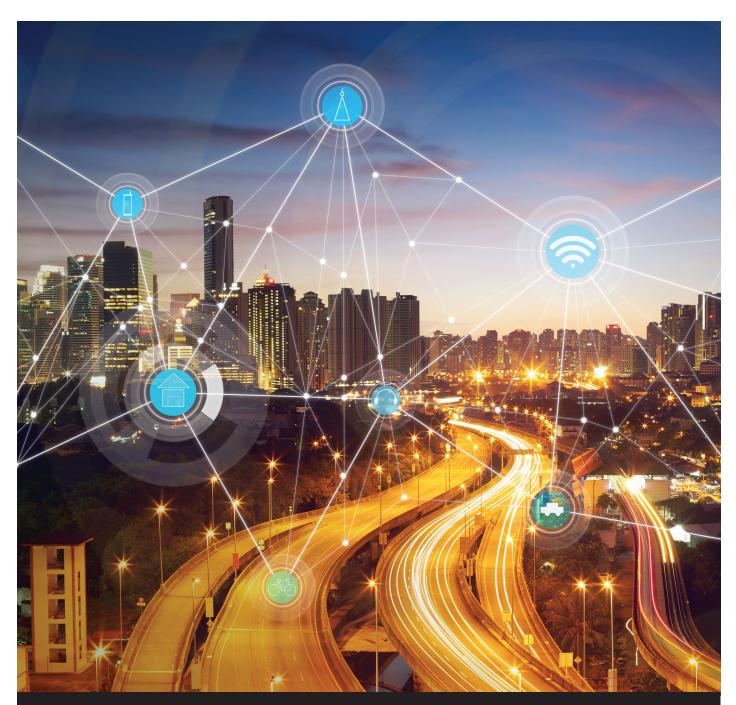
www.buildoffsite.com / Spring 17

buildoffsite



Farewell to Andy Dix. Andy took over as Chairman at the beginning of this year and had been quick to apply his energy and expertise to the role. Good-bye Andy, you will be greatly missed.

Buildoffsite Strategic Management Plan. Forward planning measures to ensure the continued success of Buildoffsite and its Members.

The innovator among the disruptors. McAvoy Group is setting the pace for 'disruptive' offsite category with continued commitment to innovation.

Housing White Paper.

The Government's long awaited Housing White Paper was finally published on 7th February, inside we give Buildoffsite's perspective.

McAvoy Group awarded place on the new NHS SBS Framework. McAvoy is now a principle contractor for major Healthcare and Education projects.

Premier Modular Queen Elizabeth

Hospital. Facilities Management team re-housed into a new office building located at the front of the hospital freeing up valuable ward space.





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"The quality of visitors has been fantastic... to showcase a good range of products and solutions, here is the perfect audience" - Kieran Fields, F P McCann.

"Amazing, been going non stop since 9 o'clock" - Christine Lamont, Premier Modular.

"This is our second time at the Offsite Show, it's a great Show and even better this year" - Jill Willoughby, Trimble Solutions.

\//elcome

For further information about Buildoffsite please contact: Roisin Sweeney

roisin.sweeney@buildoffsite.com

Buildoffsite Head Office Griffin Court, 15 Long Lane London EC1A 9PN, UK

T: +44 (0)20 7549 3306 F: +44 (0)20 7549 3349 E: info@buildoffsite.com

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We now need to look forward and carry on with the growth strategy which Andy had set out and to do so we have put in place a series of measures which will be led by a new Executive Group. We are focusing on our Members and membership services, growing our Hubs and events programmes to encourage knowledge sharing and industry insights.

In this Spring newsletter we examine how the construction industry as a whole will be performing this year and what this means for the offsite market. Plus, the Governments' new Housing White Paper, its support for non-traditional methods

We thank all of our Members for their continued support and if you would like to contribute to our Summer newsletter please contact Roisin Sweeney on 0207 549 3306 or email roisin.sweeney@buildoffsite.com

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buildoffsite

In our previous newsletter we welcomed new Chairman Andy Dix to Buildoffsite, and now it deeply saddens us to say our good-byes to this passionate and dedicated professional whom passed away in February.

of construction and how this benefits offsite housing delivery methods.

The Buildoffsite Housing Hub is looking at the impact of the Governments' announcements and how our Members can take full advantage of this.

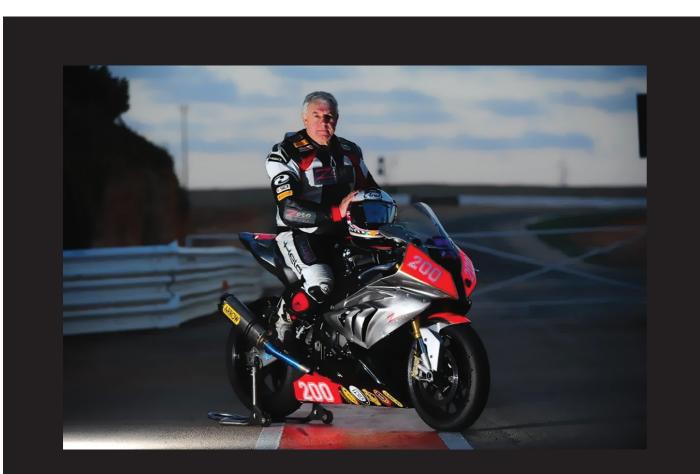
This editions' news and case studies look at education, health and housing with new methods of offsite and digital construction. All focused on efficiency saving outcomes on the overall projects

Last month we welcomed new member Baily Total Build, modular building specialists and we hope to include case studies from Baily in our coming newsletters later this year.

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Hello



A farewell to Andy Dix

As most of you will know Andy Dix died on 21st February. Our thoughts and best wishes go out to Julie and the rest of Andy's family at this impossibly difficult time.

Andy took over as Chairman of Buildoffsite at the beginning of this year and he had been quick to apply his boundless energy and expertise to the role.

Very much a people person Andy always found great delight in working with his team and members to share ideas and ambitions and to bring enthusiasm and passion to the tasks in hand.

Andy had some big ideas for Buildoffsite and the best tribute we can pay to Andy is to deliver his vision, develop the organisation and the role it can play in bringing about a better industry.

Andy – we will miss you

Buildoffsite continues as normal. Our interim plan.

Following the tragic passing of Andy Dix, Buildoffsite has moved quickly to put in place a management plan to ensure the organisation continues in good order. This article explains the measures that have been implemented to keep Buildoffsite and its work programme firmly on track.

Immediately after Andy's sudden death action was taken by the new Executive Group to take direct control of day to day operational matters, working closely with the Buildoffsite management team. We have been working to the broad principles set out in the business plan that Andy had recently put in place.

The Executive is already moving to appoint an interim lead for Buildoffsite. The Executive has a clear view of the tasks that need to be undertaken and the skills required. We hope to be in a position to make an appointment in the near future. Until then the Executive and Management groups will continue to ensure it is a case of "business as usual".

These are exciting and fast moving times for offsite construction. With so much happening it is essential that we maintain our work programme with no loss of momentum. With the support, energy and commitment of the Buildoffsite team that ambition has been and continues to be achieved. We have also benefitted from a substantial number of offers of support from the Membership.

Essentially the five point plan that has been put in place comprises:

- Most business meetings with Members, prospective Members and industry contacts are taking place as scheduled. Buildoffsite has access to a number of highly experienced industry figures who are working with the Executive to share the workload
- We have increased the resource available so that we can communicate with Members on a regular basis and we are well positioned to identify emerging business and other priorities and to take the appropriate action
- A full programme of Buildoffsite knowledge transfer and networking events is being maintained with new events being planned for the rest of the year. A schedule of upcoming events is listed in this Newsletter
- Additional resource is being applied to the operation of Buildoffsite Hubs to ensure that Hubs are being supported at a level needed to progress their work programmes and to deliver value and opportunity to Members
- Buildoffsite's highly regarded representational role is being sustained

Over recent weeks we have actively sought out members' views on effective ways of engaging with them, which in consultation with the membership we will implement.

The new Executive Group and Management Group comprises:



Roger Bayliss Senior Vice President Operational Efficiency, Skanska



Nirmal Kotecha Director of Capital Programme & Procurement, UK Power Networks



Cal Bailey Sustainability director, NG Bailey



Dirk Vennix CEO CIRIA



Ian Pannell Director, Buildoffsite

If you have any questions please contact Roisin Sweeney on 0207 549 3306 or email roisin.sweeney@buildoffsite.com

News



When will the industry change?

The industry faces two big exam questions for 2017.

How will the UK construction industry perform this year?

Which markets will be strong - which ones will disappoint? Where will the pressure points come from - and what will they be? Will issues like skills shortages move from just being plain difficult to become really serious impediments on the ability of the industry to take on projects? Don't think too hard about this - no one, including all the pundits and experts really knows.



Q1

What will the state of the market mean for the expanding role of offsite solutions and the slow but inexorable drive towards a smarter more productive industry?

Few people will be aware of this but we are fast approaching the hundredth anniversary of one of the first Government backed efforts to drive increased efficiency in the UK construction industry. That effort came about because the Government at the time was fixated on the impact of a poorly performing construction industry on the cost of built assets needed to sustain the UK's world dominance of the cotton industry. Within a few decades what we would now call globalisation, fierce international competition from more agile technology producers, has seen that industry fade away. If there is a learning point from this episode it is perhaps to note that the UK is never going to be immune from the influence of globalisation and an industry that does not invest in its

future and fails to address poor levels of productivity is always going to be at risk.

At a strategic level the need for the UK to be served by a modern, efficiently organised, technically astute and productive construction industry is fundamental to support just about all aspects of infrastructure required to support modern life. It is also a need that remains stubbornly unmet.

The jury is still out on the eventual impact of the Brexit decision but so far as the economy is concerned things are actually looking rather positive for the time being. Growth is at comfortable levels, employment is at record highs, general inflation (but not construction inflation) is under control, levels of long term investment from domestic and international sources is still flooding into the UK, and levels of migration are still hovering around at an all-time high. Riding on this tide of positive news it does seem that many if not most bits of the construction industry are doing very nicely thank you with margins substantially up and work load holding up rather well.

Clearly the value of the Pound has dropped significantly against many currencies although whether this almost overnight drop is as a result of some suddenly discovered weakness in the UK economy or is simply the result of self-interested speculation in the money markets will no doubt emerge over time. For the construction sector as for much of the wider economy the increased cost of imported material, product and components has opened up opportunities for increased manufacturing. This is certainly happening within construction as many manufacturers including overseas based companies look with fresh eyes at the opportunities to buy into the safe haven that is the UK at a substantially discounted price.



and something magical just happens?"

Other challenges include the increasingly chronic shortage of new housing in many parts of the UK. This has been a feature for much of the last decade with shortages masked by overcrowding, increased reliance on accommodation that is unfit for habitation but which seems to survive just about every fly on the wall expose and severe restrictions on the ability of people to exercise choice as to where they live or the type of accommodation they can move into.

Governments of all stripes have bemoaned the housing shortages, but to date little practical action has been taken. The politicians have of course blamed housebuilders for failing to build more but seem to find it singularly difficult to understand that housebuilders are not in the business of delivering housing policy. Housebuilders are in business to develop land and to sell homes for a profit. From a business perspective they do this brilliantly well. Put simply if Government really wants more homes then it needs to directly incentivise the supply side, to support practical steps to grow the supply chain or it needs to intervene directly as a client. Not much sign of this happening any time soon. Will the recent Housing White Paper make a difference – we'll see.

It is evident that the process of construction is woefully inefficient. Any industry that can get away with operating at productivity levels of around 50% or less is clearly in need of some intensive care. Can anyone think of another major industry that still operates in this way? Perversely those who work in the industry tend to work long hours and are really busy. Levels of waste - both in terms of material waste and waste of people resources - are excessive

Unless something changes the cost of construction will continue to rise. This inevitably means that we will build fewer not more homes, we will have less money to spend on our health buildings and on schools and transport. We will have less to spend on infrastructure of all sorts and clients will be able to spend less on buildings and will inevitably be able to create fewer jobs than would otherwise be the case. Government really needs to wake up to this challenge as ultimately it funds approximately half of all construction new build and therefore has most to gain. The opportunity to deliver huge efficiency gains is something that is crying out for serious action.

"For the construction sector as for much of the wider economy the increased cost of imported material, product and components has opened up opportunities for increased manufacturing"

"Unless something changes the cost of construction will continue to rise. This inevitably means that we will build fewer not more homes."

It really does not take a public enquiry to establish that the way the traditional construction industry has evolved lies at the heart of the problem. A design process that is disconnected from the practicalities of manufacturing and assembly, a hierarchical approach to supply chain management and contractual negotiation, excessive reliance on traditional (as cheap as possible) construction practices, a focus on "first price" rather than the more difficult, but much more relevant, concept of ''cost in use" and so on all combine to ensure that for the most part construction costs a lot more than it should, delivers poorer quality outputs and takes much longer to complete than it should.

Along with DFMA, and the intelligent use of digital modelling, the increased use of offsite construction methods is central to achieving a transformation in the performance of the UK construction industry. Supporting this transformation is why Buildoffsite exists. If we can get this right and embed the changes that are needed then it can only be good news for the UK economy and for our competitive position in the Global Village.

News

The innovator among the disruptors

DIGITAL DISRUPTION

The McAvoy Group is setting the pace for 'disruptive' offsite category with continued commitment to innovation.

The McAvoy Group has been a trailblazer in the offsite construction industry for four decades – no mean feat in the very sector that challenges the traditional construction industry.

Many offsite providers have yet to take full advantage of the rapidly evolving technologies available, which is slowing the pace needed to keep the offsite sector at the forefront of the digital revolution. Statistics in the recent Global Construction Survey revealed that as few as eight percent of companies questioned viewed themselves as 'cutting edge visionaries' in their adoption of the latest technology.

McAvoy, however, is one of that small percentage that is embracing innovation to enhance its operations. It is already well ahead of the bulk of companies who admit to being 'industry followers', being the first company of its kind to achieve BRE BIM (Building Information Modelling) Level 2 accreditation – well ahead of the Government's deadline last April.

It was also the first offsite modular company to become involved in the Offsite Management School and to meet challenges of the Government's 2025 Industrial Strategy which proposes cuts in whole-life construction costs, and promotes low-carbon and green construction. A culture of innovation has long driven operations at The McAvoy Group and senior management are committed to embedding modernisation within the business, evidenced by an internal push to continue using the best digital technology available to enhance the service it offers.

McAvoy's pursuit for the next touchstone accreditation – BIM Level 3 – has involved its increasing use of 3D virtual reality technology, not just to place its customers directly into the heart of any project, but to provide them with an authentic real-time experience of what the yet-to-be-built site will feel like.

David Clark, Innovation Manager at The McAvoy Group, said:

"Our software means that literally at the click of a button we can put people into our buildings and give them a huge sense of its scope.

"While not fully realistic yet, the simple graphics allow clients to experience what the space is going to look and feel like, helping them make decisions. We're now at the stage of developing something that makes the experience even more true to life."

The McAvoy Group's design team has been tasked with using the latest advancements in technology to enhance the customer experience further, as well as utilising clever ways of working to add weight to internal training and learning.



"In the longer term we can take it a step further and see if we can use it for training purposes, by placing our factory staff into real life situations – inside the virtual model – by creating clever 3D training programmes of procedures they would encounter on the factory floor," adds Mr Clark.

To these ends McAvoy has also engaged two students from the Queen's University of Belfast's School of Natural and Built Environment as part of a Knowledge Transfer Partnership (KTP). Tasked with reviewing software systems and BIM authoring tools, the students are investigating new frames for McAvoy's range of modular buildings and structural engineering.

McAvoy has a long history of utilising technology as soon as it became available. It was as far back as 2007 that McAvoy first introduced ArchiCAD as the primary CAD Software for the architectural design of its buildings.

David Clark concludes:

"While the use and acceptance of digital technology is currently more evolution than revolution, the fact that we're embracing it, talking about it and putting it to the test in more ways than ever before is a good thing for the sector, clients and our people. We're happy to continue to be among the Disruptors' most disruptive"

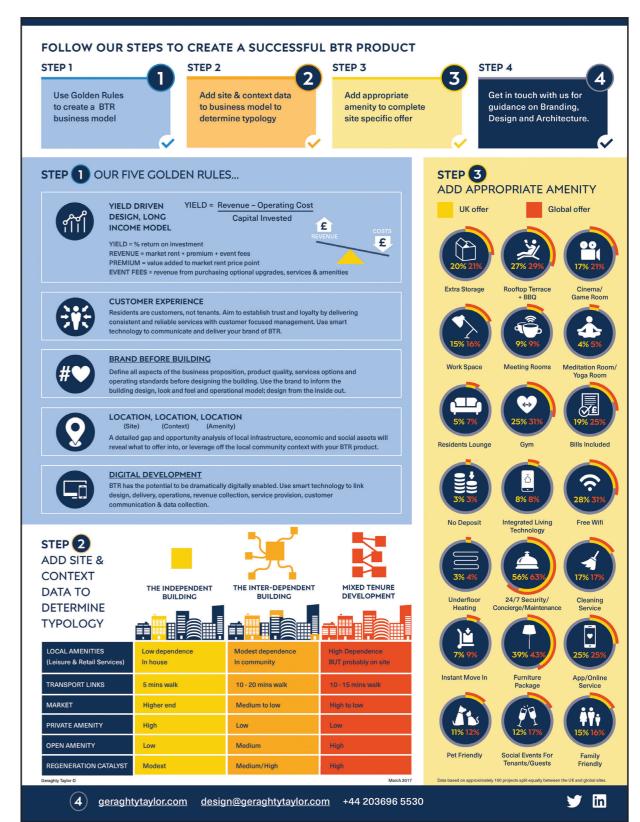
McAvoy has more than 40 years' experience as a market leader and principal contractor in the provision of permanent modular and off-site solutions for a number of sectors.

With two state of the art manufacturing facilities, it has the capacity to deliver large fast-track projects throughout the British Isles. It has successfully delivered more than three million square metres (32 million square feet) of modular accommodation for the health, education, commercial infrastructure and hospitality sectors.

Geraghty Taylor's Build To Rent 'How To' guide

Build To Rent is an exciting new sector and there is still great debate about what it is and what it could be. We see a clear process with key milestones in developing a BTR business, brand and delivery model and this motivated us to create our 5 Golden Rules for a BTR product. Each rule talks to a different but connected part of the BTR business, the more detail we can provide in each of these parts the better the final product and service.

It is not enough to design a BTR business in isolation, your site and its context will provide important additional parameters that will influence your offer to the market. The most important thing to remember is that it is about the customer experience, deciding what



amenities or services to offer your customer will be a function of the business model and the context in which you are operating.

We hope that the 5 Golden Rules will allow the market to continue the debate around BTR and for developers and operators to refine their offer and bring new products and innovation to increase the segmentation of the market.

News

The McAvoy Group awarded place on the new NHS SBS Framework



Leading offsite construction specialist, The McAvoy Group, has gained a place on the NHS Shared Business Services (SBS) Framework.

The Framework, aimed to all public sector, is covering work as principal contractor for all Healthcare and Education projects over a period of up to four years.

Guaranteed to deliver average project savings of 5%, it complements the speed of offsite construction, by providing an equally quick, easy and compliant procurement route.

McAvoy has secured positions on seven lots across the framework covering:

- · Bespoke Buildings for purchase and hire
- Healthcare buildings for purchase (all value bands)

• Education Buildings for purchase (all value bands) and hire.

McAvoy's NHS SBS Framework Manager, Nathalie Meunier says McAvoy's expertise in Building Information Modelling (BIM) is a critical element of its strong Health credentials:

"3D visualisation and room prototyping helps to provide better designed facilities allowing early clash detection, improved patient satisfaction and staff efficiency".

"We bring many years' experience in offsite construction, and have a healthcare team that includes experts in HTM and HBN-compliant buildings, M&E design and crucially, in providing bespoke finance solutions both on and off-balance sheet, that are matched to meet the predicted income stream from new installations."

"Over the past 40 years we've delivered more than 3 million m2 in modular structures the length and breadth of Britain and Ireland within the education and health sectors, so these are projects and sectors to which we are especially well suited."

For more information, please contact Senior Business Development Manager Nathalie Meunier by email: nm@mcavoygroup.com or call 028 8774 0372

Housing White Paper



The Government's long awaited Housing White Paper was finally published on 7th February.

In fairness to DCLG, to Sajid Javid and to the Prime Minister it is notoriously difficult and notoriously expensive for Government (i.e. taxpayers) to move either quickly or decisively to do much to boost housing supply.

Almost everyone, or more specifically every voter, will have a view on the subject and almost all will have some element of self -interest. There will be organised and effective lobby groups both for and against just about every action connected with housing. The term Nimby arose out of housing issues.

Housing supply is also something that in terms of capital investment is hugely expensive and in terms of social or subsidised housing is hugely expensive in revenue terms.

The nature of the challenge is made clear in the title of the White Paper "Fixing our broken housing market".

Given the decades that housing has been in difficulty this is perhaps one of the most depressing titles ever to feature on an HMSO publication.

From a construction perspective the key bits of the White Paper are those that refer to:

- Forcing developers to start building within 2 years of securing planning permission
- Setting up a fund to help small builders to deliver more homes
- Incentives for build to rent
- Provision for Local Authorities to take an increased role to deliver homes
- Measures to improve the operation of the planning process
- The need to accept higher density developments
- · Moving away from traditional building methods

From a Buildoffsite perspective..

The reference to Government support for non-traditional methods of construction is of course most welcome. That this is precisely how almost all other construction markets have been moving for decades now implies a need for house building to play catch up. OK it's a bit late in coming but welcome nonetheless

This transformation in the mechanism for housing delivery is already well underway for student accommodation and to some

Request for information from University of Huddersfield

Buildoffsite has been contacted by Dr. Algan Tezel from University of Huddersfield, a research fellow in the Built Environment. His Department is working with Cardiff University for Highways England on the opportunities of offsite and modular

construction in the highways supply chain. They would like to know what it is out there at the moment and what is possible with some support in the near future for off-site/ modular construction in civil works and in the highways supply chain.

extent in the BTR market and is being looked at seriously by housebuilders who have been suffering from shortages in traditional craft skills and cost increases in traditional materials. However, if Government really wants to play a part in enabling transformation to take place it needs both to understand the practical needs of a nascent new offsite supply side and needs to back this up with practical support.

It is great that Government is advocating a substantial role for Local Authorities and others but if that translates into only an increased demand for traditional skills and traditional materials then we will see substantial cost increases and a distinct possibility of a slowdown in the provision of new homes rather than an increase.

If suppliers of offsite housing systems are to seriously crank up their production then this will be possible only if there is certainty of demand - and demand at scale. Inevitably there will also need to be some increased element of understanding that requirements for non-standard solutions come at a cost.

Government needs to understand these practical considerations if the benefits of an industrialised approach to housing - the only sure fire way of delivering the quality and volume of homes needed - is to be realised at scale.

Buildoffsite is constantly making the case but we're just not sure that Government is listening.

You are invited to contact Dr Tezel regarding your company's capabilities in this area by email: A.Tezel@hud.ac.uk

Hub Updates



If you would like to be involved with any of the Hubs or would like to join the mailing lists, please contact Julie Fraser, the Hub Coordinator, at julie.fraser@buildoffsite.com



Rail Hub

The Rail Hub Client Group met on Friday 10th March to share sector news and projects, and review activities proposed and progress for the Hub's 2017 programme. Scope for specifications and sharing IP, life expectancy of components, and community informed design were some of the issues and ideas discussed. The second DfMA Bridges and Viaducts Workshop will be taking place on 30th June and we are in discussions about a possible Swiss Rail event for the late summer. Planning for a workshop on Design life, Adaptability and Funding is in progress with the aim of creating a guide. The Rail Client Group will be meeting throughout the year to discuss developments and plan forthcoming projects and events. The intent is to hold 2 or 3 project visits during the year along with the workshops.

On 16th March, Arup, a member of Buildoffsite, launched their rapid assembly, modular, glass-reinforced polymer footbridge. The first bridge has been installed in Oxford, in collaboration with their licensee Mabey who will market the product under the Pedesta brand.



Water Hub

The Hub's new Lead, Jon Rains of Mott MacDonald, has hit the ground running and is bringing new and exciting ideas and energy to the Hub. The current focus in on ensuring we have a strong and engaged membership, developing and supporting standardisation, and ensuring the benefits are visible.

We have a digital themed event planned for 22nd May in London, which will be led by Mark Enzer and Jaimie Johnson and will include sector-focussed sessions on SMART infrastructure, skills and communications, showcasing emerging technology and a round table discussion. A prestigious event is being scheduled for July to discuss the Infrastructure Client Group's Project 13 with speakers including Simon Murray, Nirmal Kotecha and Dale Evans. The Leads group and Client Product Group will be meeting throughout the year with the next Client Product Group meeting on 29th March and Leads Group meeting in May.



Housing Hub

We held a Housing Hub planning meeting in January to look at developments in the housing sector, the impact of government announcements and to plan future events for the Hub. Our first event of the year was a visit to Enevate's 'Peacock Rise' housing development at Chatham, Kent, on 22nd March to watch the live installation of housing modules. As part of the day the Hub held a meeting in the morning to discuss recent developments and updates in the sector, including the Government's recent white paper, "Fixing our broken housing market". Hosted by Enevate Advanced Building Systems, part of the ENEGroup, guest speakers included Harry Swales, who leads the Homes and Communities Agency's investment team, and spoke about how the HCA's Home Building Fund can help address the UK's housing shortage. Maja Jørgensen, Area Manager (North West London) with the Housing and Land department of the GLA, spoke about their Innovation Fund, which provides funding for innovative ways of delivering affordable housing in London. Paul McIntyre, Architectural Manager at EneGroup, presented on the Chatham development and their facilities in Scotland, their steel frame structure, how the pods were made and shipped to Kent, and an overview of other offsite projects. Other attendees included developers and council representatives. The Hub meeting was followed by a BOPAS Property Assurance briefing and the opportunity to attend the Kent Developers Group meeting later in the day. All attendees had the opportunity to visit the Peacock Rise development where

they could see pods being craned into place, and explore houses in various stages of completion. Feedback on the day was very positive with attendees finding the opportunity to speak with others and visit the site productive and informative.

The Hub are in discussions with the GLA regarding a networking event planned for the early summer. Watch this space.



The Education Hub will be holding their Hub meeting originally planned for 5th April later in the same month however McAvoy will still be hosting the tour of their Lynch Hill School on the 5th. The purpose of the meeting will be to plan for the year ahead and focus on engaging with groups that own academies, and focussing on understanding the procurement process and how that might be influenced to provide more opportunities for offsite construction going forward.

"All attendees had the opportunity to visit the Peacock Rise development where they could see pods being craned into place, and explore houses in various stages of completion."



Pharma Hub

The Pharma Hub held their first meeting, hosted by GlaxoSmithKline, on 13th March. Led by John Dyson, GSK, and John Hunt, Enterprise Ireland, guest clients AstraZeneca, Allergan and Takeda were given the opportunity to hear a presentation on GSK's 'Factory in a Box' project, which was developed in collaboration with Bryden Wood. The morning also included a tour of a 'Factory' currently under construction at GSK's Stevenage site. The tour was followed by discussions on shared ambitions and interests, the benefits of collaboration, and the possibilities and future direction of the Hub. The aim for this first meeting was to engage sector clients and create a dialogue that will take the Hub forward as a collaborative and active entity.

Case Study

Eurobond Sheffield UTC Olympic Legacy Park concept



Sector: Education

Client: Don Valley UTC Academy Trust				
Architects: Bond Bryan Partnership				
Main contractor: BAM Construction				
Sub contractor: Roofdec				

Need to keep your building project on time, in budget and help choosing the right composite panels? email: sales@eurobond.co.uk or call +44 (0)2920 77 66 77

Challenge

The client wanted their new training centre to have an impressive design that would integrate seamlessly with the Olympic Legacy Park concept. With strict funding limitations and a tight programme for delivery this proved a challenge.

One potential solution was a built-up system, although this would more than double the cost of installation. The budget and timescale wouldn't accommodate this, and it was decided that a single installation approach would provide a more cost effective alternative.

Objectives

The building design would need to involve the use of products that would provide a quality architectural finish while also providing excellent acoustic properties and thermal performance. The design needed to emulate the appearance of a rainscreen, with discrete vertically laid joints.



Background

The Sheffield University Technical College is located on the region's visionary Olympic Legacy Park which used to house the Don Valley Stadium complex.

Building on the success of the existing city centre campus the second UTC opened in September 2016, specialising in human science computing education for 600 students aged 14 - 19.

With the focus on the layout and efficiency of the design, the new college would provide a unique experience for students to study adjacent to elite athletes and professional sports people.

Europanel

Results

Installation

The single point installation By specifying the reduced the time taken to Europanel F5 Extra complete the project and V Groove feature, a kept material costs within rainscreen design was budget, as well as making achieved providing a clean the process easier for building exterior through the contractor. a classic secret fix joint.

Value

A range of product options were assessed, with Eurobond's composite panels being selected because of their track record on fire performance, span capability and aesthetics. The products chosen for use on the new university technical college were Europanel F5 Extra and Rainspan, because they would ensure a high-quality finish and significantly reduce the building programme.

By using Eurobond composite panels, the structure could be designed around the spanning capabilities of the product, meaning that additional steel work could be kept to a minimum – and this played a key role in reducing costs and speeding up the project.

> To add value to the project, Eurobond provided span calculations, technical support utilising BIM details - ideal for future reference in the event of further development requirements.

The composite panels needed to be installed to a high accuracy to replicate and support a rainscreen finish achieved by professional installation by the sub-contractor and supported by Eurobond's technical team that provided technical assistance throughout the project.

The final specification involved a single installation of Europanel manufactured from Colorcoat Prisma® by Tata Steel in Helios and Slate Grey (F5 Extra 200mm V Groove) and Rainspan (a composite panel providing structural support for rainscreen systems) to provide a combination of an impressive finish, completing the project in time and on budget.

Peter Severn, Project Technical at Bond Bryan, was clear about the challenge

"We knew we needed to install a vertical-look panel system that would perform well and that wouldn't need to be decorated later. Our aim was to give the building a striking look while keeping within the budget."

And, when explaining why Eurobond products were right for this build, Peter said:

"By using Eurobond's products we achieved weather tightness very early on in the building programme which meant more efficiency in the design, and minimised any additional steel work."

Case Study

Premier Manor House Mews





Project: Manor House Mews, North Ferriby Sector: Housing Value: £410,000 Site Programme: 8 weeks

"From start to finish it has been an absolute pleasure dealing with Premier Modular at every level... director, project manager, designer, factory foreman, and site foreman.

To a man or woman- they have been extremely professional, responsive, flexible, able and personable. Throughout a complex project delivered in against a tight timetable, they have not put a foot wrong."

Stephen St. Quinton Director & Principal



Premier Modular was asked to design and build a new well specified apartment scheme in North Ferriby, near Hull, due to the high quality of Premier Modular's product and its ability to produce long lasting permanent buildings.

Premier Modular was asked to design and build a new well specified apartment scheme in North Ferriby, near Hull, due to the high quality of Premier Modular's product and its ability to produce long lasting permanent buildings.

This development comprises a 2-storey building providing 4 luxury 2 bedroom apartments in the gated grounds of an existing grade two listed Manor House surrounded by mature landscaped gardens.

Premier's internal design team worked closely with the clients, Ferriby Properties Limited, to ensure that the design of the new build scheme sympathetically fits the heritage of the site. To complement the Georgian Manor House exterior, features such as bespoke floor level arched windows and a rustic brick finish were incorporated into the design to deliver a carriage-house style, demonstrating the real design flexibility that exists within Premier's systems.

The building interior design includes a bespoke communal feature oak and glass staircase, whilst the individual apartments have been fitted out with luxury bathroom suites and high specification open plan designer kitchens.

The development includes environmental features such as an attenuation tank (installed by main contractors Cawdron and Lawless Ltd), energy efficient windows and low energy light fittings.

The scheme has been independently insurance backed warranted by Checkmate for mortgage purposes. Constructing the building offsite in Premier's factory ensures that the quality of build is to the highest level, thereby providing surety to an insurer and mortgage company.

Premier Queen Elizabeth Hospital



Project: Queen Elizabeth Hospital, Birmingham Sector: Healthcare Value: £410.000 Site Programme: 1.2 million

*60 Years

Queen Elizabeth Hospital required additional patient space therefore the Facilities Management team were to relocate into a new office building located at the front of the hospital freeing up ward space. Due to the prime location of the new building on the main entrance road, the building required a high quality finish and offsite construction was considered the best solution to minimise disruption on the 24hr access/egress route.

Premier Modular Limited was chosen to construct the building due to their experience working in live Healthcare environments and their ability to offer a high quality finish internally and externally.

The building is single storey and comprises 12 modules providing open plan and individual offices, a reception, meetings room, boardroom, kitchenettes and toilet facilities. External finishes were a combination of Trespa and Eternit cladding panels with large curtain wall glazing incorporating solar shade fins a key feature of the building.

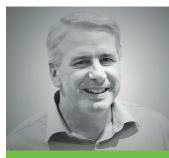
For more information, email: sales@premiermodular.co.uk or call: 0800 3160888 or visit: www.premiermodular.co.uk You can also find Premier on Twitter: @premier_modular, or LinkedIn: LinkedIn.com/company/premier-modular

*buildoff*site



Premier Modular carried out a full turnkey project including construction of new ramps and steps with galvanised handrails, hard landscaping to the perimeter of the new building and soft landscaping including new trees and planting.

New Members



For more information. please contact: **Daniel Gilmore** CEO T: 01403 261844 E: : sales@bailey-uk.com

Visit: www.bailey-uk.com

Baily Total Build

Specialists in modular building, Bailey Total Build offers clients the very latest in innovative construction techniques. The future of construction lies with companies willing to embrace new technology and collaborative ways of working. Our modular construction offering has a wealth of benefits for the architect, contractor and end user, from increasing project efficiency, to reducing costs and improving quality - resulting in a more sustainable future. Modular units are constructed in a highly controlled environment, they leave the factory 90 per cent complete, from flooring, fixtures and electrics, to façade, weather-proofing and connection pieces.

As experts in a range of BIM and virtual design and construction processes, we provide a streamlined, high quality and extremely efficient way to construct buildings. Coupled with our commitment to quality and unparalleled project management, we believe our modular offering is what the construction industry needs.



Events

Upcoming Buildoffsite Member Events

For full list of Buildoffsite events visit www.buildoffsite.com/news-events/events/

April

5th April McAvoy Lynch school tour

20th April

Education Hub meeting (TBC)

25th April Direction Group Dinner, Leeds

26th April Spring Member to Member, Trimble, Leeds

June

BOPAS Briefing & Meetin

Rail Hub DfMA Bridges & Viaducts Workshop Part 2

Water Hub Client Group Meeting

27th June **Direction Group Dinner**

28th June Direction Group Meeting, Modularize, Liverpool

May

17th May Water Hub Client Group

22th May Water Hub Digital Event

25th May

Irish Member event, Irish Embassy

"The future of construction lies with companies willing to embrace new technology and collaborative ways of working. Our modular construction offering has a wealth of benefits for the architect, contractor and end user'

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July

6th July Rail Hub Client Group Meeting

Water Hub Project 13 'Prestigious' meeting

Please contact anna.whiting@buildoffsite.com for more information

BE INSPIRED.

THE DEFINITIVE VIDEO CHANNEL FOR CONSTRUCTION