

**BuildOffsite 31st October 2018**

## **Overcoming the cost challenge**

### **1. Laing O'Rourke**

Laing O'Rourke successfully refocused after the 2010 Economic Shock. They reassessed and redesigned their business for delivery into the residential market, as well as diversified into crossrail, HS2, rail platforms, motorway bridges, commercial and hospitals.

They use automated productivity to leaner construction; including bar coded components, which leads to reduction in labour and timescales. They look for process engineering solutions and use performance measures to improve and even disrupt the construction process to drive improvement and transformation.

### **2. Alinea - cost consultants**

Alinea are looking to work with clients about unlocking the myths of OSM/MMC. They have worked with modular, volumetric apartment style blocks. They have analysed data for the detail of costs and been sure to share information with clients to ensure understanding. They use alternative contracts, as standard JCT not fit for purpose.

### **3. Saint Gobain**

Saint Gobain have been operating for the last 20 years in 64 countries. They focus on building fabric and distribution. Their drive is construction efficiency and their philosophy is for multicomfort; at the thermal, visual, acoustic and air levels. They provide a holistic solution with all their subsidiaries under the one Saint Gobain banner, to the OSM market. They add value to the overall solution. They will also assist design teams (free) to deliver a modular/panelised solution.

### **4. Meinhardt UK**

Meinhardt assist clients to understand OSM markets and overcome barriers. Their biggest clients are hoteliers, the student market and Build to Rent. These and the residential market are growing and there are fears over labour and skills shortages, increasing costs and Brexit.

Any design and product change benefit needs to be over +10% or else it won't win over the client. The cost for residential needs to be on par with traditional methods of construction. When traditional increases and modular reduces only then will RP's/LA's be able to afford the solution.

### **5. Combicycle Comparator**

They have been modelling over the last 12 years. The Combicycle Comparator is a Project Management tool that compares volumetric to traditional build. Supported and sponsored by

BuildOffSite it assesses whole life costs, including capital, life cycle elemental renewals, maintenance, cleaning, energy in occupation, sustainability; CO2 and energy and building weight. It can also provide a depth of analysis, looking at functionality and not just initial capital cost. It creates benefits on a business case to assist decision making at the point of feasibility.

It will soon become commercially available on line, which will create a new version of the comparator, funded by suppliers providing links and advertising to their websites.

## **6. Berkeley Modular**

Clients worry about being locked into one product and fear change. Traditional methods of construction are tried and tested,

Too many manufacturers rush to get their product to market without using the testing regime effectively. There is also a risk with new entrants not acquiring the correct accreditations on safety - fire resistance and build loads.

Very few OSM manufacturers invest in apprenticeships on their own books.

## **7. Canterbury Christ Church University**

Canterbury have been asked by Government to solve the Engineering skills crisis. Starting from scratch and developing a curriculum they have developed apprenticeships for OSM, and industry ready engineering graduates. They have £13m of funding and will be in a £50m new facility by 2020.

The skill set that the industry needs is not site staff but degree qualified engineers. However, that appears unattractive to today's students. CrossRail found themselves recruiting chemical engineers to address their issue with the shortfall of 22,000 engineers.

## **8. WAGO**

WAGO are a German manufacturer with 8,000 staff. They are engaged in offsite assembly and the evolution of modular M&E.

WAGO have now joined BuildOffSite and are impressed with the quality of those involved, the openness of the existing members, and the collaboration to make a difference as well as the OSM philosophy.

## **9. Panel Q&A's**

**Standards** – The confusion regarding standards can hinder the adoption of Offsite Manufacture. Loughborough university have nearly completed their report on the standards to the BSI.

**Comparator** – How the comparator will actually work was discussed.

**Client organisations** - How to influence client decision making process about using OSM was discussed. It was suggested that more cost analysis to help inform the industry costs will help. OSM is also currently under invested, and potentially expecting quick returns which

are unfeasible. However, soon only lazy procurement will see any benefit in traditional methods, and OCM will also deliver flexibility.