

## NEWSLETTER – NOVEMBER 2014

*Promoting construction offsite*



*Richard Ogden  
Chairman*

I am pleased to say that over the last few months I am picking up many more good news stories about improving conditions in the construction market. What this time last year amounted to an increase in enquiries does now seem to have transformed into significant increases in orders. This is great news, but much better trading conditions also bring challenges, including in particular the practicalities of gearing up for increased manufacturing capacity and increased requirements for project delivery capability.

This increase in industry activity is being matched by a steep increase in activity within Buildoffsite. Although we are a small organisation it never ceases to amaze me just how much work we get through. In addition to what might be termed 'business as usual' activities, we need to face up to a seemingly inexhaustible stream of new activities. Some of this represents things that need to be done as an immediate priority, but some represent something of a longer term investment to undertake tasks and bridge building activities that will deliver benefits some way down the track. We need to undertake both and increasingly the former leads inexorably to the latter. Let me share with you a snapshot of some of the things that are currently underway.

At the end of October we delivered one of our regular Direction Group meetings hosted at Ormandy's Bradford Offices, which based on the feedback I have seen was both well attended and well received by Members. My thanks to Keith Blanchard for chairing the session, and for the support provided by Nick Whitehouse and Ian Pannell. Let's just remember that these meetings belong to the Membership and decisions about how

### *External events in November*

#### **Premier Interlink launches new offsite affordable house solution**

Open Days: 18 – 20 November 2014, Hull  
See page 13 for more information.

#### **An offsite conference and site visit to the Athletes' Village, Glasgow**

20 November 2014, Glasgow

A collaboration between Buildoffsite and Edinburgh Napier University taking place at The Lighthouse, Glasgow.

See page 14 for more information.

#### **Homes 2014**

26-27 November 2014, London

An exhibition and conference programme.

A collaboration between Buildoffsite and Ocean Media Group taking place at Olympia, London.

See page 14 for more information.

we run them, where we run them and the business items that the meetings address are matters for the Membership to determine. Direction Group meetings along with the networking dinners the evening before take a lot of organising, but they are clearly worthwhile in supporting knowledge sharing, networking and helping with those all important business to business connections. The Direction Group meetings also serve a number of specific purposes, including providing the platform to introduce new Members and their business, and for everyone to get a better understanding of what the new Members are looking for from their Membership. The meetings also provide a regular opportunity to brief the Membership on progress on current work programmes which will influence the shape of the market for offsite solutions. Finally, the meetings provide an opportunity to give feedback on those additional matters that are relevant to the development of the Buildoffsite agenda.

We are always looking out for more Members to host Discovering Offsite events and I would like to take this opportunity to invite those who are interested in hosting to get in touch with us. Later in this Newsletter we have included some feedback from

Paul Cooper, in which he sets out the value for Ormandy from their hosted Direction Group meeting.

This month is also very busy for us. On 10 November we hosted a meeting of the Buildoffsite Water Hub. The water industry is massive and a very important client sector for the construction industry, and therefore, of course, a priority market for the advocacy of offsite solutions. Some of the water businesses are already making considerable use of offsite solutions as a practical and value-adding alternative to traditional design and construction, plus adopting DFMA techniques, standardisation, lean and, of course, BIM. The challenge for Buildoffsite and in particular for the Buildoffsite Water Hub, is to spread the business and project benefits of the new ways of working. The scope for making savings in both capital and revenue cost whilst at the same time improving quality, productivity and sustainability is substantial and a significant priority area. In part, the challenge we face is how best to persuade senior managers within the water businesses of the opportunities and benefits to be gained through collaboration with others in an industry where notwithstanding the natural monopolies that Government has allowed, there is little in the way of intra-industry collaboration on innovative construction methods. The work to develop the Buildoffsite Water Hub is the mechanism we are advocating as the forum through which much more effective collaboration can take place. However, to make this work will require additional water businesses to be receptive to the benefits of becoming Members of Buildoffsite.

Buildoffsite is a small organisation and there are clearly limits to the amount of work that we can take on, and therefore it is essential that we are open minded to opportunities to adopt intelligent ways of working that both protect the Buildoffsite brand and everything that goes with this, but which also enable us to achieve a much wider outreach and engagement than would otherwise be possible. For practical reasons, we need to work with locally based partner organisations who are well connected with local construction industry interest groups and who for sound business reasons share our ambitions for the future of the UK construction industry, and are keen to act as advocates for a substantially increased role for offsite solutions. Informally, we have already started to move in this

direction and it is heartening that an increasing number of excellent organisations want to work with us. On 20 November we are collaborating with Edinburgh Napier University to deliver an event at the Lighthouse in Glasgow on the Future of Construction in Scotland and the role of offsite. An audience of 100 plus will attend. I will be speaking alongside Gary Myott of ENE Group and Alex Goodfellow of Stewart Milne. This event will include a hosted visit to the Athletes' Village for the Commonwealth Games. This development of 700 homes is one of the largest offsite developments to date in the UK.

We are delighted to have been able to develop this collaboration with Edinburgh Napier University, and to take this opportunity to make new private and public sector contacts, including contacts from Scottish Enterprise and the recently established Scottish Construction Innovation Centre. We will, of course, be looking out for additional opportunities to work with Edinburgh Napier University to progress opportunities to spread the Buildoffsite message, and to seek additional Members and contributors.

On 26 and 27 November we will be at Olympia to partner the Ocean Media Group (OMG) to deliver their Homes 2014 event. This will be the first time that we have worked with OMG and indeed the first time that the Homes event has included offsite construction as a major conference theme. It is significant that OMG came to Buildoffsite to implement their vision for this event. Our particular contribution has been to support the delivery of a programme of 11 seminars that will take place in the branded Buildoffsite Seminar Theatre and which will address critical aspects of offsite construction. A number of Buildoffsite Members will be speaking at and chairing these sessions. This is a great opportunity for us to connect with key players, particularly from the social housing sector, and with funders, suppliers and politicians. Collectively, we will be able to facilitate some serious discussion about the role and capacity of offsite to make a much more substantial contribution to the delivery of new high quality homes, to challenge prejudices and also to understand the ways in which some elements of the offsite supply side need to do better.

Buildoffsite will have a stand located immediately next to the Buildoffsite Seminar Theatre and we hope to meet as many Members as possible during the

two days of Homes 2014.

Developing the skills that the industry needs to obtain maximum value from the use of offsite solutions – and indeed the skills needed at all levels to transform the productivity and performance of the UK construction industry – is clearly something that is of massive significance. Developing and implementing these skills is not going to happen overnight, but it is clearly important that this agenda should not be left just to grow organically in response to movements in the market. The industry, construction clients and society at large need and deserve better than that. A national intervention is needed. I am delighted that the UK Commission for Employment and Skills (UKCES) has been able to provide collaborative funding to support five research projects that are looking at innovative ways to tackle current skills shortages. A short summary of these projects is contained in this newsletter. These initial projects will all complete by the end of March 2015.

Buildoffsite will continue its dialogue with UKCES to identify additional opportunities to address the emerging skills needs of the expanding offsite sector. It is absolutely fantastic that a significant public investment – the first ever such investment – has been made in the offsite skills agenda. We hope that the established skills organisations who so far have taken little interest in the transition to offsite solutions have taken careful note of this direction of travel

Finally, I just want to mention the work we are undertaking with Buildoffsite Member Marwood Events to develop the Offsite Construction Show <http://www.off-siteshow.co.uk> that will take place in October 2015. This event will embrace all sectors of the construction industry. This is the first time that Buildoffsite has had the opportunity to partner with an experienced events delivery business to shape from scratch the sort of event that will deliver real value to the offsite supply side and to construction clients. We are looking to develop an offering that delivers high value exhibition opportunities, alongside carefully crafted seminars, master-classes and mentoring sessions. This will be a unique event for an increasingly confident industry. In collaboration with Marwood, we will ensure that OSCS 2015 does credit to Buildoffsite, and delivers substantial business and knowledge transfer

opportunities for those who participate.

So as you will see, we are very busy, but we are making worthwhile progress. I guess that we would not want it any other way.

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**Ormandy host the Buildoffsite Direction Group**

The Ormandy Group's Sales Director Phil Cooper reports on hosting the recent Buildoffsite Direction Group meeting.



*Phil Cooper*

We were delighted to welcome the Buildoffsite Direction Group meeting in October. It was great to see so many people at the event with over 45 Members of Buildoffsite in attendance. Hosting the event gave Ormandy the opportunity to present to a group of industry representatives who would not normally be involved in the manufacture of M&E equipment. The tours were well received and the feedback from the group was that they were very informative.



*A recent project completed and ready to leave the Ormandy works*

The Forum represented a wide range of people from a variety of roles within all aspects of the construction industry. During the open debates it could clearly be seen that Members are working at all stages of offsite development, and they can clearly benefit from the experience of the more mature businesses that were represented within the room. We all face common challenges and it is evident that the sharing of knowledge can help to make us all more successful, regardless of individual business sectors.

Although Ormandy have been involved in Offsite for the last 14 years we believe it is never too late to learn, to this end Ormandy have decided to put themselves forward for the Offsite Management School initial trials.

## News

### Addressing the Skills needs of the Offsite Industry

Earlier this year, the UK Commission for Employment and Skills (UKCES) launched the first collaborative



research competition to address the skills needs to support the increased use of offsite construction techniques. This is the first time that public funding has been made available to support the development of the skills needs of the offsite industry.

As a result of the competition, five project proposals were selected. These pilot projects will all complete by the end of March 2015. An overview of the five winning proposals has been issued by UKCES:

Five employer-led project groups in the UK offsite construction industry are coming together to look at innovative ways to tackle current skills shortages. Co-funded by the UK Commission for Employment and Skills (UKCES), the five pilot projects will address specific skills deficiencies across the sector. This is the first competition in the 'UK Futures' programme – an ongoing Government-backed programme to encourage innovative employer-led solutions to long-standing or emerging skills issues.

The five projects will receive a total of over £630,000 of investment from UKCES over the next six months. Bringing offsite construction employers and partners together they will improve collaboration, and provide better training opportunities for both new and existing workers.

#### ▪ Skanska

Skanska will create an **employer-led Offsite Construction School** offering online training and a resource library to cover common skills gaps such as project management, design and IT skills. Developed by leading employers, trade associations and academics, it will provide access to knowledge and best practice at the forefront of the industry. This training will enable effective

management of the offsite and onsite environments, as well as encourage proficiency with the digital process covering the design, construction and operation processes to increase productivity.

#### ▪ Laing O'Rourke

Laing O'Rourke will focus on creating and testing training solutions from real-time findings and feedback from a **live site scenario**. Using a live project that is currently utilising offsite manufacture with onsite assembly, they will monitor, analyse and evaluate its delivery. Activities and interactions between the full project team and their supply chain; ranging from design, manufacture, logistics and onsite assembly will be evaluated to identify skills gaps. Laing O'Rourke will take the research obtained on the live site, combine it with lessons learned from previous projects and go on to develop training solutions that will fit the needs of the construction industry of the future.

#### ▪ Steel Construction Institute (SCI)

SCI's project focuses on the growing and developing technologies of light steel and modular construction. They aim to help those working in these innovative areas to achieve high standards of operation by collecting and sharing good practice information on different construction systems, as well as designing training and guidance on site management. As well as 'on the job' training and formalised courses, there will be accessible sector-wide **online learning solutions**, including webinars and the creation of a Virtual Learning Environment. This will increase confidence in the technology, skill and competence of these inventive areas, encouraging investment.

#### ▪ Edinburgh Napier University

Edinburgh Napier University will create an **offsite construction 'hub'** in collaboration with Heriot Watt University, Stewart Milne and CCG. The hub will act as a centre of expertise, responsible for defining and showcasing skill requirements and ensuring collaboration between professions. This will ensure companies across the industry have an understanding of the interaction between the principles of design, construction, manufacturing and engineering, and are all maintaining high standards. They will also develop practical and interactive learning material to share sector-wide, up-skilling the workforce, and creating high level

training on managing and delivering offsite construction.

▪ **The Comparator Project**

Comparator aims to improve the way that offsite and onsite solutions are compared in terms of whole-life costs and sustainability, and to facilitate the early introduction of that process. Expanding an existing **online comparison tool**, they will provide accessible information about offsite solutions to those working in the early stage of design development. This will allow fair and objective comparison between the two solutions at the earliest possible stage, encouraging surveyors, architects and engineers to consider offsite alternatives. Information on the whole-life cost and sustainability for offsite solutions will be generated by real-life projects, ensuring realistic and accurate evaluations.

Dr Bill McGinnis CBE, former Chair of the McAvoy Group (offsite solutions) and a Commissioner at UKCES, explained: *“These five projects are set to lead the way in tackling offsite construction skills shortages. In collaboration with partners and with each other, employers are using innovative solutions to develop high-quality training and implement learning across the sector. We hope that these projects are just the start of the process to better equip the workforce and to ensure that the UK remains at the forefront of the offsite construction industry.”*

Buildoffsite is continuing to meet with UKCES to discuss further opportunities to develop the skills needs of the offsite industry.

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**BIM – Delivering Real Business Benefits**

There has been a great deal of media and conference coverage – and a lot of hype – about BIM and sometimes the impression given that the supporting software represents a magic bullet that will deal with the challenge of inefficient design and construction practices. The intelligent application of BIM can certainly make a difference but let’s recognise that the software is simply a tool and like any other tool if it is going to be applied to best effect it needs to be used with great understanding, skill and imagination. Buildoffsite believes that advocacy of BIM can best be achieved through

the lens of practical examples of how BIM is being used in the real world to drive business value. In this initial piece our guide to BIM in practice is Peter Foster of Premier Interlink. Premier Interlink are on a journey which we hope to be able to share with interested readers on an ongoing basis. The details of how this will operate are set out at the end of this interview.



**PREMIER  
INTERLINK**  
WACO UK LTD



Peter Foster

Peter Foster is Head of Digital Manufacturing Implementation (BIM) at Premier Interlink (Waco UK Ltd). Peter is one of the new

generation of construction professionals who is working to use the opportunities enabled by the smart application of Building Information Modelling to drive process and organisational efficiency within their companies and to achieve sustained improvement in operational efficiency, increased client value and improved business results.

In this introductory interview Peter provides an overview of what it has meant in practice to implement BIM. He also outlines the business improvements that have been implemented and the commercial and other benefits that have already been achieved.

With BIM still to be widely implemented across the industry the prospects for achieving much greater commercial success look very positive.

**Peter, introduce yourself and tell us about your day job at Premier Interlink**

*I've been at Premier Interlink for 16 years and prior to that I worked within the Caravan industry so I've been involved in a manufacturing environment all of my working life.*

*I have a very varied role covering BIM, continuous improvement, processes as a whole for the business, and systems integration which covers the development of our 2D/3D authoring tools and our*

*Bill of Materials solution. Apart from processes and BIM I'm heavily involved in our emerging Digital Marketing solution and the use of social media.*

*I'm involved in a number of BIM4 groups that are a part of the UK BIM Task Group including **BIM4M2** (manufacturers and manufacturing) and **BIM4SME** (small and medium enterprises). I have also recently taken up heading BIM for Manufacturing for the Buildoffsite group.*

*I'm just about to start the second year of an MSc BIM Management course at Middlesex University with the thesis due next September.*

**Can you describe in broad terms how Premier Interlink is making use of BIM to compete for work?**

*First of all it needs to be made clear that we have yet to work on a collaborative BIM project because, for us, these projects and tenders have been few and far between in the past year.*

*We made a conscious decision not to over-hype our BIM deliverables and we have only recently ramped up communications. I wanted to ensure we had the processes and policies in place so we could not only discuss BIM but also deliver where required. No Hollywood BIM for us!*

**Again, in broad terms, how do you use BIM on a day to day basis?**

*Internally the drive for BIM originated around a statement I produced back in October 2013.*

*"if one of the goals of implementing BIM is greater collaboration with the team members and client we should take a look at how we collaborate as a business internally first, if our own processes fail then collaborating with others is going to be a much harder task"*

*Following this we have had a staged implementation of BIM methods and processes within the business. This has included basic elements such as working in a 3D environment that will be common to a large number of the Buildoffsite Members reading this article.*

*One of the benefits of offsite construction is the reduced time to project completion. However, one of the downsides of implementing any change in*

*authoring software is the dreaded 'learning curve' that would impact on delivery dates. To overcome this we implemented the software in a structured manner, combining a 2D/3D approach as required until today where we now approach each project with 3D design as the preferred solution.*

*We have also taken a staged approach to the implementation of the BS/PAS 1192 standards. As an offsite manufacturer we had processes in place similar to the BIM principles and what was needed was a review and implementation plan. An example of this is the implementation of BS 1192 naming convention and the standards for object naming which were implemented in conjunction with the 3D authoring software within the design office. This naming convention is slowly being rolled out to other departments and the goal is to have all project related documentation and departments using this system by the end of 2014.*

*Data control is another area that has undergone major change in the last nine months. We have a very robust Bill of Materials system that is utilised from Estimating through to Site in a seamless approach. However, it doesn't yet link directly to the 3D authoring tools, this is in progress and until then we have developed internal processes to bridge this gap.*

**What benefits have you seen as a direct result of using BIM? Can you give us some examples?**

*The last 12 months has seen significant changes in how we work and the margins generated and BIM has had a major influence on this.*

*A few stats that show why even 'lonely BIM' has been of benefit:*

*We have had an improvement on project margins of 2.5% over the last year. We calculate that 1.25% of this has been directly attributable to the application of BIM and process improvements within the business.*

*A fantastic example of a BIM mindset approach to the business was our introduction of Interface Meetings. This is where two directly communicating departments sit in a room with a thinktank type input/output and discuss problems and solutions. These meetings generated 337 ideas of which 247 have been successfully implemented within the company. The second round of these meetings are*

*due to start soon and will focus on BIM implementation so far and further progression.*

*Other stats such as increased shop floor efficiency versus the Estimate and the reduction of remedials due to better working practices and data flow are also positive examples of BIM derived benefits.*

*I have also reviewed and modified our customised approach to how we generate our steel shell design. Following interface meetings with the design team members and with a Steel Supplier I have re-customised the 3D software. This change will reduce the time to completion for our steel designs by 25%. A review of the actual process has also enabled us to reduce the fabrication output details required by around 40%. This change will have a massive impact on our business over the next year and will contribute to further improvements in margin.*

**What proportion of Premier Interlink customers are now requiring the use of BIM?**

*As mentioned earlier this has only recently started to be mentioned in tender enquiries and as yet no customer has worked on a BIM project with us. However, indications are positive that this will change in the short term. We are ready and willing!*

**Is the use of BIM now essential to the effective running of Premier Interlink's business?**

*Definitely! The change in culture alone is something we are building upon and we would not want to revert back to our old working practices.*

*We have seen excellent changes and improvements but we accept that we still have a long way to go. I'm looking forward to seeing the business stats in another 12 months.*

**Who do you see as the main influencers in driving the use of BIM – clients, designers, tier 1 contractors, others?**

*There are individuals who are making a difference across all parts of the industry but in my opinion what matters is their commitment and willingness to play a part in making BIM work – it is not so much about where they are currently placed in the industry.*

*However, the influence from the BIM Task Group cannot be understated. It was the initial source for*

*me and Premier Interlink in asking about the BIM acronym and obtaining initial understanding.*

*There is also excellent work from the BIM4 groups (Buildoffsite sits within these groups) and the BIM hubs, many people who are part of these communities do so on a volunteer basis. Credit also has to go to those businesses that recognise the value of letting their employers get involved and cooperate with others.*

*What has been clear to me while attending these groups and meetings is that the size of the business is often not a factor for effectively progressing BIM it is in fact the willingness to accept and drive change.*

*There are also a number of other initiatives such as The B1M, ThinkBIM, BIMtalk and Class of Your Own that provide invaluable support and influence for BIM and improvements in the construction industry.*

**Is Premier Interlink either encouraging or requiring the use of BIM by its own suppliers?**

*Not yet. We wanted to be in a position where we had the processes implemented internally and the relevant documentation prepared as internal standards, we would then be in a position to understand and drive our supply chain requirements.*

*Product Data Templates are going to serve as a driver for change within our supply chain, a plain language solution that enables us to deliver data for both internal and external use (for more information see [www.bimtalk.co.uk](http://www.bimtalk.co.uk)) I chair the data templates working group as part of BIM4M2 group.*

*Discussions will be taking place with our supply chain in a number of Premier Interlink led BIM events where we will discuss their current understanding and also their BIM requirements, clearly explaining that in some instances data and not BIM objects are all that is needed for us to work with them effectively on a BIM project.*

**What physical and performance attributes does Premier Interlink provide to customers through BIM data sets? Do you provide more data than customers are currently asking for?**

*This is one of my personal frustrations! We are a data rich business due to our Bill of Materials solution and manufacturing needs but currently there is often a lack of customer understanding of the value this*

could provide.

*We are seeking to change this by discussing BIM and data as part of the tender process although current opportunities to do this are rare. However, as with BIM use in general I believe the opportunities will increase rapidly and we are ready to meet this demand. In the meantime we are looking at other ways we can utilise the data for our own internal benefits which can then be passed onto the customer.*

**Based on your own experiences how close do you think we are to projects where the entire design and construction process is the subject of a BIM model?**

*We are certainly there now in certain areas of the industry and on certain projects, and I strongly believe Premier Interlink will be involved with their first externally requested BIM project within the next six months.*

*All of the initiatives I have discussed and how we are going to involve our supply chain will also have an exponential effect. The ‘tipping point’ for BIM is rapidly approaching and it’s an exciting time for all involved.*

For more information on anything covered in this item, email [peter.foster@waco.co.uk](mailto:peter.foster@waco.co.uk).

You can also follow Peter on Twitter via @kantrellk and Premier Interlink via @Waco\_UK. Buildoffsite’s Twitter account is @buildoffsite and the #buildoffsite is used to aggregate Tweets.

**Launch of the NBS BIM Object Standard**

On the 23rd September, RIBA Enterprises launched the NBS BIM Object Standard. With the increasing use of BIM, particularly in public sector projects, the demand for manufacturers to provide BIM objects that represent their products is growing rapidly. Until now, the guidance on what these should contain has been limited and in multiple documents. The scope of this new standard is ‘to define the information, geometry, behaviour and presentation of BIM objects to enable consistency, efficiency and interoperability across the construction industry’. It attempts to provide a unified source of guidance. The NBS BIM Object Standard therefore builds on

the BS 8541 series of guidance standards, the information hand-over standard adopted by the UK Government, COBie, and the buildingSMART open standard known as IFC (or Industry Foundation Classes).

The NBS arm of RIBA Enterprises launched the NBS National BIM Library some time ago and the content has been growing quickly in recent months. The publication of this standard will help manufacturers develop BIM objects that may be published through such channels so that they can be easily found by designers when they are needed.

The standard itself extends to 42 pages and contains the following Requirements sections:

- General
- Information
- Geometry
- Functional
- Metadata

It will be interesting to see whether other BIM object library providers adopt this standard in the coming months.

Further information about the standard and a pdf version are available at <http://www.nationalbimlibrary.com/nbs-bim-object-standard>.

**The Lyons Housing Review**

Many of you will have seen coverage in the media of the publication of the Lyons Housing Review – or to give the Report its full title ‘Mobilising across the nation to build the homes our children need’.

The Report - which took nine months to deliver and runs to 189 pages and sets out

39 recommendations for action - has been produced in response to a commission from Ed Miliband. The Report does not bind the hands of any future Labour Government but it does provide an evidence base for the development of Labour Housing Policies.



The Report is downloadable from <http://www.insidehousing.co.uk/journals/2014/10/16/n/z/b/The-Lyons-Housing-Review.pdf>

The Report is a very substantial piece of work and needs to be read in full. However, the fundamentals addressed in the Report come as no surprise with many elements previously analysed in the Offsite Housing Review written for DCLG and the Business Department in 2013 by Professor Nick Whitehouse and Professor John Miles of the Buildoffsite Executive.

Once again we have the statement that in crude terms we are building less than half the number of new homes that are needed for the rapidly increasing population and the increase in the number of households. The Report identifies the vital role for local authorities/local communities armed with appropriate powers to ensure that homes meet local needs and are built in the right places plus the power to ensure that enabling infrastructure is put in place from the outset. Seemingly cutting across this is a proposal for setting up a number of New Homes Corporations to act as delivery agencies and to focus in particular on development in Housing Growth Areas.

The Report asks who will build these new homes and suggests that there is a need to grow the number of house-builders – including in particular the number of SME builders which as a group currently deliver around 27% of all new homes. The Report also calls for an increase in the number of organisations empowered to commission new housing supply including LAs, HAs, other landowners and developers. There is also mention of ‘use it or lose it’ powers for Local Authorities to incentivise development.

Not much is said about how the much needed investment in new homes is to be financed both in capital and revenue terms at a time of constrained public finances but there is reference to an increasing role for financial institutions.

Specifically regarding the role for offsite construction methods, reference of the opportunities for increasing the take up of offsite solutions is set out in Recommendation 29. This Recommendation and the precursor narrative including the contribution from Nick Gavron of the

London Assembly, the reference to the BOPAS scheme and the example of action by Laing O’Rourke are worth noting. It is just a pity that Recommendation 28 which covers Skills Issues appears to focus exclusively on traditional skills and not the skills needed to optimise the use of offsite solutions.

We will have to see how Sir Michael Lyon’s Report influences Labour Party housing policies but with politicians across the board focusing on the need for more homes the commercial and project opportunities for the increased application of offsite construction solutions are likely to be considerable.

The direction of travel within Labour Party discussions will be taken into account in developing Buildoffsite’s strategy for promoting the case for the increased use of offsite solutions to deliver new homes.

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### LHC Launches New Homes Framework For Offsite Solutions

Social landlords looking to source offsite manufactured (OSM) housing structures can now turn to technical procurement specialist LHC for a solution. The new LHC New Homes (NH1) framework offers both volumetric and panelised systems from a pre-selected group of companies experienced in the design, manufacture, supply and erection of offsite systems for new build social housing projects across England, Wales and Scotland.



Tony Woods,  
Technical Manager

John Skivington, Director of LHC, commented: *“The availability of the LHC New Homes framework will save social landlords a lot of time and resource in evaluating the market. The specialist companies on the LHC NH1 framework have been appointed after a thorough technical evaluation of the systems offered and a detailed assessment of company standing and customer service performance. Social landlords can also rest assured that the framework is compliant, meeting the requirements of relevant EU and UK regulations.”*



LHC has been specialising in construction frameworks for social housing for nearly 50 years and now has over 130 users throughout the UK. Access to the framework is free of charge to all social landlords. For further information, visit: [www.lhc.gov.uk/nh1](http://www.lhc.gov.uk/nh1).

**NG Bailey wins £13m ‘190 STRAND’ development for St Edward Homes**

NG Bailey has commenced an initial design contract on St Edward Homes’ (a division of the Berkeley Group) flagship 190 Strand development in readiness to deliver a full Mechanical, Electrical and Public Health installation, worth £13 million to the business, in the coming weeks.



Due to its location in the heart of central London, the development, which is being run by the St Edward Homes delivery team, required an approach that would minimise transportation to and from site, and storage on site, as well as ensuring that work wouldn’t disrupt the surrounding ‘live environment’, just a short stroll from the Thames. NG Bailey’s solution, led by its Engineering division, will maximise the use of its offsite manufacture capability to deliver the ‘shell and core’ infrastructure to 200 luxury top-end apartments, town houses and penthouses. The scope incorporates a full M&E and Public Health installation, including building management and fire alarm systems.

The company’s IT Services division has also been charged with the integration and installation of a high-end, bespoke, security and ICT solution.

Mark King, operations director for the company’s Engineering Division in London, said: *“What a fantastic project to have on our books – one that we are proud to be associated with. We worked hard to develop a value-engineered solution that would benefit the client in terms of a reduced timeframe for the overall installation and through the integration of a number of our divisional offerings reducing the number of men on site – allowing for better health and safety, and fewer interfaces between trades – enabling better collaboration. These benefits are brought about without a compromise on quality, something the client saw through our recent installations at developments including 20 Fenchurch Street.”*



The news comes as the business vies to win more work in the high-end residential market, with over 200 developments planned in the capital alone over the next five years.

David Hurcomb, the company’s CEO, added: *“The high-end residential market is going through a period of exponential growth and the solutions we offer are perfect for these environments where developers are ‘building’ in dense City locations, with tight build timeframes. Our strategy to focus on the residential market comes as we look ahead to the growth driving the market, of which this is just one.”*

190 Strand is a residential led, mixed use project which is set to rejuvenate the Temple area of the Strand. The site was occupied by a vacant 1960s office block, which is being replaced with a scheme designed to respond to the historical context of this unique location.

**Water sector urged to innovate contract models to take advantage of offsite manufacture potential**

Water companies are being urged to adopt new ways of working if they are to catch up with other sectors that are turning to offsite manufacture in ever-increasing numbers. According to NG Bailey, one of the UK's leading specialists in the offsite manufacturing marketplace, the water industry can generate its own time and cost savings arising from this evolving approach if it 'rebooted' its procurement processes.



Graham Cleland, general manager of NG Bailey's offsite manufacture division, said it was time for the sector to take a leap of faith and create more innovative supplier relationships and contract models. NG Bailey counts Network Rail, Arla Foods, the NHS and Heathrow Airport among its portfolio of offsite manufacturing clients. Graham said: *"The water sector's approach to offsite manufacture to date is a classic case of the tortoise and the hare. The benefits of offsite are as far-reaching for utilities as they are for every other sector. Together – in terms of better safety, improved quality, faster work programmes, greater sustainability and less waste – they combine to offer a compelling driver for change. Yet while many of the biggest names that make up the very fabric of Britain have been quick off the blocks and are now seizing these advantages in record numbers, the water sector has traditionally adopted a more pedestrian stance."*

He said there were lessons for the water sector to learn in speeding up the pace of change to bring it upside other industries, particularly by ensuring it has a greater and earlier opportunity to shape the design and development of a project. But he added that the Gordian Knot which dictates the extent to which it can unlock the potential of offsite lay in the very nature of the water industry itself.

*"We believe that one of the keys to this is rebooting the procurement process and transforming the way partnerships are developed with suppliers,"* he said.

*"At the heart of this would be an innovative contract model that for the first time brings together the technological capability of offsite with the intellectual property that sits hand-in-glove with it. Moulding these two facets of offsite together will equip the water sector with a new way of thinking, a new way of working and a new solution for some of its biggest challenges."*

He added: *"Those savvy end-clients of the future might realise that offsite providers actually want to make their manufacturing capability and capacity available over the long-term, not merely sell one-off or small volumes of multiple-off products.*

*Intellectual capital is a scarce resource and is often under-utilised or inappropriately applied on matters that are not directed towards helping clients conceive increasingly better solutions. The savvy water utility client might eventually realise that 'buying' or 'retaining' this available intellectual capital – or at least a portion of it – for a fixed period of time to work on whatever solutions, are best suited to the capabilities and capacities of that offsite provider, is money well spent. And, in the race for innovative solutions, the tortoise may yet – like Aesop's famous fable – pip the hare to the finishing line."*



Graham Cleland

**NG Bailey launches latest sustainability report with a focus on people**

As a long-standing innovator in the world of green business, NG Bailey has unveiled a raft of initiatives aimed at plugging a widening skills gap and creating more sustainable employment opportunities. They are also urging other companies to join in to trigger greater excitement among young people for pursuing careers in these sectors.



Cal Bailey

The company revealed its blueprint as it published its latest annual sustainability report, which charts the progress it is making towards a series of targets

designed to strengthen its position at the forefront of operating responsibly. Its approach is spearheaded by the creation of a new schools programme to open pupils' eyes to the range of careers across the construction industry; the launch of a 'virtual university' and a commitment that for every person it employs, it will have helped young people to be more successful in their future careers – thanks to a £3 million annual training and development programme.



*Apprentices at the £600 million Gateway project to modernise Birmingham New Street Station*

NG Bailey has also pledged to expand and broaden its sector-leading apprenticeship programme – the springboard for over 5,500 careers since 1969 – and equip more young people with the skills to achieve even more advanced levels of qualification. Chief executive David Hurcomb said: *“Staff are our greatest asset – they hold the key to delivering our clients’ future success and their own sustainability goals. Through the responsible and ethical ways we work, we’re determined to draw upon best practice not only to safeguard the future of our planet, but also the future of our people – and this is reflected in what we have achieved this year. There are significant skills gaps to address if the UK is to deliver on its infrastructure investment commitments over the next 10-20 years. As well as up-skilling those who are already in our industry, we need to help young people get excited by science, technical or engineering careers. And this has to start in schools.”*

The company has developed a new programme for schools called Inspire. Although in its infancy, it has

already engaged with over 500 young people in Leeds and Manchester, helping them get involved in projects that bring to life the breadth of career options available in construction.

With plans to roll out the initiative to 12 schools nationwide within the next four years, NG Bailey hopes it will encourage participants to seek out construction options at college or university, or even apply for an apprenticeship.

This is the eighth annual sustainability report published by NG Bailey but the first which highlights the successes of its new strategy, ONE APPROACH, which was launched last year with the challenge of meeting 18 far-reaching commitments by 2018. Over and above its focus on developing sustainable careers, ONE APPROACH in its inaugural year has helped NG Bailey:

- Achieve Investors in Diversity status four years ahead of target
- Drive down transport carbon dioxide emissions by 9 per cent
- Be rated 9th best UK employer for apprenticeships
- Reduce the number of reportable health and safety accidents by 27 per cent, including working 200,000 hours without one incident at the £600 million project to transform Birmingham New Street Station
- Ensure 100 per cent of bids were compliant with its Ethical Working Policy
- Support staff and customers in raising more than £125,000 for charity and good causes.

Cal Bailey, the company's sustainability director, added: *“Our approach is geared towards providing sustainable futures both for our employees today and for those who will join us in years to come; and it’s about helping the communities in which we operate to create sustainable employment opportunities. I hope that NG Bailey can encourage others within our industry to get involved.”*

For more information, please contact Milly Rose, Marketing Department, NG Bailey, tel: 01943 601933 x3336 or email [milly.rose@ngbailey.co.uk](mailto:milly.rose@ngbailey.co.uk), visit the website [www.ngbailey.com](http://www.ngbailey.com), or view the report at <http://sustainability2014.ngbailey.com>.

## Premier Interlink's new affordable housing scheme



Premier Interlink (Waco UK Ltd) is launching a new affordable housing scheme and is hosting three open days in November to debut their fantastic new product. The modular construction was designed, developed and built offsite in the company's Brandesburton based factory, and is HQI and LABC compliant, Lifetime Homes approved and code 4. It also boasts a 10-year warranty (CML approved) and has a proven low environmental impact, with low energy consumption offering reductions in fuel poverty and rent arrears.

For more information visit: [www.waco.co.uk](http://www.waco.co.uk) or call 0800 316 0888.

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## Portakabin provides complete interim junior school

Portakabin Hire, the UK's leading interim modular building specialist, has designed and supplied a complete school for short-term use at Highgate Junior School in north London. The building is in use for two years whilst a new facility is under construction.

Established in 1565 by Royal Charter, Highgate is an independent co-educational day school for pupils aged 3 to 18. The school was founded in the 16th century and its brand new Junior School building will be finished in December 2015 – the school's 450th anniversary year.

During the construction of the new Junior School building, teaching facilities of a high standard were needed to accommodate Junior School pupils and staff.

Portakabin designed the modular building to meet the school's precise requirements. It was configured as a single and double storey facility arranged around a landscaped courtyard that provides an additional outdoor space.

Facilities include reception, 16 general classrooms, two science laboratories, music and practice rooms, library, learning support room, IT suite, staff room, school office, cloakrooms, and toilets with disabled access. The building was fully equipped by Portakabin with fire and intruder alarm systems, emergency lighting, data communications, two stair pods, and air conditioning to the IT suite and library.



Commenting on the project, Mark James, Principal at Highgate Junior School, said, *"We visited a number of buildings at the outset and were impressed with the quality of Portakabin buildings."*

*"Since completion of the scheme, we have received universally positive feedback from parents, pupils and staff – everyone is delighted with the facility. It is bright and well designed, and allows us to zone the year groups together. We particularly like the wide corridors and stairwells, and how spacious and airy the classrooms feel. It also has an attractive, welcoming entrance. We are very happy with the building which is working well."*

Robert Snook, Director and General Manager of Portakabin Hire, said, *"The school's aim for this project was to achieve an interim facility which had the attention to detail and quality of finish that is as close to a permanent building as possible. We are pleased to report that the scheme was delivered on time, is performing well, and that we have received such positive feedback from the school."*

Externally, the building was finished in light dove grey with contrasting blue windows. Portakabin also

installed a canopy over the central walkway linking the general classrooms block to the specialist classrooms block as well as a canopy over the main entrance timber decking.

Portakabin provided a complete package of services to Highgate which included assisting in the design process, Building Regulations compliance, ground works and fitting out.

Delivery of the 65 steel-framed building modules had to be timed to minimise any disruption to local residents and to the day-to-day running of the school. This involved detailed planning and time restrictions for the arrival of the modules on site.

Education facilities for short-term use are provided by Portakabin Hire and designed and constructed to permanent standards and in line with the latest Department for Education guidelines for teaching and learning.

The buildings incorporate design best practice and generously-sized, light, modern classrooms. The accommodation can be configured as learning clusters, standalone teaching blocks and even single classroom buildings to meet a school's precise requirements.

For further information, please visit [www.portanews.co.uk](http://www.portanews.co.uk), email [information@portakabin.co.uk](mailto:information@portakabin.co.uk) or call 0845 401 0010.

## Events

### Buildoffsite teams up with Edinburgh Napier University

20 November 2014 | Lighthouse, Glasgow



Buildoffsite has teamed up with Edinburgh Napier University to deliver a one day conference to address the future of construction in Scotland and to explore the role of offsite. The conference will take place on 20 November at the Lighthouse in Glasgow starting at 9.30am.

A number of Buildoffsite Members will be speaking at the conference.

In addition to the conference there will also be a hosted visit to the Athletes' Village built for the Commonwealth Games which included 700 offsite delivered homes.

Offsite timber framed housing has long been the preferred solution in Scotland but with visible growth in all market sectors and with active support from the Scottish Government the opportunities to grow the overall market for offsite solutions are likely to increase significantly.

### Buildoffsite at Homes 2014

26-27 November 2014 | Olympia, London

The Homes 2014 Exhibition and conference programme is taking place at Olympia on 26 and 27 November. Hosted by the Ocean Media Group (OMG) Homes 2014 has a particular focus on the social housing sector. Homes is now in its third year and this year for the first time the event will include a focus on offsite construction.



Buildoffsite has teamed up with OMG to host a programme of presentations over both days which will take place in a dedicated Buildoffsite Seminar Theatre.

Seminar themes will include:

- Can offsite construction provide the volume, speed and quality of affordable homes to meet the housing shortage?
- How offsite enabled homes compares with the cost and value of traditionally delivered homes
- Designing in quality and achieving adaptable homes
- Innovations in offsite construction
- Innovative funding solutions for offsite housing projects
- Delivering quality, affordable homes at scale

The full details of the Exhibition and the Seminar programmes are shown on the Buildoffsite website. The Buildoffsite Team will be located immediately

adjacent to the Buildoffsite Seminar Theatre with the stand sponsored by Buildoffsite Member Climate Energy Homes.

Participating at Homes 2014 provides Buildoffsite with a platform to make contacts and to promote its role and the increasingly important role of offsite construction solutions in the social housing market place.

**BOPAS**

9 December 2014 | Stewart Milne Offices, Apex 3, 94, Haymarket Terrace, Edinburgh EH12 5HD



The Buildoffsite Property Assurance Scheme (BOPAS) has been developed by Lloyds Register, Building Life Plans, Buildoffsite, the Royal Institute of Chartered Surveyors and the Council of Mortgage Lenders to provide assurance to the lending community and valuers, that non-traditional systems of construction can be used in new house-building with total confidence and traceability, with the option of insurance cover to provide additional certainty.

BOPAS certification is available to manufacturers and constructors and will provide confirmation that new properties, built using non-traditional forms of construction, will be sufficiently durable to support loans over a period of not less than 60 years. The availability of a BOPAS certification is a recognised means to manage financial and construction risk and is proving to be of particular interest to private purchasers requiring a mortgage, institutional investors in new public and private sector housing developments, and client groups including RSLs and LAs.

This morning seminar will provide an overview of BOPAS Certification and its role in supporting innovative forms of house-building.

**Programme:**

Welcome and introduction

The BOPAS Scheme:

- Scheme context and benefits
- Accreditation process and database

- Durability assessment process
  - Overview of default warranty provision
- Q&A and Discussion  
Networking  
Close

For more information, contact Anna Whiting at [anna.whiting@buildoffsite.com](mailto:anna.whiting@buildoffsite.com).

**Buildoffsite Direction Group**

17 December 2014 | London

The next Buildoffsite Direction Group meeting will take place on Wednesday 17 December from 10am-12.30pm at the CIRIA offices in Griffin Court, 15 Long Lane, London EC1A 9PN. Participation at Direction Group meetings is for Buildoffsite Members and invited guests only. The meeting will be followed by a Christmas lunch at Vinoteca, Barbican.



**Infrastructure – Engineering the Future Today**

21 January 2015 | ICE, London

For the third year running Buildoffsite, Mott MacDonald and the Institution of Civil Engineers are collaborating to deliver a major conference to review the ways in which the delivery of Infrastructure is evolving, and the increasing role of offsite solutions and other innovative practices.

This important event will take place at the Institution of Civil Engineers on the afternoon of Wednesday 21 January.

The Programme for the event is being finalised, but this year, rather than focus simply on current leading practice in delivering infrastructure, the programme will also review developments in infrastructure in the near term up to say 2025 and then a longer term

view of how the industry may evolve in the period 2035 and beyond.



We are delighted that once again Tekla has agreed to sponsor the early evening drinks reception.



Buildoffsite Members who wish to register as delegates can do so by contacting: [anna.whiting@buildoffsite.com](mailto:anna.whiting@buildoffsite.com).

We anticipate that the conference programme will be available by the end of November.

**The Offsite Construction Show 2015**  
14-15 October 2015 | ExCeL, London



Supported by RIBA and in association with Buildoffsite, the first ever major exhibition devoted solely to offsite will include an anticipated 100 exhibitors that already include Willmott Dixon, NG Bailey, Caledonian Modular, Modularize and Tekla. This major specialist event will promote offsite construction by bringing people together, providing focus and perspective, and be a Launchpad for new products and systems.

Exhibitors at OSCS2015 will include Offsite manufacturing specialists, existing and potential members of the supply chain, BIM and CAD specialists, specialist tool and machinery

manufacturers, specialist lifting and other specialist site service suppliers, general construction companies, precast concrete manufacturer, steel suppliers and fabricators, specialists in timber construction and many more categories.

OSCS2015 is being promoted online, in the trade press and by direct email.

An extensive show marketing campaign has already commenced with a feature advertisement in Construction News and other titles that will be used include Building, New Civil Engineer, Architects Journal and the Construction Index.

For more information, call Paul Shelley of Marwood Events on 020 3086 9296 x3.

*Case studies*

**Premier Interlink – RAF Benson (Buildings 1 & 2) and RAF Coningsby**

RAF Benson and RAF Coningsby are part of the project SLAM (Single Living Accommodation Modernisation) initiative to provide accommodation on Military bases across the country. Premier Interlink worked alongside Debut Services Ltd on the projects, and in both cases, the modules were constructed with light gauge steel frames, whilst the core areas were of a beam and post construction. Windows were installed and bathroom units fully fitted out whilst still at Premier Interlink's premises. The modules were taped, filled and decorated, with floorings fitted where possible before delivery.

To alleviate health and safety concerns, Premier Interlink designed and developed an innovative lifting frame, which allows operatives to work with optimum safety at height when installing modular buildings. Debut Services recognised the potential of the system and have forwarded it for consideration to be included in their own procedures worldwide.

**Project:** RAF Benson  
**Sector:** Defence  
**Site Programme:** 12 weeks

This project provided the base at RAF Benson with two new living accommodation blocks. The 3-storey buildings each provide en-suite bedrooms and

ancillary areas for Junior Ranks and Senior Non-Commissioned Officers.



Andrew Hill, Project Manager, Debut Services Ltd (Project SLAM), said: *“It was without doubt a challenge and involved a lot of hard work by many people. It’s fair to say that without the huge effort and commitment put in by the site teams we would not have made it. There are too many people to thank individually. The Establishment and Defence Infrastructure Organisation (DIO) is delighted with what we have delivered for them, and our shared success will be rapidly radiated by both.”*



**Project:** RAF Coningsby  
**Sector:** Defence  
**Site Programme:** 32 weeks (for all 3 consecutive buildings)



This project provided the base at RAF Coningsby with three 4-storey accommodation blocks to house

Senior Non-Commissioned Officers and Junior Ranks at the RAF base. The modular buildings, constructed from 351 modules in total, comprise 231 bed spaces, with one SNCO block housing 104 officers and two Junior Ranks blocks accommodating 63 and 64 personnel respectively.

Premier Interlink was delighted to successfully achieve a defect free handover at RAF Coningsby. Michael Poole-Sutherland, Operations Executive, Debut Services Ltd (Project SLAM), said: *“Thank you to all involved, there’s far too many to name. To follow and build the 3 blocks on a very tight restrictive site is quite an accolade to all involved, which clearly demonstrates collaboration and communication from all stakeholders. Thanks again – another great result!”*



For more information, please visit [www.waco.co.uk](http://www.waco.co.uk) or call 0800 316 0888.

**British Gypsum improves hospital health with ACTIVair**



British Gypsum, part of the Saint-Gobain group, is the UK’s leading manufacturer of interior lining systems. Their mission is to develop innovative products and services that help customers build better spaces to live, work and play. In every kind of building – from home to work, from the local supermarket to the local hospital – they help to create partitions, provide comfort, protect against fire and insulate against sound.

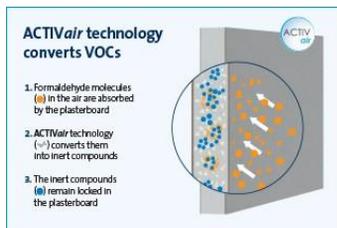
British Gypsum ceiling tiles and plasterboard products have been used to help create a healthy

indoor environment for patients, visitors and employees at a new unit of St Mary's Hospital, Kettering.

When faced with the challenge of developing an interior that is as conducive to patient recovery as possible, main contractor, Balfour Beatty, made air quality one of its key considerations. After turning to British Gypsum for a solution, a system containing the manufacturer's innovative ACTIVair technology was specified alongside a range of interior lining systems to meet the hospital's acoustic and impact resistance requirements.



ACTIVair technology absorbs volatile organic compounds (VOCs), which are harmful pollutants found in the air and converts them into harmless, inert compounds, preventing their re-emission back into the atmosphere. ACTIVair technology performs for more than 50 years, which is longer than the intended design life of most healthcare interiors.



British Gypsum's Gyptone ceiling range with ACTIVair, was installed in four key areas of the existing hospital building as a retrofit measure. The lead nurse office, corridor areas and memory assessment services office were used to test the success of the products in-situ, providing Balfour Beatty with sufficient data to demonstrate the performance of the technology. Another benefit of this testing phase was that it allowed the client to choose preferred ceiling designs from the comprehensive range. Gyptone Ceiling tiles and plasterboard with ACTIVair technology were then specified throughout the new build hospital building.

The effectiveness of ACTIVair technology has been tested by the accredited Eurofins laboratory. The test shows that ACTIVair decomposes up to 70 per cent of the formaldehyde in a controlled test environment.

The St. Mary's Hospital project tests showed that, following the installation of ACTIVair ceiling and plasterboard products, there was an average reduction of 42 per cent in levels of formaldehyde, a common VOC which is linked to health issues in high concentrations. Measurements taken in rooms without ACTIVair showed significantly higher formaldehyde levels, in comparison to the same rooms with ACTIVair installed. All results were well below the maximum level recommended by the World Health Organisation of 0.08ppm.

Mark Walsh, project manager at Balfour Beatty, said: *"We were asked to create a healthy environment at St Mary's Hospital to improve patient wellbeing, and British Gypsum's ACTIVair seemed perfect for the job. We were able to offer an innovative solution for Northamptonshire Healthcare NHS Foundation Trust (NHFT) to address the issue of indoor air quality and the results speak for themselves – the innovation has reduced the concentration of formaldehyde in the atmosphere, improving the environment for patients and staff at the hospital."*

*"In addition to the end-user benefits, the ACTIVair technology works through a paint finish, the products are easy to install, and they offer the same fire, acoustic and durability performance as the standard ceiling and plasterboard ranges – important factors that we have to consider when selecting new solutions."*

Neil Austin, project manager at NHFT, said: *"NHFT always looks for opportunities to improve the environment for patients, visitors and the staff. The trial of ACTIVair products in existing buildings and use in the new unit further confirms our commitment to look at all aspects of care for our stakeholders."*

The project was also supported by sub-contractor Titan Interior Solutions who specialise in installing plasterboard and ceiling solutions. GypWall Classic, GypWall Robust, GypWall QUIET and GypWall QUIET SF systems were used to meet the project's acoustic and duty requirements in accordance with BES5234 Part2 1992.

To view a video case study on St Mary's Hospital Kettering, follow this link: <http://www.british-gypsum.com/case-studies/british-gypsum-improves-hospital-health-with-activair>

## New Members

### C Caswell Engineering Services Limited



C Caswell Engineering Services Limited is one of the UK's leading Ventilation and Air Conditioning Specialists. The business is a well-established family owned company. From modest beginnings back in 1969, Caswell now operate from a purpose built 40,000 sq ft factory and office premises in the heart of Lancashire.

Caswell has three areas of business: Ventilation Ductwork Contracting, Acoustic Enclosures, and Ventilation and Air Conditioning Solutions. We have an impressive CV of major projects, for which we have supplied and installed the ventilation ductwork. These include the Arndale Centre, Harvey Nichols and Selfridges (all in Manchester), Xscape Castleford and Cheshire Police HQ. Customers have included NG Bailey, Balfour Beatty Engineering Services Limited and Boulting Environmental Services.

Caswell design and build acoustic enclosures to house power generation, and combined heat and power plants. The enclosures are tailor-made to meet our customers' exacting noise reduction standards. We have housed up to 3MW generation plants c/w supply and extract ventilation to cool the engines during operation. The enclosures and ventilation systems are manufactured using offsite techniques.

Caswell specialise in providing turnkey solutions to our customers in the restaurant sector. We design, manufacture, install, commission and maintain HVAC services.

Caswell has completed over 1200 new build restaurants for customers such as McDonald's and Nando's. Caswell has worked closely with McDonald's throughout their modular building



Richard Coxen  
Chairman

roll out over the past 15 years, providing HVAC Solutions for offsite buildings. We have completed a video of our 1000th McDonald's Restaurant, which will be available through our website shortly: [www.caswell.uk.com](http://www.caswell.uk.com). This building was constructed offsite by Elliot, with HVAC Services by Caswell.

For more information, call Richard Coxen on 01706 227935 or visit [www.caswell.uk.com](http://www.caswell.uk.com).

### Nomenca Limited



Specialist services provider Nomenca Limited is a wholly owned subsidiary of North Midland Construction PLC.

The company has a wide scope of capabilities comprising of: design and project management of Mechanical, Electrical Instrumentation Control and Automation (MEICA) works within both combined civil/M&E turnkey contracts and standalone MEICA services. Nomenca operates nationally with regional offices in Mansfield, Warrington, Plymouth, Bristol, Leeds and St Austell in the following sectors: Water, Power, Government, Waste to Energy, and Materials Handling.

The subsidiary also has a complementary product portfolio encompassing fabricated steel products which are CE marked to BS EN1090-1, chemical dosing rigs for water and waste water applications, booster sets, pumping stations and UV disinfection. This is supplemented by an operation and maintenance provision for complete client service.

Nomenca focuses on innovation, continuous improvement and delivering a high level of customer satisfaction by investing and developing our regional resources.



Mark Hanrahan  
Group Business  
Development Director

Founded in 1946; North Midland Construction PLC

(NMC) successfully undertakes construction projects covering the spheres of Civil Engineering, Building and Mechanical and Electrical Engineering.

For more information please contact the marketing team: Katherine Robinson, Business Development Coordinator on 01925 281200 or [kat.robinson@nmgroup.uk.com](mailto:kat.robinson@nmgroup.uk.com)  
Sarah Boulton, Marketing Manager on 01925 281222 or [sarah.boulton@nmgroup.uk.com](mailto:sarah.boulton@nmgroup.uk.com)

**Potter Raper Partnership**



Potter Raper Partnership is a Construction Consultancy providing Quantity Surveying, Building Surveying, Project Management, Employer's Agent, Health and Safety, Site Inspectors and 3D CAD and BIM Services to both Public and Private sector organisations across the UK.

Founded as a Quantity Surveying Practice in 1970, we have developed throughout the intervening years into a Multi-Discipline Consultancy delivering a variety of projects ranging from small extensions to £450million regeneration projects to Clients across various sectors:

- Residential
- Offices
- Education
- Retail
- Industrial
- Conservation
- Leisure
- Healthcare

Employing over 140 staff we have substantial resources available to service any commission.



*Phil Bass  
Partner*



*Rob Humphrey  
Partner*

We are fully conversant with the advantages of offsite construction and have provided professional services on a wide variety of schemes incorporating offsite systems.

We are therefore able to provide expert advice to any Organisation wishing to use offsite technology and systems.

We are delighted to be a Member of Buildoffsite and believe we will be able to contribute positively to promoting the clear benefits that offsite manufacturing can provide.

Please contact Rob Humphrey or Philip Bass should you wish to find out more about us or ways that we can help you.

Website: [www.prp.gb.com](http://www.prp.gb.com)  
Emails: [robert.humphrey@prp.gb.com](mailto:robert.humphrey@prp.gb.com)  
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