

- [Subscribe](#)
- [Register now](#)
- [Activate my subscription](#)
- [Newsletters](#)
- [Sign in](#)



We can build the way the Georgians did

14 February, 2013 | By [Paul Finch](#)



Rational House shows we can build the way the Georgians did - and do it better, writes *Paul Finch*

If point blocks are the answer, what was the question? Following last week's column, in which I took objection to the simple-minded error of those who think tall buildings cause crime, this week it is a real pleasure to talk about people with intelligent ideas, who have done their research properly and who are making a practical contribution to the provision of housing.

Rational House is the brainchild of architect Robert Dalziel and services engineer Tim Battle. They spent four years developing their ideas about how to create a contemporary equivalent of the Georgian house via a panelised construction system that is capable of delivering both houses and apartment buildings (of, potentially, up to eight storeys). They then successfully competed in an OJEU procedure to become framework suppliers to Hammersmith and Fulham Council under an agreement which also covers Westminster and Kensington & Chelsea.

Having completed a prototype family house in Hammersmith (on a plot previously occupied by two cars), the council has ordered 100 more units on various sites in the borough, which will be delivered by a joint venture between Rational House and Aecom plus a comprehensive supply chain. Discussions are under way with the other boroughs, and with councils including Ealing, Cardiff and Edinburgh.

There are several clever ideas deployed in the Rational House proposition. First, precast panels, floors and staircases are mainly made using 'secondary' aggregates, ie the equivalent of industrial waste. Second, the sandwich construction gives high insulation levels (Code Level 4 as a minimum) and is extremely fast to assemble on site - the prototype took six weeks but the designers reckon it could be done in two. Third, the proportional system, based on Georgian houses and the golden rectangle, makes the design seem instantly at home in ordinary streets of terraced housing. Fourth, a full-height basement, naturally lit on two elevations, provides welcome flexibility - as does a generous floor-to-ceiling dimension of 2.9m.

In the prototype (Arup was sustainability and M&E consultant), three floors of generous and identical dimensions allow the occupier plenty of choice over disposition and layout. There are no loadbearing internal walls so it will be easy to change the interior in years to come; it will be possible to make quite significant changes to the way the house is used and it could even be adapted for other purposes, such as office or retail. At 500 habitable rooms per hectare and with a plot ratio of 1.5:1, the house is reasonably dense but, of course, densities would rocket as and when the system is used to create terraces/mews/courts/square etc, when increases in energy performance could also take place.

What is striking about the house is that it addresses the notion that we can't build the way the Georgians did. We can, and we can do it better - not least because we can resolve issues of energy management without sacrificing generosity of built volume.

Describing the house does not do justice to the underlying ideas that led to the built-form propositions. These are based on analysis of housing density and design worldwide, and comparisons of what different approaches can offer. This is very well illustrated, with much useful dimensional and statistical data in a book which is, in effect, the Rational House manifesto. *A House in the City: Home Truths in Urban Architecture*, edited by Tim Battle and written by Robert Dalziel and Sheila Qureshi Cortale (RIBA Publishing), is well worth reading, as it is one of the few worked-through propositions about housing in recent years that is resulting in actual construction - a welcome example of theory turning into practice.

Like

1

Tweet

0