

# Developers to reap MMC benefits

Since its launch just three years ago, the Design for Manufacture Competition has met its twin objectives to build environmentally sustainable homes for a construction cost of £60k. But it is the associated outcomes, some woven into the way in which the competition was run, with others inherent in the approaches and technologies used, which may produce the biggest benefits for developers, writes Steve Carr, Director of Policy and Economics at English Partnerships



Oxley Woods in Milton Keynes

**D**esign for Manufacture is essentially led by English Partnerships in its role as the Government's national regeneration agency, and delivered for and by the construction industry. Technology often develops at an exponential pace, but it needs a driver, something to build and maintain momentum. Design for Manufacture has provided some of that necessary momentum; the innovations and lessons learnt will inform the Carbon Challenge, for example, and those developers who partnered with us on Design for Manufacture will be ahead of the game.

The Modern Methods of Construction (MMC) technologies used – steel and timber frame homes, panellised and modular systems – mean that homes can be built more quickly, more cost effectively and to a higher consistent standard than through traditional bricks and mortar.

All MMC homes are factory precise and rigorously tested to ensure insurability and mortgageability – essential for all occupants. Up front supply chains – driving economies of scale by encouraging the use of MMC – mean more certainty on performance, and that 'snagging' is kept to a minimum. In simple terms, less things to put right immediately post development, means yet another time and cost saving for housebuilders.

MMC also has a major impact on available space,

which in turn means the Design for Manufacture homes are more flexible, with adaptations, perhaps for wheelchair access, easier and cheaper to carry out. The homes meet Lifetime Homes standards, making them flexible enough to change layouts and configurations, in pace with people's changing lifestyle needs.

Again, the additional space affected by MMC technologies – single span homes mean there is no need for restrictive load bearing walls and in-built sprinkler systems reduce the need for fire doors - is key to this flexibility, and is an additional benefit to the tenant in terms of how they make their living space their own. In total the removal of wasted 'circulation space' – unnecessary corridors and hallways – adds around 12% to the overall living space. Finally, flexibility and space means it is easier to let social homes to capacity – a necessity in a time of relative housing shortage.

The homes are better insulated than their bricks and mortar contemporaries. On the Crest Nicholson schemes in Maidstone and Newport Pagnell, for example, a single radiator is all that's needed to heat the entire house, with significant savings on heating costs. Bigger windows, and corner windows, afford more light to reduce lighting bills, and give better visibility – a key tenet of the "Secured by Design" principles.

To combat overheating, the flip side of better insulation, natural 'stack effect' technology as exemplified by the 'EcoHats' at Oxley Woods

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in Milton Keynes circulate air internally to regulate temperatures.

Many of the Design for Manufacture communities will require longer term management, for example the open public spaces or shared facilities. Again this is deliberate, encouraging as it does a sense of ownership, responsibility and social cohesion.

For more information about Design for Manufacture, visit: [www.designformanufacture.info](http://www.designformanufacture.info)