more effective insulation and therefore using less energy. However, for this more sustainable future to be delivered the housebuilding industry must whole-heartedly embrace the new technologies and techniques that are available. □

