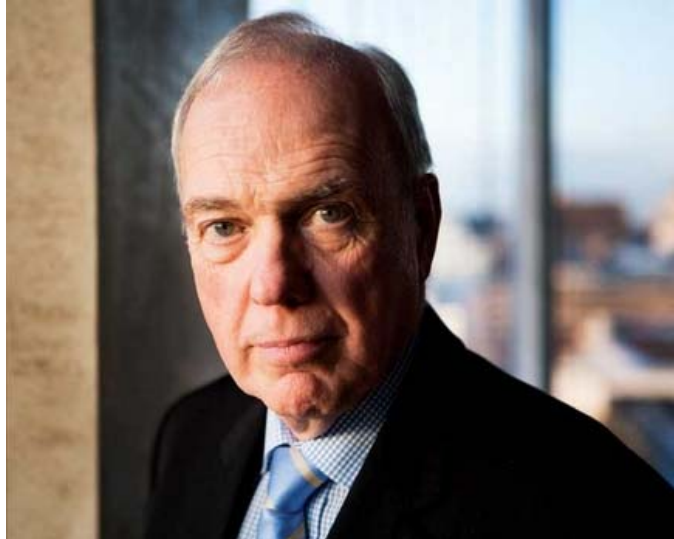


Fast build nation: Richard Ogden on offsite construction

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By **Emily Wright**

Richard Ogden, the man who built a McDonald's in two days, thinks the speed, efficiency and sustainability of offsite manufacture, and investment from major contractors such as Laing O'Rourke, will at last win over a sceptical industry



Very few people can claim to have built a McDonald's – golden arches and all – in 48 hours flat. Richard Ogden is one of them. In fact, the whole thing was his idea. In 1996, when he was vice-president of the fast food company's construction arm, he challenged his team to build a restaurant on a site in Peterborough, from ground break to opening, in two days flat. Why? To prove that offsite construction, something he has been trailblazing since the eighties, really works. He wanted to show the industry that this method of building was the future by proving just how dramatically it could cut development times and costs. Unfortunately, the McDonald's wasn't hailed as an example of a new and sustainable construction method – in fact it was dismissed as a gimmick. More than 10 years on, most of the industry is still pretty dismissive of offsite techniques.

But Ogden is not one to give up. For the past five years he has been chairman of BuildOffsite, a organisation that campaigns for prefabrication. He is convinced that after over a decade of spearheading the campaign to change the industry's perception, and building support among clients and construction firms, the UK is “on the cusp of a step change”.

That's pretty confident talk seeing that we're talking about a construction philosophy that most of the industry has ignored for decades. “We have been here many, many times before in a cycle where offsite has come up higher on the agenda, been discussed and then gone away again,” Ogden says. “But I think this time will be different. In fact, I don't just think, I know.”

Even so, Ogden is all too aware of what he is up against: “People in general, and the construction industry in particular – which is a very old industry compared with say, the car industry – tend to revert to type,” he says. “It's the dummy of comfort.”

And so there needs to be a catalyst to push these changes forward, and Ogden believes that in offsite's case, it's the carbon agenda. The greater accuracies in the factory-based manufacturing process means higher sustainability levels can be achieved. In addition, the factory manufacture of composite materials such as SIPs (structural insulated panels) adds to building performance efficiency. Ogden believes that these benefits, twinned with the pressure to meet sustainability and carbon efficient/neutral codes, will force firms to take offsite seriously.

“The new codes and requirements both in the UK and around the world say we can't afford to bleed energy,” he says. “I am sure that carbon efficiency codes will soon become law. It is not hard to see that using products that have been made in a controlled environment will do a better job at meeting standards.”

And Ogden is in no doubt about which construction method produces the higher quality products: “You can't have a craft-based activity delivering the same quality that you can get in a factory; there is no discussion on that point,” he says. “If I were to build a car on the side of the road in a field, what would the quality be like? It certainly wouldn't be the same as the car you and I choose to drive because those were manufactured in a factory in controlled conditions ...

I don't believe that sites are the ideal environment for modern construction. When you actually have to put together things like bridges and houses in the rain and the dark it's a huge challenge and it can be miserable.

“And it affects the incumbents around the site. If it takes 10 years to build a structure, why should all the people living and working around it have to cope with the noise, dust, dirt and mess when there is a way of avoiding it?”

Support from the big boys

“This is the 21st century; we've flown to the moon. Surely people can get their heads around a house that was built in Poland and shipped to the UK?”

The good news for him is that more companies are now adopting the method on their projects. Since 2005 there has been a 100% increase in the use of offsite methods in construction projects which now makes up around 10% of market share. And as more key clients and construction firms use the method, Ogden says everything is on track to hit the next target – for offsite to have gained 20% of market share by 2020.

Public and private sector clients including BAA, Premier Inn and the Ministry of Justice are using offsite to develop parts of big projects to keep costs and time down, and major construction firms are also beginning to see the benefits. Kier, Interserve, NG Bailey, Arup, Capita Symonds and Wolseley have now all registered support. Laing O'Rourke is perhaps the most fervent backer of offsite having invested £100m in opening a precast concrete factory as part of a move towards this style of construction. And, as recently as January this year, the firm was reported to be considering the launch of a business that used Japanese robotic technology to create modular housing in a manufacturing plant.

The future?

So if Ogden is right where are we likely to see the most impact?

We have all seen how successful offsite has been in delivering hospitals and Ogden's aim now is to prove how well it would work in other sectors. He points to the nuclear sector as one that could benefit from the system. Vast amounts of cash are going to ploughed into these plants, and anything that can shorten the time it will take to deliver the schemes is going to look even more attractive than it usually does.

Ogden also thinks offsite could save time and money on the Crossrail programme – something particularly worth considering as infrastructure spending hangs in the balance: “The section that goes underground is going to be a major, major civil engineering exercise and not necessarily conducive to offsite techniques. But when you come above ground, think about how much can be mechanised and pre-planned: stations, footbridges, tracks, platform components... It's like a big model railway set. And you don't go and make those individually, do you? You make them in bulk.”

Is it what people want?

A giant model railway and a nuclear programme are one thing. But when it comes to another major offsite sector, prefabricated housing, there is another sticking point to consider: the end user. Is modular housing really what people want?

“People want a house,” shoots back Ogden. “Full stop.” He adds that anyone who dismisses prefabricated structures needs to be more open minded because, in his eyes, they soon won't have much of a choice: “Times are changing. We have ferocious housing targets to hit and if we are going to have a shot at delivering all of this stock so more people can have a decent roof over their heads, the way it is done will have to change. This is the 21st century; we've flown to the moon. Surely people can get their heads around a house that was built in Poland and shipped to the UK? We need to learn from our global friends. The Japanese have accepted offsite as a mainstream construction method, and it works.”

But then, the Japanese have always been streets ahead when it comes to embracing change and innovation. And the Brits are famously conservative. Ogden responds: “In Wolverhampton there is a 25-storey modular building comprising 805 flats. It was constructed in Cork and delivered in ships. It took half the time it would have done to build on site. If you talk to mortgage lenders and insurers, there is a recognition now that prefabrication is a solution, not a fad. People can try to ignore it, stamp their feet and say ‘we don't like it’ but it's here. I think it's time to accept it.”