

THE VOICE OF THE UK OFFSITE INDUSTRY

# *build*offsite



**How to adapt now  
and for the future**

**What will  
industrialised  
construction mean  
for the future of  
work?**

**Covid-19 is 'once-  
in-a-lifetime  
opportunity' to tackle  
global climate crisis**



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### Premier Modular awarded £7.5m offsite housing contract in high Wycombe

Buckinghamshire Council has awarded a £7.5m contract to Premier Modular for the offsite construction of 58 apartments which will provide facilities for homeless people and their families in urgent need of housing. Work will start on site this summer and is due for completion in 2021.

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### Joe Dyde, Business Manager

Welcome to the August edition of the Buildoffsite e-magazine, I hope this finds you all safe and well and beginning to return to some sense of 'normality' both at home and work.

As we continue to emerge from the impacts of COVID-19, in many cases the last few months have highlighted how resilient, robust and innovative the offsite sector is and has brought MMC and its benefits more front and centre than ever before. There is an opportunity to continue to grow and develop offsite increasingly, and through hard work, sustained collaboration and improvement I truly believe this will be the case.

Whilst this edition focusses on some of the major projects that have continued and completed during the pandemic, there is a future-looking theme running through many articles; whether that be around procurement, the future of the workforce, sustainability and working successfully in the 'new normal'.

Underpinning much of this forward-thinking activity and how we may deliver these positive changes as a whole industry, sees the recent work and announcements from organisations such as the Construction Leadership Council & Construction Innovation Hub, some of which is featured in this e-magazine. The CLC's Roadmap to Recovery presents the industry with a call to arms on how to build back an even more sustainable, profitable industry; in line with this we have recently produced an offsite sector response to the impact of COVID-19 and recommends how to restart, reset and reinvent which you will find details on how to access within these pages.

Stay safe, stay well.



# BUILD-OFFSITE MEMBERS PARTNER IN £350 MILLION GRANGE UNIVERSITY HOSPITAL PROJECT



**Gleeds and Laing O'Rourke have completed works on several sections of the £350m Grange University Hospital in Gwent, allowing part of the hospital to open almost a year ahead of schedule.**

The Grange University Hospital in Gwent can now help Aneurin Bevan University Health Board's (ABUHB) tackle Covid-19.

Chief executive Judith Paget, Aneurin Bevan University Health Board, said: "At the beginning of the coronavirus outbreak we needed to plan for the worst-case scenario.

"I would like to thank Laing O'Rourke and Gleeds for the great amount of effort and skill they have shown to get these areas of the hospital ready for us to use.

"Thankfully the general public have observed the advice on staying at home and social distancing, so we



don't need to open the extra beds just yet. I would urge people to keep following the government guidance to protect themselves, to ease the pressure on our NHS services, and to save lives."

With more than half of confirmed cases of the novel coronavirus in Wales reportedly falling within the region, the completion of the hospital has been fast-tracked in order to make 384 new beds available to patients battling the disease if required.

## Collaboration

Victoria Head, project director at Gleeds, commented: "Since its inception the Grange University Hospital project has always had a true collaborative ethos at its heart – working together for a shared goal.

"Gleeds led the leadership team of Laing O'Rourke and the health board in its commitment to supporting the health board during this national crisis and we've stuck to that, proudly tackling every challenge to complete the hospital in record time by

adopting a solution-based approach."

Just four weeks after the health board asked the team to respond to the impact of the Covid-19 crisis, on 27 April, it took possession of 50% of the space within the Grange University Hospital. With takeover of the majority of the ward blocks, the ground floor of the diagnostic & treatment departments, including pathology, pharmacy, FM and mortuary, as well as car parking zones and plant areas, NHS staff now have the capacity to treat at least 350 patients, should it be required.

Mike Lewis, Laing O'Rourke project director, said: "Aneurin Bevan University Hospital Board had the foresight to ask us to bring our construction programme forward, creating 384 bed spaces as part of their preparations to tackle coronavirus in Wales. I am humbled by the tremendous effort shown by all in our project team and I thank them for their commitment.

"Our motivation to deliver key parts of The Grange for use a year ahead

of schedule has been driven by our determination to provide vital NHS facilities and to support all those working in the NHS, to whom we owe so much."

The project team reprioritised site activities, with a new commissioning strategy designed to allow for zonal access and reallocation of resources. The health board team was also able to work alongside the project team on a live site, fitting out the wards with beds and equipment. This collaborative approach condensed the commissioning and soft landings periods from twelve to four weeks.

Extensive resource planning was required, balancing the need to deliver a fast-track programme while ensuring the safety of the workforce, all of whom worked in line with government and health guidelines.

Head added: "With the best will in

the world, fundamentally, had this been a traditional build with the same start date we would not have been in a position to offer support to this national pandemic and the NHS.

"We've always been proud of the modern methods of construction (MMC) involved at GUH and the programme savings which it offered compared to a traditional build but never have the benefits been more apparent than during this crisis."



**Our motivation to deliver key parts of The Grange for use a year ahead of schedule has been driven by our determination to provide vital NHS facilities and to support all those working in the NHS, to whom we owe so much."**

**Mike Lewis**

**Project Director, Laing O'Rourke**



**CLIENT:** ANEURIN BEVAN UNIVERSITY HOSPITAL HEALTH BOARD

**SECTOR:** BUILDINGS

**SERVICES:** BUILDING CONSTRUCTION DFMA AND OFFSITE MANUFACTURING

**DURATION:** 2017-2021

**PROJECT PARTNERS:** GLEEDS, BDP, AECOM, WSP

**For further information please visit: [www.laingorourke.com](http://www.laingorourke.com)**

# LAING O'ROURKE SAYS PROCUREMENT MUST PRIORITISE INNOVATION

**Procurement for public and private construction projects must do more to encourage R&D investment and help steer the uptake of offsite manufacturing if Britain is to recover quickly from the Covid-19 crisis.**

Innovation could be the “big winners” if procurement starts to focus on value and resilience rather than just price, Laing O’Rourke’s director of UK clients and markets has said in a wide-ranging discussion covering hospitals, housing and the modernisation of Britain’s construction sector.

Céire O’Rourke says that procurement must do more to encourage the uptake of factory-built space in order for the construction industry to really get behind the innovation agenda. She believes there is a huge opportunity to create jobs, reduce our carbon footprint and improve the economy’s resilience if more is done to encourage R&D spending.

O’Rourke says Government procurement processes must set an example. She believes that if ministers were to award a greater number or portion of capital projects to companies using modern methods of construction (MMC) or which focus on design for manufacturing and assembly (DfMA), this would immediately encourage more private investment. Government can truly demonstrate that it is keen to get behind new, innovative ways of building, but it needs to update and modernise the way procurement works.

Over three years ago, Mark Farmer, now the government’s MMC

champion for homebuilding, issued a stark warning in a report entitled, Modernise Or Die.

Laing O’Rourke, the UK’s largest privately-owned construction company, has successfully implemented one of the country’s most advanced offsite manufacturing methodologies. Focusing on DfMA, Laing O’Rourke, which is currently helping to deliver the Royal Liverpool University Hospital, has spent the last 11 years investing over £200 million into its offsite manufacturing capability, which is spread across two main factories in Nottinghamshire and Oldbury.

Between them, the factories can deliver products such as modular mechanical and electrical plant installations, bridge and platform systems for the rail industry and completed ‘pods’ used to assemble buildings for a range of uses, including housing, education facilities and hospitals.

O’Rourke explains that Laing O’Rourke operates using a 70-60-30 metric for their projects - which span across engineering, building construction and infrastructure.

“When we look at projects, we say can we deliver 70 percent of it offsite? If so, it leads to a 60 percent increase in productivity and a 30 percent reduction in delivery time.”



**Céire O’Rourke,**  
**Director of UK Clients and Markets**

Laing O’Rourke applied this exact metric to deliver the Grange University Hospital in South Wales. In April, the company announced they had delivered sections of the hospital a year earlier than originally planned, enabling an extra 384 beds to become available for the NHS as it stepped up its fight against the Covid-19 outbreak.

O’Rourke explains how this feat was possible. “The biggest facilitator is having a good design team across all disciplines. We now believe we have a blueprint for delivering hospitals in two or three years - at least a year

ahead of traditional methods.”

However, it isn’t just the pace of development that makes offsite manufacturing so impressive.

As O’Rourke puts it, “quality is one of the unsung heroes of MMC because by working in a factory environment the quality you can provide for the product is second to none.”

Equally impressive is MMC’s sustainability credentials.

By manufacturing offsite, Laing O’Rourke is able to create buildings that are more airtight. This means less heat escapes, resulting in long-term savings on energy use and maintenance costs. In addition, digital technology allows the company’s design teams to generate precise estimates of materials needed for each project, meaning waste is minimised.

But for sustainability to be a successful agenda, O’Rourke notes that “you can’t go after everything - if we do, it might never happen. If we break it down into bite sized pieces, there is every chance we’ll be able to succeed.”

She continues by saying, “it’s going to take investment. That shouldn’t just sit with the contractors or supply chain partners. It has to be everyone together. For example, if a client wants to build a sustainable building in central London, they may have to accept that it can’t be done for the same price as traditional. It has to be everyone investing for the future.”

Like most offsite manufacturers, Laing O’Rourke’s design teams use digital tools to measure and benchmark the performance of their factory-built space. Built Information Modelling (BIM) - which allows design teams to create a digital twin of buildings - ensures costly defects are ‘designed out’, with clash checks and advanced geometry rules providing precise alignment checks and measurements.

However, O’Rourke has been disappointed with the pace in which companies have taken up digital design technology, such as BIM. “The challenge is that there isn’t a standardised system. So there are different interpretations of digital engineering.”

“I’m not advocating there should be one system, but we need to figure out a way that the different [digital design] systems can talk to each other. We need a way that people can be individual in the way that they work, because that’s part of the consultant brand, but you need a common platform that everyone can feed into. This would be a game changer.”

“The challenge you have is when clients across the whole spectrum [housing, education, healthcare, infrastructure] say that they want quality, but when it comes down to the procurement process price is the big winner,” O’Rourke says. “This doesn’t lend itself to an environment where you invest thousands or millions of pounds into a new, more efficient way of working.”



**Quality is one of the unsung heroes of MMC because by working in a factory environment the quality you can provide for the product is second to none.”**

**Céire O’Rourke,**  
**Director of UK Clients and Markets**



# LAING O'ROURKE TO DELIVER £160M RESIDENTIAL TOWER IN SALFORD

**Laing O'Rourke has been chosen by developer One Heritage to deliver a 55-storey residential tower at Greengate in Salford**

The residential tower, called One Heritage Tower, will comprise 545 apartments, secured underground car parking, a residents' library and gym, as well as ground floor commercial space and extensive public realm, to include a new riverside walkway.

The project design team has also been instructed to progress to RIBA Stage 4 design.

A pre-construction agreement has been signed whilst the two companies negotiate details.

## **'Flagship scheme' for the north west**

Director of One Heritage, Jason Upton, said: "We have undergone a rigorous assessment process to reach this stage and it's a credit to the development and project management teams for getting us to this key milestone.

"This is a flagship scheme for the north west and it's fitting that we're working with a globally-recognised contractor.

"Laing O'Rourke have responded energetically to the challenge and demonstrated their appetite for working alongside us. I look forward to continuing the fantastic momentum on this project."

Consultant project director, Awais Shahid from Atzaro Real, commented: "In spite of the problems posed by Covid-19 we've remained on target, with no slippage to our programme.

"The project team has worked collaboratively under trying circumstances and we're pleased to have been able to keep valued members of the professional community in work.

"Once construction begins there'll be a further substantial boost to the local economy."

Shahid has revealed that, subject to contract, much of the residential tower's components would be pre-fabricated offsite by Laing O'Rourke in sterile factory conditions, making new social distancing guidelines easier to fulfil.

"We'll also be able to minimise the number of bodies on site as a result, which will make our site work safer," he added.

## **Maximise digital engineering & offsite**

Céire O'Rourke, director of UK clients and markets at Laing O'Rourke, added: "We are delighted to have secured preferred bidder status for One Heritage Tower, a landmark building that will provide quality homes in Salford and wider benefits for the local community.

"We are looking forward to working with the forward-thinking team at One Heritage, who recognise the advantages of our approach based on early engagement between client and contractor.

"The project will maximise the use of digital engineering and offsite manufacture using a kit of parts from our factory in the East Midlands. There is much work ahead, but we're excited to have the opportunity to deliver this stunning project."

The principal consultants on the project are OMI Architects, Box Clever Consulting (project management), Crookes Walker Consulting (building services), DP Squared (structural engineering), BB7 (fire engineering), Gardiner & Theobald (quantity surveying) and GIA (wind and rights to light).

Work is expected to start on site in Q3 of this year, with the residential tower targeted for completion in 2024.



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**“The project will maximise the use of digital engineering and offsite manufacture using a kit of parts from our factory in the East Midlands. There is much work ahead, but we’re excited to have the opportunity to deliver this stunning project.”**

**Céire O’Rourke,**

**Director of UK Clients and Markets**

# WHAT WILL INDUSTRIALISED CONSTRUCTION MEAN FOR THE FUTURE OF WORK?

We are at an inflection point for the global construction industry. COVID-19 has disrupted operating conditions and brought extreme financial stress to construction firms in the short-term. However, it will also accelerate long-term change within our sector, making innovation essential to confronting longstanding issues such as lagging productivity growth.

This will change the way we work as an industry, making a new range of skills vital for RICS professionals to grasp the long-term opportunities that may arise, and deliver confidence to their clients in a changing landscape.

## A challenging short-term outlook, but long-term support

COVID-19 has clouded the immediate outlook for the construction industry. Through forcing the closure of sites, output has been hit significantly, with repercussions up the supply chain. Meanwhile, for those sites that have remained open or re-opened, the introduction of social distancing measures is naturally reducing productivity. The economic impact of the pandemic will also reduce demand in the short-term, with the speed of the sector's recovery tied to the shape of the global economic rebound and the nature of fiscal stimulus from governments globally.

Nonetheless, construction will remain a key driver of value creation in the global economy as we collectively rise to the long-term challenge of rapid urbanisation. Indeed, as we note in our recent Futures 2020 Report, more than half the global population lives in

urban areas, with 1.5m people added to the global urban population every week. These long-term drivers for the industry won't disappear. However, as the construction sector looks towards a post-pandemic recovery, it must be prepared to evolve further.

## Mind the productivity gap in recovery

In collaboration with Autodesk, our latest research into the future of construction highlighted the scale of the extant productivity gap prior to the virus. Productivity within construction has grown at an average annual rate of just 1% over the past 20 years, compared with 2.8% annual growth in the overall economy. The benefit of closing this gap is significant. If construction productivity matched that of the overall economy, the improvement would be worth \$1.6 trillion each year. Faced with this gap, and a skills shortage in many areas, construction sector stakeholders are exploring industrialized construction as a long-term solution. We expect this to happen more rapidly as the industry reshapes itself following the pandemic. Our joint report explores the benefits and the implications for built environment professionals.

## The benefits of industrializing construction

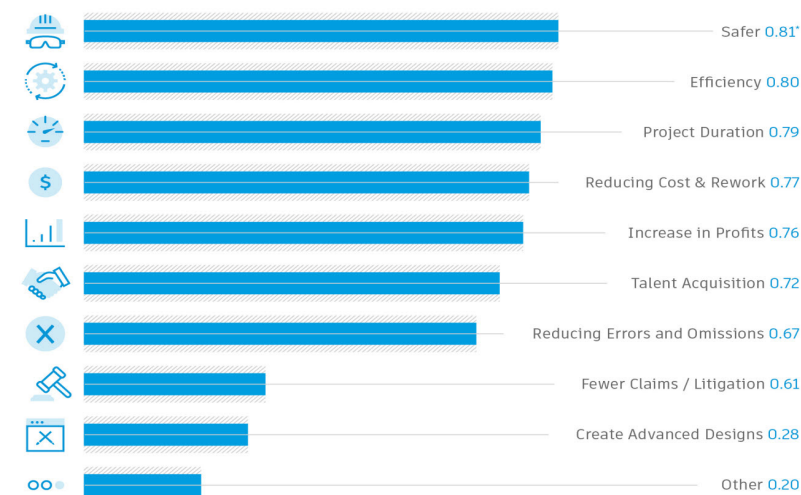
Industrialized construction is a system that uses innovative and integrated techniques and processes such as building information modelling (BIM) and common data environment (CDE) to connect the design-to-make process by embracing five megatrends:

Prefabrication and offsite construction  
Additive manufacturing  
Robotics and automation  
Big data, artificial intelligence (AI), and predictive analysis  
Internet of Things (IoT)  
This system has the potential to bring about a positive shift for the industry. Our joint report with Autodesk highlights that there was broad consensus on its potential, giving the companies that adopt it a competitive edge by improving efficiency, reducing construction costs and rework, and making construction processes safer.

## Talent and skills

We are committed to reviewing and evaluating our education and qualifications framework to ensure they remain relevant - now, and in the future.

FIGURE 2 TOP IC BENEFITS



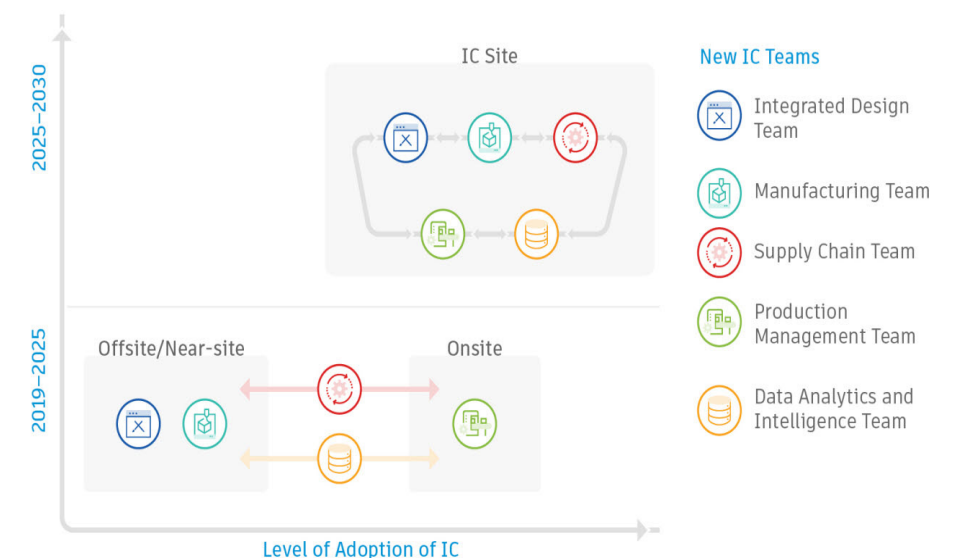
\* Relative Importance Index (RII) scale 0.0 to 1.0



## Creating new roles, teams and embedding new skills

Embracing industrialised construction also means that skill sets, roles, and team structures will evolve. Greater automation will allow team members to increase time spent on value-adding tasks, whether management, decision-making, or planning, reducing time spent on manual tasks. This is already taking place among firms that have adopted industrialised practices, and there is evidence of existing roles incorporating new skills and new roles emerging to match the five megatrends - whether building in greater specialism in data analytics and AI or modular design. The nature of teams will change too. We expect a greater blurring between offsite and on-site teams and greater collaboration between a broader range of departments to improve agility and efficiency and match client needs.

FIGURE 5 NEW IC TEAMS AND THEIR EVOLUTION OVER TIME



## Collaborating to innovate

In the face of unparalleled upheaval and challenge in the light of COVID-19, we have seen incredible collaboration between parties. This collaboration will need to sit at the heart of long-term innovation in the construction industry. All have a part to play. Academic institutions, for instance, are vital in ensuring the pipeline of new professionals have sufficient exposure to the megatrends and knowledge that will shape core skillsets for the future. Working with industry, they can identify and respond to the need for new specialisations. Private companies, whether architects, engineers, or contractors, will need to modify their operating models and embed new ways of working together in a tech-driven world. The role of governments will be crucial too, fostering environments where positive innovation can take place while supporting recovery. Professional bodies such as RICS also have a vital role to play in developing global construction standards, including qualifications, data and cybersecurity standards. As an organisation, RICS is firmly committed to equipping our profession with the skills and knowledge a 'new normal' will require. With such disruption and technological development, supporting lifelong learning has perhaps never been more important. We also continue to review our own standards, guidance, and qualification routes to ensure that current and future RICS professionals can take advantage of opportunities that innovation will bring for the built environment.

"Future of Work in Construction" white paper is available at <https://academy.autodesk.com/construction-technology>.



# HOW TO ADAPT NOW AND FOR THE FUTURE

**Business are tackling urgent problems but they also need to think further ahead about long-term trends emerging from this crisis, says Alinea's Iain Parker**



**Iain Parker,**  
**Partner at Alinea**

Governments all over the world have been forced to make significant interventions in response to tackling coronavirus, and industry is adjusting to the human and business impacts of these interventions. Most companies are, understandably, putting their immediate energy into shorter-term issues (items under the microscope) and perhaps some are starting to speculate on longer-term matters (gazing through the telescope). Thinking about both together is somewhat daunting, although equally important.

## **Under the microscope**

Health, safety and wellbeing: looking after employees has to be first on the list, and after perhaps an initial period of confusion it is encouraging to see most businesses quickly get to grips with this issue. For office-based people this is somewhat

easier than for site-based teams and workers, although most construction companies have now adjusted site set-ups to comply with legislation and guidance and are achieving some level of productivity. However, there is a long way to go and the eventual effect on price and programme is a current hot topic for conversation.

Financial strength: all good functioning businesses are reliant upon being well-capitalised and a strong performing cashflow. Understandably, all industry organisations would have spent many hours reviewing financial positions and taking advantage of government support schemes, such as furloughing. Scrutinising business costs, collecting cash and bidding for new work would have all received much attention in the boardroom over the past few weeks, in addition to a thorough review of contractual liabilities. It is a real concern for the industry that many

businesses will, sadly, fail over coming months and years which adds to the longer-term challenge of skills shortages and lack of competition and choice in an environment that desperately needs continued new players and fresh thinking.

Working remotely: while many companies have enjoyed a level of remote working for some time, we have all now had to adapt to the whole workforce doing this together where there is no necessity to leave home. This has resulted in a new approach which has taken some adjustment and an immediate focus on IT systems, resilience and security. Clients have also sought reassurance that this arrangement is both possible and comes without a dip in productivity, both of which appear possible. Communications: the ability to communicate well and maintain engagement and a positive business culture is an area that needs a heightened level of short-term attention. Sharing plans and showing transparency through clear and cohesive communication (internal and external) will greatly assist in building trust and showing that strong leadership which is needed more than ever at the moment. Clients will be looking for clear communication of

business strategy from consultants and contractors as they try to work out who they want to be partnering with in a prolonged period of uncertainty, and the same applies the other way around.

Forecasts and pipeline: scenario-planning around where your business is likely to be in 12 months and 'right-sizing' for the future is a difficult contemplation. Reviewing order books and making predictions receives a lot of short-term attention, but it is generally done in a manner that assumes everything will, at some point, get back to 'normal' – but what will the future 'normal' actually look like? Time to bring out the telescope ...

Data analytics: there is no doubt that the design and construction process creates, and relies upon, a huge amount of data. The same can be said for running businesses, with just about every organisation on the planet currently being tested around decision-making. The extent to which organisations embrace the future power of data will be interesting to see, as data has the potential to improve productivity, reduce risk, reduce cost and enhance safety. Moving from data analytics to predictive analytics (models to predict the future) with the use of machine learning and artificial intelligence is an exciting opportunity to contemplate.

Sector opportunities: how will society work, live and play in the future, and how will this affect real estate? What will be the future areas of growth, and what should we start planning for now? Difficult questions to answer but spending time to think about them is at least a start. Repurposing existing assets, distribution centres, life sciences and data centres all chime with current noises, but how the built environment and infrastructure evolve within cities is a fascinating topic.

There are many challenges that lay ahead but the industry will rise to the challenge, both in the short and longer term. We will emerge with a renewed



**There is likely to be a considerable re-think around how best to make complex supply-chains more simple and reliant."**

focus on sustainability and resilience. Cities will need to serve more residents who work from home for some of the time, leading to investments in telecommunications and smart city initiatives.

In a period of prolonged uncertainty (don't forget Brexit) it remains difficult to see exactly how things will be different in the future. However, companies who emerge with solid finances, a resilient supply chain, skilled workers and the capacity to gather and analyse data that aid good decisions, will be well-placed to lead the market.



**Moving from data analytics to predictive analytics with the use of machine learning and artificial intelligence is an exciting opportunity to contemplate."**

# MMC IN SCHOOL DESIGN SHOULD BE TREATED WITH OPENNESS, NOT SUSPICION

**Modern methods are nothing for architects to fear and could actually protect design quality, argues Sheppard Robson's James Jones.**

Schools being built using Modern Methods of Construction (MMC) is inevitable. In fact, it's happening already. So, what does this mean for architects?

Some architects already have experience with MMC schools of one sort or another—3d volumetric or 2d panelised—and others are quickly gearing up as they work with teams on the Department for Education's (DfE) offsite framework. However, it is probably fair to say that there is still a suspicion in the profession that MMC in schools is part of a move away from quality design towards utilitarian, non-designed, bulk-buy educational spaces.

Considering the vast number of school buildings across the country and the importance of good educational environments, it is entirely proper for government to take a rigorous and analytical approach to school design and quality.

MMC may well help this, and architects who believe in quality school environments should embrace the opportunities of offsite technology. If done right, MMC could be a great leveller, holding the key to delivering high-quality schools across the country,

irrespective of location, socio-economic context or politics.

Starting from the guidance formerly contained in Building Bulletins, the DfE has developed a 'pattern book' for schools in which teaching and support spaces are already highly componentised. Up to now, however, schools designed using these 'educational components' have generally been constructed in a traditional manner. The logic of pairing school components with modern constructional technology is undeniable, and it should benefit

school architecture as much as construction quality, programme and cost.

Architects have already proved their worth in the design of new schools. Not through 'iconic' designs, but in the true architectural skill of arranging a defined set of components in an efficient manner. A skill that both satisfies the educational needs of a unique school community and responds to the particulars of a specific site and differences in local social and planning policy. Getting this right is a tremendous achievement,



**James Jones, Partner at Sheppard Robson**

but it's hard, especially when budgets, overall area limits (GIFA) and programmes are tight to the point of breaking—not to mention consultant fees. Can the move to MMC help? There are some positive reasons why it might.

The government believes that the use of MMC offsite technologies will bring improvements to all three of the holy trinity of construction: time, quality and cost. Certainly in the long term, after some inevitable prototyping, the first two should see improvements. Factory production is cleaner, more accurate and less wasteful, and the fact that it can progress in parallel with site preparation and groundworks might help programme. Considering quality, architects often design cleverly to provide well-proportioned schools within DfE guidelines, yet the finished buildings are compromised due to lack of on-site quality control and a failure to coordinate components—particularly M&E services. The space planning may be excellent, but the finish is uninspiring. Offsite construction will significantly improve this problem.

How about the third parameter: cost? Will it be cheaper? Perhaps, given time, however, MMC will dramatically change how we measure building costs and how cost-control interacts with the other two parameters of time and quality. The RICS, in their 2018 paper on MMC, acknowledge that offsite requires that cost decisions, which means design, material and manufacturing decisions are fixed much earlier in the programme: "the points at which labour is most intensively used throughout a project differs from traditional build, with the cost curve far more front-loaded." From a cost control perspective, this front-loading is considered a risk. From a design fixity and quality perspective, however, it is a positive.

Often with schools the need to cut cost late in the design programme leads to ill-considered change. This effects build quality, but often also some



**Modern Methods are nothing for architects to fear and could actually protect design quality"**

**James Jones,  
Partner at Sheppard Robson**

significant part of the educational vision, painstakingly briefed and integrated into the design. Fixing costs early is only a risk insofar as the early design is not precisely costed, including costing of risks. If MMC forces design and cost decisions to be fixed earlier than for architects—and for building users—this can only be a good thing. Once offsite schools are fully prototyped with the systems up and running, the cost per unit will be well understood. Proper contingencies will need to be in place for site-specific risks, but once out of the ground the cost of a school should and must be fully understood, right from early stage design.

The DfE push towards offsite is bold and ambitious. There will be challenges, both logistical—considering

the lack of capacity within the UK's current manufacturing base – and perceptual—because users are unfamiliar with MMC—but there will also be opportunities. The immediate opportunity for architects is to move into a modern way of making buildings and to capitalise on the potential for better designed, coordinated and finished schools. Long term, we should hope that there is a greater opportunity to use standardisation of learning spaces, and the efficiencies of offsite, to challenge and loosen the stranglehold of GIFA on school design. If we are building efficiently for the future with MMC, there must be opportunity to expand the important spaces outside of the efficient classrooms: space for collaboration, space for self-learning, space for gathering, and space for joy.



**If done right MMC could be a great leveller, holding the key to delivering high-quality schools across the country, irrespective of location, socio-economic context or politics."**

**James Jones,  
Partner at Sheppard Robson**

**For further information please visit: [www.sheppardrobson.com](http://www.sheppardrobson.com)**



# ‘THIS IS NOT GOING TO GO AWAY’ – HOW NMCN PLANS TO LIVE WITH THE PANDEMIC

**The government’s chief scientific adviser, Chris Whitty, recently warned that COVID-19 social distancing could remain in place in certain forms until the end of the year. For the industry this presents many challenges. David Price spoke to NMCN about the firm’s plans to cope**

At the start of 2020, NMCN had a two-year growth plan. It was anticipating more work for its water business – which is its main source of revenue – as AMP7 frameworks took off, as well as increased activity in its burgeoning highways division. After a difficult few years leading up to 2019, its telecoms operations were also expected to gain from the government’s commitment to rolling out full-fibre broadband to the whole of the UK. NMCN even had a small development business on the go.

Chief executive John Homer, who spoke to Construction News following the release of the company’s 2019 results, says much of the plan remains intact, although development work has been paused to conserve cash. But the company now has another element that is being integrated and will guide its growth. “We’re overlaying that [plan] now with ‘Living with COVID-19’, because this is not going to go away,” he says.

NMCN’s strategy for living with a

disease that has caused disruption unlike anything experienced in modern times is centred around what he calls the three Rs: reality, restart and revival.

## Conserving cash

“‘Reality’ is where we are now,” Homer says, explaining that the priorities are to ensure the health and wellbeing of staff while maintaining operations as much as possible during the period of restricted movement and site lockdown. This has resulted in many NMCN staff working from home while making use of video-conferencing tools, as well as smaller teams of no more than two people per van travelling about to continue essential water, telecoms and highways projects

At the same time, the company, like many others across the economy, is trying to conserve as much cash as possible. This has resulted in the listed PLC suspending dividend payments, furloughing 15 per cent of workers, implementing pay cuts of 10-20 per cent for directors and managers, and halting work on its own development projects. On top of this, the company has applied to the Coronavirus Large Business Interruption Loan Scheme (CLBILS).

“We don’t need it [a loan] right now – we don’t need it in any shape or form. We’re still very much cash-positive and we’ve got a healthy balance

sheet,” Homer says, describing the move as “insurance”. He adds: “We have applied to the CLBILS loan because why wouldn’t we?”

Getting extra financing in place now is prudent instead of waiting until it is needed urgently, the NMCN boss says, regardless of whether it is used or not. “You don’t want to be rushing around, say, in nine months’ time thinking ‘there’s a loan we could have had but we didn’t know it was going to get this bad,’” he explains.

## ‘Controlled startup’

After ‘reality’ is confronted, next comes ‘restart’. Homer says the firm is entering this phase now as some 30 per cent of its projects, mainly building jobs, start to come back online. In many ways NMCN’s restart plans are an extension of the measures already taken, with the company preparing to operate in a world where social distancing and enhanced hygiene could be the norm for a long time. “It’s a controlled startup in the sort of ‘new normal’ using social distancing, video conferencing, working from home, the different techniques that we’ve got for the various site operations, particularly in relation to where we’ve got gangs on utility work,” he says.

The final phase is ‘revival’. “Revival is a transformation plan,” Homer explains. NMCN has invested in offsite construction facilities in recent years,



and he expects these to give the company a competitive advantage, especially given the hurdles created by COVID-19. “We expect to see the returns from the factories that we’ve invested in continue to yield in an accelerated way,” he says. “If you go to the factories, it is very much easier to observe the safe systems of work and social distancing because you’re in a controlled environment.”

It may be uncomfortable to think of the current restrictions lasting a year or more, but Homer says NMCN is planning for that possibility. He says: “Living with COVID-19 is very much an integral part now of what we’re going to be doing as an organisation.”



**“We expect to see the returns from the factories that we’ve invested in continue to yield in an accelerated way”**

**John Homer,  
NMCN**

# BUILDOFFSITE MEMBER, FIRST START HOMES – THE NEW NAME IN AFFORDABLE HOUSING USING OFFSITE MANUFACTURING



**First Start Homes (FSH) is part of the Purever Group, a well-established company in the business of Offsite manufacture and MMC with projects delivered across the world.**

For over 25 years, the Purever Group has been researching more efficient and sustainable construction methods that create real savings, not only in economic terms but also in terms of time and energy & carbon reduction. In addition to the extraordinary durability, its design nature allows it to be fully adjusted to the different construction types and client needs, adapting to the desired aesthetics and format as required for buildings as diverse as houses, schools, medical centres and hospitals, banks, etc.

Three years ago Purever Group saw the growing interest in Modern

Methods of Construction (MMC) in the UK housing market and started the process at looking to set up a UK business arm to provide affordable housing for both the social and private sector housing market.

During this time great developments and research have been made in both the system and processes for housing development. We are BOPAS accredited, registered members of the Local Authority Building Control (LABC) and members of Buildoffsite.

To help landlords/developers in developing new communities across both new development projects or small redevelopment areas such as garage sites, FSH have developed a full range of services from supply only, through to a full turnkey operation and have a fully designed off the shelf suite of properties to suit the

first time buyer and social housing provider market, from a one-bedroom bungalow to a block of low rise flats, this ensures affordability for all without compromising on quality.

The Purever Group factory can produce over 200 properties per week to cater for the ever-growing demand for quality homes in the UK.

With our business models, it is our aim to help landlords provide affordable housing to their tenants and create communities that people enjoy living in and also to first-time buyers enabling them to easily afford to own their home in areas they choose to live in or stay in the communities they have grown up in when in some cases this is not possible due to current house prices.

FSH can do this because we have a

well-established parent company which has been working within offsite manufacture for many years, and is able to offer its factory facility, product, and scalability through FSH.

FSH has an extremely passionate team who together strive to create the perfect homes at an affordable cost for everyone.

We also plan to help Local Authorities and Housing Associations across the UK reduce homelessness and families living in temporary accommodation with our specially developed business model.

## **A truly affordable, high-quality solution to meet housing needs**

- Warranty for 60 years
- Cost efficiency, the right choice considering its lifespan
- More comfort - insulated both from heat and low temperatures
- Can be supplied fully equipped (bathroom, kitchen) and with a solar kit that provides renewable energy
- Modular designs can be increased in size or adapted for different usage
- Quick installation
- Certification certified by relevant laboratories for fire, earthquakes and winds
- Social Housing

Our modular building system can be supplied as a turn-key solution, fully equipped as to provide an efficient and quick response to any housing need.

It provides a scalable model, with an initial layout that can be customised to each project in size and equipment to meet any requirement.

This is a solution for the public sector, for fast development of public services or a quick response to urgent



**With our business models, it is our aim to help landlords provide affordable housing to their tenants and create communities that people enjoy living in and also to first-time buyers enabling them to easily afford to own their home in areas they choose to live in or stay in the communities they have grown up in when in some cases this is not possible due to current house prices.”**

housing needs, such as a natural disaster (floods, storms etc.) or for underprivileged areas.

FSH along with our sister company Purever UK Ltd with factories in UK, France, Spain and Portugal and with presence in more than 30 countries, have a considerable production capacity to undertake sizeable projects.

Our technology is certified in many countries like Spain, France and in numerous countries in South America and Africa.

## **Keeping it Green**

It is our aim to make FSH a market leader in Energy Efficient homes.

The homes themselves are already at a SAP rating of high B into A making them extremely energy efficient, this added to the fact we will offer the option to upgrade at very little cost to have energy storage, photovoltaic and solar thermal incorporated into the build, our homes will be virtually passive making them even more

affordable for the homeowner or tenant.

## **Technical Advice**

Our team of architects and engineers have specific expertise and training to ensure effective selection of appropriate products for each project, thus solving any technical doubts.

Planning and Development of Projects

We turn ideas into real projects, economically sustainable, which can be developed according to the highest requirements and always considering the specific needs of our clients.

## **Bespoke Designs**

Whether modern or traditionally built we have the ability to make the properties to your specification.

## **Contact**

For more information please visit our website [www.firststarthomes.co.uk](http://www.firststarthomes.co.uk) or email Marcus Fookes at [marcus@firststarthomes.co.uk](mailto:marcus@firststarthomes.co.uk) or Keith Meredith at [keith@firststarthomes.co.uk](mailto:keith@firststarthomes.co.uk)



# COVID-19 IS ‘ONCE-IN-A-LIFETIME OPPORTUNITY’ TO TACKLE GLOBAL CLIMATE CRISIS

**Covid-19 could be an historic turning point in tackling the global climate crisis, says the Committee on Climate Change (CCC), as it calls on ministers to seize the opportunity.**

Ministers must seize the opportunity to turn the Covid-19 crisis into a defining moment in the fight against the global climate crisis, the CCC says.

In its annual report to Parliament, the CCC provides new advice to the government on delivering an economic recovery that accelerates the transition to a cleaner, net-zero emissions economy and strengthens the UK's resilience to the impacts of climate change.

For the first time the Committee has set out its recommendations government department by government department. These are considered urgent steps that must be taken in the months ahead to initiate a green, resilient Covid-19 recovery.

**In its new report, the Committee highlights five clear investment priorities in the months ahead:**

- 1. Low-carbon retrofits and buildings that are fit for the future.**
- 2. Tree planting, peatland restoration, and green infrastructure.**
- 3. Energy networks must be strengthened for the net-**

**zero energy transformation in order to support electrification of transport and heating.**

- 4. Infrastructure to make it easy for people to walk, cycle, and work remotely.**
- 5. Moving towards a circular economy.**

There are also opportunities to support the transition and the recovery by investing in the UK's workforce, and in lower-carbon behaviours and innovation:

Reskilling and retraining programmes. The net-zero economy will require a net-zero workforce. Leading a move towards positive behaviours. Government reinforce the 'climate-positive' behaviours that have emerged during the lockdown, including increased remote working, cycling and walking. Targeted science and innovation funding.

**'A once-in-a-lifetime opportunity'**

CCC Chairman, Lord Deben, said: "The UK is facing its biggest economic shock for a generation. Meanwhile, the global crisis of climate change is accelerating.

"We have a once-in-a-lifetime opportunity to address these urgent challenges together; it's there for the taking.

"The steps that the UK takes to rebuild from the Covid-19 pandemic can accelerate the transition to a successful and low-carbon economy and improve our climate resilience. Choices that lock in emissions or climate risks are unacceptable."

Chair of the CCC's adaptation committee, Baroness Brown of Cambridge, commented: "Covid-19 has shown that planning for systemic risks is unavoidable.

"We have warned repeatedly that the UK is poorly prepared for the very serious impacts of climate change, including flooding, overheating and water shortages.

"Now is the moment to get our house in order, coordinate national planning, and prepare for the inevitable changes ahead.

"The UK's domestic ambition can be the basis for strong international climate leadership, but the delivery of effective new policies must accelerate dramatically if we're to seize this chance."

## **Industry response**

Julie Hirigoyen, chief executive at UKGBC, said: "We're pleased to see that the CCC has again highlighted the key role of buildings in reaching our net-zero target.

"Coronavirus has transformed the

context of our race to net-zero and Government must now focus on directing economic stimulus spending towards areas that align with meeting our emissions target.

"The built environment is consistently cited as one of the key levers that can address all three priorities at once: jobs, climate and health.

"We fully support the CCC's calls for Government to integrate net-zero into all policy making and ensure procurement strategies are consistent with the UK's climate objectives."

Christy Hayes, CEO at Tide Construction and Vision Modular Systems, commented: "We fully agree with the Committee on Climate Change's report which makes clear that energy-efficient homes and greener methods of house building will be vital in delivering a clean recovery post-crisis.

"We believe innovative, modern methods of construction are essential to drive forward the government's clean growth strategy.

"We continue to invest heavily in research and development with a particular emphasis on sustainability and our modular homes are proven to be more energy efficient in both delivery and operation. This ultimately translates into cost savings for our clients and residents, and the sustainable delivery of higher quality housing."



**We believe innovative, modern methods of construction are essential to drive forward the government's clean growth strategy. We continue to invest heavily in research and development with a particular emphasis on sustainability and our modular homes are proven to be more energy efficient in both delivery and operation. This ultimately translates into cost savings for our clients and residents, and the sustainable delivery of higher quality housing.**

**Christy Hayes, CEO  
Tide Construction & Vision Modular Systems**

# ARE YOU CARRYING OUT RESEARCH & DEVELOPMENT? LEARN MORE ABOUT BUILDOFFSITE MEMBER, ELA8 & HOW THEY CAN ASSIST YOU WITH R&D TAX RELIEF

**ela8**  
tax relief for clever companies

## What is R&D tax relief?

The R&D Tax Relief regimes are aimed at encouraging UK companies to invest in research and development through the provision of significant tax incentives for certain types of R&D activity. In essence, if your company engages in innovation or technologically challenging work to improve or develop a product, material, tool, service, approach or process you may be able to claim relief under these regimes. The benefit is currently worth up to 33.35% of qualifying expenditure for SMEs, whilst large companies can claim a post-tax credit of 9.7% (increasing to 10.5% for expenditure incurred on or after 1 April 2020).

## Who are we?

ela8 is a specialist R&D tax relief consultancy and a member of Buildoffsite. Established in 2007, and with experience stretching back to the introduction of the regimes in the UK, we have worked alongside numerous businesses to help prepare R&D claims that optimise the relief available. We have a portfolio of clients that includes companies of all shapes and sizes and across all sectors, supporting construction, software, technology, pharmaceutical, engineering, energy and telecoms. Our affiliation to Buildoffsite and support for its members means that we have strong experience and reputation in both traditional and offsite construction sectors. ela8 has a 100% success rate in making claims and we enable our clients to focus on their core business while we take care of their

claim. In terms of cost, we usually work on a contingent fee, so we don't get paid unless your claim is successful.

## How can we help?

The world has changed significantly in the past few months as a result of the global pandemic and in the UK many businesses are struggling with the harsh new economic realities and operating within stringent financial constraints. Like many others, the construction industry has been severely impacted and remains vulnerable. However, the government remains keen to encourage ongoing research and development that materially improves the efficiency of delivery of construction projects through R&D tax incentives and we have clients who have benefitted from

making successful claims in recent weeks, generating cash at a time when it is most needed. There are still many businesses in this sector that either overlook their potential to claim R&D Tax Reliefs or fail to fully optimise their claims – and this is where we can help. Typically, the R&D activities in the offsite constructor sector relate to:

- Development in or improvements to manufacturing and production processes, such as new tooling, technology or engineering approaches
- Development of new prototype materials and structures, as well as the associated technologies used to connect, transport and finish modules
- Development and integration of environmentally friendly methods or sustainable technologies that minimise waste, repurpose materials or enhance environmental performance
- Any process, approach or technology innovations that help offsite construction projects meet new building, health and safety or fire regulations.

“

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# KIER SECURES 13 SCHOOL PROJECTS WORTH £170M

**Kier has bagged a haul of 13 school projects across England and Wales as the Government presses to ramp up school building.**

The mix of new build, conversions and refurbishment projects are together worth £170m and will provide facilities for 11,304 pupils.

These new deals give a big boost to Kier after lockdown and will build on the firm's strong track record, after delivering over £5bn of educational facilities in the last decade and adding up to 1.2m sq m to the nation's schools estate.

New build projects include:

Addington Valley, a £15m new SEN school in Croydon and Barton Court Academy, a £21m new free school in Canterbury.

In Bournemouth, Kier will transform a former police station, magistrates and coroners court into a STEAM specialist all-through school.

In Milton Keynes, it will deliver an £18m new build block, which will include teaching space for science, design technology art and ICT for Stantonbury International School.

Major refurbishment programmes will be carried out at both Park Hill Junior School in Croydon and in Wales, four new school projects will provide much-needed school places for the city of Swansea. Andrew Davies, chief executive of Kier, said:

"Through our delivery of these vital new school buildings we will provide critical infrastructure and support the Government's aim of laying the foundations for everyone to have the opportunity to succeed.

"As a leading provider of educational

buildings, we will use our expertise to deliver with a firm focus on quality, reducing carbon emissions and innovative solutions, through digitisation and modern methods of construction."



**As a leading provider of educational buildings, we will use our expertise to deliver with a firm focus on quality, reducing carbon emissions and innovative solutions, through digitisation and modern methods of construction."**

**Andrew Davies,  
CEO at Kier**

# NEW BIM INFORMATION PROTOCOL LAUNCHED



**BSI, the Centre for Digital Built Britain, the UK BIM Alliance and the Construction Industry Council have released an Information Protocol to support BS EN ISO 19650-1 and 2.**

The new Protocol has updated the CIC Protocol Second Edition and is a flexible and user friendly document which provides a template for reflecting ISO 19650-1 and 2 in any contract.

Beale & Co Senior Associate, Andrew Croft, is a co-author of the new protocol, alongside May Winfield from Buro Happold and Simon Lewis of Womble Bond Dickinson.

Andrew commented of the protocol: "The Information Protocol will support the implementation of BS EN ISO 19650, a key standard for the adoption of BIM, alongside other important guidance published by the UK BIM Framework. We would encourage the legal and construction industry to familiarise themselves with the Information Protocol and make appropriate use of the Information Protocol in all contracts to which BS EN ISO 19650 applies."

Andrew has taken an influential role in BIM in the construction industry for the last 10 years, having

contributed to the 2011 Government BIM strategy paper and being involved in drafting the first and second editions of the CIC BIM Protocol.

More information regarding the new protocol can be found [here](#).

For legal advice around BIM please do not hesitate to contact Andrew on the details below.



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**The Information Protocol will support the implementation of BS EN ISO 19650, a key standard for the adoption of BIM, alongside other important guidance published by the UK BIM Framework.**

**Andrew Croft,  
Senior Associate at Beale & Co**

# NETWORK RAIL UNLOCK BROWNFIELD SITE TO PARTNER WITH ILKE HOMES FOR FIRST MODULAR HOUSING DEVELOPMENT

40 sustainable modular homes are set to be created in Nottinghamshire after Network Rail and modular home developer ilke Homes announced a significant investment in a brownfield site next to Beeston station.

The deal, which has been brokered by JLL, will see a partnership-led redevelopment of the 2.2-acre site, delivering much-needed housing and car parking around a key transport hub which offers direct transport links into Nottingham city centre.

Modular homes – which are built off-site in a factory-controlled setting – are more cost-effective to maintain, quicker to construct and have a lower carbon footprint than traditional brick houses, making them a sustainable housing solution.

The development will be backed by government funding after ilke Homes secured a £30 million investment from Homes England to increase the capacity of its factory, as part of a scheme to boost modern methods

of construction and deliver more modular homes across the UK.

The partnership with ilke Homes supports Network Rail’s strategy to release land for housing to drive economic growth and help communities to thrive, whilst generating capital to fund rail improvements for the benefit of passengers, taxpayers and the economy.

David Biggs, Managing Director, Network Rail Property, said: “By joining forces with ilke Homes on the redevelopment of this brownfield site, we are able to deliver sustainable housing in a growing area, with brilliant access to transport.

“The development not only supports the government’s strategy to accelerate the rollout of modular housing but will also drive local economic growth. What’s more, all profits generated by Network Rail will be reinvested back into railway.”

Tom Heathcote, Executive Director, Development, ilke Homes: “We are proud to partner with Network Rail to create a sustainable development of much-needed family homes for a growing community.

“Modular homes represent the future of housing and we believe this residential development will be a shining example of what they can deliver for homeowners, communities and the UK economy.”

Anabel Christmas, Residential Agent, JLL, said: “It is great that we have been able to broker such a positive deal despite these challenging and uncertain times for the industry.

“By supporting this partnership-led scheme between Network Rail and ilke Homes, we are playing our part in providing much-needed sustainable housing solutions to communities across the UK, while supporting the government’s housing strategy.”



## Notes

- The government is encouraging the redevelopment of brownfield sites to bring new investment into areas and increase housing delivery.
- Much of Beeston is undergoing redevelopment, with a £50m redevelopment of Beeston Square – including an eight-screen Arc cinema, 132 homes and space for a number of restaurants and bars – given the green light in May.
- Modular housing company, ilke Homes, will manufacture the homes at its 250,000 sq ft factory in Knaresborough, North Yorkshire, before installing them on the Beeston site.



**The development not only supports the government’s strategy to accelerate the rollout of modular housing but will also drive local economic growth. What’s more, all profits generated by Network Rail will be reinvested back into railway.**

**David Biggs,  
Managing Director at Network Rail**



# DfE READIES FIRMS FOR 'NEW DEAL' SCHOOLS BUILDING PUSH



**The Department for Education is calling up contractors for a major market engagement event ahead of renewing its huge school building framework.**

Chiefs at DfE are gearing up for a major school building push promised by Boris Johnson as part of his Covid-19 infrastructure recovery programme.

Over £1bn will be released shortly to fund the first 50 projects of an ambitious, 10-year school rebuilding programme, starting from 2020-21.

These first projects will be confirmed in the Autumn, and construction on the first sites will begin from September 2021.

Now more than 30 contractors on the existing £8bn schools framework face a fight for places ahead of the new panel of preferred contractors being selected for next year.

Under the existing arrangement, works were divided across 22 lots by region and project value.

How the next framework will be organised is still to be determined, but is unlikely to be as complex as the challenge is on to find economies of scale.

DfE is attempting to shift delivery to modern methods of construction and earlier this year unveiled its offsite construction partners to deliver around 30 schools a year with an

estimated pipeline of up to £3bn over the next four years.

The new market engagement event will gather feedback from contractors and supply chains, to inform the design of the new framework, the level of interest from the market and best procurement strategy.

# EMBRACING A MOVEMENT FOR CHANGE - TRANSFORMING CONSTRUCTION NETWORK PLUS CONFERENCE 2020

The Transforming Construction Network Plus (N+) is delighted to welcome you to its second annual conference on Tuesday 15 September 2020. In the past year, the industry has seen a flourish of new initiatives, supported and encouraged by the Transforming Construction Challenge. Industry, academics, policy-makers, are working together to shape future construction, and address some of the biggest obstacles facing the industry. The breakout of Covid-19 has shown us that the need to overhaul the sector has never been greater, but has also underscored our incredible determination and innovative capabilities.

To accelerate this transformation, we all need to get involved and embrace this call for change. This one-day conference will reflect on what transformation means for the industry, what role digital technologies will play, and how to create an industry that would work for all. The event will feature renowned speakers from the UK, Europe and the USA, sharing their views on the key issues that lay ahead of us.

They invite delegates from the UK and around the world to join them to discuss how the construction sector can embrace change. This is an opportunity to come on board to help transform the industry.

For more information and to register please click [here](https://movementforchange.net).

## EMBRACING A MOVEMENT FOR CHANGE

TRANSFORMING CONSTRUCTION NETWORK PLUS  
CONFERENCE 2020

15 September

Your chance to take part in changing the way we build.

[movementforchange.net](https://movementforchange.net)

TRANSFORMING  
CONSTRUCTION  
NETWORK PLUS



# PREMIER MODULAR'S NEW MANAGING DIRECTOR SPEAKS TO BUILDOFFSITE ON HIS NEW ROLE AND VISION FOR THE FUTURE



David Harris,  
Managing Director at Premier Modular

**Firstly, congratulations David on your new position.**

**How would you summarise your core product philosophy and company ethos?**

"Premier is all about commitment, teamwork, performance, innovation and flexibility. These are some of the factors which enable us to work in such a variety of spaces and range of sectors across the UK; whether we work with the principal contractors, a supply chain partner or it is a construction management contract. So, this gives us unrivalled flexibility to work in a way that suits our clients' needs.

We previously had a cabin business, but we divested that to allow us to completely focus on modular buildings and offsite construction for interim or permanent projects. This gives us real focus and is what has really fuelled our growth in recent years."

**You have said previously that you want to grow the business by around 50% in the next three years how will you do that and will it involve more factories?**

Diversification is key. We see great

opportunity to increase our market share for our offsite construction solutions in the residential sector. Our site welfare business has been very London centric in the past and we are increasing our geographical reach to support Tier 1 and regional contractors across the UK. We have grown the business considerably in the last five years and we hope to take that to the next level, and become the supplier of choice throughout the UK and into northern Europe."

We have invested heavily over the last six or seven years in our five factories, extending them, adding more lifting and movement facilities, which means we have considerable capacity to grow our output within our existing operations. So our first priority will be to work hard with what we already have in place and use that capacity to best effect."

**On the subject of factories, there is quite a different approach across the UK - there are very few that have totally embraced the fully automated manufacturing model and they're still very 'human heavy' as I would call it. You are obviously from an automotive background yourself, so do you have any vision that Premier's future capabilities might include a higher focus on production line technologies or do you think the hybrid formula is where your true potential lies?**

"I think the hybrid formula is right for us in the way we are trying to operate currently and will remain the case for the next couple of years. Because of our diverse market sectors, flexibility is crucial for us. We could be manufacturing a school, an interim construction welfare building or a new ward block for a hospital; so we have to have flexibility of products and flexibility of approach.

**Some of Premier's most prestigious projects have included the Hinkley C accommodation**

**and most recently the Nightingale Hospital in Exeter, which I believe took just 4 weeks - which is phenomenal, congratulations. What are your current plans in the residential sector?**

"Many years ago, Premier was a pioneer of modular housing. We really felt that traditional housing was the right area for us and we worked in that space for a number of years but found it extremely difficult to generate traction from different social housing providers to actually embrace offsite solutions. Basic cost was always the driver.

As we have matured as a business, we realised our building solutions are best suited to mid-rise residential schemes, where it is far easier to achieve repeatability. Our manufacturing capabilities and offsite fitting out drive real value and benefits for developers. We can offer much greater certainty of quality, delivery on programme, on cost and safety. As an example, we have just won a major scheme for homeless accommodation for Buckinghamshire Council. That is five stories. We are also targeting build-to-rent, student accommodation and affordable housing, from five to 13/14 storeys. We adopt the design philosophy of a fabric-first approach to minimise impact on the environment and reduce operating costs such as heating. It is also important to design for offsite construction in order to optimise the benefits of standardisation.

**We obviously have to consider COVID-19. I understand that Premier have successfully kept production going throughout. I even saw that you have recruited during lockdown, which in itself is an exceptionally positive position to be in. I wanted to ask how much of an impact have the last few months had on the business and what do you envisage the longer-term impact or changes to working practices to be, if any?**

"It was very positive to be able to increase our production staff during the economic downturn caused by Covid-19. We have just recruited a further 25 people in our factory. This is due to a surge in new orders across the business.

Covid-19 did impact on our business, but it was much less than it could have been thankfully. Some of our traditional sectors; education, construction, site welfare accommodation and retail saw a slowdown, but that was balanced by an increase in the healthcare sector and in residential to meet the new Government targets for housing for the homeless.

And now some of those projects that were delayed are back on track. We currently have significant order uptake. I think there will be an impact, in reality, on our interim buildings; particularly where we support contractors working on large-scale projects for new residential or commercial developments. At best, I think we will see some strength returning in these sectors next year.

However, we also see significant opportunities following recent Government announcements for new infrastructure, education, and healthcare projects. We have the flexibility to put different types of buildings through our factories according to the needs of the market and our customers. That still gives us tremendous opportunities to grow the business.

I also think it reiterates what you can do as a supplier in the supply chain. The fact that you can react that quickly and turn around 40 modules in just 4 weeks, actually makes other sectors step back and look at what we have achieved. Why can't we have a school in four weeks? It actually builds momentum in terms of what offsite is all about - which is speed, certainty, quality, and safety."



**We are all familiar with the Construction Leadership Councils' Roadmap to Recovery, so I was wondering if you felt that this agenda truly represents a critical opportunity to reset the direction of travel for construction as a whole? Most specifically, how do you predict Premier benefiting from more 'collaborative forms of working' – assuming they are adopted?**

"It's very hard to say whether this roadmap is a critical opportunity or not. I'd like to hope it's a feasible opportunity because partnership working is the way forward. Businesses like Premier who are willing to collaborate through early engagement and create long-term partnerships, will generate greater value and better buildings for the client. Our approach is open, honest and transparent. We can definitely deliver best value through early engagement.

I think the traditional forms of contract are becoming outdated. We are still dealing with it on some major contracts where you have seen tenders come out, which are so poorly defined. This approach does not encourage best value for the client. You cannot help but think, 'if you just engaged with us, you would probably be saving 20% because we would have developed a far better solution'.

**What do you feel can help to ensure that Modern Methods of Construction are at the forefront of the minds for local authorities, the NHS, the education sector etc and why do you feel that the true potential of offsite construction has not been embraced fully up to now? And, what do you anticipate the biggest hurdles, to fully realise the industry's potential, are going to be?**

"It's an interesting issue. I have been involved in the modular/offsite sector for 20 years. I can remember when I started, standing up in front of



**Businesses like Premier who are willing to collaborate through early engagement and create long-term partnerships, will generate greater value and better buildings for the client. Our approach is open, honest and transparent. We can definitely deliver best value through early engagement.**

**David Harris,  
Managing Director at Premier Modular**

hundreds of architects, talking about offsite and modular and being faced with complete scepticism. Our sector has come such a long way since then, and you see more and more fantastic quality projects being successfully delivered. But I think that there are still perception issues around modular buildings which can only really be addressed by showcasing more great offsite projects.

Generating outstanding customer feedback is critical and as an industry we need to continually publicise that to help change perceptions and encourage more enlightened clients to adopt an offsite approach. I also think more and more construction talent is coming through with the increased acceptance, knowledge and understanding of offsite, and actually realising what a rewarding career you can have in this sector.

Procurement is definitely still an issue.

Having frameworks where you still need to produce lengthy tenders doesn't solve the problem. We need frameworks which encourage best practice through early engagement and work to a target to achieve best value.

The construction industry needs to step up. It needs to stop employing consultants and actually be led by clients, getting their solutions built in the most direct way, spending their money on the actual building - not on 'flannel'."

**I totally agree with what you have just touched on about not shouting loud enough. But it's also about changing people's perception of offsite construction, so many think of modular homes as a 'box'.**

"I agree 100%. I also think that, just to come back to your point about COVID, that everything happening at this time is actually demonstrating once again

how efficient and productive offsite manufacturing is.

All the offsite factories can manage their space, processes, and what they are manufacturing day to day. So social distancing has had much less impact than on site. The new requirements are actually benefiting manufacturers because there is more discipline and therefore, more efficiency in the process. I think it just stems, yet again, from the benefits you can get from manufacturing buildings in a controlled factory environment."

**How do you see the landscape of offsite construction changing over the next ten years?**

"I think we will see exponential growth. This is reflected in our quote bank and our order book and I can hear it from the conversations I'm having with customers.

There are more and more drivers to use offsite, so I don't see any reason why the industry won't be 10 times the size we are now, in 10 years' time." Critically as well, there has been a government push and recognition. The appointment of Mark Farmer's position for instance.

"There is recognition. I think one of the issues is that some of the offsite frameworks aren't being offered to offsite providers, because of the way that procurement works. They need to take that final step and I don't see why it shouldn't happen."

**Lastly, what will be your measure of success for Premier, besides the earlier discussed growth in turnover?**

"We pride ourselves on having one of the best teams in the industry and are attracting outstanding talent which we will continue to do.

Continuing to attract really happy clients and exceed their expectations are fundamental to give us future

growth. We need great projects with great customer feedback. We have a lot of USPs for both our offsite construction solutions and our hire business. We want to maintain our reputation for both divisions. Our commitments to quality and service, our flexibility, our product value, are key drivers. These factors will demonstrate that we are achieving success. Against all those, with a business that continues to be financially strong."

**Many thanks for your time David and best of luck in your new role.**



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**David Harris,  
Managing Director at Premier Modular**

**Interviewed by Karen Shanks, Industry Advisor at Buildoffsite.**

# PREMIER MODULAR AWARDED £7.5M OFFSITE HOUSING CONTRACT IN HIGH WYCOMBE

**Buckinghamshire Council has awarded a £7.5m contract to Premier Modular for the offsite construction of 58 apartments which will provide facilities for homeless people and their families in urgent need of housing. Work will start on site this summer and is due for completion in 2021.**

The project in the Desborough area of High Wycombe is an innovative partnership between principal contractor Premier and Claritas Group to deliver best value for the client and a highly sustainable scheme, which will be completed in a much shorter timescale than with traditional build.

The one-bedroom apartments will be fully fitted out offsite at Premier's factory in East Yorkshire and will arrive on site late autumn, complete with shower rooms and kitchens pre-installed. The homes will be constructed around a central courtyard which will provide a valuable amenity space for residents. A housing management office, offices for the relocated British Red Cross, and laundry will be located on the ground floor, with refuse stores and cycle storage in the plaza.

The building has been designed to enhance the local area and to deliver a high standard of environmental performance. The energy-efficient 'fabric first approach' to the development's construction will

increase the level of insulation, reduce heat loss and air infiltration, and will use roof-mounted solar panels to generate electricity.

According to Cllr John Chilver, Cabinet Member for Property and Assets for Buckinghamshire Council, "As a Council, we are committed to exploring modern methods of construction and more innovative ways of delivering new housing. The use of an offsite solution for this scheme radically reduces time on site which will mean far less disruption locally during the build programme."

Cllr Isobel Darby, Cabinet Member for Housing and Homelessness at Buckinghamshire Council added, "We have ambitious plans to provide more accommodation for people who are homeless. This project will increase the number of temporary homes in High Wycombe by 65 per cent, enabling us to meet the growing local need and provide a much better living environment for families who need our help. The new accommodation will also bring people closer to local amenities, such as transport facilities, GP surgeries and schools as well as other support services."

Dan Allison, Director of Premier Modular, said, "There is an urgent need across the UK for emergency accommodation for people, who, often through no fault of their own, have become homeless. These individuals and families need housing for a short

period of time, while a more permanent place is found for them to live. Offsite construction is very well suited to building this type of accommodation. As well as meeting the required standards for quality and sustainability, we can reduce the completion time to deliver new temporary homes more quickly for people on emergency housing waiting lists."

With fabrication and fitting out of the apartments taking place in a controlled factory environment, offsite manufacturing achieves unrivalled precision and a higher and more consistent quality of finish. The number of construction workers on site is also reduced - an important health and safety benefit following the Covid-19 pandemic.

Built on the highly constrained site of a former car park which is being relocated, the four and five storey scheme will be finished in a palette of colours including terracotta, slate grey and off white to complement the surrounding local area. The apartments will be accessed by lifts and staircases built using in-situ construction. There will be two accessible apartments, each with a parking space.

For further information, visit [www.premiermodular.co.uk](http://www.premiermodular.co.uk), call 0800 316 0888 or email [info@premiermodular.co.uk](mailto:info@premiermodular.co.uk).



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**Dan Allison,  
Director at Premier Modular**



# THE TECHNICAL DESIGN SERVICES GROUP JOINS STELLAR, MAXIMISING MMC IMPACTS FOR SMES & SOCIAL HOUSING

TDSG has joined Stellar, a consortium of academic, technical, industry and end user stakeholders, that will work together in supporting SMEs and Social Housing Providers to embrace MMC (Modern Methods of Construction). Created and lead by Totally Modular, a leading manufacturer of innovative volumetric modular homes, with the intention of producing a common steel framing platform that can be utilised without the need to start from first engineering principles each and every time designs change, alongside the demonstration that a satellite manufacturing facility can be fully operational within a shortened time frame, whilst most prevalently negating the need for a multi-million pound capex investment.

TDSG's specific involvement will be to utilise the inhouse MMC expertise of each of their sister companies TDS and Design4Structures, to provide structural engineering services as well as BIM compliant design and detailing including development of parametric modelling tools. Other key contributors to the Stellar initiative are Citizen Housing, Spacious Place, Wolverhampton University and Jali. Daniel Leech, CEO of the Technical Design Services Group commented:

"We are delighted to be working with Totally Modular and all of our other consortium colleagues on the Stellar Project. We have lots of experience around the residential sector in both traditional and offsite construction methods and bringing this experience into the housing sector will hopefully add real value to what we are trying to achieve as an industry.

There is a huge shortage of housing nationally and we hope that the Stellar Project will represent something that is innovative, collaborative and really pushes the boundaries on what can be done digitally. We are very excited to be able to focus our energy on developing parametric modelling tools in order to streamline the BIM process and demonstrate what can be achieved by utilising the latest construction technology solutions available on the market."

Echoing Dan's comments the ethos supporting Stellar is that modern methods of construction, such as off-site manufacturing of houses in factories, promise lower-cost, higher-quality homes constructed in days instead of months. This is particularly beneficial to suppliers of social housing (e.g. housing associations, local authorities), who are facing ever greater challenges in delivering

quality affordable homes. As the UK faces an unprecedented housing shortage; 3.9 million new homes must be built just to meet current demand, just half the homes needed are being built and the shortfall continues to increase - this could be the answer in addressing the issue. Housing associations often need small volumes of customised properties to suit infill and brownfield sites, which does not match with the needs of factory owners to sell high volumes of near-identical properties. Concentrating manufacturing in a handful of large, centralised factories also increases transportation and impacts the local workforce.

STELLAR offers social housing developers and owners the tools and business models they desperately need to provide affordable homes across the UK in line with demand. Our model centralises complex and high-cost design, frame manufacturing and warranty tools within a central virtual 'hub', supporting SME-operated 'spoke' factories near to the point of need.

To achieve this, Stellar will combine and enhance the UK's best available tools and knowledge, delivering:

1. 3D 'digital twin' factory planning tool to ensure fit to need and support capital investment
2. Parametric Modelling tool for SMEs, enabling them to optimise house design and

ringfence production slots

3. A UK first, open-access 'Should-Cost' Model driven by parametric design to generate accurate build costs

4. A Modular Build Design App, directly informing production, enabling HAs to specify homes that meet their needs.

5. Demonstration home(s) – Homes designed and produced through the hub-and-spoke model and STELLAR toolkit will be installed in client specified configurations. They will come complete with a suite of unobtrusive miniature IoT enabled environmental and usage sensors to enable energy and operational performance data to be monitored and analysed. A period of occupation will then be completed prior to future-casting to confirm environmental performance, whole-life cost and longevity, and provide a strong return on investment.

In a huge boost to the above, after months of hard work, dedication and collaboration, the consortium has secured a hat-trick of Innovate UK grants as part of the Industrial Strategy Challenge Fund (ISCF) & UK Research and Innovation (UKRI), following three successful submissions for the Transforming UK Construction calling. Brian Maunder, Founder of Totally Modular has commented on the success of the financial award commenting:

"The committed and highly innovative STELLAR consortium includes modular steel frame specialists, home builders and highly respected academics. We form a complete value chain that will last beyond this project. The team has attracted positive attention from organisations including National Housing Associations and the House of Lords, who recently sought Totally Modular's input to upcoming national strategies. This funding will definitely positively transform the MMC sector specifically for social and affordable housing. However, it also brings significant social benefits and drives forward our message for 'Local Homes for Local People,



Technical Design Services Group

providing Local Jobs that supports the Local Economy".

Totally modular commented further that MMC has the potential to help solve the UK housing crisis, create the highly paid and highly skilled jobs of the future and set global standards for house-building. As an SME volumetric, offsite manufacturer they believe that these 3 projects are a key stepping stone to progress this MMC evolution and the Technical Design Services Group couldn't be happier to be onboard for the ride!



# DOUBLING DOWN ON IMPACT: AN INTRODUCTION TO THE HUB'S VALUE THEME



**Ron Lang ,**  
**Impact Director for Value at the**  
**Construction Innovation Hub**

As we start a new financial year, I find myself reflecting on just how far we've come at the Construction Innovation Hub. The programme has brought together three vastly different organisations, and in the process, created one of the most passionate, diverse and dynamic teams I have ever had the pleasure of working with. This dynamism is rooted in the sharing of one clear vision: To drive the transformation of the construction sector. Perhaps more astonishing though, is that this energy has been equally and proudly matched by our industrial partners and stakeholders. I have never seen a greater imperative or opportunity to fundamentally shift the way we work and the value we deliver. With such opportunity comes great responsibility of course, and we are determined to demonstrate our commitment to the cause.

Against this overwhelmingly positive backdrop, it is of course appropriate for me to acknowledge the current COVID-19 pandemic. It is clear that the

impact of this unprecedented crisis will be felt deeply across multiple sectors, including construction, and the Hub is committed to working closely with industry, leading sector trade bodies and government to do all we can to provide stability during this challenging time. We continue to enable cross-sector dialogue, delivering a programme that reflects industry's longer-term needs whilst drawing on the progress we have made to date to accelerate those elements that can help to shape a recovery that sees us emerge stronger and more resilient to future challenges. Indeed, that same dynamism is now more evident and more important than ever.

Working across our four central themes of Value, Assurance, Digital and Manufacturing, the Hub's sole purpose is to 'Catalyse' the transformation of the sector. Our work is neither contained within the individual Hub centres nor within Hub as an entity. If we are to drive genuine change, we must focus on identifying the right things to do, the right time to do them, and the right people to do them with. As such, this year we will be shifting the balance of our programme, reinforcing our engagement with government and industry to ensure we are delivering the impact we have committed to demonstrate.

To support this approach, we now have established a central Impact Team to drive engagement with the sector and to shape the strategic priorities of the programme and the themes within it. Accordingly, I write to you as the new Impact Director for Value, and I am delighted to be joined by Trudi Sully as Impact Director for Manufacturing, David Philp, as interim Impact Director for Digital, and Ellie Jenkins, as Head of Engagement. We will announce the appointment of our Impact Director for Assurance in the coming weeks.

Over the coming months, we will each give a periodic account of the Hub's activity in each core theme. For the first of these Impact Blogs, I wanted to give a brief insight into the work underpinning our Value theme and my current take on where we're going next.

Back in the Autumn, the Hub announced that we would be partnering with the Construction Leadership Council (CLC) to progress their work on Procuring for Value. Led by Ann Bentley of Rider Levitt Bucknall, the Procuring for Value working group has made great progress over the last few years in building the case for value-based procurement over the predominant lowest-cost-wins practice. In fact, I would argue this case has now become a movement, and one I am

extremely proud to be a part of. In response to the vision of the industrial strategy and subsequent construction sector deal, the Hub is absolutely committed to driving better outcomes for society, for the environment and for the economy. The CLC's work provides an ideal taking off point for this.

Although the original title of 'Procuring for Value' suggests a focus on the procurement phase, the combined workstream will see the development of a new methodology - underpinned by Forum for the Future's 5-capitals model - to support the clear and consistent articulation and measurement of Value across the asset lifecycle. Development is already underway for a new web-based tool, based on this methodology, which helps clients to weight value categories, set performance criteria and compare scheme options from the outset and in a way that can be designed, procured, measured and optimised through life.

We acknowledge the plethora of work being undertaken in the space of performance measurement and benchmarking as well as existing schemes and tools which look at one or more elements of value. Therefore, this work is drawing in other related initiatives and schemes to kickstart a genuinely joined-up approach to data collection. For the tool to be a success, it must be underpinned by consistent and robust as-built data, driving improvement in design-stage predictions and providing clients with the evidence they need to make informed decisions. In time, we see the opportunity to drive better industry behaviours, with data shining a light on those in the supply chain that consistently deliver better value. As it stands, the disconnect between client expectations, design predictions, tender stage promises, and value delivered does not encourage such behaviours.

Of course, the drive for an industry focused on outcomes above cost asks fundamental questions of our

delivery models and commercial strategies. That is why we are quickly ramping up our activity in this space, working alongside the Association of Consultancy and Engineering (ACE) to explore the ecosystem within which projects and programmes are delivered. We share the ACE's hypothesis that the optimum delivery model and commercial strategy for any given project or programme must be driven by a clear definition of value (served by our work on PFV) and a detailed understanding of the context within which that value needs to be delivered (e.g., risk profile, client capability, market context).

Of course, there is little point in helping clients to ask for things differently if the supply chain is unable to respond in kind. This work will also provide the supply chain with the insight they need to transform themselves, ensuring they are ready to respond to new ways of working and new measures of success. Work already conducted by the ACE through their Future of Consultancy Campaign has made great progress in defining how the consultancy industry may need to transition to new ways of working which look differently at the value they bring. We will be building on this work, looking across the supply chain to understand where new business models may be required as well as identifying gaps in the broader ecosystem, from insurance products to contracts and procurement practices.

As the landscape in our sector continues to evolve at pace due to the COVID-19 crisis, and based on the work I have outlined above, it is clear that the success of our programme is contingent on our continued engagement with government and industry. As uncertain as the current situation might be, we will continue to be as proactive as possible, helping the construction industry to move forward, and to emerge from this crisis more resilient and more connected on the other side.

Through the value framework, we will support government policy on outcome-based decision making, whilst harnessing the appetite of the private sector to drive investment through value rather than capital cost. At the same time, our work on delivery models and commercial strategy will ensure we have the right ecosystem to support these ambitions, driving the right behaviours and ensuring better outcomes for all.





# NEW TOOLKIT SIGNALS SHIFT TOWARDS VALUE-BASED DECISION MODEL



- New 'Value Toolkit' will help to accelerate decision making, driving greater value and supporting 'Project Speed' ambitions
- Value Toolkit is key priority in the sector's Roadmap to Recovery
- Flagship initiative builds on groundwork laid by the Infrastructure and Projects Authority (IPA) and the Construction Leadership Council
- Toolkit launched as part of UKRI 'Future of Building Week'

UK construction could soon be on the verge of a fundamental shift towards value-based decision making, thanks to a flagship initiative unveiled today by the Construction Innovation Hub.

The Government-backed R&D programme is working with Government and leading industry bodies to develop a new 'Value Toolkit' intended to help policy makers and clients make faster, informed decisions which incentivise industry to respond with innovative, high value solutions.

The Toolkit will support better decision-making throughout the whole investment lifecycle from business case through to procurement and delivery and operation, improving overall sector performance consistent with key policy objectives such as driving Modern Methods of Construction (MMC), delivering social

impact and accelerating the path towards Net Zero.

Announced today as part of UK Research and Innovation's Future of Building Week, the new Toolkit contains a suite of tools in four linked modules which will:

- Support policy makers, clients and advisors in defining the unique value profile for a given project and create value indices through which informed decisions can be made;
- Help clients and their advisers to select a delivery model and commercial strategy, and industry to develop business models, that best meet the value drivers of the project;
- Build on the groundwork laid by Ann Bentley and the Construction Leadership Council Procuring for Value Working Group and the IPA's Transforming Infrastructure Performance to allow clients make procurement decisions based on the value drivers of the project and industry to shape their offers accordingly; and,
- Continuously forecast and measure value performance throughout delivery and operation, helping clients and industry to maximise value on each project and using performance data to help policy makers shape decisions on future

projects.

Construction Innovation Hub Programme Director Keith Waller said:

"With the CLC Roadmap to Recovery and the supportive measures recently announced by the Prime Minister and Chancellor, the starting gun on sector recovery has well and truly been fired. It is crucial however, that we don't lose sight of the bigger prize here - the opportunity to embed a lasting shift towards value-based decisions that drive better social, economic and environmental outcomes.

"By abandoning, once and for all, our sector's historic affinity with cheapness and embracing a new model where delivering value drives our decision-making, we can ensure that UK construction is actively supporting the path to Net Zero, boosting productivity, delivering safe, higher quality buildings, improve social impact, supporting regeneration, levelling up and much more."

"As well as making better decisions, our Toolkit will ensure we make them faster, ensuring industry can deliver on the Government's vital 'Project Speed' ambitions to stimulate our economy.

"For this to deliver real and lasting impact however, support and buy-

in from policy makers, clients and industry at large is crucial. We are very fortunate to have strong support from some of construction's leading voices like ACE, CE, CECA, CLC, as well as the Responsible Authorities we announced last week to take this crucial package of work forward."

Minister for Business and Industry, Nadhim Zahawi MP said:

"This brilliant new initiative reflects the Government's desire to ensure we embrace a construction procurement process that has clean, green innovation at its heart.

"It complements our commitment to boost the productivity of this vital industry as part of our economic recovery. I look forward to working with the Construction Innovation Hub and Construction Leadership Council to realise this ambition."



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**Keith Waller,  
Programme Director at Construction Innovation Hub**

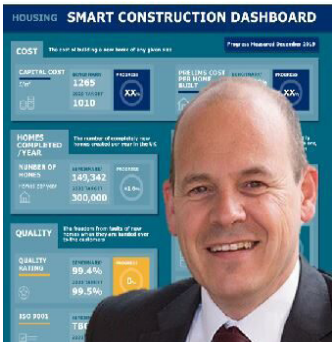


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**Nadhim Zahawi, MP  
Minister for Business and Industry**

# NEW CLC SMART CONSTRUCTION DASHBOARD PUBLISHED



The Construction Leadership Council Smart Construction Dashboard demonstrates housing sector performance using a set of agreed KPI's and Benchmarks. The dashboard contains maturity metrics for cost, digitisation, waste, energy, productivity (pre-manufactured value), carbon, health, safety and speed of build, and wellbeing. Since the first release of the dashboard in October 2018 the sector has evolved. The UK government's construction transformation funds has enabled housing projects to focus on future performance and innovation. Covid-19 has substantiated the requirement for an accelerated approach to deliver Smart construction. Digital technologies are gaining momentum in the sector, with leading contractors embracing and investing in advanced manufacturing and measurement. We are observing substantial progress with investment to transform the sector, such as the Urban Splash £90M deal with Sekisui, as well as TopHat receiving investment of £75M from Goldman Sachs.

In 2019 our CLC Innovation in Buildings workstream measures

working group merged with the demonstrator projects and business case working group enabling the set metrics to be specified on housing projects and to demonstrate best housing practices against the UK Government's Construction 2025 goals.

I'm pleased to announce the release of our second Housing Dashboard incorporating new data from 2019 to show the performance of the sector against the metrics. Greater guidance will be given for housing providers, developers and contractors to measure the performance on their own housing projects. We have introduced a new health and wellbeing measure,

and made enhancements to the dashboard which consist of some new benchmarks, created by gathering better data sources with improved methodologies. The 2020 target is set at a 20% improvement on the benchmark target.

Along with each metric, there is a progress box containing a circle with a number in the middle. The number in the middle of the circle represents the % change between the 2019 benchmark figure and the 2018 benchmark figure. The circles round the outside represent the % progress towards the 2020 target, with the white line representing the % progress made. See below.

It is encouraging to see new built housing completions were rising in 2019. Based on the data set, improvements have been made across the sector with a lower number of injuries compared to the previous dashboard. Productivity has also improved for the sector. We have recalibrated the capital cost metric and the embodied carbon with new data, added prelims and the new health and wellbeing measure. Waste on site has gone up and time on site has increased in the new build homes sector, this could be for a number of reasons, including reasons like sales rate and Brexit impacts. Quality has not changed, and we are working towards a revised method in the next dashboard release.

I'm also excited to announce a new case study will be shortly available.

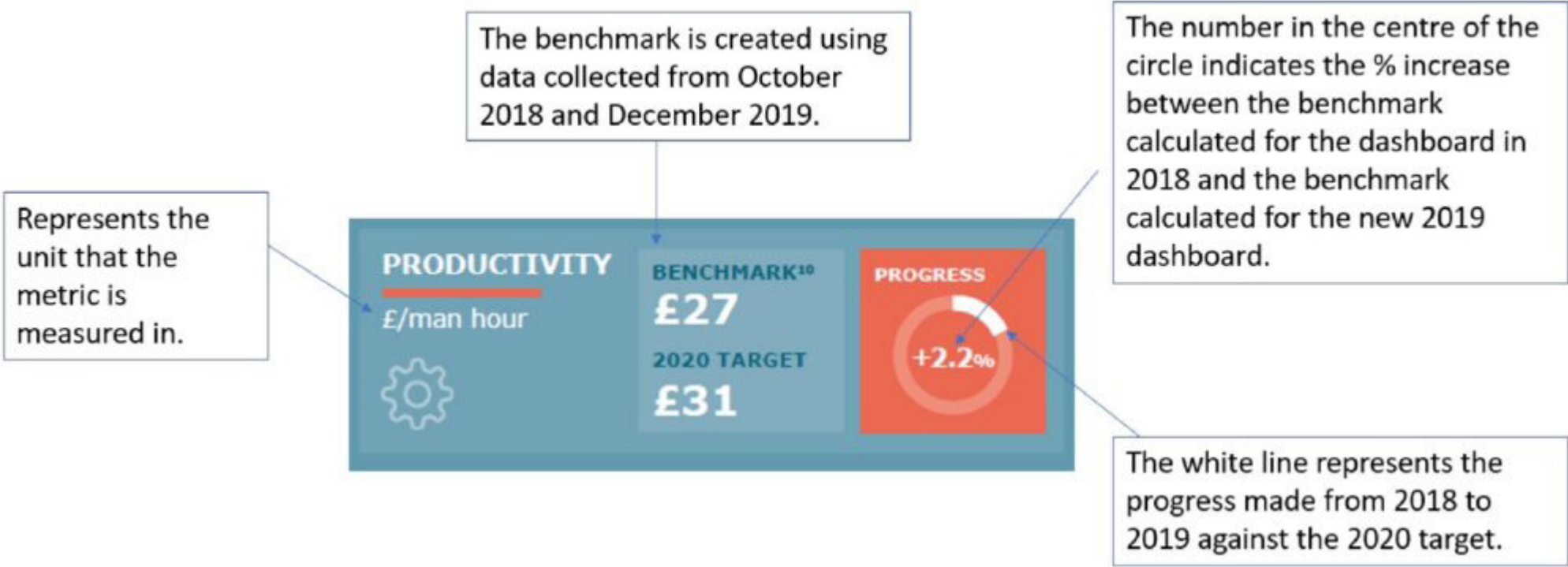
The housing sector is, all things being relative, at a "start point" when compared to other advanced industrialised sectors, and much more can be done to adopt innovation, deliver significant increases in productivity, satisfy end customers, and improve construction safety and wellbeing.

The CLC workgroup approach is to create demand and gain buy in for measuring project performance for the housing sector. We want to normalise performance measurement. We know the measures still need to be significantly improved, and we are working towards an improved dashboard later in 2020. Homes England, and innovative housing organisations, like Your Homes Newcastle are applying measures directly on projects, enabling

their supply chain to respond to the challenges. The CLC team are determined to work with everyone to make this right, and move the sector forward.

I would like to encourage all companies involved in housing supply and development to learn more about the CLC Housing metrics, adopt them where possible and demonstrate that the targets can met

**Simon Cross, BRE & Construction Leadership Council**





# BUILDOFFSITE OFFSITE RESPONSE TO COVID-19 IMPACT

## Buildoffsite Offsite Sector Response to COVID-19 Impact



buildoffsite

The Construction Leadership Council has provided the industry with a [Roadmap for Recovery](#) as we slowly emerge from the impacts of COVID-19. In response to this Buildoffsite has facilitated the creation of the '[Offsite Sector Response to COVID-19 Impact](#)' paper, in which we set out to identify how the use of offsite construction may be exploited to achieve the progress that the CLC has called for. It highlights what may be done and how stakeholders may benefit from increasing the use of offsite assembly methods in construction projects.

The paper considers the situation from a range of perspectives; starting with that of the ultimate client before considering project management, design, delivery and use of a facility. Throughout, there is a focus upon value and how offsite approaches can help maximise it.

It pulls together the learning from a wealth of experience across a wide range of construction projects and highlights how offsite (in line with the three timeframes set by the CLC) can help us recover by:

- Accelerating the way projects are delivered
- Ensuring that less waste and wasteful activities are incurred

- Enhancing safety, quality, sustainability
- Improving productivity and reducing costs (whilst coping with social distancing challenges)

The paper is structured around stakeholder's perspectives;

- Clients will be able to consider how to better define value, how they may facilitate delivery of this, and obtain benefits through the whole life of the asset.
- Project managers will be able to consider prompts that should help them mitigate the impacts of the pandemic and provide them with experience to help them improve project delivery in the future.
- Designers will benefit from some practical guidance on how to exploit offsite productivity effectively.
- Contractors and their suppliers will see how to exploit offsite production and ensure that the benefits are achieved when that content is brought to site.

# £400M MODULAR HOUSING FRAMEWORK LAUNCHED

**A £400m framework agreement for the construction of offsite-manufactured modular homes has been launched by procurement organisation Procure Plus.**

Contractors appointed to the framework will be required to design and manufacture the houses, as well as acting as main contractor for the completion of the works.

Customers of the four-year agreement will be able to select from the contractor's standard house types, with a range of enhancements and variations.

Procure Plus was originally focused in the North West but is now extending its offer with the aim of delivering a service across the UK.

Full tender details can be found [here](#) and companies need to register their interest by **2nd September 2020**.



# UKRI MOVES TO A NEW PHASE OF FUNDING IDEAS TO ADDRESS COVID-19



In response to the COVID-19 pandemic, UK Research and Innovation (UKRI) worked at considerable pace to publish an open call at the end of March 2020 for proposals for short-term projects to address and mitigate the health, social, economic, cultural and environmental impacts of the COVID-19 pandemic.

To date, in twelve weeks, UKRI has funded 125 projects worth around £40m. This is part of a wider investment in COVID-19 related projects. So far, as part of these calls, investments and by repurposing existing grants, UKRI has funded projects worth in excess of £185m.

Projects funded by the open call to date span UKRI's entire remit and range from the effects of COVID-19 on businesses and the economy, to drug repurposing for treatment; the detection of fragments of genetic material from the virus in waste water; to identifying and mitigating the impact of COVID-19 on inequalities experienced by people from BAME backgrounds working in health and social care.

The application process for the open call was significantly streamlined to allow UKRI to quickly identify projects needing urgent funding. Peer reviewers and panel members stepped up to ensure rapid turnaround of reviews often within days rather than months, and teams across UKRI have worked tirelessly to ensure applicants receive a response as quickly as possible.

As the pandemic progresses, the nature of the research questions that need to be addressed is evolving rapidly; while some projects still require urgent action, others can be addressed

with less urgency. UKRI is therefore moving to a new way of managing proposals to its COVID-19 open call.

Proposals continue to be accepted on a rolling open basis. Applicants will be asked to explain how their proposed research fits with and complements the wider landscape of ongoing research, as well as justifying a start date within three months. Funding panels will meet every four to six weeks allowing UKRI to continue to respond rapidly; for proposals identified as highly urgent, rapid review will continue.

[Full details on how to submit proposals.](#)

This programme is under regular review. UKRI will shortly implement changes to the application process. Please check the funding opportunity page regularly before submitting an application.

[See the overview of UKRI-funded COVID-19 research projects.](#)

# FUNDING COMPETITION: MANUFACTURING MADE SMARTER: DIGITAL SUPPLY CHAIN, FEASIBILITY STUDIES



**UK registered businesses can apply for funding towards feasibility studies into digital technologies to transform supply chains in UK manufacturing. This funding is from the Industrial Strategy Challenge Fund.**

Innovate UK, part of UK Research and Innovation, is to invest in 2 competitions to drive digital innovation in UK manufacturing supply chains. The funding is from the Industrial Strategy Challenge Fund (ISCF).

Your project must help UK manufacturing supply chains to develop digital technologies to become more efficient, productive, flexible, resilient. These must encourage the use of digital approaches to better integrate and optimise the performance of supply chains.

This competition comprises of 2 strands running at the same time. The strands are:

- feasibility studies (this strand)
- industrial research

Please review the scope to ensure you are applying to the most appropriate strand for your project.

In this competition all projects awarded funding must upload evidence for each expenditure with every claim made. These might include invoices, timesheets, receipts or spreadsheets for capital usage. This is part of Innovate UK's obligations under the Managing Public Money government handbook in relation to assurance, financial management and control.

**Competition opened:** Monday 6 July 2020

**Competition closes:** Wednesday 7 October 2020 11:00am

**Funding type:** Grant

**Project size:** Your project's total eligible costs must be between £250,000 and £500,000.

Find out more [here](#).



# MEET OUR LATEST MEMBER



**For more info please contact:  
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Having over 30 years’ experience each in the construction industry Paddy Leighton and Gerry Sheridan set up Greentherm Solutions Ltd to distribute and market the Icynene range of Spray foam Insulation products to the UK market. They identified a gap in the market for an insulation product that would provide high levels of insulation combined with air tightness in one application. Conventional insulations were not capable of doing this and had a detrimental effect on good construction practices and energy efficiency measures.

In 2001 Paddy & Gerry embarked on a research mission to find a suitable product and their investigations led them to Canada and the USA, where expandable foam applications had been popular for a several years. “We found there were at that time approximately 45 different manufactures of foam all making various claims about their product” says Gerry.

Since then Greentherm has developed a network of accredited contractors in the British Isles and Icynene has achieved BBA, ETA and KIWA approvals and certifications, together with a host of other approvals and recommendations. “We have seen countless examples over the years as to why we made the correct decision. Icynene has surpassed all other products on the market in terms of quality, performance, technical back-up and support in conjunction with innovation and research and development” says Leighton.

In the last 18 months Matthew Carder has been positioned into the role of Business development manager for the UK, having worked in the spray foam market place for a number of years. Now Matthew provides training , sales and marketing support and growth into yet untapped markets.

In these challenging times we now look forward to a more positive future in conjunction with Icynene and the benefits it can bring to the customer in terms of value for money and speed of installation.

**1. Why you joined?**

Networking, introductions into new projects in the buildoffsite and construction industry.

**2. What are you looking to achieve in the sector and how can the Buildoffsite network support in that?**

Growth of our business and being able to educate the sector about our product range.

**3. Who do you want to connect with?**

Modular builders, project Managers, specifiers, architects

**4. What can you offer to Buildoffsite’s network?**

Full product range of eco airtight insulation products. From a Global Brand with 34 years experience.

# WEBINAR RECORDINGS

**21 May** Designing for overbuild, creating sites & efficient building

**04 Jun** Commercial approaches to infrastructure overbuild

**18 Jun** Delivering an overbuild project with some innovation

**25 Jun** Can offsite be the route to carbon zero construction projects?

**02 Jul** How to approach risk if new to the rail sector

**16 Jul** Making overbuild economics work, panel discussion

**23 Jul** Catalyst for change – collaborating for recovery

# UPCOMING WEBINAR

**1 Sept** Designing out waste Adopting Offsite to become Carbon Neutral

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